BROOKHAVEN NATIONAL LABORATORY

2024

Site Environmental Report

GROUNDWATER STATUS REPORT

VOLUME II

SITE ENVIRONMENTAL REPORT
VOLUME II
GROUNDWATER STATUS REPORT

June 30, 2025

Environmental Protection Division
Groundwater Protection Group

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ACRONYMS AND ABBREVIATIONS

These acronyms and abbreviations reflect the typical manner in which terms are used in Volume II of this document and may not apply to all situations.

µg/L	micrograms per liter
AFFF	Aqueous Film Forming Foam
AGS	Alternating Gradient Synchrotron
AOC	Area of Concern
AS/SVE	Air Stripper/Soil Vapor Extraction
AST	Aboveground storage tank
AWQGV	NYS Ambient Water Quality Guidance Value
AWQS	NYS Ambient Water Quality Standard
BGD	Below Ground Ducts
BGRR	Brookhaven Graphite Research Reactor
BLIP	Brookhaven Linac Isotope Producer
bls	below land surface
BMRR	Brookhaven Medial Research Reactor
BNL	Brookhaven National Laboratory
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
Ci	curies
Cr VI	Hexavalent chromium
CSF	Central Steam Facility
D&D	Demolition and Decommissioning
DAR	Division of Air Resources
DCA	1,1-dichloroethane
DCE	1,1-dichloroethylene
DCG	Derived Concentration Guide
DOE	United States Department of Energy
DQO	Data Quality Objective
DWS	Drinking Water Standards
EDB	ethylene dibromide
EIC	Electron Ion Collider
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FFA	Federal Facilities Agreement
Freon-11	Trichlorofluoromethane
Freon-12	Dichlorodifluoromethane
Ft	feet
ft msl	feet relative to mean sea level
GAC	granular activated carbon
gpm	gallons per minute
HAL	Health Advisory Level
HBWC	Health Based Water Concentrations
HFBR	High Flux Beam Reactor
HFPO-DA	hexafluoropropylene oxide dimer acid
HTAC	High Toxicity Air Contaminant
HWMF	Hazardous Waste Management Facility
MPF	Major Petroleum Facility
mrem/yr	millirems per year
msl	mean sea level
MTBE	methyl tertiary-butyl ether
ng/L	nanograms per liter
NMR	Nuclear Magnetic Resonance
NPL	National Priorities List
NSE	North Street East
NSLS-II	National Synchrotron Light Source II
NSRL	NASA Space Radiation Laboratory
NYCRR	New York Code of Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	Operable Unit
PCBs	polychlorinated biphenyls
PCE	tetrachloroethylene
pCi/L	picocuries per liter
PFAS	Per- and Polyfluoroalkyl Substances
PFBS	perfluorobutane sulfonic acid
PFHxS	perfluorohexane sulfonic acid
PFNA	perfluorononanoic acid
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
PFS	Pile Fan sump
QA/QC	Quality Assurance and Quality Control
RA	Removal Action
RCRA	Resource Conservation and Recovery Act
RHIC	Relativistic Heavy Ion Collider
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SBMS	Standards Based Management System
SCDHS	Suffolk County Department of Health Services
SCWA	Suffolk County Water Authority
SDWA	Safe Drinking Water Act
SIM	Select Ion Monitoring
SOP	Standard Operating Procedure
SPCC	Spill Prevention Control and Countermeasures
SPDES	State Pollutant Discharge Elimination System
Sr-90	strontium-90
STP	Sewage Treatment Plant
SU	standard unit
SVOC	semivolatile organic compound
TCA	1,1,1-trichloroethane

IAG	Interagency Agreement	TCE	trichloroethylene
ID	identification	TCRA	Time Critical Removal Action
lb/hr	pounds per hour	TTA	tolyltriazole
lbs	pounds	TVOC	total volatile organic compound
Linac	Linear Accelerator	UCMR3	Third Unregulated Contaminant Monitoring Rule
LIPA	Long Island Power Authority	USGS	United States Geological Survey
LISF	Long Island Solar Farm	UST	underground storage tank
mCi	millicuries	VOC	volatile organic compound
MCL	Maximum Contaminant Level	VP	vertical profile
MDC	Minimum Detectable Concentration	WCF	Waste Concentration Facility
MDL	Minimum Detection Limit	WMF	Waste Management Facility
mg/L	milligrams per liter	WSB	Western South Boundary
MGD	million gallons per day	ZVI	Zero Valent Iron

2024 Brookhaven National Laboratory

GROUNDWATER STATUS REPORT

EXECUTIVE SUMMARY

The *2024 Brookhaven National Laboratory (BNL) Groundwater Status Report* is a comprehensive summary of data collected during the 2024 calendar year supplemented with relevant investigation data collected during the first quarter 2025, an evaluation of Groundwater Protection Program performance, and recommendations for program changes. This is the 29th annual groundwater status report issued by BNL. This document examines the performance of the program on a project-by-project basis.

GROUNDWATER RESTORATION (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT – CERCLA)

Table E-1 summarizes the status and progress of groundwater cleanup at BNL under the provisions of CERCLA. As of December 2024, seven volatile organic compound (VOC) groundwater remediation systems were in operation, along with one strontium-90 (Sr-90) treatment system, and two per- and polyfluoroalkyl substances (PFAS) treatment systems. In 2024, 41 pounds of VOCs were removed from the Upper Glacial and Magothy aquifers by the treatment systems. To date, 7,914 pounds of VOCs have been removed from the aquifers. The Brookhaven Graphite Research Reactor (BGRR) Sr-90 treatment system removed 0.10 millicuries (mCi) of Sr-90 from the Upper Glacial aquifer in 2024. A total of 34.89 mCi for both the BGRR and Chemical Holes Sr-90 systems have been removed since operations began. The Current Firehouse PFAS groundwater treatment system has removed approximately 0.95 pounds of PFAS from the Upper Glacial aquifer since it began operation in October 2022. Furthermore, the Former Firehouse treatment system, which began operations in January 2023, has removed a total of 0.34 pounds of PFAS from the Upper Glacial aquifer. Approximately 1.1 billion gallons of groundwater were treated in 2024.

There were 657 monitoring wells, and 41 temporary wells, sampled as part of the CERCLA Groundwater Monitoring Program, with analytical results from a total of 1,327 groundwater sampling events that were evaluated for this report. Groundwater remediation activities will continue until the cleanup objectives for the plumes are met. The specific goals are as follows:

- Achieve maximum contaminant levels (MCLs) for VOCs in the Upper Glacial aquifer by 2030;
- Achieve MCLs for VOCs in the Magothy aquifer by 2065;
- Achieve the MCL of 8 picocuries per liter (pCi/L) for Sr-90 at the BGRR in the Upper Glacial aquifer by 2070; and
- Achieve the MCL of 8 pCi/L for Sr-90 at the Chemical/Animal Holes in the Upper Glacial aquifer by 2040.

The cleanup goals for PFAS will be determined at the completion of the forthcoming Remedial Investigation/Feasibility Study (RI/FS) and documented in the subsequent OU X Record of Decision (ROD).

The cleanup objectives will be met by a combination of active treatment and monitored natural attenuation. The comprehensive groundwater monitoring program measures remediation progress.

Table E-1.
BNL Groundwater Remediation System Treatment Summary for 1997 – 2024 (Shading indicates closed systems)

	1997 – 2023		2024	
VOC Remediation (start date)	Water Treated (gallons)	VOCs Removed (pounds)(c)	Water Treated (gallons)	VOCs Removed (pounds)(c)
OU I South Boundary (Dec. 1996) (a)	4,177,473,000	369	(Closed)	0
OU III Carbon Tetrachloride (Oct. 1999) (e)	153,538,000	349	Decommissioned	0
OU III Building 96 (Feb. 2001)	620,697,000	147	6,512,800	0.1
OU III Building 452 Freon-11 (March 2012) (a)	124,997,000	106	(Closed)	0
OU III Middle Road (Oct. 2001)	4,272,547,000	1,378	186,000,000	21
OU III South Boundary (June 1997)	5,632,151,000	3,084	53,000,000	6
OU III W. South Boundary (Sept. 2002)	2,687,555,000	212	89,000,000	7
OU III Industrial Park (Sept. 1999)	2,577,662,000	1,077	(Standby)	0
OU III Industrial Park East (May 2004) (f)	357,192,000	38	Decommissioned	0
OU III North Street (June 2004)	1,680,942,000	342	(Closed)	0
OU III North Street East (June 2004) (g)	1,331,454,000	50	74,656,000	1
OU III LIPA/Airport (June 2004)(h)	4,377,067,620	505	209,922,620	6
OU III HFBR Tritium Plume (May 1997) (a)	721,795,000	180	(Closed)	0
OU IV AS/SVE (Nov. 1997)	NA (b)	35	Decommissioned	0
OU VI EDB (August 2004)	2,959,657,000	(d)	133,600,000	(0.53[d])
Totals	31,674,727,620	7,873	752,691,420	41.1

	2003 – 2023		2024	
Sr-90 Remediation (start date)	Water Treated (gallons)	Sr-90 Removed (mCi)	Water Treated (gallons)	Sr-90 Removed (mCi)
OU III Chemical Holes (Feb 2003)	65,663,000	4.94	(Shutdown)	0
OU III BGRR (June 2005)	224,603,000	29.85	6,600,000	0.1
Totals	290,266,000	34.79	6,600,000	0.1

	2022 - 2023		2024	
PFAS Remediation (start date)	Water Treated (gallons)	PFAS Removed (lbs)	Water Treated (gallons)	PFAS Removed (lbs)
OU X Current Firehouse (Oct 2022)	238,144,000	0.42	215,000,000	0.53
OU X Former Firehouse (January 2023)	108,204,000	0.17	105,314,000	0.17
Totals	346,348,000	0.59	320,314,000	0.70

Notes:
(a) System was approved for closure in 2019.
(b) Air Sparging/Soil Vapor Extraction (AS/SVE) system performance measured by pounds of volatile organic compounds (VOCs) removed. System was decommissioned in 2003.
(c) Values rounded to the nearest whole number.
(d) Ethylene dibromide (EDB) cumulative mass calculation began with the startup of EW-3E and EW-4E in January 2024.
(e) System was decommissioned in 2010.
(f) System was decommissioned in 2014.
(g) The North Street East System was restarted in July 2020 for treatment of the EDB plume. Pounds removed in 2020 includes EDB and VOCs.
(h) LIPA system approved for closure in December 2024.
NA – Not applicable

The locations and estimated extents of the primary VOC and radionuclide plumes, as of the fourth quarter of 2024, are summarized on **Figures E-1** and **E-2**, respectively. The locations and estimated extents of the Current Firehouse/Building 170 and Former Firehouse PFOS plumes are depicted on **Figures E-3** and **E-4,** respectively.

Additional information on the groundwater remediation program is summarized in **Table E-2** below.

INSTITUTIONAL CONTROLS

During 2024, institutional controls continued to be effective in protecting human health and the environment. In accordance with the *BNL Land Use Controls Management Plan, Rev 5* (BNL, 2022b) institutional controls continued to be implemented for the groundwater remediation program including:

- Groundwater monitoring, including BNL potable supply systems;
- Suffolk County Department of Health Services (SCDHS) and BNL conduct outpost groundwater monitoring near the Suffolk County Water Authority's (SCWA) William Floyd water supply well field that is located west of the BNL site;
- Implementing controls on the installation of new supply wells and recharge basins on BNL property;
- Continuing to offer private well testing (via SCDHS) for those homes in the previously defined hook-up area with private wells used for drinking water on properties that declined the Department of Energy's (DOE's) offer of public water hookups; and
- Maintaining property access agreements for BNL groundwater treatment systems located off the BNL property.

GROUNDWATER STATUS REPORT RECOMMENDATIONS AND HIGHLIGHTS

The data summarized in this report are the basis for optimizing operational and monitoring elements of the cleanup program. A summary of the highlights and significant changes follows below (specific details of which are provided in **Section 5**).

- **OU I South Boundary Treatment System/Former Hazardous Waste Management Facility Sr-90 Plume**
  - The leading edge of the Sr-90 plume originating from the former Hazardous Waste Management Facility (HWMF) continues to slowly migrate to the south. Sixteen temporary wells were installed to supplement monitoring of the high concentration segments of the plume. The slow migration rate of the plume is consistent with the 2020 groundwater model predictions.
- **OU III Building 96 Treatment System**
  - Per a recommendation in the 2021 CERCLA Five-Year Review Report (BNL, 2021b), during 2023, BNL completed plans to inject liquid carbon and zero-valent iron for *in-situ* treatment of the source area soils. The injections were completed in 2024 and initial results indicate they were successful at reducing the mobility of tetrachloroethylene in groundwater. Continued groundwater monitoring will confirm its enhanced degradation.

Extraction well RTW-1 is currently in a pulsed pumping mode and total volatile organic compound (TVOC) concentrations have remained below the 50 micrograms per liter (µg/L) system capture goal since 2015 in this extraction well. The TVOC concentrations in the source area monitoring well 085-379 continued to exceed the capture goal, with a maximum concentration of 89 µg/L recorded prior to the treatment injections. PCE is the main contributor to the TVOC concentration, detected at 88 µg/l in the aforementioned sample. Following the completion of the chemical treatment injections, PCE was non-detectable in well 085-379.

§ **OU III Middle Road/South Boundary Treatment Systems**

- Deep Upper Glacial aquifer VOC concentrations in this area of the site are not declining at a rate that will definitively meet the ROD cleanup goal of meeting MCLs by 2030. Per the recommendations in the 2021 CERCLA Five-Year Review Report (BNL, 2021b), BNL began performing groundwater modeling simulations to evaluate whether system modifications are appropriate to meet the ROD cleanup goal of achieving MCLs by 2030. The modeling recommended the addition of two new extraction wells for the Middle Road System and one for the South Boundary Treatment System.

§ **OU III Western South Boundary Treatment System**

- A significant reduction in deeper VOC contamination has been observed following the installation and operation of four new extraction wells in 2019. Current recommendations include maintaining the four newer extraction wells (WSB-3, WSB-4, WSB-5, and WSB-6) in pulsed pumping mode. WSB-1 and WSB-2 will remain in standby mode as TVOC concentrations in this well have remained below the system capture goal.
- Based upon the TVOC concentration trends in both the monitoring and extraction wells it is recommended that a petition for shutdown be prepared.

§ **Industrial Park Treatment System**

- Plume core well concentrations are below the 50 µg/L capture goal for this system. Based upon the fact that TVOC concentrations in the plume core wells remain below the capture goal it is recommended that a petition for closure of the Industrial Park Treatment System be prepared.

§ **OU III North Street East Ethylene Dibromide (EDB) Treatment System**

- The two extraction wells (NSE-EDB-EW-3 and NSE-EDB-EW-4) have been effective in reducing EDB concentrations since they became operational in 2020. It is recommended to prepare a petition for shutdown, as EDB concentrations remained below the DWS through 2024.

§ **LIPA/Airport Treatment System**

- A petition for closure of the LIPA system received regulatory approval in December 2024. A post closure monitoring program of six monitoring wells will be implemented in 2025.
- Maintain the LIPA program extraction wells EW-1L, EW-2L, EW-3L and EW-4L in an operationally ready state pending the completion of the OU X RI/FS.

§ **BGRR/WCF Sr-90 Treatment System**

- Continue operating well SR-1 in full-time mode. Maintain wells SR-3, SR-4, SR-5, SR-6, SR-7, SR-8, and SR-9 in standby mode. Well SR-3 will be operated as necessary when Sr-90 concentrations in monitoring well 075-701 show elevated levels of Sr-90.
- Reduce the source area monitoring frequency for BGRR source area wells 075-701 and 075-664 from monthly to quarterly. If an increase in Sr-90 concentrations, or a rise in groundwater elevation, is observed in these wells the monitoring frequency may be increased.
- In 2025, install supplemental temporary wells for the WCF area. Continue with this triennial characterization every third year (next in 2028).
- Shutdown well SR-2 due to continuously low concentrations of Sr-90. The extraction well will be restarted if concentrations of SR-90 increase significantly after shutdown.

§ **Operable Unit VI EDB Treatment System**

- Continue operation of the two new extraction wells (EW-3E and EW-4E).

§ **Operable Unit X Current Firehouse**

- During 2025, continue full-time system operations, with extraction wells CF-RW-C and CF-RW-F maintained in standby due to low PFAS concentrations. If PFAS concentrations increase in either well, they may be restarted.
- Reduce sampling frequency of the treatment system influent, midpoint, and effluent from two times per month to monthly, as defined in the SPDES Equivalency Permit.
- Reduce sampling frequency of the treatment system extraction wells from monthly to quarterly.
- Discontinue sampling 13 source area monitoring wells on a quarterly basis and maintain semiannual sampling of all 80 Current Firehouse/Building 170 monitoring wells. Samples from all wells will be analyzed for PFAS using EPA Method 1633, and samples from approximately 17 wells will also be analyzed for 1,4-dioxane using EPA Method 8270 SIM.
- Evaluate whether a new shallower extraction well is required at the location of CF-RW-F to effectively capture the high concentration segments of the Building 170 PFAS plume.
- Evaluate whether an additional shallower extraction well is required east of CF-RW-E to more effectively capture the high concentration segments of the Current Firehouse PFAS plume.

§ **Operable Unit X Former Firehouse**

- During 2025, continue full-time operation of the three extraction wells.
- Reduce the sampling frequency of the treatment system influent, midpoint, and effluent from two times per month to monthly, as defined in the SPDES Equivalency Permit.
- Reduce sampling frequency of the treatment system extraction wells from monthly to quarterly.

- Discontinue quarterly sampling of 10 source area monitoring wells and maintain semiannual sampling of all 42 Former Firehouse monitoring wells. Continue analyzing groundwater samples from 31 select OU III Middle Road, South Boundary, and Industrial Park wells for PFAS during the 4th quarter monitoring period. Samples will be analyzed for PFAS using EPA Method 1633, and a select number of samples will be analyzed for 1,4-dioxane using EPA Method 8270 SIM.

§ **Operable Unit X 2024 Characterization**

- Eighty permanent monitoring wells, eight temporary Geoprobe® wells, and 12 temporary vertical profile wells were used to monitor the Current Firehouse and Building 170 PFAS plumes. The four new wells that were installed south of West Princeton Avenue based upon the vertical profile well data will be incorporated into the monitoring program during 2025.
- Seventy-one on-site and off-site monitoring wells were used to monitor the Former Firehouse PFAS plume.
- Six permanent monitoring wells and three temporary vertical profile wells were used to monitor PFAS and 1,4-dioxane in the southwest portion of the BNL site that is within the source water contributing area for the SCWA William Floyd Well Field. Low levels of PFOS and PFOA were detected in several permanent and temporary wells, with maximum concentrations of 21 ng/L and 10 ng/L, respectively. Although 1,4-dioxane was not detected in any of the permanent monitoring wells, low levels (up to 0.3 µg/L) of 1,4-dioxane were detected in the three temporary vertical profile wells.

§ **g-2 Tritium Source Area**

- During 2024, tritium concentrations in g-2 source area monitoring wells were below the 20,000 pCi/L DWS, with a maximum concentration of 12,400 pCi/L.

§ **BLIP Facility**

- Tritium concentrations in the Brookhaven Linac Isotope Producer (BLIP) facility monitoring wells have been less than the 20,000 pCi/L DWS since 2006. During 2024, tritium was detected at a maximum concentration of 770 pCi/L.

§ **Building 650**

- Install several temporary wells downgradient of monitoring well 076-184 in an area south of Brookhaven Avenue.

FACILITY MONITORING

BNL's Facility Monitoring Program includes groundwater monitoring at eight active research facilities (e.g., accelerator facilities) and support facilities (e.g., fuel storage and waste management facilities). Monitoring conducted at the BLIP is used to verify the effectiveness of required CERCLA corrective actions. During 2024, groundwater samples were collected from 108 wells during 141 individual sampling events.

Highlights of the Facility Monitoring Program are as follows:

- Monitoring conducted at BNL's major accelerator facilities (e.g., Alternating Gradient Synchrotron (AGS), Relativistic Heavy Ion Collider (RHIC), National Synchrotron Light Source-II (NSLS-II), and BLIP) has not identified any new impacts to groundwater quality.
- Monitoring conducted at BNL's major support facilities (e.g., Waste Management Facility (WMF), Major Petroleum Facility (MPF), Sewage Treatment Plant (STP), and Motor Pool) has not identified any new impacts to groundwater quality.

Table E-2.
Groundwater Remediation Progress (Shading indicates closed systems)

Project	Target	Mode	Treatment Type	Expected System Shutdown	Highlights
OU I					
OU I South Boundary (RA V)	VOCs	Closed	Pump and Treat (P&T) with Air Stripping (AS)	2013 (Actual)	No rebound in VOC concentrations has been observed. Petition for Closure approved in Sept. 2019.
Current Landfill	VOCs tritium	Long Term Monitoring & Maintenance	Landfill capping	NA	VOCs and metals are detected at low levels immediately downgradient of the landfill.
Former Landfill	VOCs Sr-90 tritium	Long Term Monitoring & Maintenance	Landfill capping	NA	No longer a continuing source of contaminants to groundwater.
Former HWMF	Sr-90	Long Term Monitoring & Maintenance	Monitoring	NA	Continue to track higher Sr-90 concentrations migrating south from Former HWMF.
OU III					
Chemical/Animal Holes	Sr-90	Standby	P&T with ion exchange (IE)	2018 (Actual)	Petition for Shutdown approved, and system shut down in July 2018. Monitoring indicates no significant rebound of Sr-90 concentrations.
Carbon Tetrachloride former source area	VOCs (carbon tetra-chloride)	Decommis-sioned	P&T with carbon	2009 (Actual)	Treatment system was decommissioned in 2010.
Building 96	VOCs	Operational (RTW-2, RTW-3 and RTW-4 in standby)	Recirculation wells with AS for 3 of 4 wells. RTW-1 is P&T with AS.	2025	During 2024, BNL performed *in-situ* source area treatment using liquid carbon with zero valent iron.
Building 452	VOCs (Freon-11)	Closed	P&T with AS	2017 (Actual)	Petition for Closure approved in August 2019.
South Boundary	VOCs	Operational (EW-3, EW-4, EW-5, EW-6, EW-7, EW-8 and EW-12 on standby)	P&T with AS	2029 (Under Evaluation)	Extraction well EW-17 is capturing deep VOCs at site boundary and is the only operational extraction well. Deeper VOC concentrations continue to exhibit little change. Plume migration towards extraction wells is slower than anticipated which will impact the system shutdown timeframe. An evaluation of system modifications as recommended in the 2021 CERCLA 5-Year Review recommended the addition of one new extraction well.
Middle Road	VOCs	Operational (RW-1, RW-4, RW-5, and RW-6 on standby)	P&T with AS	2029 (Under Evaluation)	Monitoring persistent elevated deep VOCs south of Princeton Avenue. Plume migration towards the extraction wells is slower than anticipated which will impact the system shutdown timeframe. An evaluation of system modifications as recommended in the 2021 CERCLA 5-Year Review recommended the addition of two new extraction wells.

Project	Target	Mode	Treatment Type	Expected System Shutdown	Highlights
Western South Boundary	VOCs	Operational (WSB-2 on standby) Pulsed WSB- 1 through 6	P&T with AS	2025	VOC concentrations in the four new extraction wells have met system capture goals and have begun pulsed pumping. WSB-1 has met system capture goal and placed in standby mode. A petition for shutdown is recommended for this system.
Industrial Park	VOCs	Standby	In-well stripping and P&T with carbon	2019 (Actual)	All extraction wells have been in standby since July 2019 due to VOCs below capture goals.
Industrial Park East	VOCs	Decommissi-oned	P&T with carbon	2009 (Actual)	Treatment system was decommissioned in 2014.
North Street	VOCs	Closed	P&T with carbon	2013 (Actual)	A Petition for Closure was approved in March 2020.
North Street East	VOCs EDB	Closed (VOCs) Operational (EDB)	P&T with carbon	2014 (Actual for VOCs) 2025 (EDB)	VOC system closed in 2020. EDB plume extraction wells have achieved system capture goals and a petition for shutdown is recommended for this system.
Long Island Power Authority (LIPA)	VOCs	Standby	P&T with carbon	2017 LIPA (Actual)	A Petition for Closure was approved in December 2024. Six post closure wells will continue to monitor LIPA.
Airport	VOCs	RTW-2A, RTW-3A and RTW-5A on standby	P&T and recirculation wells with carbon	2028 Airport	Persistently elevated VOCs in upgradient monitoring wells along Crestwood Drive may impact Airport system shutdown.
HFBR Tritium	Tritium	Closed	Pump and recharge	2012 (Actual)	A Petition for Closure was approved in March 2019. Ten wells continue to monitor the HFBR.
BGRR/Waste Concentration Facility (WCF)	Sr-90	Operational (Standby: SR-3, SR-4, SR-5, SR-6, SR-7, SR-8 SR-9)	P&T with IE	2026	BGRR source area Sr-90 concentrations remained low in 2024.
OU IV					
OU IV AS/SVE system	VOCs	Decommission ed	Air sparging/ soil vapor extraction	2003 (Actual)	System decommissioned in 2003.
Building 650 Sump Outfall	Sr-90	Long Term Monitoring	Monitored Natural Attenuation (MNA)	NA	Sr-90 plume continues to attenuate as expected.
OU V					
STP	VOCs, tritium	Completed	MNA	NA	Monitoring completed in 2014.
OU X					
Current Firehouse	PFAS, 1,4 Dioxane	Operational (Wells CF-RW-C and H in standby)	P&T with carbon	2040 to be further evaluated during RI/FS	Plume shift to the east may require system modifications
Former Firehouse	PFAS, 1,4 Dioxane	Operational	P&T with carbon	2040 to be further evaluated during RI/FS	System operating as expected.

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1.0 INTRODUCTION AND OBJECTIVES

The mission of Brookhaven National Laboratory's (BNLs) Groundwater Protection Program is to protect and restore the aquifer system at BNL. The program is built on four key elements:

- Pollution prevention: Preventing the potential pollution of groundwater at the source.
- Restoration: Restoring groundwater that has been affected at the BNL site.
- Monitoring: Monitoring the effectiveness of pollution-prevention efforts, as well as progress in restoring the quality of affected groundwater.
- Communication: Communicating the findings and results of the program to regulators and stakeholders.

The *BNL 2024 Groundwater Status Report* is a comprehensive summary of groundwater data collected in the calendar year 2024 that provides an interpretation of information on the performance of the Groundwater Protection Program. This is the 29th annual groundwater status report issued by BNL. This document examines the performance of the program on a project-by-project basis.

How to Use This Document. This document is a detailed technical report that includes analytical laboratory data, as well as data interpretations conducted by BNL's Groundwater Protection Group. This document can also be obtained through BNL's website. Data are presented in four key subject areas:

- Improvements to the understanding of the hydrogeologic environment and surrounding areas.
- Progress in cleaning contaminated groundwater.
- Identification of any new impacts to groundwater quality due to BNL's active operations.
- Proposed changes to the groundwater protection program.

This document satisfies BNL's requirement to report groundwater data under the Interagency Agreement (IAG), the Department of Energy's (DOE) reporting requirements, and partially fulfills the commitment of the Groundwater Protection Program to communicate the program's findings and progress to regulators and stakeholders.

Section 1 discusses the regulatory requirements of the data collection work in 2024, the site's groundwater classification, and the objectives of groundwater monitoring. **Section 2** discusses the hydrogeologic environment at BNL and its surrounding area. It also summarizes the dynamics of the groundwater flow system during 2024. In **Section 3**, the groundwater cleanup data and progress towards achieving the site's cleanup goals are described. **Section 4** outlines the groundwater surveillance data used to verify that operational and engineered controls are preventing further contamination from BNL's active experimental and support facilities. **Section 5** is a summary of the proposed recommendations to the Groundwater Protection Program identified in **Sections 3** and **4**.

Appendices A and **B** include hydrogeologic data that support the discussions in **Section 2**. **Appendix C** contains the analytical results for each sample obtained under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program. **Appendix D** contains analytical results for each sample obtained under the Facility Monitoring program. Due to the volume of these data, the report appendices are provided via a SharePoint site, which significantly reduces the size of this report in printed format. **Appendix E** contains information on sample collection, analysis, and Quality Assurance/Quality Control (QA/QC). **Appendix F** consists of data supporting the remediation system discussions in **Section 3**. **Appendix G** is a compilation of data usability report forms. In addition to the appendices, this entire report is provided via SharePoint with active links to tables and figures. **Appendix H** contains the groundwater modeling report prepared during 2024.

1.1 GROUNDWATER MONITORING REPORT

1.1.1 Regulatory Requirements

Activities at BNL are driven by federal and state regulations as well as DOE orders.

CERCLA

On December 21, 1989, BNL was included on the National Priorities List (NPL) of contaminated sites identified for priority cleanup. DOE, the United States Environmental Protection Agency (EPA), and the New York State Department of Environmental Conservation (NYSDEC) created a comprehensive Federal Facilities Agreement (FFA) that integrated DOE's response obligations under CERCLA, the Resource Conservation and Recovery Act (RCRA), and New York State hazardous waste regulations. The FFA, also known as the IAG, was finalized and signed by these parties in May 1992, and included a requirement for groundwater monitoring (U.S. EPA, 1992).

New York State Regulations, Permits, and Licenses

The monitoring programs for the Current Landfill and Former Landfill are designed in accordance with post-closure Operation and Maintenance requirements specified in 6 New York Code of Rules and Regulations (NYCRR) Part 360, Solid Waste Management Facilities.

BNL's Major Petroleum Facility (MPF) is operated under NYSDEC Bulk Petroleum Storage License No. 01-1700. This license requires BNL to routinely monitor the groundwater. Together with approved engineering controls, the groundwater monitoring program verifies that storage operations for bulk fuel have not degraded the quality of the groundwater. The engineered controls and monitoring program for the MPF are described in the *BNL Spill Prevention, Control and Countermeasure Plan* (BNL, 2021d).

BNL's Waste Management Facility (WMF) is a hazardous waste storage facility operated under NYSDEC RCRA Part B Permit No. 1-4722-00032/00102-0. The permit requires groundwater monitoring as a secondary means of verifying the effectiveness of the facility's administrative and engineered controls.

BNL's State Pollution Discharge Elimination System (SPDES) permit (NY0005835) requires the collection of annual groundwater samples in the vicinity of the Sewage Treatment Plant's (STP) recharge basins.

DOE Orders

BNL conducts groundwater monitoring at active research and support facilities in accordance with the environmental surveillance requirements defined in DOE Order 458.1, Radiation Protection of the Public and the Environment and DOE Order 436.1A, Departmental Sustainability. Groundwater monitoring is conducted to: characterize pre-operational conditions; to detect, characterize, and respond to contaminant releases from site operations and activities; evaluate dispersion and attenuation patterns; and to characterize the potential pathways of exposure to members of the public.

1.1.2 Groundwater Quality and Classification

In Suffolk County, drinking water supplies are obtained exclusively from groundwater aquifers (e.g., the Upper Glacial aquifer, the Magothy aquifer, and, to a limited extent, the Lloyd aquifer). In 1978, EPA designated the Long Island aquifer system as a sole source aquifer pursuant to Section 1424(e) of the Safe Drinking Water Act (SDWA). Groundwater in the sole source aquifers underlying the BNL site is classified as "Class GA Fresh Groundwater" by the State of New York (6 NYCRR Parts 700–705); and considers the best usage of Class GA groundwater as a source of potable water. Accordingly, in establishing the goals for protecting and remediating groundwater, BNL follows federal Drinking Water Standards (DWS), New York State (NYS) DWS (also known as maximum contaminant levels [MCLs]), and NYS Ambient Water Quality Standards (AWQS) for Class GA groundwater.

For drinking water supplies, the applicable federal MCLs are set forth in 40 Code of Federal Regulations (CFR) 141 (for primary MCLs) and 40 CFR 143 (for secondary MCLs). In New York State, the SDWA requirements relating to the distribution and monitoring of public water supplies are promulgated under the NYS Sanitary Code (10 NYCRR Part 5), enforced by the Suffolk County Department of Health Services (SCDHS) as an agent for the New York State Department of Health (NYSDOH). These regulations apply to any water supply that has at least five service connections or that regularly serves at least 25 individuals. BNL supplies water to approximately 3,000 employees and visitors, and therefore must comply with these regulations. In addition, DOE Derived Concentration Guides (DCGs) are used for radionuclides not covered by existing federal or state regulations (DOE, 2021). On August 26, 2020, NYS formally adopted MCLs of 10 ng/L for perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) and 1.0 µg/L for 1,4-dioxane. Furthermore, in 2023, NYS released Final Ambient Water Quality Guidance Values (AWQGV) of 2.7 ng/L and 6.7 ng/L for PFOS and PFOA, respectively, and 0.35 µg/L for 1,4-dioxane. These Guidance Values were also incorporated into the effluent requirements for SPDES permitted facilities that discharge to groundwater.

BNL evaluates the potential impact of radiological and non-radiological levels of contamination by comparing analytical results to NYS and DOE reference levels. Non-radiological data from groundwater samples collected from surveillance wells usually are compared to NYS AWQS (6 NYCRR Part 703.5). Radiological data are compared to the DWS for tritium, strontium-90 (Sr-90), gross beta, gross alpha, radium-226, and radium-228; and the 40 CFR 141/DOE DCGs for determining the 4 millirems per year (mrem/yr) dose for other beta- or gamma-emitting radionuclides.

Tables 1-1, **1-2**, **1-3**, and **1-4** show the regulatory and DOE "standards, criteria, and guidance" used for comparisons to BNL's groundwater data.

1.1.3 Monitoring Objectives

Groundwater monitoring is driven by regulatory requirements, DOE orders, best management practice, and BNL's commitment to environmental stewardship. BNL monitors its groundwater resources for the following reasons:

Groundwater Resource Management

- To support initiatives in protecting, managing, and remediating groundwater by refining the conceptual hydrogeologic model of the site and maintaining a current assessment of the dynamic patterns of groundwater flow and water-table fluctuations.
- To determine the natural background concentrations for comparative purposes. The site's background wells provide information on the chemical composition of groundwater that has not been affected by BNL's activities. These data are a valuable reference for comparison with the groundwater quality data from affected areas. The network of wells also can warn of any contaminants originating from potential sources that may be located upgradient of the BNL site.
- To ensure that potable water supplies meet all regulatory requirements.

Groundwater Facility Monitoring

- Determine pre-operational/baseline groundwater quality at new facilities that have the potential to impact groundwater quality.
- To verify that administrative and engineered controls effectively prevent groundwater contamination.

- To demonstrate compliance with applicable DOE and regulatory requirements for protecting groundwater resources.

1.1.4 Groundwater - CERCLA Monitoring

Groundwater monitoring for the CERCLA program is conducted for the following:

- To track groundwater cleanup problems when designing, constructing, and operating treatment systems.
- To measure the performance of the groundwater remediation efforts in achieving cleanup goals.
- To protect public health and the environment during the cleanup period.
- To define the extent and degree of groundwater contamination.
- To provide early warning of the arrival of a leading edge of a plume, which could trigger contingency remedies to protect public health and the environment.

The details of the monitoring program are described in the *BNL 2024 Environmental Monitoring Plan* (BNL, 2024d). This plan includes a description of the source area, description of groundwater quality, criteria for selecting locations for groundwater monitoring, and the frequency of sampling and analysis. **Figure 1-1** highlights BNL's operable unit (OU) locations designated as part of the CERCLA program, and Areas of Concern (AOCs). Details on the sampling parameters, frequency, and analysis by well are listed in **Tables 1-5** and **1-6**. Screen zone, total depth, and ground surface elevations are summarized in **Table 1-7**. **Figure 1-2** shows the locations of wells monitored as part of the Laboratory's groundwater protection program. BNL's CERCLA groundwater monitoring has been streamlined into five general phases (**Table 1-8**):

Start-up Monitoring

A quarterly sampling frequency is implemented for a period of two years. This sampling frequency provides sufficient data while the system's operation is in its early stages.

Operations and Maintenance (O&M) Monitoring

This is a period of reduced monitoring during the time when the system is in a routine operational state. The time frame for each system varies. This phase is also utilized for several plume monitoring programs not requiring active remediation.

Shutdown Monitoring

This is a two-year period of monitoring implemented prior to petitioning for system shutdown. The increased sampling frequency provides the necessary data to support the shutdown petition.

Standby Monitoring

This is a period of reduced monitoring following system shutdown. The time frame for each system varies but is typically up to a five-year duration to identify any potential rebounding of contaminant concentrations. If no significant rebound is observed during this time, the petition for closure of the system is recommended.

Post Closure Monitoring

This is a monitoring period of varying length for approximately 20 percent of the key wells in a given project following system closure. Monitoring continues until the Record of Decision (ROD) goals are reached.

BNL uses a structured Data Quality Objective (DQO) process to continually review and refine the groundwater monitoring and remediation projects. The results of the DQO reviews are documented annually in updates to the *BNL Environmental Monitoring Plan.*

Modifications are implemented to specific wells to adjust sample frequencies or parameters in order to account for changing conditions or unexpected results. These modifications may temporarily alter the monitoring of a well from specifications associated with the general phase of monitoring stated for that well.

Table 1-8. CERCLA Groundwater Monitoring Program – Typical Well Sampling Frequencies

Project Activity Phase	Well Type	Phase Duration (yrs)	Sampling Freq. (events/yr)[4]
Start-up Monitoring	Plume Core	2	4x
	Plume Perimeter	2	4x
	Sentinel/Bypass	2	4x
O&M Monitoring	Plume Core	End Start-up to Shutdown[1]	2x
	Plume Perimeter	End Start-up to Shutdown[1]	2x
	Sentinel/Bypass	End Start-up to Shutdown[1]	4x
Shutdown Monitoring	Plume Core	2	4x
	Plume Perimeter	2	4x
	Sentinel/Bypass	2	4x
Standby Monitoring	Key Plume Core	5	2x
	Plume Perimeter	5	1x
	Sentinel/Bypass	5	2x
Post Closure Monitoring[3]	20% of key wells	Up To 2030[2]	1x

Notes:
1- Varies by project, see Table 1-5.
2 - Magothy: 2065, BGRR Sr-90: 2070, South Boundary Rad: 2038, Chem Holes Sr-90: 2040
3 - Verification monitoring for achieving MCLs.
4- Sr-90 monitoring projects use approximately half the defined sampling frequency.

The groundwater monitoring well network for each program is organized into background, core, perimeter, bypass, and sentinel wells. The wells are designated as follows:

- Background –water quality results will be used to determine upgradient water quality
- Plume Core – utilized to monitor the high concentration or core area of the plume
- Perimeter – used to define the outer edge of the plume both horizontally and vertically
- Bypass – used to determine whether plume capture performance is being met
- Sentinel – an early warning well to detect the leading edge of a plume

1.2 PRIVATE WELL SAMPLING

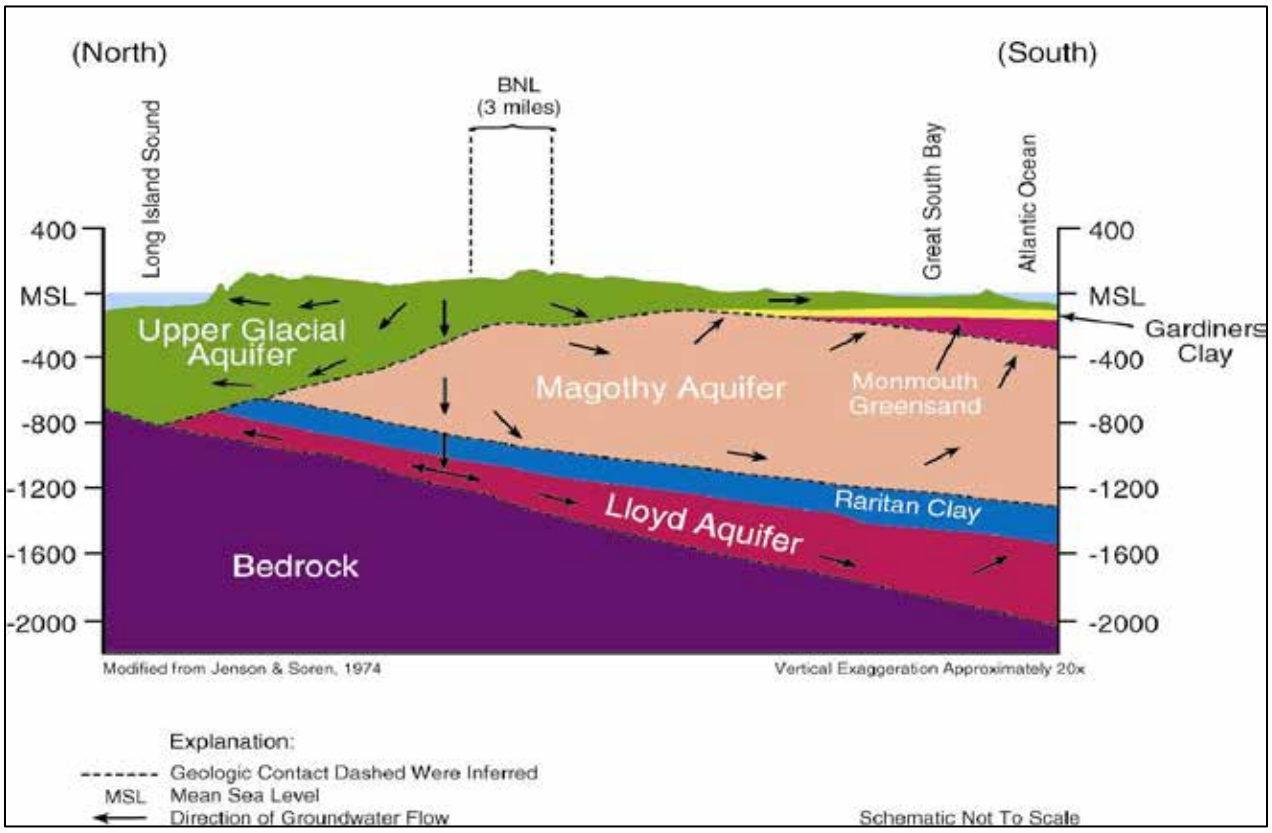
In accordance with the OU III and OU VI RODs, DOE formally offers the property owners that previously declined DOE's offer of public water hookups, free testing of their private drinking water wells on an annual basis. SCDHS coordinates and performs the sampling and analysis. During 2024, there were four residences within the defined hook-up area south and east of BNL who continue to use their private wells for drinking water purposes. In December 2024, all four homeowners had their potable supply wells sampled. In addition, one homeowner also had an agricultural well tested. In addition to the routine analyses typically performed, the wells were also analyzed for six per- and polyfluoroalkyl substances (PFAS) compounds and 1,4-dioxane.

2.0 HYDROGEOLOGY

This section briefly describes the hydrogeologic environment at BNL and the surrounding area. It also summarizes the dynamics of the groundwater flow system in 2024, along with on-site pumping rates and rainfall recharge.

Detailed descriptions of the aquifer system underlying BNL and the surrounding areas are found in the U.S. Geological Survey (USGS) report by Scorca and others (1999), *Stratigraphy and Hydrologic Conditions at the Brookhaven National Laboratory and Vicinity, Suffolk County, New York, 1994–97*, and the USGS report by Wallace deLaguna (1963), *Geology of Brookhaven National Laboratory and Vicinity, Suffolk County, New York.* The stratigraphy below BNL consists of approximately 1,300 feet of unconsolidated deposits overlying bedrock (**Figure 2-1**). The current groundwater monitoring program focuses on groundwater quality within the Upper Pleistocene deposits (Upper Glacial aquifer), and the upper portions of the Matawan Group-Magothy Formation (Magothy aquifer).

Figure 2-1.
Generalized Geologic Cross Section in the Vicinity of Brookhaven National Laboratory



Note: Units are in feet relative to mean sea level (ft msl)

The Pleistocene deposits are about 100–200 feet thick and are divided into two primary hydrogeologic units: undifferentiated sand and gravel outwash and moraine deposits, and the finer-grained, more poorly sorted Upton Unit. The Upton Unit makes up the lower portion of the Upper Glacial aquifer beneath several areas of the site. It generally consists of fine- to medium-grained white to greenish sand with interstitial clay. In addition to these two major hydrogeologic units, there are several other distinct hydrogeologic units within the Upper Glacial aquifer. They include localized, near-surface clay layers in the vicinity of the Peconic River (including the STP area), and reworked Magothy deposits that characterize the base of the aquifer in several areas. The Gardiners Clay is a regionally defined geologic unit that is discontinuous

beneath BNL and areas to the south. Typically, it is characterized by variable amounts of green silty clay, sandy and gravelly green clay, and clayey silt. Where it exists, the Gardiners Clay acts as a confining or semi-confining unit that impedes the vertical flow and migration of groundwater between the Upper Glacial aquifer and the underlying Magothy aquifer.

The Magothy aquifer is composed of Cretaceous aged continental deltaic deposits. The Magothy aquifer at BNL is approximately 800 feet thick, and because it is composed of fine sand interbedded with silt and clay, it is generally less permeable than the Upper Glacial aquifer. The Magothy aquifer is highly stratified. Of particular importance at BNL is that the upper portion of the Magothy contains extensive, locally continuous, layers of grey-brown clay (referred to herein as the Magothy Brown Clay). Regionally, the Magothy Brown Clay is not interpreted as being continuous; however, beneath BNL and adjacent off-site areas, it acts as a confining unit (where it exists), impeding the vertical flow and movement of groundwater between the Upper Glacial and Magothy aquifers.

Regional patterns of groundwater flow near BNL are influenced by natural and artificial factors. **Figure 2-2** shows the locations of pumping wells and recharge basins. Under natural conditions, recharge to the regional aquifer system is derived solely from precipitation. A regional groundwater divide exists immediately north of BNL near Route 25. It is oriented roughly east–west and appears to coincide with the centerline of a regional recharge area. Groundwater north of this divide flows northward, ultimately discharging to the Long Island Sound (**Figure 2-1**). Shallow groundwater in the BNL area generally flows to the south and east. During high water-table conditions, groundwater can discharge into local surface water bodies such as the Peconic River and adjacent ponds. The BNL site is within a regional deep-flow recharge area, where downward flow helps to replenish the deep sections of the Upper Glacial aquifer, the Magothy aquifer, and the Lloyd aquifer. South of BNL, groundwater flow becomes more horizontal and ultimately flows upward as it moves toward regional discharge areas such as the Carmans River and Great South Bay. Superimposed on the natural regional field of groundwater flow are the artificial influences due to pumping and recharge operations.

2.1 HYDROGEOLOGIC DATA

Various hydrogeologic data collection and summary activities were undertaken as part of the 2024 Groundwater Protection Program to evaluate groundwater flow patterns and conditions. This work is described in the following sections and includes the results of groundwater elevation monitoring, information on pumping and recharging activities on-site and off-site, and precipitation data.

2.1.1 Groundwater Elevation Monitoring

Synoptic groundwater levels are obtained from a network of on-site and off-site monitoring wells screened within the shallow section of the Upper Glacial aquifer. These data are used to characterize the groundwater flow-field (direction and rate) and to evaluate seasonal and artificial variations in flow patterns.

The synoptic water-level measurement event for this report was conducted during August 12-20, 2024, using 226 on-site and off-site wells. Water levels were measured with electronic water-level indicators following the BNL *Environmental Monitoring Standard Operating Procedure* EM-SOP-300. **Appendix A** provides the depth-to-water measurements and the calculated groundwater elevations for these measurements. Monitoring results for long-term and short-term hydrographs for select wells are discussed in **Section 2.2**.

2.1.2 Pumpage of On-Site Water Supply and Remediation Wells

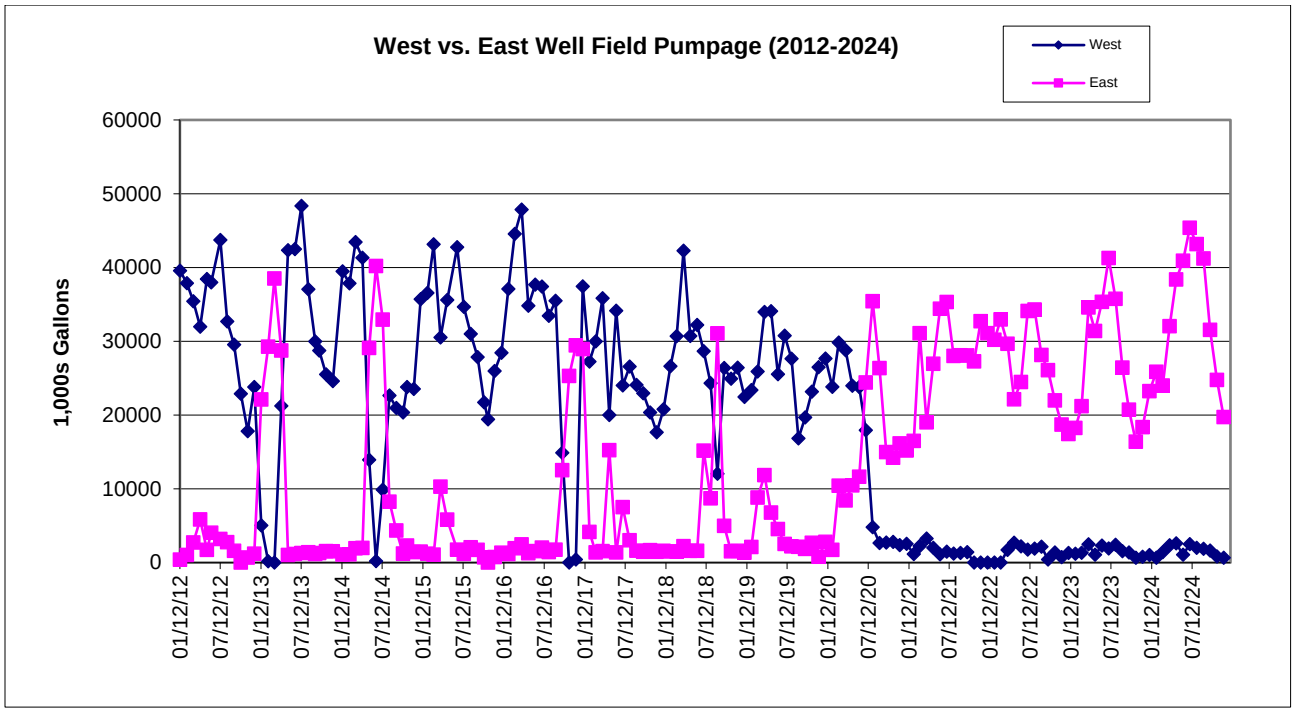
BNL has six water supply wells to provide potable and process cooling water, and 85 treatment wells used for the remediation of contaminated groundwater. All six water supply wells are screened entirely within

the Upper Glacial aquifer. Thirty-one of the 85 treatment wells were in operation at some period in 2024 either in full-time operation or in pulsed pumping mode (**See Table 3.0-1**). The location and operational status of the treatment wells (full time operation, pulsed pumping, standby/off) and treatment systems (operating, shutdown, decommissioned) are shown on **Figure 3.0-1**. **Figure 2-2** shows the locations of the water supply and remediation wells. The effects that the groundwater withdrawals have on the aquifer system are discussed in **Section 2.2**.

Table 2-1 provides the monthly and total water usage for 2024 for potable supply wells BNL-7, BNL-10, BNL-11 and BNL-12. It includes information on each well's screened interval and pumping capacity. The variation in monthly pumpage reflects changes in water demand, and maintenance schedules for the water supply system. The western potable well field includes wells BNL-4, BNL-6, and BNL-7, of which only BNL-7 is currently operational. The eastern field includes wells BNL-10, BNL-11 and BNL-12. Although eastern supply well BNL-12 had been out of service since October 2008, this well was placed back into operation in April 2022. For the past 11 years, supply well BNL-4 has been taken out of service due to low yield resulting from age and iron fouling of the screen. Its future use will be further restricted due to its proximity to BNL's Current Firehouse, which has been identified as a significant source of PFAS contamination. In June 2018, the use of supply well BNL-6 was also suspended due to the detection of PFAS chemicals PFOS and PFOA, with PFOS concentrations exceeding the NYS DWS of 10 ng/L that was established in August 2020.

Figure 2-3 below summarizes monthly pumpage for the eastern and western well fields.

Figure 2-3: Summary of Monthly Supply Well Pumpage from the BNL Eastern and Western Well Fields – 2012 through 2024



Since 1999, the implementation of effective water conservation measures has resulted in a significant reduction in the amount of water pumped from the aquifer. During 2024, a total of approximately 409 million gallons of water were withdrawn from the aquifer by BNL's potable supply wells. **Table 2-2** summarizes the 2024 monthly water pumpage for the groundwater remediation systems. Additional details on groundwater remediation system pumping are provided in **Section 3** of this report.

2.1.3 Off-Site Water Supply Wells

Several SCWA well fields are in the vicinity of BNL. The William Floyd Parkway Well Field is west/southwest of BNL (see **Figure 2-2**) and consists of three water supply wells that withdraw groundwater from the mid to deep Upper Glacial aquifer. The Country Club Drive Well Field is south/southeast of BNL and consists of three water supply wells that withdraw groundwater from the mid-section of the Upper Glacial aquifer. Pumpage information for 1989 through 2024 is provided as **Figure 2-4**. In 2024, the William Floyd Parkway and Country Club Drive Well Fields produced 679 and 476 million gallons for the year, respectively. The Lambert Avenue Well Field, located south of BNL, produced 437 million gallons for the year.

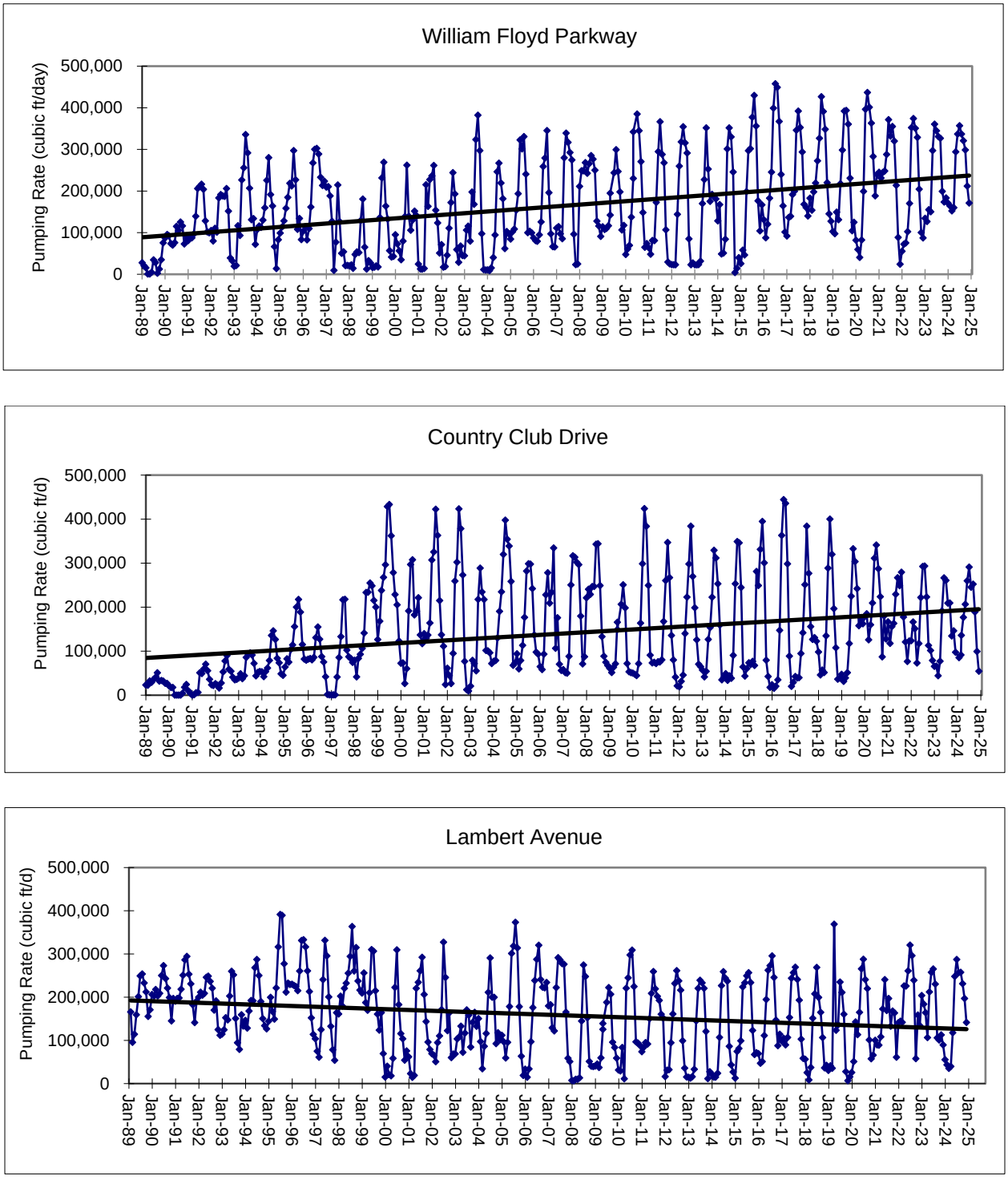
2.1.4 Summary of On-Site Recharge and Precipitation Data

This section summarizes artificial (e.g., on-site recharge basins) and natural recharge from precipitation. **Table 2-3** summarizes the monthly, and total, flow of water through 11 on-site recharge basins during 2024. Their locations are shown on **Figure 2-2**. **Section 2.2** (Groundwater Flow) provides a discussion on the effects associated with recharge. Seven of the basins (HN, HO, HS, HT-W, HT-E, HX, and HZ) receive stormwater runoff and cooling water discharges. Flow into these basins is monitored monthly per NYSDEC SPDES permit requirements. Details on the SPDES program are provided in Volume I of the annual *Site Environmental Report (Chapter 5, Water Quality)*.

The remaining three basins, Removal Action (RA) V, OU III, and the HP basins, recharge water that is processed through several of the groundwater remediation systems. As discussed below, recharge basin WSB did not receive flow during 2024. **Figure 2-5** provides a comparison of monthly flow rates for basins HO, RA V, OU III, HP, and HS over the period of 1999 through 2024. Until September 2001, treated groundwater from the OU III South Boundary Pump and Treat System was discharged solely to the OU III basin along Princeton Avenue. After September 2001, treated groundwater from that system and the OU III Middle Road system was discharged to the OU III and RA V basins. Until 2013, water from the OU I South Boundary and the High Flux Beam Reactor (HFBR) system was discharged to the RA V basin. The HFBR and OU I Treatment Systems met their cleanup objectives, and their extraction wells were shut down in May and July 2013, respectively. Because reductions in water discharges to the RA V basin could have resulted in significant changes in local groundwater flow patterns, groundwater modeling was used to determine how to effectively divide the remaining treated water discharges toward the OU III and RA V basins to maintain stable groundwater flow directions. Monitoring of groundwater flow patterns demonstrated that this effort was successful for several years. However, with additional reductions in water discharged from the OU III Treatment System, the groundwater flow direction in the former Building 650 area has shifted more to the southeast (**Figure 2-2**). Starting in March 2019, the treatment of the OU III Western South Boundary changed to process water through the OU III Middle Road/South Boundary air stripping towers and is now discharged to the OU III and RA V recharge basins. With the startup of the new Current Firehouse/Building 170 PFAS Groundwater Treatment System in late October 2022, treated water from the system is being discharged to the HP basins. Furthermore, with the startup of the Former Firehouse PFAS Groundwater Treatment System in late January 2023, treated water is being discharged to the RA V basin. The impact of these changes in treated water discharge to groundwater flow is noted in the comparison of the water table maps from 2022 to 2024 (**Figure 2-2 and Figure 2-5**). **Table 2-3** provides estimates of flow to the recharge basins. Other important sources of artificial recharge, not included in **Table 2-3**, include a stormwater retention basin referred to as HW (on Weaver Drive), and recharge basins at the STP. Until October 2014, treated water from the STP was first processed through sand filter beds before being discharged to the Peconic River. Approximately 20 percent of the water infiltrated into the aquifer below the filter beds, which contributed to localized mounding of the water table caused by shallow clay and silt deposits. Starting in October 2014, the STP discharge was re-directed to newly constructed groundwater recharge basins located along the eastern portion of the plant. Because the recharge basins are in an area containing highly permeable soils, these discharges are not causing significant mounding of the

water table. A groundwater mound is still present in the former filter beds due to persistent perched water table conditions resulting from near surface clay and silt deposits.

Figure 2-4. Suffolk County Water Authority Water Supply Well Pumping Near BNL



Precipitation provides the primary recharge of water to the aquifer system at BNL. Under long-term conditions in undeveloped areas of Long Island, about 50 percent of precipitation is lost through evapotranspiration and direct runoff to streams; the other 50 percent infiltrates the soil and recharges the

groundwater system (Aronson & Seaburn, 1974); (Franke & McClymonds, 1972). For 2024, it is estimated that the recharge at BNL was approximately 28 inches. **Table 2-4** summarizes monthly and annual precipitation results from 1949 to 2024 collected on site by BNL Meteorology Services. Variations in the water table generally can be correlated with seasonal precipitation patterns. As shown in **Table 2-4**, total annual precipitation in 2024 was 56.08 inches, which was above the long-term yearly average of 49.05 inches.

2.2 GROUNDWATER FLOW

BNL routinely monitors horizontal and vertical groundwater flow directions and rates within the Upper Glacial aquifer by using water-level data collected from a large network of on-site and off-site monitoring wells. Short-term and long-term seasonal fluctuations of water levels are also evaluated using hydrographs for select wells, and trends in precipitation.

2.2.1 Water-Table Contour Map

Figure 2-2 is a groundwater elevation contour map representing the configuration of the water table for August 12-20, 2024. The contours were generated from the water-level data from shallow Upper Glacial aquifer wells. Localized hydrogeologic influences on groundwater flow were considered, including on-site and off-site pumping wells, and on-site recharge basins (**Section 2.1**).

Groundwater flow in the Upper Glacial aquifer is generally characterized by a southeasterly component of flow in the northern portion of the site, with a gradual transition to a more southerly direction at the southern boundary and beyond. Flow directions in the eastern portion of BNL are predominately to the east and southeast. The general groundwater flow pattern for August 2024 was generally consistent with historical flow patterns.

In addition to pumping induced cones of depression near groundwater supply and remediation wells, influences from water recharge activities can be observed as localized mounding of the water table, particularly around the OU III and RA V recharge basins (in the center of the site), and the STP. The degree of mounding is generally consistent with the monthly flows to recharge basins summarized in **Section 2.1**. Groundwater mounding is also evident at the STP as a result of perched water table conditions resulting from near surface clay and silt deposits.

Other noteworthy features are the influence that surface water bodies have on groundwater flow directions. **Figure 2-2** shows groundwater flowing towards the Carmans River in areas south/southwest of BNL. This pattern is consistent with the fact that the Carmans River is a significant regional discharge boundary.

2.2.2 Well Hydrographs

Groundwater hydrographs are useful in estimating recharge rates and the location of the water table relative to contaminant sources. Long-term (1950–2024) well hydrographs were constructed from water-level data that were obtained for select USGS and BNL wells. These hydrographs track fluctuations in the water level over time. Precipitation data also were compared to natural fluctuations in water levels. **Appendix B** contains the hydrographs, as well as a map that shows the locations of these wells.

Generally, the highest groundwater elevations can be observed during the March-May time frame in response to snow melt and spring rains. Normally, the position of the water table drops through the summer and into the fall. The long-term hydrographs indicate that typical seasonal water-table elevation fluctuations are on the order of four to five feet. During the spring of 2024, the water levels in wells 065-14 (NYSDEC # S-6431) and 093-03 (NYSDEC # S-5517) were observed to increase by approximately four and a half feet, before dropping by several feet as precipitation values declined later in the year. Some of the large-scale water-table elevation changes have occurred during prolonged periods of low precipitation. For

example, as shown in the hydrograph for well 093-03 a fluctuation of nearly 14 feet was observed during the regional drought of the early 1960s. As shown on the hydrograph for well 065-14, water levels at BNL reached the highest level on record during 2010. Since then, a nearly 10-foot variation in water table elevations has been observed.

A long-term hydrograph was constructed from historical water-level data from BNL well 093-03 (NYSDEC # S-5517.1; USGS Site Number 405149072532201). This well, installed by the USGS in the late 1940s, is screened in the Upper Glacial aquifer close to the water table. The USGS has collected monthly water-level information from this well from 1948 through 2005. In 2006, the USGS installed a real time continuous water-level recorder in the well. Data from this monitoring station can be accessed on the web at:

https://waterdata.usgs.gov/monitoring-location/405149072532201/#parameterCode=72019&period=periodOfRecord.

2.2.3 Groundwater Gradients and Flow Rates

Evaluation of the horizontal hydraulic gradients provides information on the driving force behind groundwater flow. These gradients can be used with estimates of aquifer parameters such as hydraulic conductivity (175 feet per day [ft/day]) and effective porosity (0.24) to assess the velocities of groundwater flow. The horizontal hydraulic gradient at the BNL site is typically 0.001 feet per foot (ft/ft), but in recharge and pumping areas it can steepen to 0.0024 ft/ft or greater. The natural groundwater flow velocity in most of the Upper Glacial aquifer is estimated to be approximately 0.75 ft/day, but velocities can be lower in some portions of the deep Upper Glacial aquifer where finer-grained sands are present. Flow velocities in recharge areas can be as high as 1.45 ft/day, and those in areas near BNL supply wells can be as high as 28 ft/day (Scorca, Dorsch, & Paquette, 1999).

2.3 NEW GEOLOGIC DATA

During March of 2024 the United States Geological Survey (USGS) conducted borehole logging using Nuclear Magnetic Resonance (NMR) tooling in several monitoring wells within the OU III Middle Road area. These data were collected in an effort to provide data-based estimations of aquifer and confining unit hydraulic properties for better determination of hydraulic conductivity within the Upper Glacial aquifer. These data were then used to help update the geologic framework in the groundwater model. This information was used to help produce the OU III Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**). The data obtained by the USGS NMR logging correlated well with the existing geologic data.

From July 2024 through January 2025, 15 vertical profile (VP) wells and four permanent monitoring wells were installed south of Princeton Avenue to delineate PFAS and 1,4-dioxane emanating from the Current Firehouse and Building 170 source area (**Section 3.5.1**). During the installation of each VP, a gamma log was collected which provides information about the lithology of the unconsolidated sediments within the geologic framework. These gamma logs were used to verify the geology found in cross-sections (R-R') and (S-S') found in **Section 3.5.1**. Split-spoon geologic samples were collected at one of the fifteen VP wells at location OU10-VP-020.

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3.0 CERCLA GROUNDWATER MONITORING AND REMEDIATION

Section 3.0 provides an overview of groundwater monitoring and remediation efforts at BNL during 2024. The section is organized first by OU, and then by the specific groundwater remediation system and/or plume monitoring program. **Figure 1-2** shows the locations of monitoring wells throughout the site by project. Project specific monitoring well location maps are included throughout **Section 3.0**.

Report and Data

Appendices C and D contain the 2024 analytical results for each monitoring well sample. Due to the large volume of data, these appendices are provided electronically via SharePoint; significantly reducing the size of the hardcopy of this report. The SharePoint directory has a table of contents with active links, such that, by selecting the specific project and analytical suite, the user will be directed to the associated table of results. The groundwater results are arranged by specific monitoring project and then by analytical group (e.g., VOCs, semi-volatile organic compounds [SVOCs], PFAS, 1,4-dioxane, metals, chemistry, pesticides/polychlorinated biphenyls [PCBs], and radionuclides). The data are further organized by well identification (ID), the depth the sample was collected from, and the collection date of the sample. Chemical results and analytical laboratory qualifiers, if any, are identified. For radionuclides, results, detection limits/minimum detectable concentration, and uncertainty/error are reported; along with a data verification, validation, and/or usability qualifier (if assigned), and/or a laboratory data qualifier. If a data verification/validation/usability qualifier was not assigned by BNL, the laboratory data qualifier, if any, is presented. The complete analytical results are included to allow the reader the opportunity for detailed analysis.

Plume Maps

Maps and profiles are provided that depict the areal extent, vertical extent, and magnitude of the contaminant plumes. In most cases, the VOC plumes were simplified by using the total VOC (TVOC) values for drawing the contours, except for those plumes that consist almost exclusively of one chemical, such as the OU III North Street East EDB plume, the OU VI EDB plume, and the OU X PFOS, PFOA and 1,4-dioxane plumes. TVOC concentrations are a summation of the individual concentrations of detected VOCs analyzed by EPA Method 8260 Low Level. In June 2021, BNL switched from using EPA Method 524.2 to EPA Method 8260 Low Level for analyses of VOCs in groundwater. The change was a result of BNL's contractor analytical laboratories now using EPA Method 8260 Low Level for groundwater samples and EPA Method 524.2 for drinking water samples. In addition, EPA Method 8260 Low Level can meet the low detection limits identified in Method 524.2. During 2024, groundwater samples were analyzed using EPA Method 1633 for PFAS, and EPA Method 8270 Select Ion Monitoring (SIM) for 1,4-dioxane. In December of 2024, BNL began using EPA Method 8011 instead of EPA Method 504.1 for EDB due to BNL's contractor laboratories logistical needs.

The extent of plumes containing VOC contamination was contoured to represent concentrations that were greater than the typical NYS AWQS of 5 micrograms per liter (µg/L) for most compounds. The PFAS plumes are currently contoured to the PFOS MCL of 10 nanogram per liter (ng/L). Radionuclide and EDB plumes were contoured to their appropriate DWS. **Figure 3.0-1** shows the VOC and radionuclide plumes as well as the location and operational status of the groundwater extraction wells and treatment systems. Beginning with the *2022 Groundwater Status Report* (BNL, 2023c), the new groundwater treatment system that addresses the PFAS plumes downgradient of the Current Firehouse, Building 170, and the Former Firehouse was added to **Figure 3.0-1**. The Former Firehouse PFAS treatment system began operation in January 2023.

Starting with the *2021 Groundwater Status Report* (BNL, 2022b), individual posting of the data on the plume figures is represented to the nearest tenth for TVOCs, Sr-90, PFOS, PFOA and 1,4-dioxane. Data for EDB is posted to the nearest hundredth. This helps improve clarity of the figures by reducing

unnecessary detail. The **Appendix C and Appendix D** data tables will continue to report all monitoring well data to the hundredth, as applicable.

Following the capping of the landfill areas and the beginning of active groundwater remediation systems in 1997, there have been significant changes in the size and concentrations of several of the plumes. These changes can be attributed to the following:

- The beneficial effects of active remediation systems
- Source control and removal actions
- The impacts of BNL pumping and recharge on the groundwater flow system
- Radioactive decay, biological degradation, and monitored natural attenuation

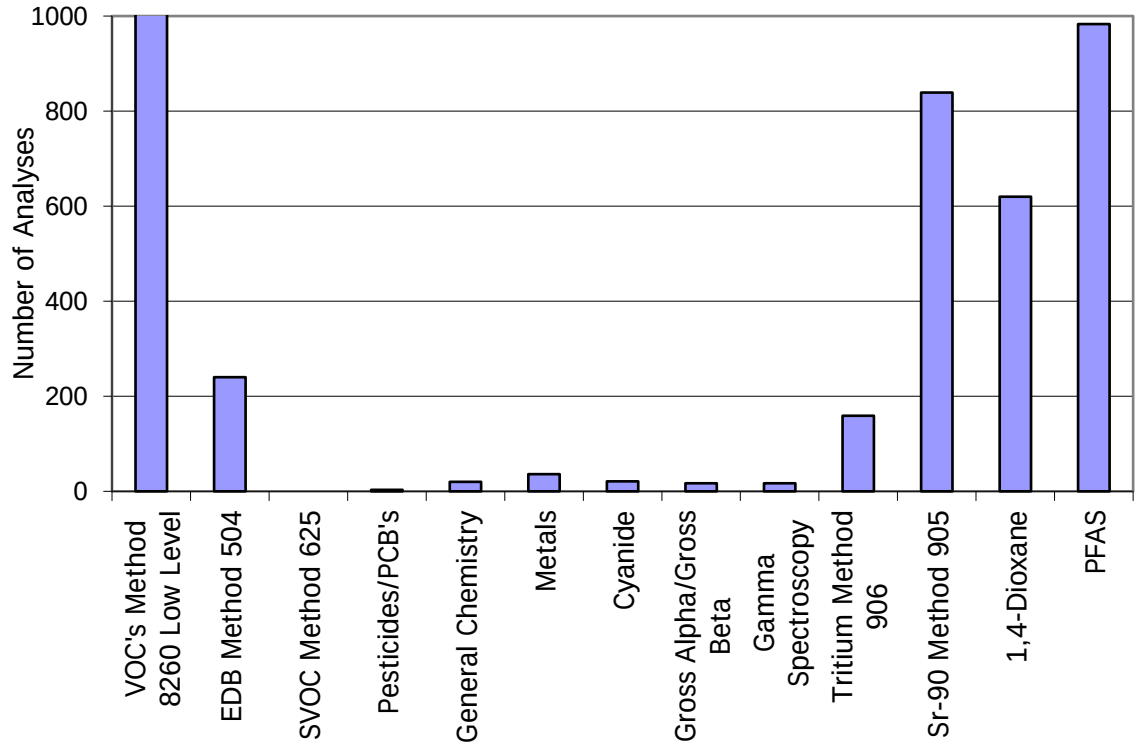
Additionally, BNL's ability to accurately depict these plumes has been enhanced over the years by:

- Installation of additional permanent monitoring wells to the existing well networks
- Installation of temporary (e.g., drilled vertical profile wells and direct push Geoprobe® wells), single use wells that helped to fill in geologic and chemical data gaps as well as characterization of new plumes
- Efforts to improve the regional hydrogeologic framework and conducting periodic groundwater modeling to help predict possible changes in plume positions and concentrations over time

During 2024, 1,327 groundwater sampling events (a groundwater sampling event is defined as the sampling of a well on a defined date for a prescribed set of parameters) from 657 on-site and off-site permanent monitoring wells were used to track the contaminant plumes. From June 2024, through March 2025, 41 temporary profile wells were installed, and 808 samples were collected. **Figure 3.0-2** below provides a summary of the number of analyses performed for the permanent monitoring wells arranged by analytical method. Unless otherwise noted, the extent of contamination for a given plume is based primarily on 2024 data from permanent monitoring wells. Contaminant plumes associated with the OU I Former Hazardous Waste Management Facility Sr-90 and Building 170/Current Firehouse PFAS plumes, were further defined in 2024 using temporary wells.

For the production of plume maps for this report, in general, a single representative round of monitoring data is chosen for each plume, typically from the last quarter of the year. This sampling period will normally include the most comprehensive sampling of monitoring wells for the year. In addition, this report also serves as the fourth quarter operations report for the remediation systems. Contaminant concentration trend plots for key monitoring wells and analytes in each plume are provided to identify significant changes. Data from monitoring wells sampled under BNL's Facility Monitoring Program are evaluated in **Section 4.0**.

Figure 3.0-2. Summary of Laboratory Analyses Performed for the CERCLA Permanent Monitoring Well Program During 2024



History and Status of Groundwater Remediation at BNL

Initial efforts to remediate groundwater contamination at BNL started in the mid-1980s with a treatment system designed to address VOC contamination at the former Hazardous Waste Management Facility (HWMF). Groundwater remediation systems installed as part of BNL's CERCLA program have been in operation since 1997, beginning with the OU I South Boundary Pump and Treat System. The goal of groundwater remediation, as defined by the OU III ROD, is to prevent or minimize plume growth and not to exceed MCLs in the Upper Glacial aquifer within 30 years or less (by 2030). Based on additional information obtained during the Strontium-90 Pilot Study, the *OU III Explanation of Significant Differences (ESD)* (BNL, 2005a) identified changes to the cleanup goal time frames for the Sr-90 plumes. For the Brookhaven Graphite Research Reactor/Waste Concentration Facility (BGRR/WCF) and Chemical Holes Sr-90 plumes, MCLs must be reached by 2070 and by 2040, respectively. In addition, the *OU III ESD* established the cleanup goal for Magothy aquifer VOC contamination to not exceed MCLs within 65 years or less (by 2065).

As of December 2024, there are ten groundwater remediation systems in operation. To date, three systems have met their cleanup goals and have been decommissioned: the OU IV AOC 5 Air Sparge/Soil Vapor Extraction System (OU IV AS/SVE); the Carbon Tetrachloride Pump and Treat System; and, the Industrial Park East Treatment System. Since 2019, five additional systems have been approved for closure by the regulatory agencies: the HFBR Tritium Pump and Recharge System; the Building 452 Freon-11 Treatment System; the OU I South Boundary Treatment System; the North Street Treatment System; and most recently the OU III LIPA Treatment System. Although the original North Street East (NSE) Treatment System was approved for an administrative closure in March 2020, the carbon filtration units were repurposed for the treatment of the NSE EDB plume starting in September 2020. In 2019, the air stripper piping for the Building 452 Freon-11 System was reconfigured to treat water from Building 96 extraction well RTW-1. As mentioned, two new groundwater treatment systems were constructed in 2022 for the treatment of PFAS. Starting in October 2022, the Current Firehouse Treatment System is treating PFAS contaminated

groundwater originating from the Current Firehouse and Building 170 source areas. The Former Firehouse Treatment System is treating PFAS contaminated groundwater originating from the former firehouse area and began operation in January 2023. The HFBR carbon filtration units have been repurposed for treatment of the Former Firehouse PFAS plume. The OU I, OU III North Street, and OU III LIPA systems will be maintained until characterization of PFAS and 1,4-dioxane is complete.

Figure 3.0-1 shows the locations of the existing and decommissioned treatment systems. In addition to the groundwater treatment systems, two landfill areas (Current and Former) were capped, and numerous soil source area removals were conducted, which minimizes the potential for further groundwater contamination.

BNL performs routine maintenance checks on the treatment systems in addition to their routine and non-routine maintenance. In 2024, 1,340 treatment system samples were obtained from 98 sampling points. The data from the treatment system samples are available in **Appendix F**.

In general, BNL currently uses two types of pump and treat groundwater remediation systems to treat VOC contamination: air stripping and granular activated carbon (GAC) filters. Pump and treat remediation activities consist of pumping contaminated groundwater from the plume via extraction wells and piping it to a treatment system, where the contaminants are removed by either air stripping or GAC filtration. Treated water is then introduced back into the aquifer via recharge basins, injection wells, or dry wells. Historically, in several on-site and off-site areas, BNL has utilized recirculation wells to remediate VOCs. When in use, these types of wells pump VOC contaminated groundwater from a lower well screen, treat contaminated groundwater by air stripping or GAC, and then reinject into the aquifer using a shallower well screen on the same well. BNL utilizes ion-exchange treatment for remediating Sr-90 contaminated groundwater. Pump and recharge (without treatment for tritium) was utilized to hydraulically contain the HFBR tritium plume. Beginning in 2022, treatment of PFAS was initiated also using GAC.

Table 3.0-1 summarizes the existing remediation systems. In addition to tracking contaminant levels in monitoring wells, extraction wells, and treatment systems, groundwater modeling is also used as a tool to help determine if remediation of the plumes is proceeding as planned to meet the overall groundwater cleanup goals, and to help determine whether modifications to the remediation systems are necessary.

Groundwater Sampling Methodology Summary

Groundwater sampling, analysis methods, quality assurance reviews, and database methodologies are detailed in **Appendix E**. A summary of the techniques used to collect groundwater samples are described below.

Groundwater samples are collected from permanent, long-term, monitoring wells typically using dedicated bladder pumps. Using a low flow purge technique, a minimum of two times the volume of the sample pump and discharge tubing are purged. Samples are collected once water quality parameters (pH, oxidation reduction potential, specific conductance, dissolved oxygen, turbidity, and temperature) stabilize or when an amount of groundwater equal to 25 percent of a casing volume has been purged. Groundwater samples are collected using analytical laboratory-supplied bottles. The samples are preserved according to their analysis requirements.

The collection of groundwater samples from temporary, single use, wells is dependent on the method used to install them. When using an auger rig, hollow stem augers are advanced to the deepest sampling interval. A stainless-steel well screen is connected to two-inch diameter steel well pipe and lowered through the center of the augers to the required sampling depth. The augers are then withdrawn from the borehole. A submersible pump is lowered to the well screen and a minimum of three well volumes of groundwater are purged prior to collecting samples. The samples are preserved according to the analysis requirements. This procedure is repeated at each depth interval required by the work plan.

When collecting groundwater samples via direct push (e.g.: Geoprobe®), a steel well casing with an expendable drive point is advanced to the deepest sample collection level and an internal screen is released from the bottom of the well casing using a trip rod. Typically, high density polyethylene tubing is used with an attached check valve and sent down the well until they reach the bottom of the screen. An inertial pump (e.g., Waterra) is used to purge the temporary well. Three casing volumes of groundwater are typically removed from the well prior to collecting samples and samples are preserved according to their analysis requirements. This procedure is repeated at each depth interval required by the work plan.

Table 3.0-1. 2024 Summary of Existing Groundwater Remediation Systems at BNL

Operable Unit System	Type	Target Contaminant	No. of Wells	No. of Wells Operating in 2024[f]	Years in Operation	Recharge Method	Pounds VOCs Removed in 2024/Cumulative
Operable Unit I							
South Boundary[a]	P&T AS	VOC	2	0	Closed Operated: 16	Basin	0/369
Operable Unit III							
South Boundary	P&T (AS)	VOC	8	1	28	Basin	6/3090
HFBR Pump and Recharge[a]	Pump and Recirculate	Tritium	4	0	Closed Operated: 9	Basin	0/180
Industrial Park	Recirc. Well/ (AS/Carbon) P&T (Carbon)	VOC VOC	7 2	0 0	Operate: 16 Standby: 9 Operate: 4 Standby: 5	Recirc. Well Inj. Wells	0/1066 0/10
Building 96[d]	Recirc. Well (AS/Carbon)	VOC	4	1	Operate: 20 Standby: 3	Recirc. Well	0.1/148
Middle Road	P&T (AS)	VOC	7	3	23	Basin	21/1399
Western South Boundary[e]	P&T (AS)	VOC	6	4	22	Basin	7/219
Chemical Holes	P&T (IE)	Sr-90	3	0	Operate: 15 Standby: 6	Dry Well	0[b]/4.94
North Street[g]	P&T (Carbon)	VOC	2	0	Closed Operated: 9	Inj. Wells	0/342
North Street East	P&T (Carbon)	VOC/EDB	4	2	Operate:14[h] Standby: 6	Inj. Wells	1/51
LIPA/Airport	P&T and Recirc. Wells (Carbon)	VOC	10	3	20	Inj. Wells and Recirc. Well	6/511
BGRR/WCF	P&T (IE)	Sr-90	9	3	19	Dry Wells	0.15[b]/29.9
Building 452 Freon-11[a]	P&T (AS)	Freon-11	1	0	Closed Operated: 6	Basin	0/106
Operable Unit VI							
EDB	P&T (Carbon)	EDB	4	2	19	Inj. Wells	0.53/0.53[c]
Operable Unit X							
Current Firehouse/ Bldg. 170	P&T (Carbon)	PFAS	9	9	2	Basin	0.53/0.95
Former Firehouse	P&T (Carbon)	PFAS	3	3	1	Basin	0.17
		Total Wells	85	31			

Notes:

AS = Air Stripping
AS/SVE = Air Sparging/Soil Vapor Extraction
EDB = ethylene dibromide
IE = Ion Exchange
LIPA = Long Island Power Authority
NA = Not Applicable
P&T = Pump and Treat
(Shading indicates a closed system)
a = Approved for Closure in 2019
b = Sr-90 removal is expressed in mCi
c = Cumulative EDB calculated since startup of EW-3E and EW-4E in January 2024.
d = Well RTW-1 was modified from a recirculation well to surface discharge in May 2008.
Recirculation = Double screened well with discharge of treated water back to the same well in a shallow recharge
e = Four additional extraction wells for the Western South Boundary System became operational in 2019.
f = Includes wells in operation for any time during the year.
g = Approved for Closure in 2020.
h= Operate time is VOCs (10yrs) plus EDB beginning in 2020
i= LIPA approved for closure December 2024.

3.1 OPERABLE UNIT I

The two sources of VOC groundwater contamination within OU I are the former HWMF and the Current Landfill. The former HWMF was BNL's central RCRA receiving facility for processing, neutralizing, and storing hazardous and radioactive wastes for off-site disposal until 1997, when a new Waste Management Facility was constructed along East Fifth Avenue. Several hazardous materials spills were documented at the former HWMF. Facility demolition and soil remediation programs were completed for this facility in September of 2005. The Current Landfill consists of one unlined waste-cell that operated from the late 1960's through 1990 for disposing of Laboratory generated wastes. The Current Landfill was capped in 1995.

VOC plumes from the Current Landfill and former HWMF became commingled south of the former HWMF. The commingling was partially caused by the pumping and recharging effects of a spray aeration groundwater remediation system, which operated from 1985 to 1990. This system was designed to treat VOC-contaminated groundwater originating from the former HWMF. TVOC concentrations from post-closure and Current Landfill monitoring wells are depicted on **Figure 3.1-1** and the cross-sectional view on **Figure 3.1-2**.

The on-site segment of the Current Landfill/former HWMF plume was remediated by a groundwater pump and treat system consisting of two wells (EW-1 and EW-2) screened in the deep Upper Glacial aquifer at the site property boundary (OU I South Boundary Treatment System). The extracted groundwater was treated for VOCs by air stripping, and the treated water was recharged to the ground at the RA V basin, located northwest of the Current Landfill. A Petition for Shutdown of the OU I South Boundary Treatment System was approved by the regulatory agencies in July 2013. A Petition for Closure was approved by the regulatory agencies in September 2019 as the conditions for closure were satisfied as described in the *OU III ROD* (BNL, 2000a) and the *Operations and Maintenance Manual for the OU I South Boundary Treatment Facility* (BNL, 2005b). A second system (NSE System) was built to treat the off-site portion of the plume. That off-site groundwater remediation system began operations in June 2004 and was included under the OU III ROD (**Section 3.2.7**). The NSE system was shut down and placed in standby mode in 2014 and a petition for closure of this treatment system was approved by the regulators in 2020. In 2019, the NSE System was modified by adding two extraction wells to address newly discovered EDB contamination in the deep Upper Glacial aquifer. Operation of the new wells began in July 2020.

3.1.1 OU I South Boundary Treatment System

The OU I South Boundary Groundwater Treatment System was approved for closure by the regulatory agencies in September 2019.

3.1.2 System Description

For a complete description of the former OU I South Boundary Treatment System, see the *Operations and Maintenance Manual for the OU I South Boundary Treatment Facility* (BNL, 2005b).

3.1.3 Groundwater Monitoring

Well Network

Six monitoring wells are used for post-closure VOC monitoring of the OU I South Boundary area and twelve wells are used to monitor the Current Landfill source area (**Section 3.7**). The OU I South Boundary and Current Landfill monitoring wells are shown on **Figure 3.1-1**. A total of 25 permanent wells are used to monitor the former HWMF Sr-90 plume supplemented by 16 temporary wells installed in October 2024 through January 2025 (**Figure 3.1-4**).

Sampling Frequency and Analysis

The wells are monitored for VOCs, and/or Sr-90 per the schedule provided in **Table 1-5**.

3.1.4 Monitoring Well VOC Results

Figure 3.1-1 shows TVOC data for the OU I post-closure monitoring program based on samples collected in the fourth quarter of 2024. The data posted on this figure were obtained from the six OU I Post Closure monitoring wells and the Current Landfill monitoring program wells. The primary VOCs detected in this plume consisted of benzene, chlorobenzene, chloroethane and 1,1-dichloroethane (DCA), which originated from the Current Landfill.

A detailed discussion of the landfill monitoring well data is provided in the *2024 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2024a). The downgradient portion of the OU I South Boundary VOC plume (which was defined by TVOC concentrations greater than 5 µg/L) has been remediated by a combination of groundwater pump and treat, landfill capping, and monitored natural attenuation. The off-site portion of the OU I VOC plume and the associated NSE Treatment System, is discussed in **Section 3.2.7**.

Figure 3.1-3 provides the historical trends of VOC concentrations in key plume core and bypass wells. **Appendix C** has a complete set of 2024 analytical results. Significant findings for 2024 include:

- The TVOC concentration in Current Landfill source area monitoring well 088-109 has fluctuated generally between not-detectable and 100 µg/L since monitoring of this well began in 1997. The historical maximum TVOC concentration in this well was 352 µg/L in 1998. TVOC concentrations in this well have predominantly been below 50 µg/L since June 2020. The maximum TVOC concentration in 2024 in this well was 33 µg/L. The well is located immediately east of the Current Landfill footprint, and approximately 3,500 feet north of the BNL site boundary **(Figure 3.1-1)**. All other Current Landfill source area monitoring well TVOC concentrations have remained below 20 µg/L since 2010 and were each below 10 µg/L in 2024. Monitoring well 098-99 was installed to provide a sentinel plume monitoring point approximately 1,200 feet downgradient of the Current Landfill. TVOC concentrations in this well have been less than 5 µg/L since November 2021 and was 1 µg/L in 2024. These data continue to confirm groundwater modeling predictions for the attenuation of VOCs from the Current Landfill prior to reaching the site boundary.
- Well 107-40 was installed approximately 500 feet north of the site boundary to monitor the center line of the former HWMF VOC plume. The last individual VOC detected above the AWQS in this well was 1,1-dichloroethylene (DCE) in 2017.

3.1.5 Radionuclide Monitoring Results

Two OU I monitoring program wells were analyzed annually for tritium (107-23 and 115-36) until the beginning of 2023. Tritium has not been detected in wells 107-23 and 115-36 since 2014 and 2017, respectively. These wells were removed from the monitoring program in 2023 per the *2022 Groundwater Status Report* (BNL, 2023c) recommendations. A subset of 27 wells were also analyzed for gamma spectroscopy annually until the beginning of 2023. There were no detections for gamma emitting radionuclides for the 20-to-30-year monitoring period for these wells; therefore, gamma spectroscopy was removed from the program. These monitoring wells are shown on (**Figure 3.1-4**). The complete results for these wells are provided in **Appendix C**.

Twenty-five permanent wells are monitored for Sr-90 contamination from the former HWMF (**Figure 3.1-4**). A total of 16 temporary wells were installed from October 2024 through January 2025 to supplement the monitoring well network. The highest Sr-90 concentration was detected in permanent monitoring well

098-104 with a concentration of 185 pCi/L observed in March 2024 (**Appendix C**). The highest concentration observed in the temporary wells was 130 picocuries per liter (pCi/L) in OU I-SR-90-GP-71 in December 2024 at a depth of 40 to 44 feet below land surface (bls) (**Table 3.1-1**).

Monitoring well 098-100 is located immediately downgradient of the source area and has shown an increasing trend of Sr-90 concentrations since 2020. The sampling results for this well in 2024 show that concentrations ranged between 85 pCi/L and 116 pCi/L, an increase from the 2023 results (**See Figure 3.1-5**).

The two narrow Sr-90 plumes migrating south of the former HWMF are monitored by wells 098-103 (eastern plume) and 098-104 (western plume) as shown on **Figure 3.1-4**. Sr-90 concentrations in 098-103 have shown a decreasing trend of Sr-90 concentrations and has ranged between 63 pCi/L in October 2020 and 17 pCi/L in September 2024. In 098-104, the highest Sr-90 concentration was 347 pCi/L in March 2021. The concentration of Sr-90 in 098-104 during 2024 ranged from 166 pCi/L in September and 185 pCi/L in March. As mentioned above, this was the highest concentration of Sr-90 observed during 2024.

Temporary wells have been installed at the same locations over the past several years along a transect approximately 600 feet to the south in the Long Island Solar Farm (LISF) (OUI-SR-90-GP-69 through OUI-SR-90-GP-74). The December 2024 Sr-90 concentration (130 pCi/L) in temporary well GP-71 showed a slight decrease compared to the March 2024 sampling that showed a concentration of 181 pCi/L. A transect consisting of six temporary wells (OUI SR-90-GP-97 through OUI-SR-90-GP-102) was installed approximately 400 feet further to the south, just outside the solar farm boundary. The highest Sr-90 concentration observed in this transect of wells was 5 pCi/L in OUI-SR-90-GP-101, which indicates that the leading edge of this plume (as defined by the 8 pCi/L DWS) is attenuating to below the DWS. A transect consisting of three temporary wells (OUI SR-90-GP-88 through OUI-SR-90-GP-90) were installed 150 feet downgradient of the above-mentioned temporary wells, and one temporary well (OUI-SR-90-GP-103) was installed approximately 200 feet downgradient of OUI-SR-90-GP-89. The highest concentration of Sr-90 in these wells was 6 pCi/L in OUI-SR-90-GP-103. This temporary well is located at the northern trailing edge of the southern Sr-90 plume.

The well locations and plume map are shown on **Figure 3.1-4.** Sr-90 trend plots are provided on **Figure 3.1-5**.

3.1.6 System Operations

The VOC groundwater treatment system was approved for closure in September 2019. During 2024, the extraction wells did not operate (**Table F-1** and **Figure 3.1-6**). Approximately 369 pounds of VOCs were removed from the aquifer during system operation from 1996 through 2013 (**Figure 3.1-7 and Table F-4**).

3.1.7 System Evaluation

Although the system remains closed, groundwater monitoring continues, and no rebound of VOC concentrations has been observed. The OU I South Boundary Treatment System performance can be evaluated based on the decisions identified by applying the DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Current Landfill VOCs

Yes, VOCs continue to be observed immediately downgradient of the Current Landfill which is covered by an engineered cap. Periodic high-water table conditions continue to flush contaminants from the vadose zone and/or the bottom of the landfilled materials.

Former HWMF Sr-90

Yes, Sr-90 continues to be detected in wells associated with the former HWMF. Concentrations in source area monitoring well 098-100 have shown an increasing trend of Sr-90 concentrations over the last several years. The highest plume concentrations are located between the southern boundary of the former HWMF yard and the southern boundary of the LISF as demonstrated by the permanent and temporary well results. The existence of a Sr-90 groundwater plume in this general area can be attributed to the removal of buildings and pavement in the former HWMF area as part of the 2005 remediation work. Precipitation infiltration through the unsaturated zone and/or water table flushing are the mechanisms for mobilizing the residual Sr-90 to groundwater.

2. Were unexpected levels or types of contamination detected?

No unexpected VOC or radionuclide results were observed.

3. Has the downgradient migration of the plume been controlled?

Current Landfill VOCs

The OU I South Boundary System was approved for closure in 2019. VOCs periodically released from the Current Landfill are attenuating as they migrate south. The VOC travel time from the Current Landfill to the BNL site boundary is approximately 12 to 15 years. Modeling simulations indicate that VOC concentrations from the Current Landfill will attenuate to below 5 µg/L prior to reaching the site boundary. The modeling results continue to be supported by both the low VOC concentration levels observed in sentinel monitoring well 098-99 (located approximately 2,400 feet north of the site boundary) along with several wells at or near the site boundary over the past several years.

Former HWMF Sr-90

A plume of Sr-90 exceeding the 8 pCi/L DWS extends from the former HWMF yard to an area just south of the LISF, approximately 2,500 feet to the south. This plume is migrating slowly to the south as verified by monitoring data obtained over the past several years. The leading edge of the plume was first observed in monitoring well 098-30 in 2010. The data obtained from temporary and permanent wells over the previous eleven years supports a Sr-90 migration rate of approximately 20-25 feet per year. This rate is similar to migration rates calculated for other BNL Sr-90 plumes and the value utilized for groundwater modeling simulations.

Groundwater model natural attenuation simulations were updated in 2020. The simulation showed that Sr-90 could reach the site boundary in the middle of the Upper Glacial aquifer at a concentration of approximately 20 pCi/L in 2080. The 2024 monitoring data supports these modeling results.

4. Has the groundwater cleanup goal of meeting MCLs for VOCs by 2030 been achieved? Has the groundwater cleanup goal of 8 pCi/L for Sr-90 been achieved?

VOCs

No. MCLs have not been achieved for individual VOCs in all wells. Several Current Landfill area wells have showed individual VOC concentrations in exceedance of MCLs (e.g., choloroethane, DCA). There were no exceedances of MCLs in the post-closure downgradient wells in 2024. A comparison of groundwater quality in the OU I South Boundary area is shown on **Figure 3.1-8** which compares the VOC plume from 1997 to 2024.

Sr-90

No. A monitoring program is in place to track the migration and attenuation of the Sr-90 plume.

3.1.8 Recommendations

The following recommendations are presented for the OU I Groundwater Monitoring Program:

- Maintain the VOC post-closure groundwater monitoring program of annual sample collection from post-closure wells: 107-40, 107-41, 115-13, 115-16, and 115-51. Maintain quarterly sampling of Current Landfill sentinel well 098-99.
- Install temporary wells as needed to fill monitoring data gaps and characterize extent of the Sr-90 plume. Install a temporary well to the west of OU I -Sr-90-GP-74 to verify the western extent of this higher concentration plume segment.

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3.2 OPERABLE UNIT III

There were a number of groundwater issues addressed under the OU III Remedial Investigation/Feasibility Study (RI/FS) and subsequent ROD/ESD. VOC plumes originated from several source areas, including Building 96, Building 452 Freon, and sources (some unknown) in the north-central developed portion of the site, the Former Landfill, and the former carbon tetrachloride underground storage tank (UST). **Figure 3.2-1** is a representation of the VOC plumes based on areas containing TVOC concentrations exceeding 5 µg/L. The eastern portion of **Figure 3.2-1** also includes the North Street (OU I/IV) plumes. **Figure 3.2-2** is cross-section B–B′, which is drawn through the north–south center-line of the primary OU III VOC plumes, as shown on **Figure 3.2-1**.

The primary VOC contaminants found in OU III groundwater are 1,1,1-trichloroethane (TCA), tetrachloroethylene (PCE), 1,1-DCE and carbon tetrachloride. These four chemicals are the primary VOCs detected in the OU III on- and off-site monitoring wells. In addition, PFAS and 1,4-dioxane have been identified in several areas both on- and off-site (**Section 3.5**).

Three radiological plumes are also addressed under OU III. The HFBR tritium plume has naturally attenuated to below DWS, and in 2019 BNL received regulatory approval for the closure of the pump and recharge system. Sr-90 plumes are present downgradient of the former WCF, and several sources related to the BGRR with active treatment and monitoring. A Sr-90 plume that is downgradient of the Chemical/Animal Holes is currently in shutdown mode with continued monitoring.

Figure 3.2-3 presents a comparison of the OU III VOC plumes between 1997 and 2024. Several changes in the plumes can be observed in this comparison:

- Significant progress is evident in reducing the higher concentration segments of the plumes both on- and off-site. This is due primarily to the source control and groundwater remediation that has been implemented, along with the effects of monitored natural attenuation.
- Deep Upper Glacial aquifer VOC contamination in the OU III Middle Road area was identified in the *2021 CERCLA Five-Year Review* (BNL, 2021b) as requiring additional remedial action in order to meet groundwater cleanup goals. See **Section 3.2.2** for actions taken during 2024.
- Remaining residual contamination is continuing to contribute to shallow Upper Glacial aquifer contamination in the OU III Building 96 area. This issue was identified in the *2021 CERCLA Five-Year Review* (BNL, 2021b) as requiring additional remedial action in order to meet groundwater cleanup goals. See **Section 3.2.1** for actions taken during 2024.
- Hydraulic control of the plumes by the OU III South Boundary Treatment System, and off-site at the Industrial Park and the LIPA/Airport system, is evidenced by the segmentation of the plumes in these areas (**Figure 3.2-1**).
- The high concentration segment of the LIPA portion of the OU III plume has been significantly reduced and individual VOCs are below MCLs. A petition for closure of the LIPA system was approved in the fourth quarter of 2024.
- VOC concentrations have been significantly reduced in the vicinity of the North Street System.
- Remediation of deeper VOC contamination in the Western South Boundary area was enhanced by modifying the system to include four new extraction wells in 2019. As a result, VOC concentrations have been significantly reduced. Based on improving groundwater

conditions and the recommendation made in the *2022 Groundwater Status Report* (BNL, 2023c), the system was placed in a pulsed pumping mode in 2023 to enhance the remediation. If the trend of decreasing VOCs continues, it is anticipated that a petition for shutdown of this system will be submitted.

- § VOC concentrations have been significantly reduced in the vicinity of the Industrial Park System. If the trend of decreasing VOCs continues, it is anticipated that a petition for closure of this system will be submitted.
- § EDB concentrations have been significantly reduced in the vicinity of the NSE EDB System. If the trend of decreasing EDB continues, it is anticipated that a petition for shutdown of this system will be submitted.

While the NSE VOC plume was addressed under OU III, it is the off-site portion of the OU I South Boundary plume. The plume comparison is shown on **Figure 3.1-8**. Remediation of the NSE EDB plume was initiated in 2020 with the addition of two new extraction wells.

Sections 3.2.1 through **3.2.13** summarize and evaluate the groundwater monitoring and system operations data for the OU III VOC and radiological plumes, including both operational groundwater treatment systems and the monitoring-only programs.

3.2.1 Building 96 Treatment System

This section summarizes the 2024 operational and monitoring data from the OU III Building 96 Treatment System, which consists of one operating extraction well (RTW-1) with air stripping and three recirculation wells (RTW-2, RTW-3, and RTW-4) with air stripping and vapor-phase carbon treatment. The recirculation wells are currently in standby. This section also presents conclusions and recommendations for future operation of the system and describes the source area optimization project completed in 2024. The system began operation in February 2001. Starting in 2012, treatment well RTW-1 was also used to treat the low-level downgradient portion of the Building 452 Freon-11 plume. The Building 452 Freon-11 Treatment System was approved for closure in 2019. Currently, RTW-1 operates on a pulsed pumping schedule of one month on and one month off to control further downgradient migration of VOC contamination.

3.2.1.1 System Description

When in operation, recirculation wells RTW-2, RTW-3, and RTW-4, draw contaminated groundwater from the aquifer via submersible well pumps in wells that are screened 48 to 58 feet bls near the base of the contaminant plume. The groundwater is pumped into an air stripping tray adjacent to each of the three wells. After treatment, the clean water is recharged back into the respective wells through an upper screen zone, 25 to 35 feet bls. In May 2008, RTW-1 was modified from a recirculation well to a pumping well with air stripping and hexavalent chromium (Cr VI) ion exchange treatment, with discharge to nearby surface drainage. In January 2010, the ion exchange treatment was eliminated following a decline in Cr VI concentrations to below the AWQS and was decommissioned in 2018 following regulatory approval. In June 2019 a new pump and motor was installed in RTW-1 to increase its pumping capacity, and the well was connected (via pipe) to the former Freon-11 treatment building air stripper to handle the increased flow. RTW-1 was restarted in June 2020 and the pumping rate was increased from 30 gallons per minute (gpm) to 60 gpm to increase capture of VOCs in the western portion of the plume. A complete description of the system is included in the *Operations and Maintenance Manual Building 96 Groundwater Treatment System Rev.2* (P.W.Grosser, 2024a).

3.2.1.2 Source Area In-Situ Chemical Treatment

A source area investigation performed in 2008 identified an approximately 25 foot by 25 foot area where PCE was present in the unsaturated zone. To address the continuing source of tetrachloroethylene (PCE) above the water table, in 2010 approximately 370 cubic yards of contaminated soil was excavated to the water table interface at that time (approximately 16 feet bls) and disposed. Following the soil removal, a significant initial decrease in the TVOC concentration in groundwater was observed, followed by a rebound, indicating the continued presence of residual source material.

As identified in the *2021 CERCLA Five Year Review* (BNL, 2021b), these conditions indicated that the Building 96 area may not achieve the established cleanup goals by 2030 due to the residual contamination. The recommended follow-up actions included evaluating and implementing a liquid carbon and zero-valent iron (ZVI) in-situ chemical treatment. Therefore, an in-situ chemical treatment (liquid carbon and ZVI) was performed in July 2024 to reduce the mobility of PCE and enhance its degradation. The scope of work was performed in accordance with the approved *OU III - Building 96 Source Area Optimization Work Plan* (P.W.Grosser, 2024a).

Prior to performing the injections, one new monitoring well (085-416) was installed downgradient of the source area, and extraction well RTW-1 was shut down to reduce artificially enhanced groundwater velocity and allow the chemical treatment solution time to adhere to the soil matrix. A total of 19 injection points were installed spanning the water table (approximately 21 feet bls) from approximately 19 feet bls to 29 feet bls throughout the source area.

The chemical treatment program included the use of a solution of two chemicals:

- PlumeStop®, a liquid activated carbon material which consists of a suspension of very fine charged particles. Upon injection, target contaminants will partition out of the aqueous phase and sorb onto the carbon particles, creating a reactive barrier.
- Colloidal S-MicroZVI® provides a source of iron, creating conditions for abiotic reduction via the formation of iron sulfides, oxides, and hydroxides, while also maintaining strongly reducing conditions in the treatment area for an extended timeframe.

In addition to the routine groundwater monitoring performed for Building 96 (**Table 1-5**) one round of pre-injection and two rounds of post-injection groundwater monitoring were performed to measure the performance of the injections.

The results of the pre- and post-injection monitoring data indicated that PCE in monitoring well 085-379, immediately downgradient of the source area, has decreased from a pre-injection PCE concentration of 88 µg/L to non-detectable concentrations. In general, the concentration of PCE decreased in most of the Building 96 monitoring wells and extraction well RTW-1, with some exceptions in monitoring wells (095-159, 095-166, and 095-312) downgradient of RTW-1. The monitoring results are discussed in further detail in **Section 3.2.1.4** below. A complete description of the work performed, and the results are provided in the *OU III – Building 96 Source Area Optimization Report* (P.W.Grosser, 2024b).

Based on the results, the treatment chemical injection program was successful at reducing the mobility of PCE from the source area. Continued groundwater monitoring will confirm the enhanced degradation and overall reduction of PCE over time. Based on the distance and estimated travel time, the observed increase in the concentration of PCE in the downgradient monitoring wells is likely a result of groundwater around extraction well RTW-1 migrating southward with the extraction well temporarily shut down to facilitate the injection work. As a result, RTW-1 was returned to its pulsed pumping schedule in March 2025.

Figure 3.2.1-1 shows the location of the treated source area in relation to the 2024 VOC groundwater plume. **Figure 3.2.1-2** shows the injection area and plume on a hydrogeologic cross section.

3.2.1.3 Groundwater Monitoring

A network of 35 wells was used to monitor the VOC plume and the effectiveness of the Building 96 groundwater remediation system (**Figure 3.2.1-1**) during 2024. Samples were analyzed for VOCs, as noted in **Table 1-5**.

3.2.1.4 Monitoring Well Results

Complete VOC results are provided in **Appendix C**. The fourth quarter 2024 plume is shown on **Figure 3.2.1-1** and **Figure 3.2.1-2** and trends for several key wells are presented on **Figure 3.2.1-3**. PCE is the primary component of this plume. A summary of key monitoring well data for 2024 is as follows:

Former Source Area to RTW-1:

- Well 085-379 is located immediately south of the source area and the 2024 chemical treatment injection area. The well is screened across the water table to ensure that the release of any residual groundwater contamination from the source area can be observed by sampling regardless of water table fluctuations. TVOC concentrations in this well have ranged between 0.3 µg/L and 200 µg/L since 2016 (**Figure 3.2.1-3**). In 2024, prior to the chemical treatment injections, the maximum TVOC concentration was 89 µg/L in 085-379

with a concentration of PCE at 88 µg/L. Following the completion of the chemical treatment injections, PCE was non-detectable in 085-379.

- In the new monitoring well (085-416) installed downgradient of the source area and 085-379, the concentration of PCE prior to performing the injections was 18 µg/L. Following the completion of the injections, the concentration of PCE has ranged from 11 µg/L to 18 µg/L.
- TVOC concentrations in the eleven core monitoring wells placed up to 100 feet south of well 085-379 have remained below the system capture goal of 50 µg/L since 2017. The historic high concentration in this area was 3,000 µg/L in well 095-305 during 2010.
- Monitoring well 085-349 exhibited a higher than usual TVOC concentration of 45 µg/L in October 2024. The concentration of PCE during this sampling event was 0.7 µg/L. There were several petroleum hydrocarbons including primarily benzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, toluene, and xylene. These compounds have historically not been detected in this or other Building 96 monitoring wells and may be attributed to sample contamination.
- The TVOC concentration in well 095-84, located immediately upgradient of extraction well RTW-1, ranged from 7.6 µg/L to 19 µg/L during 2024. These concentrations are significantly lower than the historical maximum TVOC concentration in this well of 18,000 µg/L in 1998.
- TVOC concentrations in monitoring wells 095-294, 095-307, 095-308, and 095-313 have remained at concentrations below 15 µg/L since 2017, with no individual VOCs exceeding MCLs in 2024. These wells monitor the slightly deeper VOC contamination that was observed west of the main Building 96 plume.

RTW-1 to Downgradient Recirculation Wells RTW-2 through RTW-4:

- TVOC concentrations in well 095-159 decreased from 134 µg/L in August 2020 to non-detect in December of 2020. In 2021 the concentration ranged between 5 µg/L and 10 µg/L. This correlates well with the increased pumping rate for RTW-1 starting in July 2019 and indicates that the western portion of the plume is being captured. RTW-1 was placed in a pulsed pumping mode in May 2022. From 2022 through 2023, the TVOC concentration ranged from 3 µg/L to 53 µg/L. In 2024, prior to shutting down RTW-1 to facilitate the chemical treatment injections, the maximum TVOC concentration in 095-159 was 36 µg/L. Following the completion of the injections with RTW-1 remaining off in standby, the TVOC concentration ranged from non-detect to 98 µg/L. This is likely attributable to liberating groundwater around RTW-1 zone of stagnation and allowing it to migrate southward during its shutdown period.
- Monitoring well 095-312 exhibited slightly elevated TVOC concentrations since shutting down RTW-1 as compared to historic data. From January 2020 through December 2023, the TVOC concentration ranged from non-detect to 5 µg/L in this well. In 2024, following the shutdown of RTW-1, the TVOC concentration in this well was 11 µg/L.
- TVOC concentrations in plume bypass well 095-162 have been slightly above detectable levels since 2019, ranging from non-detect to 4 µg/L in September 2024. These data support the continued capture of the plume by RTW-1.

Wells Downgradient of RTW-2 through RTW-4:

- TVOC concentrations observed in the six bypass wells, located immediately downgradient of RTW-2, RTW-3, and RTW-4 (095-163, 095-165, 095-166, 095-168, 095-169, and 095-170) ranged from below to slightly above detectable levels from 2019-2023 with one exception of a detection of 7 µg/L in well 095-165 in October 2021. During 2024, the highest TVOC concentration was recorded in 095-166 at 21 µg/L.
- The maximum TVOC concentration in sentinel monitoring well 095-318, located on Weaver Drive, during 2024 was 2.7 µg/L in October. TVOC concentrations in this well have been generally below 5 µg/L since 2015.

3.2.1.5 System Operations

Operating Parameters

Extraction well RTW-1 operated full-time until May 1, 2022 when it began a one month on, one month off, pulsed pumping schedule, which continued until May of 2024 when it was placed in standby mode to facilitate the chemical treatment injections. Extraction well RTW-2 was placed back in standby mode in June 2020 following a brief period of operation. Extraction wells RTW-3 and RTW-4 have remained in standby mode since January 2016 and October 2012, respectively.

January – September 2024

The system operated on a one month on, one month off, pulsed pumping schedule until May when it was placed in standby mode for the remainder of the year. The system treated approximately 5 million gallons of water during this period.

October – December 2024

The system was in standby mode for this period.

During 2024 the system treated approximately 5 million gallons of water (**Table 2-2**).

3.2.1.6 System Operational Data

Recirculation/Treatment Well Influent and Effluent

Table F-5 lists the monthly influent VOC concentrations for well RTW-1, and the influent concentrations for wells RTW-2 through RTW-4 which are sampled quarterly. The TVOC concentration from the RTW-1 influent ranged between 2.4 µg/L and 4.6 µg/L during 2024 which is approximately the same as 2023 levels. **Figures 3.2.1-4** and **3.2.1-5** show the TVOC concentrations in the extraction wells over time. **Table 3.2.1-1** shows the maximum measured effluent contaminant concentrations compared to the SPDES equivalency permit for well RTW-1.

Table 3.2.1-1
OU III Building 96 RTW-1 Treatment Well, 2024 SPDES Equivalency Permit Levels

Parameter	Permit Level (µg/L)	Max. Measured Value (µg/L)
pH range (SU)	5.0–8.5	7.3– 7.5
tetrachloroethylene	5.0	ND
1,1,1-trichloroethane	5.0	ND
thallium	Monitor	ND
trichlorofluoromethane	5.0	ND
methyl bromide	5.0	ND
methyl chloride	5.0	ND
methylene chloride	5.0	ND
1,2-Dichloroethane	0.6	ND
Perfluorooctanesulfonic acid (PFOS)	Monitor	18 ng/L
Perfluorooctanoic acid (PFOA)	Monitor	4.9 ng/L

Note: Required effluent sampling frequency is monthly following a period of 24 consecutive weekly with no exceedances. Monthly for pH.

SU - Standard Units

ND –not detected

A renewed SPDES permit was issued by NYSDEC on September 1, 2022, for this system. The system met all equivalency parameters for operation in 2024. See **Table F-6** for RTW-1 effluent detections. RTW-1 was also used to capture lower levels of Freon-11 from the Building 452 area that migrated beyond extraction well EW-18 (approved for closure in 2019). Freon-11 concentrations in RTW-1 have declined from a peak of 38 μg/L in 2013 to non- detectable levels in 2022. In 2023, there was one estimated detection of Freon-11 in October of 0.16 μg/L. There were no detections of Freon-11 in 2024. RTW-1 TVOC concentrations have remained below 10 μg/L since 2019.

Air Discharge

Table 3.2.1-2 shows the air emissions data from the OU III Building 96 RTW-1 air stripper groundwater treatment system and compares the values to the existing Air Equivalency Permit and levels stipulated in NYSDEC Division of Air (DAR)-1 guidance. Emission rates are obtained through mass-balance calculations for water treated during 2024.

In accordance with the DAR-1 guidance, treatment is required for a remedial system that has a potential to emit greater than 0.01 pounds per hour of a Part 212-2.2 Table 2-2 high toxicity air contaminant (HTAC). Treatment is required below this level if the annual total emissions exceeds the Table 2-2 Mass Emission Limit. If the remedial system does not have the potential to emit greater than 0.01 pounds per hour of a HTAC and potential emissions are below the Mass Emission Limit, then no treatment or further evaluation is required. For non-HTAC VOCs, treatment is required if the system has the potential to emit TVOCs at a rate greater than 0.5 pounds per hour.

As demonstrated in **Table 3.2.1-2**, the Building 96 RTW-1 system met all air emission parameters for operation as specified in DAR-1 guidance and the existing air equivalency permit for the Building 96/Building 452 Freon system.

Cumulative Mass Removal

Table 3.2.1-3 shows the monthly extraction well pumping rates. The annual average pumping rate for the system was 13 gpm. The pumping and mass removal data are summarized in **Table F-7**. In 2024, approximately 0.1 pounds (lbs) of VOCs were removed. Since February 2001, the system has removed approximately 147 lbs of VOCs.

Table 3.2.1-2
OU III Building 96 Area
2024 Average VOC Emission Rates

Parameter	Allowable ERP (lb/hr)	Mass Emission Limit (lbs/yr)	Calculated Average ER (lbs/hr)	Actual Mass Emission (lbs/yr)	Actual ER (lb/hr)
Existing Building 96/Building 452 Freon Air Equivalency Permit Analytes					
dichlorodifluoromethane	0.0000187	--	--	--	ND
acetone	0.000674	--	--	--	NA
methylene chloride	0.000749	--	--	--	ND
2-butanone	0.000187	--	--	--	NA
Benzene (Table 2-2 HTAC)	0.000112	100	0.011	ND	ND
Tetrachloroethylene (Table 2-2 HTAC)	0.000165	1,000	0.11	0.363	0.0000835
m,p-xylene	0.0000116	--	--	--	ND
isopropylbenzene	0.000243	--	--	--	ND
n-propylbenzene	0.0000599	--	--	--	ND
1,3,5-trimethylbenzene	0.000375	--	--	--	ND
1,2,4-trimethylbenzene	0.000225	--	--	--	ND
4-isopropyltoluene	0.00000749	--	--	--	ND
naphthalene	0.0000225	--	--	0	0
carbon disulfide	0.0000487	--	--	--	NA
styrene	0.00000637	--	--	--	ND
trans-1,3-dichloropropane	0.0000157	--	--	--	ND
Other Table 2-2 HTACs:					
trichloroethylene	--	500	0.057	0	0
carbon tetrachloride	--	100	0.011	0.063	0.000014
vinyl chloride	--	100	0.011	0	0
1,1,2,2-tetrachloroethane	--	1,000	0.11	0	0
1,2-dichloroethane	--	100	0.011	0	0
Other Analytes:					
Chloroform	--	--	--	0.079	0.000018
Total VOCs	--	--	--	0.427	0.000098

Notes:
Allowable ERP (Emission Rate Potential) – Based on existing treatment system Air Equivalency Permit.
Mass Emission Limit – NYSDEC Part 212-2.2 Table 2-2 High Toxicity Air Contaminant (HTAC) List.
Calculated Average (ER) Emission Rate – Calculated average ER based on Table 2-2 HTAC Mass Emission Limit.
Actual Mass Emission – Calculated cumulative mass emission based on average system influent and effluent VOC concentrations and system operational data for 2024.
Actual ER – Calculated ER based on average system influent and effluent VOC concentrations and system operational data for 2024.
NA – Not analyzed.
ND – No Detection
-- - No value

3.2.1.7 System Evaluation

The Building 96 Treatment System performance can be evaluated based on the decisions identified by applying the DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Yes, however, based on the initial data, the 2024 in-situ chemical treatment injections have reduced the mobility of residual PCE in the source area. Continued groundwater monitoring will confirm its enhanced degradation and overall reduction in groundwater contamination. Since the 2010 source area soil removal, TVOC concentrations in the source area monitoring well 085-379 have fluctuated from

21 µg/L to 200 µg/L PCE and other VOCs have been non-detect in this well since the completion of the injections. RTW-1 was returned to pulsed pumping operation in March 2025 and is continuing to capture residual VOCs migrating away from the remediated source area.

2. Were unexpected levels or types of contamination detected?

Yes, there were several BTEX (benzene, toluene, ethylbenzene, and xylene) compounds detected in monitoring well 085-349 during one sampling event in 2024. These VOCs have not been historically observed in this well and the unexpected anomaly may be attributed to sampling contamination. Continued groundwater monitoring will determine if the results are repeatable.

3. Has the downgradient migration of the plume been controlled?

Yes, RTW-1 is capturing the leading edge of the VOC plume. See **Figure 3.2.1-6** for a comparison of the plume from 2000 to 2024. However, the TVOC concentration in RTW-1 (98 µg/L) was detected above the capture goal of 50 µg/L in 2024 following the temporary shutdown of RTW-1 to facilitate chemical injection program. The TVOC concentration was slightly elevated but below the capture goal in monitoring wells 095-166 and 095-312. Based on the distance and estimated travel time, the observed increase in these wells was likely a result of groundwater around RTW-1 migrating southward following its temporary shutdown. TVOC concentrations in plume bypass well 095-162 have been just above detectable levels since 2019. TVOC concentrations have remained low in sentinel well 095-318, located on Weaver Drive, indicating the plume is not reaching this location.

4. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

No, although source area monitoring well 085-379 has not had detectable concentrations of VOCs since the completion of the in-situ chemical treatment injections, downgradient monitoring well 095-159 has shown TVOC concentrations above the capture goal of 50 µg/L. RTW-1 was returned to a pulsed pumping mode (one month on, and one month off) in March 2025 as a result. Influent TVOC concentrations in downgradient recirculation wells RTW-3 and RTW-4 have been below 50 µg/L since 2008. The only TVOC concentration in RTW-2 above the capture goal since operations began was a detection of 65 µg/L in 2018. Due to the consistently low TVOC levels, extraction wells RTW-2, RTW-3 and RTW-4 have remained in standby mode.

4a. Are TVOC concentrations in plume core wells above or below 50 µg/L?

TVOC concentrations in two of 21 core wells (085-379 and 095-159) were above 50 µg/L in 2024. 085-379 was 89 µg/L prior to performing the injections and has been non-detect since their completion. The TVOC concentration in 095-159 was 98 µg/L while RTW-1 was temporarily shut down.

4b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

No, the TVOC concentration in extraction well RTW-1 has remained below 5 µg/L since 2021 and in the downgradient extraction wells (RTW-2, RTW-3, and RTW-4) it has remained below 5 µg/L since 2018. As detailed above, the TVOC concentration exceeded the capture goal of 50 µg/L in monitoring well 095-159 following the temporary shutdown of RTW-1 during one sampling event. A slight increase in TVOCs was also observed in monitoring wells 095-166 and 095-312 but remained below the capture goal.

5. Has the groundwater cleanup goal of meeting MCLs been achieved?

MCLs have not been achieved for individual VOCs in all plume core wells. The highest PCE concentration in 2024 was 97 µg/L in well 095-159. Historically, monitoring well 085-379 had

exhibited continued concentrations of PCE above the MCL; however, since performing the chemical treatment injections, the concentration of PCE has been non-detect.

3.2.1.8 Recommendations

The following are recommendations for the OU III Building 96 Groundwater Remediation System and monitoring program:

- RTW-1 and area wells will be monitored for any significant rebound of concentrations over the system capture goal and place RTW-1 in standby if the TVOC concentration remains below the capture goal for several consecutive quarters.
- Maintain treatment wells RTW-2, RTW-3, and RTW-4 in standby mode, and restart the wells if extraction or monitoring well data indicate that TVOC concentrations exceed 50 µg/L.
- Reduce the sampling frequency in upgradient monitoring wells 085-382, 085-383 and 085-386 from semiannual to annual sampling.

3.2.2 Middle Road Treatment System

The Middle Road Treatment System began operating in October 2001. This section summarizes the operational data from the Middle Road System for 2024 and presents conclusions and recommendations for future operation. The analytical data from the monitoring wells are also evaluated in detail.

3.2.2.1 System Description

The Middle Road Treatment System has seven extraction wells and air-stripping treatment to remove VOCs from the groundwater. The system is currently operating with wells RW-2, RW-3, and RW-7. During 2019, the Middle Road/South Boundary system was interconnected with the Western South Boundary system combining them into a single treatment system. During this modification four new and two existing Western South Boundary extraction wells were tied in, and effluent water discharge is now being monitored under the Middle Road and South Boundary Treatment System SPDES equivalency permit. A complete description of the system is included in the *Operation and Maintenance Manual for the OU III Middle Road and South Boundary Groundwater Treatment Systems, Revision 2* (BNL, 2014a) and *Operations and Maintenance Manual for the Western South Boundary Treatment System* (BNL, 2020b).

3.2.2.2 Groundwater Monitoring

The Middle Road Monitoring Program consists of a network of 34 monitoring wells. As recommended in the *2022 Groundwater Status Report* (BNL, 2023c) two additional monitoring wells were installed at the location of temporary vertical profile wells installed during 2021. The two additional monitoring wells that were installed during 2023 are 105-80 and 105-81. As recommended in the *2023 Groundwater Status Report* (BNL, 2024b) well 106-56 was removed from the program during 2024. The locations of the monitoring wells are shown on **Figure 3.2.2-1**. The wells are sampled and analyzed for VOCs as shown in **Table 1-5**. During 2024 a subset of Middle Road wells were also analyzed using EPA Method 1633 for PFAS compounds and are incorporated into the Former Firehouse monitoring program (**Section 3.5.2**).

3.2.2.3 Monitoring Well Results

The complete VOC results are provided in **Appendix C**. The highest VOC concentrations are generally found in the area between extraction wells RW-2 and RW-7 (**Figure 3.2.2-1**). TVOC concentrations in monitoring wells east of RW-2 are well below the 50 µg/L capture goal for this system. The highest TVOC concentration in Middle Road monitoring wells during 2024 was 238 µg/L in well 105-80 during the May sampling round. This monitoring well is located approximately 500 feet north of extraction well RW-7.

Figure 3.2.2-2 shows the vertical distribution of contamination running along an east–west line through the extraction wells; the location of this cross section (E–E') is shown on **Figure 3.2.2-1**. VOC contamination in the western portion of the remediation area (RW-3 through RW-7) extends to the deep Upper Glacial aquifer and shallow portions of the Magothy aquifer. **Figure 3.2.2-3** shows plots of the VOC concentrations versus time for key monitoring wells. The results for key monitoring wells are as follows:

- Plume core well 104-37 (screened in the deep Upper Glacial aquifer) is approximately 2,000 feet upgradient of RW-7, just south of Princeton Avenue. The TVOC concentration in October 2024 was 64 µg/L. TVOC concentrations in this well were much higher historically, followed by a significant decline. They have remained at the current level with a slow decline for the past several years.

- Well 105-68 is approximately 500 feet north of the extraction well RW-7. This well contains elevated TVOC concentrations with the highest concentration of 156 µg/L in February 2024. The data from this location along with data from monitoring wells 104-37, 105-80, and 121-53 continue to indicate that there is a zone of higher concentration VOC contamination (primarily PCE and carbon tetrachloride) in the deep Upper Glacial aquifer extending from Princeton Avenue to the Middle Road and then south of RW-7 to the South Boundary near EW-17 (**Figure 3.2.2-1** and **Figure 3.2.2-4**).
- Plume core monitoring wells 105-66 and 105-67 continued to show elevated TVOC concentrations in 2024, with maximum values of 133 µg/L and 138 µg/L, respectively.
- Recently installed plume core well 105-80 located approximately 500 feet north of extraction well RW-7 showed an elevated TVOC concentration of 238 µg/L. The PCE concentration during this sample event was 169 µg/L and the carbon tetrachloride concentration was 63 µg/L.
- TVOC concentrations in monitoring wells in the vicinity of extraction wells RW-4, RW-5, and RW-6 were well below the system capture goal of 50 µg/L in 2024. See **Figure 3.2.2-1** for monitoring well data for this area.
- Wells 095-322 and 095-323 are located along Weaver Drive (**Figure 3.2.2-1**). These wells were installed in 2014 to monitor VOCs in the deep Upper Glacial aquifer. The highest TVOC concentrations in these wells during 2024 were 31 µg/L and 16 µg/L observed in well 095-322 and well 095-323, respectively. The TVOC concentrations in these wells have remained relatively stable since 2014.

3.2.2.4 System Operations

The effluent sampling parameters for pH and VOCs follow the requirements for monthly sampling, per the SPDES equivalency permit (**Table 3.2.2-1**). The Western South Boundary is now operating under the same SPDES equivalency permit as the Middle Road and South Boundary projects. The effluent concentrations from the treatment system during this period of operation were below equivalency permit discharge levels. Sampling for tritium was discontinued during the last quarter of 2023 due to not having any detections in over twenty years. Approximately 186 million gallons of water were treated in 2024 by the Middle Road Treatment System. The Middle Road, South Boundary and Western South Boundary Systems treated a combined total of approximately 328 million gallons. Approximately 170 million gallons of this treated water were transferred to the RA V recharge basin while the remainder was discharged to the OU III recharge basin. In

Table 3.2.2-1.
OU III Middle Road/South Boundary/Western South Boundary Air Stripping Tower
2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit (µg/L)	Max. Observed Value (µg/L)
pH range (SU)	6.5–8.5	6.92 – 7.78
carbon tetrachloride	5	ND
chloroform	7	ND
dichlorodifluoromethane	5	ND
1,1-dichloroethane	5	ND
1,1-dichloroethylene	5	ND
methyl chloride	5	ND
tetrachloroethylene	5	ND
toluene	5	ND
1,1,1-trichloroethane	5	ND
1,1,2-trichloroethane	5	ND
trichloroethylene	10	ND

Notes: SU – Standard Units
Required sampling frequency is monthly for VOCs and pH.
ND – Not detected.

addition, these systems extraction wells, influent, and effluent were analyzed for PFAS and 1,4-dioxane starting in 2023 (**Section 3.5**).

The following is a summary of the Middle Road System operations for 2024.

January – September 2024

The system operated normally with RW-3 and RW-7 operating full time, and RW-1, RW-4, RW-5 and RW-6 in standby mode. The system was off from July 3rd until August 6th for tree trimming near overhead powerlines. The system operated normally from August 7th through the month of September. Approximately 137 million gallons of water were treated.

October – December 2024

During the fourth quarter the system operated normally through December 4th. The system was off from December 5th through 12th for electrical controls upgrades. Approximately 49 million gallons of water were treated.

3.2.2.5 System Operational Data

System Influent and Effluent

Figure 3.2.2-6 plots the TVOC concentrations in the extraction wells versus time. Results of the extraction well samples are found in **Table F-8.** The influent VOC concentrations showed slight variations with values ranging from 11 µg/L to 17 µg/L. The results of the influent and effluent sampling are summarized in **Tables F-9** and **F-10**, respectively.

Cumulative Mass Removal

Cumulative mass was calculated for the period of operation to determine the mass of VOCs removed from the aquifer by the extraction wells. Average flow rates for each monthly monitoring period were used, in combination with the TVOC concentrations in the air-stripper influent, to determine the pounds removed. Flow averaged 358 gpm during 2024 (**Table 3.2.2-3** and **Table F-11**), and approximately 21 pounds of VOCs were removed. At the end of 2024, 1,399 pounds of VOCs have been removed since the system began operations in October 2001. The cumulative total of VOCs removed vs. time is plotted on **Figure 3.2.2-5**.

Air Discharge

Table 3.2.2-2 shows the air emissions data from the system for the OU III Middle Road air stripper tower during 2024 and compares the values to levels stipulated in the existing Air Equivalency Permit and NYSDEC DAR-1 guidance. Emission rates are obtained through mass-balance calculations for the water treated during that time (**Table F-9**). The Middle Road/South Boundary and Western South Boundary systems are being co-treated via air stripping. The cumulative total emission rates of the co-treated system are provided below and the emission rates are still well below permitted levels.

As demonstrated in **Table 3.2.2-2**, the combined OU III Middle Road/South Boundary/Western South Boundary system met all air emission parameters for operation as specified in DAR-1 guidance and the existing air equivalency permits.

Table 3.2.2-2
OU III Middle Road/South Boundary/Western South Boundary Air Stripper
2024 Average VOC Emission Rates

Parameter	Allowable ERP* (lbs/hr)	Mass Emission Limit Table 2-2 HTAC (lbs/yr)	Calculated Average ER Table 2-2 HTAC (lbs/hr)	MR Actual Mass Emission** (lbs/yr)	MR Actual ER*** (lbs/hr)	MR/SB/WSB Total ER**** (lbs/hr)
Existing OUIII MR/SB/WSB Air Equivalency Permit Analytes						
carbon tetrachloride	0.016	100	0.011	0.614	0.00007	0.000165
chloroform	0.0031	--	--	0.566	0.000065	0.00013
chloroethane	10	--	--	ND	ND	ND
1,1-dichloroethane	10	--	--	ND	ND	0.000046
1,2-dichloroethane	0.008	100	0.011	ND	ND	0.0000011
1,1-dichloroethylene	0.034	--	--	0.432	0.000049	0.000393
cis-1,2-dichloroethylene	10	--	--	ND	ND	ND
trans-1,2-dichloroethylene	10	--	--	ND	ND	ND
tetrachloroethylene	0.387	1000	0.11	17.38	0.00198	0.003
1,1,1-trichloroethane	10	--	--	0.776	0.000088	0.000251
trichloroethylene	0.119	500	0.057	0.822	0.0000938	0.00017
Other Table 2-2 HTACs:						
benzene	--	100	0.011	ND	ND	ND
vinyl chloride	--	100	0.011	ND	ND	ND
1,1,2 trichloroethane	--	100	0.011	ND	ND	ND
1,1,2,2-tetrachloroethane	--	1,000	0.11	ND	ND	ND
Other Detected Analytes:						
1-methylethyl-benzene	--	--	--	0.041	0.00000463	0.00000463
dichlorodifluoromethane	--	--	--	--	--	0.0000542
Methyl chloride	--	--	--	--	--	0.00000214
Naphthalene	--	--	--	--	--	0.0000021
Total VOCs	--	--	--	20.629	0.00235	0.00375

Notes:
*Allowable ERP (Emission Rate Potential) – Based on existing treatment system Air Equivalency Permits. Conservative value used.
Mass Emission Limit – NYSDEC Part 212-2.2 Table 2-2 High Toxicity Air Contaminant (HTAC) List.
Calculated Average (ER) Emission Rate – Calculated average ER based on Table 2-2 HTAC Mass Emission Limit.
**Actual Mass Emission – Calculated cumulative mass emission based on average system influent and effluent VOC concentrations and system operational data for 2024.
***Actual ER – Calculated ER based on average system influent and effluent VOC concentrations and system operational data for 2024.
****MR/SB/WSB Total ER =Cumulative Total for Middle Road/South Boundary/Western South Boundary.
-- – No value.

Extraction Wells

The system is currently operating utilizing wells RW-2, RW-3, and RW-7. Extraction wells RW-4 and RW-5 were shut down in September 2003 and placed on standby due to low concentrations of VOCs. Extraction well RW-6 was shut down in September 2006. Extraction well RW-1 was shut down in November 2015. The extraction wells are sampled quarterly. TVOC concentrations in wells RW-1, RW-4, RW-5 and RW-6 were all below the capture goal of 50 µg/L in 2024, with a maximum concentration of 2 µg/L in well RW-4 in August. The maximum TVOC concentration observed in the operating extraction wells in 2024 was in well RW-7 at a concentration of 37 µg/L in January. This

extraction well remained in operation due to TVOC concentrations above the capture goal in upgradient monitoring wells. See **Figure 3.2.2-6** for a plot of the TVOC concentrations for the seven extraction wells. **Table 3.2.2-3** shows the monthly extraction well pumping rates.

3.2.2.6 System Evaluation

The Middle Road Treatment System performance can be evaluated based on the decisions identified for this system from the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

No unexpected concentrations or types of contamination were detected. However, PFAS and 1,4-dioxane were detected in the system and some monitoring wells, as detailed in **Section 3.5**.

2. Has the downgradient migration of the plume been controlled?

Yes, the plume in the deep Upper Glacial aquifer is being captured by extraction wells RW-2, RW-3 and RW-7. The VOCs that have migrated past Middle Road prior to the installation of RW-7 will be captured by the South Boundary Treatment System.

3. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

Extraction wells RW-1, RW-4, RW-5 and RW-6 have been in standby mode. TVOC concentrations below the 50 µg/L capture goal continued to be observed in the vicinity of these wells. Although extraction wells RW-2 and RW-7 were below the capture goal, they will continue operation due to nearby monitoring wells with TVOC concentrations above the capture goal in 2024. RW-3, however, can be placed in standby based on the recommendations of the groundwater modeling efforts conducted during 2024 and early 2025 (**Appendix H**).

3a. Are TVOC concentrations in plume core wells above or below 50 µg/L?

Eight plume core wells during 2024 had TVOC concentrations above the capture goal of 50 µg/L.

3b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

There has been no rebound in TVOC concentrations in the extraction wells currently in standby mode and there has not been a rebound in the monitoring wells in those areas.

4. Has the groundwater cleanup goal of meeting MCLs been achieved?

No. Groundwater contaminant concentrations and overall extent of the OU III plume have decreased significantly due to the operation of the Middle Road Treatment System. However, several monitoring wells are not declining at a rate that will definitively achieve the cleanup goal of 5 µg/L for individual VOCs by 2030.

3.2.2.7 Recommendations

The following recommendations are made for the Middle Road Treatment System and groundwater monitoring program:

- Maintain extraction wells RW-1, RW-4, RW-5 and RW-6 in standby mode. Restart the well(s) if extraction or monitoring well data indicate that TVOC concentrations exceed the 50 µg/L capture goal.
- Continue full-time operation of RW-2, and RW-7.

- Place extraction well RW-3 in standby mode based on the recommendations found in the OUIII Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**).
- Deep Upper Glacial aquifer VOC concentrations in this area of the site are not declining at a rate that will definitively meet the ROD cleanup goal of MCLs by 2030. Therefore, as per the OUIII Middle Road/South Boundary Groundwater Modeling Assessment recommendations, install two additional extraction wells in the approximate locations of monitoring wells 105-80 and 105-81 in order to expedite the cleanup timeframe for the Middle Road portion of the plume.

3.2.3 OU III South Boundary Treatment System

This section summarizes the operational data from the OU III South Boundary Treatment System for 2024 and provides conclusions and recommendations for future operation. The analytical data from the monitoring wells are also evaluated in detail.

3.2.3.1 System Description

This system began operation in June 1997. It utilizes air-stripping technology for treatment of groundwater contaminated with chlorinated solvents. There are eight original extraction wells that date back to 1997. Extraction well EW-17 was installed in 2012 to address historical high VOC concentrations in the deeper segments of the plume near the site boundary. During 2024, the system operated utilizing one extraction well EW-17. The remainder of the wells were in standby mode. During 2019, the Middle Road/South Boundary system was interconnected with the Western South Boundary system combining them into a single treatment system. During this modification four new and two existing Western South Boundary extraction wells were tied in, and effluent water discharge is now being monitored under the Middle Road and South Boundary Treatment System SPDES equivalency permit. A complete description of the system is included in the *Operation and Maintenance Manual for the OU III Middle Road and South Boundary Groundwater Treatment Systems, Revision 2* (BNL, 2014a) and *Operations and Maintenance Manual for the Western South Boundary Treatment System* (BNL, 2020b).

3.2.3.2 Groundwater Monitoring

The OU III South Boundary monitoring well network consists of a total of 34 monitoring wells and was designed to monitor the VOC plume(s) in this area of the southern site boundary, as well as the efficiency of the groundwater remediation system (**Figure 3.2.3-1**). As recommended in the *2022 Groundwater Status Report* (BNL, 2023c) an additional monitoring well (121-57) was installed in 2023 at the location of a temporary vertical profile well installed during 2021. The monitoring wells were sampled and analyzed for VOCs at frequencies detailed in **Table 1-5**. During 2024 a subset of South Boundary wells were also analyzed using EPA Method 1633 for PFAS compounds and are incorporated into the Former Firehouse monitoring program (**Section 3.5.2**).

3.2.3.3 Monitoring Well Results

The South Boundary segment of the OU III VOC plume continued to be bounded by the existing monitoring well network. VOCs were detected in the deep Upper Glacial aquifer in the vicinity of the site boundary, as depicted on **Figure 3.2-2**, **Figure 3.2.3-1**, and **Figure 3.2.3-2**. **Appendix C** has the complete groundwater monitoring well results for 2024.

Elevated VOC concentrations remain in the deep Upper Glacial aquifer upgradient of extraction wells EW-4 and EW-17, as can be seen on cross section G–G' (**Figure 3.2.3-2**). The VOC concentration trends for the monitoring wells are shown on **Figure 3.2.2-3**. The extraction well TVOC concentration trends are on **Figure 3.2.3-3**. Results for key monitoring wells are as follows:

- Bypass well 121-43, located several hundred feet south of extraction wells EW-4 and EW-17, historically had shown elevated levels of VOCs. Extraction well EW-17 was installed in 2012 to address the historical high VOC concentrations that had been observed in well 121-43 and capture the deeper portion of the VOC plume at the boundary. The TVOC concentration in well 121-43 has declined from 398 µg/L in 2008 to <1.0 µg/L in November 2024 (**Figure 3.2.3-1**).

- Three additional monitoring wells are used to monitor the performance of extraction well EW-17. They include: 121-47, a western plume perimeter well; 121-48, an eastern plume perimeter well; and 121-49, located upgradient of extraction well EW-17. The TVOC concentration in both 121-47 and 121-48 remained relatively stable throughout 2024. The upgradient monitoring well 121-49 showed slightly decreasing TVOC concentrations during 2024. TVOC concentrations in well 121-49 have shown an overall decreasing trend from 740 µg/L in 2017 to 46 µg/L in November 2024 (**Figure 3.2.2-3**). Although well 121-49 has seen a reduction of TVOC concentrations, recent monitoring data suggests that due to the proximity to EW-17 and the similarities in screen zone depths, drawdown effects may play a role in the concentrations observed within 121-49. Data collected during March 2023 showed a rebound in concentrations to 130 µg/L during a time when EW-17 was off for maintenance.
- Monitoring well 121-45 was installed to monitor the plume between the Middle Road and South Boundary. The TVOC concentration was 2 µg/L in November 2024. This is a significant reduction from the initial concentration of 613 µg/L in 2006 (**Figure 3.2.2-3**).
- Well 121-54 was installed in 2014 to monitor VOC concentrations upgradient of extraction well EW-17. This well has had persistent TVOC concentrations between 40 µg/L (October 2024) and 267 µg/L (September 2014). Well 121-53 was also installed upgradient of EW-17, and it remained elevated with a TVOC concentration of 128 µg/L in October 2024.
- Well 121-57 was installed in 2023 approximately 650 feet upgradient of EW-17 and has an elevated TVOC concentration of 235 µg/L during the October 2024 sample event.
- Well 122-05 is a Magothy monitoring well west of EW-8. TVOC concentrations in this well continued to remain relevantly stable with a concentration of 7 µg/L in October 2024 (**Figure 3.2.2-3**).

Table 3.2.3-1.
OU III Middle Road/South Boundary/Western South Boundary 2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit* (µg/L)	Max. Observed Value (µg/L)
pH range (SU)	6.5 – 8.5	6.92–7.78
carbon tetrachloride	5	ND
chloroform	7	ND
dichlorodifluoromethane	5	ND
1,1-dichloroethane	5	ND
1,1-dichloroethylene	5	ND
methyl chloride	5	ND
tetrachloroethylene	5	ND
toluene	5	ND
1,1,1-trichloroethane	5	ND
1,1,2-trichloroethane	5	ND
trichloroethylene	10	ND

Notes:
*Maximum allowed by requirements equivalent to a SPDES permit.
Required sampling frequency is monthly for VOCs and pH.
SU – Standard units.

3.2.3.4 System Operations

The individual extraction wells are sampled quarterly and analyzed for VOCs. The effluent sampling parameters of pH and VOCs are obtained monthly, in accordance with SPDES equivalency permit requirements (**Table 3.2.3-1**). Sampling for tritium was discontinued during the last quarter of 2023 due to not having any detections in over twenty years. Effluent VOC concentrations from the treatment system during this period of operation were below equivalency permit requirements. Because extraction well EW-17 utilized the electrical equipment from EW-12, EW-12 has not been sampled since 2012. In 2024, approximately 53 million gallons of water were treated by the South Boundary System. The combined Middle Road, South Boundary and Western South Boundary System

treated a total of approximately 328 million gallons. Approximately 170 million gallons of this treated water were transferred to the RA V recharge basin while the remainder was discharged to the OU III recharge basin. In addition, these systems extraction wells, influent, and effluent were analyzed for PFAS and 1,4-dioxane starting in 2024 (**Section 3.5**).

The following is a summary of the South Boundary System operations for 2024.

January – September 2024

The system operated normally with well EW-17 until July 3rd. The system was off from July 3rd until August 6th for tree trimming near overhead powerlines. The system operated normally from August 7th through the month of September. In the first three quarters, the OU III South Boundary System pumped and treated approximately 35 million gallons of water.

October – December 2024

The system operated normally with well EW-17 through December 4th. The system was off from December 5th through 12th for electrical controls upgrades. The OU III South Boundary System pumped and treated approximately 18 million gallons of water.

3.2.3.5 System Operational Data

System Influent and Effluent

Figures 3.2.3-3 and **3.2.3-4** plot the TVOC concentrations in the extraction wells versus time. The influent water and the individual extraction wells show a declining trend in TVOC concentrations. System influent and effluent sampling results are summarized in **Tables F-13** and **F-14**, respectively.

Cumulative Mass Removal

Average flow rates for each monthly monitoring period were used, in combination with the TVOC concentration in the air-stripper influent, to calculate the mass removal (**Table F-15**). The cumulative total of VOCs removed by the treatment system versus time is plotted on **Figure 3.2.3-5**. During 2024, the total amount of VOCs removed by the South Boundary system was approximately six pounds. The South Boundary system has removed approximately 3,090 pounds since startup in June 1997.

Air Discharge

Table 3.2.3-2 shows the air emissions data from the OU III South Boundary system for 2024 and compares the values to levels stipulated in the existing Air Equivalency Permit and NYSDEC DAR-1 guidance. Emission rates are obtained through mass-balance calculations for water treated during that time (**Table F-13**). The Middle Road/South Boundary and Western South Boundary systems are being co-treated via air stripping. The cumulative total emission rates of the co-treated system are provided below and the emission rates are still well below permitted levels.

As demonstrated in **Table 3.2.3-2** the combined OU III Middle Road/South Boundary/Western South Boundary system met all air emission parameters for operation as specified in DAR-1 guidance and the existing air equivalency permits.

Extraction Wells

Only extraction well EW-17 operated during 2024. EW-17 showed a maximum TVOC concentration of 13 µg/L in April. This well is located slightly downgradient and deeper than well EW-4. **Table F-12** summarizes the data for the extraction wells. **Table 3.2.3-3** shows the monthly extraction well pumping rates. The system averaged 103 gpm in 2024. Starting in 2023, the system has been analyzed for PFAS and 1,4-dioxane (**Section 3.5**).

Table 3.2.3-2
OU III Middle Road/South Boundary/Western South Boundary Air Stripper
2024 Average VOC Emission Rates

Parameter	Allowable ERP* (lbs/hr)	Mass Emission Limit Table 2-2 HTAC (lbs/yr)	Calculated Average ER Table 2-2 HTAC (lbs/hr)	SB Actual Mass Emission** (lbs/yr)	SB Actual ER*** (lbs/hr)	MR/SB/WSB Total ER**** (lbs/hr)
Existing OUIII MR/SB/WSB Air Equivalency Permit Analytes						
carbon tetrachloride	0.016	100	0.011	0.757	0.0000864	0.000165
chloroform	0.0031	--	--	0.197	0.0000225	0.00013
chloroethane	10	--	--	ND	ND	ND
1,1-dichloroethane	10	--	--	ND	ND	0.000046
1,2-dichloroethane	0.008	100	0.011	ND	ND	0.0000011
1,1-dichloroethylene	0.034	--	--	0.122	0.0000140	0.000393
cis-1,2-dichloroethylene	10	--	--	ND	ND	ND
trans-1,2-dichloroethylene	10	--	--	ND	ND	ND
tetrachloroethylene	0.387	1000	0.11	4.44	0.00051	0.003
1,1,1-trichloroethane	10	--	--	0.061	0.00000692	0.000251
trichloroethylene	0.119	500	0.057	0.18	0.000021	0.00017
Other Table 2-2 HTACs:						
benzene	--	100	0.011	ND	ND	ND
vinyl chloride	--	100	0.011	ND	ND	ND
1,1,2 trichloroethane	--	100	0.011	ND	ND	ND
1,1,2,2-tetrachloroethane	--	1,000	0.11	ND	ND	ND
Other Detected Analytes:						
dichlorodifluoromethane	--	--	--	--	--	0.0000542
1-methylethyl-benzene	--	--	--	--	--	0.00000463
Methyl chloride	--	--	--	--	--	0.00000214
Naphthalene	--	--	--	0.019	0.0000021	0.0000021
Total VOCs	--	--	--	5.76	0.00066	0.00375

Notes:
*Allowable ERP (Emission Rate Potential) – Based on existing treatment system Air Equivalency Permits. Conservative value used.
Mass Emission Limit – NYSDEC Part 212-2.2 Table 2-2 High Toxicity Air Contaminant (HTAC) List.
Calculated Average (ER) Emission Rate – Calculated average ER based on Table 2-2 HTAC Mass Emission Limit.
**Actual Mass Emission – Calculated cumulative mass emission based on average system influent and effluent VOC concentrations and system operational data for 2024.
***Actual ER – Calculated ER based on average system influent and effluent VOC concentrations and system operational data for 2024.
****MR/SB/WSB Total ER =Cumulative Total for Middle Road/South Boundary/Western South Boundary.
-- – No value.

3.2.3.6 System Evaluation

The OU III South Boundary Treatment System performance can be evaluated based on the decisions identified for this system resulting from the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

No unexpected concentrations or types of VOC contamination were detected. However, PFAS and 1,4-dioxane were detected in the system and some monitoring wells as detailed in **Section 3.5**.

2. Has the downgradient migration of the plume been controlled?

Yes, extraction well EW-17 is controlling the plume at the site boundary. This has resulted in reduced VOC concentrations in bypass well 121-43 from 87 µg/L in October 2012 to <1.0 µg/L in November 2024 (**Figure 3.2.3-1 and Figure 3.2.2-3**).

3. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

Seven of the eight extraction wells have been shut down as they have achieved the capture goal for this system. Well EW-17 will continue to operate on a full-time basis to capture VOCs in this area.

4. Are TVOC concentrations in plume core wells above or below 50 µg/L?

There are still four plume core wells 121-49, 121-53, 121-54, and 121-57 with persistent TVOC concentrations above 50 µg/L in the capture zone of well EW-17.

5. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

No. For the extraction wells that have been shut down, significant concentration rebound has not been observed. Extraction well EW-17 is still in full-time operation.

6. Has the groundwater cleanup goal of meeting MCLs been achieved?

No. Individual VOC MCLs have not been achieved. Monitoring well 121-49, located near EW-4 and EW-17, has a shown a decrease in TVOC from 1,257 µg/L TVOCs in November 2011 to less than 70 µg/L in 2024. However, similar to the Middle Road Treatment System, monitoring well 121-53, 121-54, and 121-57 located approximately halfway between the Middle Road and South Boundary Treatment System has VOC concentrations that are not decreasing at a rate that will definitively achieve cleanup goals by 2030.

3.2.3.7 Recommendations

The following are recommendations for the OU III South Boundary Treatment System and groundwater monitoring program:

- Maintain wells EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, and EW-12 in standby mode. The system's extraction wells will continue to be sampled on a quarterly basis, with the exception of EW-12. The wells will be restarted if extraction or monitoring well data indicate TVOC concentrations exceed the 50 µg/L capture goal.
- Continue to operate extraction EW-17 on a full-time basis.
- Deep Upper Glacial aquifer VOC concentrations in this area of the site are not declining at a rate that will definitively meet the ROD cleanup goal of MCLs by 2030. Therefore, per the OUIII Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**) recommendations, install one additional extraction well in the approximate location of monitoring well 121-57 in order to expedite the cleanup timeframe for the South Boundary portion of the plume.

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3.2.4 Western South Boundary Treatment System

The Western South Boundary (WSB) Treatment System was designed to capture VOCs in the Upper Glacial aquifer along portions of the WSB. The capture goal for the system is 20 µg/L of TVOC. The system was designed to reduce additional off-site migration of VOCs, and potential impacts of the VOC plume to the Carmans River. The system began operating in September 2002 and was changed to a pulsed pumping mode in late 2005, one month on and two months off. Based on increasing VOC concentrations in an upgradient monitoring well, extraction well WSB-1 was put back into full-time operation starting in November 2008. Extraction well WSB-2 was placed in standby in October 2016. During 2018, four new extraction wells were added to this system. They began operations in March 2019. Details are provided below on the new extraction wells.

3.2.4.1 System Description

A complete description of the WSB Treatment System is contained in the *Operations and Maintenance Manual for the Western South Boundary Treatment System, Rev. 3* (BNL, 2020b). A modification to this system to add four new extraction wells was undertaken beginning in June 2018 (see BNL, 2018c) and was completed in March 2019. The four new wells were installed to address deeper VOC contamination. These wells along with the two existing wells were connected to the Middle Road/South Boundary Treatment System. A schematic of the new well configuration and piping is shown on **Figure 3.2.4-7**. The existing WSB air stripper is no longer operating and will be decommissioned in the future. The WSB extraction well effluent water discharge is now monitored under the Middle Road and South Boundary Treatment System SPDES Equivalency permit.

3.2.4.2 Groundwater Monitoring

A network of 35 wells is used to monitor this plume. The well locations are shown on **Figure 3.2.4-1**. The wells are sampled in accordance with **Table 1-5.**

3.2.4.3 Monitoring Well Results

The primary VOCs associated with this plume are dichlorodifluoromethane (Freon-12), 1,1,1-trichloroethane (TCA), and DCE. These VOCs were first observed in vertical profile wells installed throughout the WSB area in the late 1990s as part of the OU III RI/FS. TVOC concentrations ranging from 20 µg/L to 40 µg/L were encountered at depths between 120-170 ft bls throughout the area at that time.

Monitoring of this plume has identified several specific areas of higher VOC concentrations than were observed during the RI/FS. An area of VOC concentrations higher than previously seen (up to 170 µg/L TVOC concentrations) was characterized beginning in 2008, from the Middle Road area south to WSB-1 at the south boundary. This plume segment of higher concentrations was primarily focused at depths between 130 and 150 feet bls. During 2008 and 2009, an area of Freon-12 with concentrations up to 55 µg/L, was characterized in the deep Upper Glacial aquifer at depths of 180-200 feet bls approximately 800 feet south of Princeton Avenue.

During characterization efforts in 2016-2017 to define the southern extent of the deeper Freon-12, a zone of high VOC concentrations was encountered. Most of the plume was at slightly greater depths than previously seen in this area (140-210 feet bls). The primary VOCs continued to be TCA, DCE and Freon-12. Based on the characterization data, the areas of higher TCA and DCE concentrations represent slugs of contamination that may have originated from periodic releases from the center of the site. The deeper concentrations of elevated Freon-12 are more discontinuous. **Figure 3.2.4-2** is a vertical cross section from north to south that shows the VOC contamination. This cross section shows this area

of deeper VOC contamination at the south boundary near wells WSB-5 and WSB-6 with some areas of contamination below the Gardiners Clay.

Figure 3.2.4-1 presents fourth quarter 2024 monitoring well concentrations. **Figure 3.2.4-2** provides a north-south cross section (H-H') of the plume. **Figure 3.2.4-6** provides an east-west cross section (H1-H1') along the site boundary and **Figure 3.2.4-3** provides trend graphs for key monitoring wells. A summary of key monitoring well data for 2024 follows:

- Upgradient monitoring wells 103-18 and 103-19 are located near Princeton Avenue. During 2024, four samples were collected from 103-18, and the highest concentration observed was 8 µg/L in May. TVOC concentrations in well 103-19 have remained stable around 5 to 6 µg/L.
- **Figure 3.2.4-6** shows an east west cross section near the BNL site boundary. This figure shows that the higher concentrations are slightly deeper than the original extraction well WSB-1 and further to the west near extraction wells WSB-5 and WSB-6.
- Well 126-20 located between WSB-4 and WSB-5 had a peak TVOC concentration in 2024 of 3 µg/L in June. This is a significant reduction from the 2018 peak of 150 µg/L.
- Monitoring well 126-18 is located upgradient of extraction wells WSB-5 and WSB-6. It is screened at a depth similar to well WSB-5, the shallower of the two extraction wells. TVOC concentrations in this well were 7 µg/L in September 2024. This was primarily toluene and may have been due to sample contamination as it was not observed in samples before or after this date. This is a significant reduction from the peak concentration of 203 µg/L in 2018.
- Downgradient monitoring wells 130-09, 130-10 and 130-11 located south of extraction wells WSB-5 and WSB-6 showed VOC concentrations below AWQS in 2024. This is a good indication that the two extraction wells are capturing the plume.
- The area of higher TCA and DCE concentrations that was identified in 2008-2009, extending at that time from well 119-06 at the Middle Road, south to WSB-1, has now decreased to below AWQS in the vicinity of WSB-1. Individual VOC concentrations in upgradient wells 119-06 and 126-17 were below AWQS. The plume is now below AWQS in the vicinity of WSB-1 as shown on **Figure 3.2.4-1**.
- TVOC concentrations in well 126-14, immediately upgradient of well WSB-1, were below AWQS in 2024. This well is approximately 200 feet north of WSB-1. The well had a peak concentration of 170 µg/L in 2018.
- Well 126-16 located just south of the BNL site boundary had TVOC concentrations of up to 13 µg/L; however, all individual VOCs were below MCLs.
- Three off-site monitoring wells are located on the west end of Carleton Drive: 000-558, 000-559, 000-560. The maximum TVOC concentration in these wells was 14 µg/L in well 000-558 in November.

3.2.4.4 System Operations

During 2024, extraction wells WSB-3, WSB-4, WSB-5, and WSB-6 continued the pulsed pumping schedule in accordance with the recommendations in the *2022 Groundwater Status Report* (BNL, 2023c). Extraction well WSB-2 was in standby mode in 2024 based on the TVOC concentrations remaining below the capture goal of 20 µg/L. Extraction well WSB-1 was turned off and placed into standby mode per the recommendations in the *2023 Groundwater Status Report* (BNL, 2024b). System

samples were collected monthly, and extraction wells were collected quarterly and analyzed for VOCs. In addition, the effluent was analyzed for pH monthly in conjunction with the Middle Road and South Boundary pH sample. **Table 3.2.4-1** provides the effluent limitations for meeting the requirements of the SPDES equivalency permit. The Western South Boundary is now operating under the same SPDES equivalency permit as the Middle Road and South Boundary projects. The system's effluent discharges met the SPDES equivalency permit requirements during 2024. The Middle Road, South Boundary, and Western South Boundary System treated a combined total of approximately 328 million gallons. Approximately 170 million gallons of this treated water
was transferred to the RAV recharge basin while the remainder was discharged to the OU III recharge basin. Starting in 2023, the system was also analyzed for PFAS and 1,4-dioxane **(Section 3.5)**.

The system operations are summarized below.

January – September 2024

The system operated normally with WSB-1 and WSB-3 through WSB-6 operating full time until July 3rd. The system was off from July 3rd until August 6th for tree trimming near overhead powerlines. The system operated normally from August 7th through the month of September. During the first three quarters, the system treated approximately 65 million gallons of water.

October – December 2024

The system operated normally under the pulsed pumping schedule through December 4th. The system was off from December 5th through 12th for electrical controls upgrades. The system treated approximately 24 million gallons of water.

Table 3.2.4-1
OU III Middle Road/South Boundary/Western South Boundary Treatment System 2024 SPDES Equivalency Permit Levels

Parameter	Permit Level (µg/L)	Max. Measured Value (µg/L)
pH range (SU)	6.5–8.5	6.92-7.78
carbon tetrachloride	5	ND
chloroform	7	ND
dichlorodifluoromethane	5	ND
1,1-dichloroethane	5	ND
1,1-dichloroethylene	5	ND
methyl chloride	5	ND
tetrachloroethylene	5	ND
toluene	5	ND
1,1,1-trichloroethane	5	ND
1,1,2-trichloroethane	5	ND
trichloroethylene	10	ND

Note:
Required effluent sampling frequency is monthly for VOCs and monthly for pH.
SU = Standard units

3.2.4.5 System Operational Data

Extraction Wells

During 2024, the WSB System treated approximately 89 million gallons of water, with an average flow rate of approximately 171 gpm. **Table 2-2** gives monthly pumping data for the six extraction wells. **Table 3.2.4-2** shows the monthly extraction well pumping rates. VOC concentrations for the extraction wells are provided in **Table F-16**. TVOC concentrations for extraction wells WSB-1 and WSB-2 have remained below the capture goal of 20 µg/L since 2006. TVOC concentrations for extraction wells showed a maximum concentration in well WSB-5 of 11 µg/L. Trends for the extraction wells are shown on **Figure 3.2.4-4.**

System Influent and Effluent

Influent TVOC concentrations remained stable with a maximum concentration of 14 µg/L. The only individual VOCs above its AWQS during the year were DCE and PCE at 7.3 µg/L and 6.8 µg/L respectively. (**Table F-17**). The air stripping system effectively removed the contaminants from the influent groundwater. The system's effluent data were below the analytical method detection limits and below the regulatory limits specified in the equivalency permit (**Table F-18**).

Table 3.2.4-3
OU III Middle Road/South Boundary/Western South Boundary Air Stripper
2024 Average VOC Emission Rates

Parameter	Allowable ERP* (lbs/hr)	Mass Emission Limit Table 2-2 HTAC (lbs/yr)	Calculated Average ER Table 2-2 HTAC (lbs/hr)	WSB Actual Mass Emission** (lbs/yr)	WSB Actual ER*** (lbs/hr)	MR/SB/WSB Total ER**** (lbs/hr)
Existing OUIII MR/SB/WSB Air Equivalency Permit Analytes						
carbon tetrachloride	0.016	100	0.011	0.075	0.00000856	0.000165
chloroform	0.0031	--	--	0.3957	0.0000452	0.00013
chloroethane	10	--	--	ND	ND	ND
1,1-dichloroethane	10	--	--	0.403	0.000046	0.000046
1,2-dichloroethane	0.008	100	0.011	0.0094	0.0000011	0.0000011
1,1-dichloroethylene	0.034	--	--	2.93	0.00033	0.000393
cis-1,2-dichloroethylene	10	--	--	ND	ND	ND
trans-1,2-dichloroethylene	10	--	--	ND	ND	ND
tetrachloroethylene	0.387	1000	0.11	0.446	0.000051	0.003
1,1,1-trichloroethane	10	--	--	1.366	0.000156	0.000251
trichloroethylene	0.119	500	0.057	0.44	0.0000502	0.00017
Other Table 2-2 HTACs:						
benzene	--	100	0.011	ND	ND	ND
vinyl chloride	--	100	0.011	ND	ND	ND
1,1,2 trichloroethane	--	100	0.011	ND	ND	ND
1,1,2,2-tetrachloroethane	--	1,000	0.11	ND	ND	ND
Other Detected Analytes:						
dichlorodifluoromethane	--	--	--	0.475	0.0000542	0.0000542
1-methylethyl-benzene	--	--	--	--	--	0.00000463
Methyl chloride	--	--	--	0.0188	0.00000214	0.00000214
Naphthalene	--	--	--	--	--	0.0000021
Total VOCs	--	--	--	6.55	0.00075	0.00375

Notes:
*Allowable ERP (Emission Rate Potential) – Based on existing treatment system Air Equivalency Permits. Conservative value used.
Mass Emission Limit – NYSDEC Part 212-2.2 Table 2-2 High Toxicity Air Contaminant (HTAC) List.
Calculated Average (ER) Emission Rate – Calculated average ER based on Table 2-2 HTAC Mass Emission Limit.
**Actual Mass Emission – Calculated cumulative mass emission based on average system influent and effluent VOC concentrations and system operational data for 2024.
***Actual ER – Calculated ER based on average system influent and effluent VOC concentrations and system operational data for 2024.
****MR/SB/WSB Total ER =Cumulative Total for Middle Road/South Boundary/Western South Boundary.
-- – No value.

Cumulative Mass Removal

Average flow rates for each monthly monitoring period were used, in combination with the TVOC concentration in the influent, to calculate the pounds of VOCs removed per month (**Table F-19**). The cumulative mass of VOCs removed by the treatment system is provided on **Figure 3.2.4-5**. During 2024, approximately seven pounds of VOCs were removed. A total of approximately 219 pounds have been removed since the start-up of the system in 2002.

Air Discharge

Table 3.2.4-3 presents the VOC air emission data for 2024 and compares the values to levels stipulated in the existing Air Equivalency Permit and NYSDEC DAR-1 regulations. Emission rates are calculated through mass balance for water treated during operation. The Middle Road, South Boundary, and Western South Boundary systems are being co-treated via air-stripping. The cumulative total emission

rates of the co-treated system are provided above, and the emission rates are still well below permitted levels.

As demonstrated in **Table 3.2.4-3** above, the combined OU III Middle Road/South Boundary/Western South Boundary system met all air emission parameters for operation as specified in DAR-1 guidance and the existing air equivalency permits.

3.2.4.6 System Evaluation

The Western South Boundary Treatment System performance can be evaluated based on decisions identified for this system from the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

There were no unexpected levels or types of VOC contamination. However, PFAS and 1,4-dioxane were detected in the system, as detailed in **Section 3.5.**

2. Has the downgradient migration of the plume been controlled?

The four new extraction wells address the migration of the deeper VOC contamination. The bypass wells at the site boundary continue to remain below MCLs indicating the system is controlling the plume.

3. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

WSB-2 remained in standby mode and TVOC concentrations in this area are well below the capture goal of 20 µg/L. TVOC concentrations in WSB-1 have declined to below the capture goal. The four new extraction wells began operation in March 2019. Based upon the current low VOC concentrations in this plume a recommendation to submit a petition for shutdown for this system in 2025 will be made in this report.

3a. Are TVOC concentrations in plume core wells above or below 20 µg/L?

None of the core monitoring wells showed TVOC concentrations above the capture goal of 20 µg/L in 2024.

3b. Is there a significant concentration rebound in core wells and/or extraction wells following pulsed pumping or shutdown?

No rebound was observed in the extraction wells during 2024.

4. Has the groundwater cleanup goal of meeting MCLs been achieved?

No. the cleanup goal of meeting MCLs has not been achieved. Although there has been significant reduction in VOC concentrations in the monitoring wells and the overall plume concentrations since the startup of the new extraction wells in March 2019, MCLs have not been achieved for individual VOCs in each of the plume core wells. See **Figure 3.2.4-8** for a comparison of the plume from 2018 to 2024.

3.2.4.7 Recommendations

The following are recommendations for the OU III Western South Boundary Treatment System and groundwater monitoring program:

- Based on the TVOC concentrations below the capture goal of 20 µg/L in WSB-1 and WSB-2, maintain these extraction wells in standby mode. If TVOC concentrations greater than

20 µg/L are observed in WSB-2 or the adjacent monitoring wells, extraction well WSB-2 may be put back into full-time operation.

§ Continue the current pulse pumping of the remaining four operating extraction wells until a petition for shutdown is submitted and approved. The pulsed pumping should continue on the current schedule of wells WSB-3 and WSB-5 on one month while wells WSB-4 and WSB-6 are off. The following month, wells WSB-4 and WSB-6 should be on while wells WSB-3 and WSB-5 are off.

§ Based upon the TVOC concentrations in both the monitoring and extraction wells it is recommended that a petition for shutdown be submitted for this system.

§ Continue the current monitoring frequency for the WSB monitoring wells as shown in **Table 1-5**.

3.2.5 Industrial Park Treatment System

This section summarizes the operational data from the Industrial Park Groundwater Treatment System for 2024 and presents conclusions and recommendations for its future operation. The Industrial Park system was designed to contain and remediate a portion of the OU III plume between BNL's southern boundary and the Industrial Park. **Figure 3.2.5-1** illustrates the extent of the OU III contaminant plume in the vicinity of the Industrial Park, located south of the Long Island Expressway. The primary VOCs associated with this portion of the OU III plume are TCA, PCE, and carbon tetrachloride.

The system began operation in September 1999. A petition for shutdown was submitted to the regulators in February 2013 (BNL, 2013a). After receiving approval from the regulators, the system was shut down in May 2013. In March 2014, wells UVB-3 through UVB-6 were returned to full time operation due to a rebound of VOC concentrations. They were shut down in January 2017. A modification to the industrial park system was completed in January 2015 which added two new extraction wells.

3.2.5.1 System Description

The original Industrial Park system consisted of a line of seven in-well air stripping treatment wells. Each treatment well was constructed with two well screens separated by an inflatable packer. Contaminated groundwater is withdrawn from the aquifer via submersible pump through a lower screen (extraction) set at the base of the treatment well. The groundwater is pumped to a stripping tray located in a below ground vault over the wellhead. After passing through the stripping tray, treated groundwater flows back down the well and is recharged to a shallower portion of the aquifer through an upper screen (recharge). Some of the treated groundwater that is recharged through the upper screen recirculates through the cell and is drawn back into the extraction screen for further treatment, while the balance flows in the direction of regional groundwater flow.

A closed-loop air system through a single blower keeps the vault under a partial vacuum. The vacuum draws air from below the stripping tray as contaminated groundwater is discharged on top. VOCs are transferred from the liquid phase to the vapor phase as contaminated groundwater passes through the stripping tray. The contaminated air stream is piped from the vault to a treatment and control building, where it is passed through two GAC units in series to remove the VOCs. Treated air is then recirculated back to the wellhead. The carbon units, system blower, and system control panel are all housed in a one-story masonry treatment building. A complete description of the system is included in the *Operations and Maintenance Manual for the OU III Offsite Removal Action* (BNL, 2007b).

In 2014, a modification to the Industrial Park System was implemented which included the installation of two new groundwater extraction wells. They are shown on **Figure 3.2.5-1** as IP-EW-8 and IP-EW-9. These wells became operational in January 2015. They were subsequently placed in standby in July 2019 and have remained off since then. The wells are screened deeper than the adjacent UVB wells to capture deeper VOC contamination identified just upgradient of this area (**Figure 3.2-2**). These wells utilize liquid phase carbon to treat the water rather than in-well air stripping. A complete description of the Industrial Park Modification is included in *the Operations and Maintenance Manual for the OU III Modification to the Industrial Park Groundwater Treatment System* (BNL, 2015).

3.2.5.2 Groundwater Monitoring

Well Network

The monitoring well network consists of 40 wells and is designed to monitor the VOCs in the vicinity of the Industrial Park, and the effectiveness of the groundwater treatment system.

Sampling Frequency and Analysis

Wells are sampled for VOCs as per the schedule in **Table 1-5**.

3.2.5.3 Monitoring Well Results

The complete analytical results are included in **Appendix C**. VOC concentrations in the plume perimeter wells remained below AWQS during 2024. Based on these data, the plume is effectively bounded by the current well network. **Figure 3.2.5-1** shows the plume distribution based on fourth quarter 2024 data. The vertical extent of contamination is shown on **Figure 3.2.5-2**. Concentration trend graphs for key monitoring wells are shown on **Figures 3.2.2-3 and 3.2.5-3.** Significant findings for 2024 include:

Plume Core Wells

- TVOC concentrations in plume core monitoring well 000-537 have remained below the capture goal of 50 µg/L since May 2022, with the highest concentration in 2024 of 41 µg/L observed in April. TVOC concentrations in plume core monitoring well 000-541 have remained below the capture goal since May 2023 with a maximum value observed in 2024 of 35 µg/L in November. TVOC concentrations in well 127-08 are also showing a steady decline, from 171 µg/L in 2015 to 18 µg/L in October 2024.
- Well 000-548 is located approximately 600 feet north of extraction well IP-EW-9. TVOC concentrations in this well were 14 µg/L in October 2024. There has been a slow decline in TVOC concentrations at this well over the past eight years.
- Well 000-529 is located 300 feet south of 000-548. TVOC concentrations in this well ranged between 7 µg/L and 14 µg/L in 2024.

Plume Bypass Wells

- Wells 000-432 and 000-544 provide bypass monitoring points downgradient of extraction wells IP-EW-8 and IP-EW-9 (not operational during 2024), respectively. VOC concentrations have been slightly above detectable levels in 000-432 over the past 10 years. The maximum TVOC concentrations in wells 000-544 and 000-432 during 2024 were 16 µg/L and 0.4 µg/L, respectively.

3.2.5.4 System Operations

In 2024, recirculation wells UVB-1 through UVB-7 and extraction wells IP-EW-8 and IP-EW-9 remained in standby mode. System extraction well pumping rates are included in **Table 3.2.5-1**. Extraction wells IP-EW-8 and IP-EW-9 operate under a SPDES Equivalency Permit (**Table 3.2.5-2**). The extraction wells are sampled on a quarterly basis for VOCs.

3.2.5.5 System Operational Data

Well Influent and Effluent

Samples were obtained quarterly for wells UVB-1 through UVB-7 and wells IP-EW-8 and IP-EW-9. The samples are analyzed for VOCs. Starting in 2023, samples of the system effluent have been analyzed for PFAS and 1,4-dioxane (**Section 3.5**).

During 2024, TVOC concentrations in the extraction wells were below the capture goal of 50 µg/L (**Figure 3.2.5-4**) with a maximum TVOC concentration of 8.5 µg/L for UVB-5 in April. The historical influent and effluent concentrations are shown on **Figures 3.2.5-4** and **3.2.5-5**. The historical removal

efficiencies for the air strippers in the extraction wells UVB-1 through UVB-7, and the extraction well data are shown in **Table F-20** and **F-23**.

Cumulative Mass Removal

The system remained in standby mode in 2024. The cumulative mass of VOCs removed from the aquifer is a total of 1,077 pounds from 1999-2019 (**Figure 3.2.5-6**).

Air Treatment System

Air samples were not collected because UVB-1 to UVB-7 were in standby mode (**Table F-22**).

Table 3.2.5-2
OU III Industrial Park Modification Treatment System 2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit (µg/L)	Max. Measured Value (µg/L)
pH (range)	5.0 – 8.5 SU	NS
carbon tetrachloride	5.0	NS
chloroform	7.0	NS
1,1-dichloroethylene	5.0	NS
1,2-dichloroethane	0.6	NS
tetrachloroethylene	5.0	NS
1,1,1-trichloroethane	5.0	NS
toluene	5.0	NS
trichloroethene	5.0	NS

Notes:
NS = Not Sampled
Required sampling frequency is monthly for VOCs and monthly for pH.
SU = Standard Units

3.2.5.6 System Evaluation

The Industrial Park Treatment System performance can be evaluated based on the major decisions identified for this system resulting from the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

There were no unusual or unexpected VOC concentrations observed in the monitoring wells or extraction wells associated with the OU III Industrial Park System during 2024. However, PFAS and 1,4-dioxane were detected in the system, as detailed in **Section 3.5**.

2. Has the downgradient migration of the plume been controlled?

Yes, an analysis of the plume perimeter and bypass well data reveals that there were no TVOC concentrations above the capture goal of the system in 2024. A comparison of the plume from 1997 to 2024 is provided on **Figure 3.2.5-7**. No monitoring well TVOC concentrations exceeded the capture goal during 2024.

3. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

The UVB wells have been on standby since January 2017 and there has been little rebound of TVOC concentrations observed in the area monitoring wells. Two extraction wells were added in 2014 (IP-EW-8 and IP-EW-9) and located to capture deeper VOCs. Since operation of these wells was initiated in 2015, the highest TVOC concentrations reported for wells IP-EW-8 and IP-EW-9 were 6 µg/L and 10 µg/L, respectively. Individual VOCs have been below AWQS since 2017. IP-EW-8 and IP-EW-9 were subsequently placed in standby mode in July 2019.

4. Are TVOC concentrations in plume core wells above or below 50 µg/L?

There were no TVOC concentrations detected above the capture goal in plume core wells in 2024.

5. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

There was no rebound of concentrations in the plume core wells associated with the recirculation wells UVB-1 through UVB-7 in 2024. No rebound of concentrations has been observed in the vicinity of wells IP-EW-8 and IP-EW-9 since they were shut down in July 2019.

6. Has the groundwater cleanup goal of meeting MCLs been achieved?

MCLs have not yet been achieved but are expected to be met by 2030.

3.2.5.7 Recommendations

The following are recommendations for the Industrial Park Treatment System and groundwater monitoring program:

- Maintain the seven UVB wells in standby. If TVOC concentrations exceed the 50 µg/L capture goal in these UVB wells or associated monitoring wells, they may be restarted.
- Maintain IP-EW-8 and IP-EW-9 in standby and continue to monitor for rebound of VOCs. If TVOC concentrations approach the capture goal of 50 µg/L in the vicinity of the extraction wells the system will be evaluated for restart.
- Continue to monitor the plume core wells. As recommended in the *2023 Groundwater Status Report* (BNL, 2024b), since TVOC concentrations in wells 000-537 and 00-541 remained below the capture goal during 2024, and the remainder of the plume core wells also remained below the capture goal over the same period, prepare a petition for closure of the Industrial Park Treatment System.

3.2.6 North Street Groundwater Monitoring

The North Street Groundwater Monitoring Program addresses a VOC plume that originated at the Former Landfill/Chemical Holes area. The remnants of the VOC plume are presently located south of the site boundary, with the leading edge extending south to Flower Hill Drive (**Figure 3.2.6-1**). The groundwater treatment system began operating in May 2004. In June 2013, a *Petition for Shutdown OU III North Street Groundwater Treatment System* (BNL, 2013b) was submitted to the regulators for review and approval. The system was shut down in August 2013 after receiving approval from the regulators. In February 2020, a *Petition for Closure for the OU III North Street Groundwater Treatment System* (BNL, 2020a) was submitted to the regulators for review and approval. This document received regulatory approval in March 2020. The document recommended the following: "*Seven of the 12 core monitoring wells are proposed for continued annual monitoring until the results for individual VOCs are consistently below MCLs. Sampling of the remaining 11 monitoring wells will be discontinued but the wells will be retained until the completion of the PFAS and 1,4-dioxane characterization at the BNL site. The two extraction wells and system infrastructure (building, carbon units, etc.) will also be retained until PFAS and 1,4-dioxane characterization is complete. The four recharge wells and the building will be used for the recently constructed North Street East Ethylene Dibromide Groundwater Treatment System."* The system is now in a post-closing monitoring phase. The groundwater treatment system consisted of two extraction wells, which are now permanently shut down. The system captured the higher concentration portion of the VOC plume (i.e., TVOC concentrations greater than 50 µg/L) in the Upper Glacial aquifer and minimized additional VOC migration into the Magothy aquifer. The North Street plume was divided into two segments for remediation purposes. The area to the north of extraction well NS-2 was addressed by the North Street remediation system, whereas the Airport System captures and treats contaminated groundwater in the area to the south (**Figure 3.0-1**). The Airport System was constructed in part to address the leading edge of this plume (**Section 3.2.8**).

Cumulative Mass Removal

The mass of VOCs removed from the aquifer by the North Street Treatment System during system operations was calculated using the average flow rates for each monthly monitoring period, in combination with the TVOC concentration in the carbon unit's influent, to calculate the pounds removed per month. Extraction well TVOC concentrations during the operation of the system are shown on **Figure 3.2.6-4**. The cumulative mass of VOCs removed by the treatment system vs. time is plotted on **Figure 3.2.6-5**. From May 2004 through September 2013, the system removed 342 pounds of VOCs. The mass removal is summarized in **Table F-24**. The system is now shut down and no further operations are expected.

The downgradient portion of the plume that was south of the North Street System prior to start-up is being captured by the Airport Treatment System's eastern extraction wells. Further detail on the Airport System is provided in **Section 3.2.8**.

3.2.6.1 System Description

The North Street System consisted of two extraction wells. Extracted groundwater was piped through two 20,000-pound GAC units located in Building OS-5 on a parcel of land owned by DOE. The clean water was discharged to four injection wells located downgradient along North Street. Both the North Street and North Street East Systems share the four injection wells. Extraction wells NS-1 and NS-2 were designed to operate at a rate of up to 200 gpm each. A complete description of the system is contained in the *Operations and Maintenance Manual for the North Street/North Street East Offsite Groundwater Treatment Systems* (BNL, 2020d).

3.2.6.2 Groundwater Monitoring

Well Network

A network of seven wells monitors the remnants of the North Street VOC plume (**Figure 3.2.6-1**). Per the approved Petition for Closure, the other eleven wells remain but are no longer sampled. The seven wells being sampled are 000-108, 000-154, 000-212, 000-343, 000-465, 000-472, and 000-474. Wells sampled under the Airport program are also utilized for tracking the downgradient portions of the North Street VOC plume.

Sampling Frequency and Analysis

Sampling of the seven wells as part of the post closure monitoring program for VOCs is performed annually per the schedule in **Table 1-5**.

3.2.6.3 Monitoring Well Results

The primary VOCs associated with this plume are carbon tetrachloride, TCE, TCA, and chloroform. **Figure 3.2-1** and **Figure 3.2.6-1** depict the TVOC plume distribution. The complete groundwater monitoring well data for 2024 are included in **Appendix C**. A north–south hydrogeologic cross section (J–J') of the plume is provided on **Figure 3.2.6-2. Figure 3.2.6-3** shows time-concentration plots for key monitoring wells. A summary of key monitoring well data for 2024 follows:

- Plume core well 000-465 is located 100 feet upgradient of extraction well NS-1. This well had historically shown the highest VOC concentrations (primarily carbon tetrachloride) in the North Street area. TVOC concentrations in this well were as high as 1,796 µg/L in 2004. In December 2024, the concentration was 8.3 µg/L.
- Well 000-472, located proximate to extraction well NS-2, had a TVOC concentration of 11.6 µg/L in January 2025.
- The TVOC concentration in core well 000-474, located approximately 500 feet upgradient of extraction well NS-2, was 9.1 µg/L in December 2024.
- Plume core well 000-154 had historically shown high individual VOC concentrations (primarily carbon tetrachloride). TVOC concentrations of approximately 1,000 µg/L were observed in this well in 1997 and 1998. However, they have steadily declined since then, and individual VOC concentrations have been below AWQS for several years. It had a TVOC concentration of 1.5 µg/L in December.
- Three wells showed individual VOC concentrations above AWQS. Well 000-474 had a concentration of PCE at 5 µg/L and 000-472 had a concentration of PCE at 5.6 µg/L. Well 000-465 had a concentration of carbon tetrachloride at 5.4 µg/L.
- **Figure 3.2.6-6** compares the TVOC plume from 1997 to 2024. The southern portion of the plume that migrated south of the North Street System prior to system start-up is being captured by the Airport Treatment System's extraction well RTW-4A.

3.2.6.4 Groundwater Monitoring Evaluation

The North Street Groundwater Monitoring program can be evaluated from the decision rules identified in the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

There were no unusual or unexpected concentrations of contaminants observed in monitoring wells associated with the North Street plume in 2024.

2. Has the groundwater cleanup goal of meeting MCLs been achieved?

MCLs have not been achieved for individual VOCs in all North Street plume core wells. Three of the seven remaining wells had individual VOCs above MCLs, with a maximum concentration of 5.6 µg/L of PCE in well 000-472. MCLs are expected to be achieved in all North Street monitoring wells by 2030 through natural attenuation.

3.2.6.5 Recommendations

The following are recommended for the North Street Groundwater Monitoring Program.

- NS-1 and NS-2 will remain shut down until the OU X RI/FS characterization (**Section 3.5**) is completed. After the completion of this characterization, a determination of the future use of these wells will be made.
- Continue monitoring the seven wells on an annual monitoring schedule until the results for individual VOCs are consistently below MCLs. The remaining 11 monitoring wells will be retained until the completion of the OU X RI/FS characterization.

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3.2.7 North Street East Ethylene Dibromide Treatment System

This section summarizes the 2024 operational and monitoring well data for the OU III NSE Treatment System. The original system operated from 2004 to 2014 to capture and control the downgradient portion of the OU I VOC plume, which migrated beyond the BNL site boundary. This treatment system (which includes extraction wells NSE-1 and NSE-2) met its goals in 2014 with no significant rebound identified since (BNL 2014b). The NSE system was shut down and placed in standby mode in 2014 and a petition for closure of this treatment system was approved by the regulators in 2020. As recommended in the *2019 Groundwater Status Report* (BNL, 2020c), this system is now administratively closed for its originally designed purpose. In September 2019, a modification to the North Street East Groundwater Treatment System was submitted to the regulators. This included the addition of two new extraction wells to remediate the EDB plume that was characterized. This system became operational in July 2020.

3.2.7.1 System Description

Each well is designed to operate at approximately 100 gpm. The extracted groundwater is pumped through two 20,000-pound GAC units and the treated water is discharged to four injection wells located on North Street. The North Street and NSE carbon treatment units and control systems are located in the same building on North Street. A complete description of the system is contained in the revised *Operations and Maintenance Manual for the North Street/North Street East Offsite Groundwater Treatment Systems* (BNL, 2020d).

3.2.7.2 Groundwater Monitoring

The monitoring network for the EDB plume consists of 12 wells (See **Figure 3.2.7-1**). The sampling frequency for the EDB plume monitoring wells is quarterly, except for upgradient perimeter well 115-42 which is sampled semiannually. As part of the shutdown monitoring for the original VOC treatment system, 10 of the 12 wells are also sampled annually for VOCs using EPA Method 8260 Low Level. See **Table 1-5** for details.

3.2.7.3 Monitoring Well Results

Figure 3.2.7-1 shows the extent of the NSE EDB plume and the location of the two extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4. The trace levels of VOCs identified from the original plume and the EDB results are discussed below, and the data are provided in **Appendix C**.

Figure 3.2.7-2 depicts the vertical distribution of EDB within the deep Upper Glacial aquifer. The north-south transect line for cross section K–K' is shown on **Figure 3.2.7-2**. **Figure 3.2.7-3** presents the trends for EDB in the six monitoring wells that have detected EDB over the last several years. **Appendix C** contains a complete set of 2024 analytical results for the NSE program wells. A summary of key monitoring well data for 2024 follows:

- As shown on **Figure 3.2.7-3**, EDB concentrations have been declining in plume core well 000-394 since a peak detection of 1.06 µg/L in 2017 and have been below the DWS of 0.05 µg/L since June 2023. This well is located immediately upgradient of extraction well NSE-EDB-EW-4.
- During 2024, EDB concentrations in plume core well 000-552 remained below the DWS and were non detect in December. A similar decrease in EDB concentrations was observed in well 000-554 from 0.07 µg/L in March 2023, to non-detect in December 2024. (see **Figure 3.2.7-1**).

- § EDB was not detected in the three bypass wells during the fourth quarter of 2024.
- § EDB has never been detected in the two upgradient perimeter wells (115-42 and 000-138).
- § Individual VOCs were detected above MCLs in two of the 10 wells within the monitoring network. : Monitoring well 000-394 showed PCE at 6.3 µg/L in December 2024, slightly above the MCL of 5 µg/L. Monitoring well 000-553 showed toluene at 21 µg/L in December 2024. This detection is not consistent with historic results for this well, and is not considered to be indicative of aquifer conditions. The well will continue to be monitored through 2025.

TVOC concentrations are shown on **Figure 3.1-1** for the aforementioned wells.

3.2.7.4 System Operations

EDB extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4 were sampled quarterly in 2024. In April 2020, NYSDEC renewed the SPDES equivalency permit for the North Street and North Street East Treatment Systems and included EDB as a discharge parameter. **Table 3.2.7-1** provides the effluent limitations for meeting the requirements of the equivalency permit. Approximately 75 million gallons of water were treated in 2024 by the North Street East Treatment System. In addition, this system's extraction wells, influent, and effluent, were analyzed for PFAS and 1,4-dioxane starting in 2023 (**Section 3.5**).

3.2.7.5 System Operational Data

EDB extraction wells (NSE-EDB-EW-3 and NSE-EDB-EW-4) became operational in July 2020.

January through September 2024

The system operated normally with NSE-EDB-EW-3 and NSE-EDB-EW-4 operating full time until May 2024 when they began pulsed pumping operations of one month on, and one month off. Approximately 54 million gallons of water were pumped and treated.

October through December 2024

The system operated normally with NSE-EDB-EW-3 and NSE-EDB-EW-4 operating on a pulsed pumping schedule. Approximately 21 million gallons of water were pumped and treated.

Extraction Wells

Extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4 were sampled monthly through August of 2023 then quarterly beginning in September of 2023. During 2024, EDB concentrations in NSE-EDB-EW-3 and NSE-EDB-EW-4 did not exceed the 0.05 µg/L DWS in any of the monthly or quarterly samples collected. No other VOCs were detected in these extraction wells above AWQS. Sampling of VOC remediation wells NSE-1 and NSE-2 was discontinued as of October 2020.

System Influent and Effluent

System influent and effluent sampling results are summarized in **Tables F-29** and **F-30**, respectively. As noted in **Table 3.2.7-1**, there were no exceedances of the equivalency permit parameters during 2024.

Table 2-2 shows the monthly pumping data for the two EDB extraction wells. **Table 3.2.7-2** identifies the pumping rates for NSE-EDB-EW-3 and NSE-EDB-EW-4. The system averaged 144 gpm in 2024. **Figure 3.2.7-4** plots the TVOC concentrations in all four extraction wells. **Figure 3.2.7-5** plots the

EDB concentrations in extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4. VOC and EDB concentrations for the extraction wells are provided in **Table F-28**.

Cumulative Mass Removal

The cumulative mass of VOCs removed by the treatment system versus time is shown on **Figure 3.2.7-6**. A cumulative total of approximately 51 pounds of VOCs were removed from the aquifer during system operation (**Table F-31**). Due to the low concentrations of EDB in the system influent, presentation of a specific mass removal graph for EDB is not provided.

Table 3.2.7-1.
OU III North Street East Treatment System
2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit (µg/L)	Max. Observed Value (µg/L)
pH range (SU)	5.5–8.5	5.55–5.88
carbon tetrachloride	5	ND
chloroform	5	1.1
1,1-dichloroethane	5	ND
1,2-dichloroethane	0.6	ND
1,1-dichloroethylene	5	ND
tetrachloroethylene	5	2.2
toluene	5	ND
1,1,1-trichloroethane	5	0.25
trichloroethylene	5	0.49J
Ethylene dibromide (EDB)	0.03	ND

Notes:
Required effluent sampling freq. is monthly for VOCs and pH.
SU: Standard Units
J: The associated numerical value is an estimated quantity.
ND – Not detected

3.2.7.6 System Evaluation

The NSE EDB Treatment System performance can be evaluated based on decisions identified for this system from the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

There were no unexpected levels of EDB detected in the monitoring and extraction wells. However, PFAS and 1,4-dioxane were detected in the system, as detailed in **Section 3.5.**

2. Has the downgradient migration of the EDB plume been controlled?

Yes. Based on the data from the monitoring wells and two new extraction wells, the system has controlled and reduced plume concentrations to below the DWS. See **Figure 3.2.7-7** for a comparison of the EDB plume remediation progress from 2019 to 2024.

3. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

Yes. The system has met the criteria for shutdown. EDB concentrations in both extraction wells have remained below the DWS since 2021. The two remaining monitoring wells showing EDB concentrations above the DWS in 2022, have declined to levels less than the minimum detection limit (MDL) in 2024.

3a. Are EDB concentrations in plume core wells above or below 0.05 µg/L?

During 2024, EDB concentrations were below the DWS in all plume core wells.

3b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

No rebound in core wells and/or extraction wells has been observed since being placed in pulsed pumping mode. The two EDB extraction wells have been pulsed pumped since May 2024.

4. Has the groundwater cleanup goal of meeting the DWS been achieved?

EDB is now below the DWS in the program monitoring wells. One of the 10 monitoring wells sampled annually using Method 8260 Low Level detected VOCs above AWQS in 2024. The VOC detected above AWQS was PCE at 6.3 µg/L in well 000-394 during the fourth quarter.

3.2.7.7 Recommendations

The following recommendations are made for the NSE EDB Treatment System and groundwater monitoring program:

- Prepare a petition for shutdown, as EDB concentrations remained below the DWS through 2024.
- Continue pulsed pumping (one month on and one month off) until a petition for shutdown is approved by the regulators.
- Maintain the quarterly sampling frequency for the 12 EDB monitoring wells using Method 8011, except for upgradient perimeter well 115-42 which is sampled semiannually. Maintain annual VOC sampling using Method 8260 Low Level for all wells except for 115-42 and 000-138.

3.2.8 LIPA/Airport Treatment System

This section summarizes the 2024 operational and monitoring well data for the LIPA/Airport Treatment System and presents conclusions and recommendations for its future operation. The LIPA system was designed to provide capture and control of the downgradient portion of the VOC plume in the Upper Glacial and Magothy aquifers that had migrated south of the Industrial Park System before that system became operational in 1999. The Airport Treatment System was designed to capture the leading edge of the OU III and OU I/IV VOC plumes and to prevent further migration of the plumes, which have migrated south of the LIPA extraction wells and the North Street extraction wells before the system began operations. The capture goals for the LIPA system have been met, and the system is currently in standby mode. The *Petition for Closure – OU III LIPA Groundwater Treatment System* (BNL, 2024e) was submitted in early 2024 and subsequently approved by the regulators in December 2024.

3.2.8.1 System Description

The three components of the LIPA/Airport Treatment System are as follows:

1. The LIPA Magothy aquifer extraction well (EW-4L) on Stratler Drive (**Figure 3.2.8-1**) addressed high-level VOCs identified in the Magothy aquifer immediately upgradient of EW-4L in monitoring well 000-130 on Carleton Drive.

2. The other three LIPA extraction wells (EW-1L, EW-2L, and EW-3L) were installed to address high concentrations of VOCs in the Upper Glacial aquifer that had migrated past the Industrial Park System before that system became operational.

3. The six extraction wells in the Airport System were installed to address the leading edge of the plumes which have migrated past the LIPA extraction wells and the North Street extraction wells prior to their installation. The sixth well (RW-6A) was added in 2007 to address VOCs observed to the west of extraction well RTW-1A. The Airport system has a TVOC capture goal of 10 µg/L. RTW-4A also addresses Magothy aquifer contamination. Extraction wells RTW-1A, RTW-4A and RW-6A are in full time operation. Extraction wells RTW-2A, RTW-3A and RTW-5A are shut down and maintained in standby mode.

When in operation, the water from the four LIPA extraction wells was pumped to the treatment plant, located about one mile south on Brookhaven [Town] Airport property, where it is combined with the water from the six airport extraction wells (RTW-1A through RTW-5A and RW-6A) and treated via GAC. The treated water is released back to the ground via a series of shallow reinjection wells located at Brookhaven Airport.

A more detailed description of this system is contained in the *Operations and Maintenance Manual for the LIPA/Airport Groundwater Treatment System* (BNL, 2008a).

3.2.8.2 Groundwater Monitoring

Well Network

The LIPA/Airport monitoring network consists of 48 wells. The LIPA program is monitored by a total of 17 monitoring wells and the Airport program is monitored by 31 wells, which monitor the portions of the plume south of the LIPA and the North Street systems. All of these wells are used to evaluate the effectiveness and progress of the cleanup associated with these three components of the system. **Figure 1-2 and Figure 3.2.8-1** shows the monitoring wells for these plumes.

Sampling Frequency and Analysis

The monitoring wells for LIPA were on a quarterly sampling schedule for VOCs in 2024 to support the petition for closure. However, based on the data collected to support the petition for closure, during 2024 the LIPA wells were reduced to a semiannual schedule. The Airport wells are primarily sampled semiannually, and several wells are sampled quarterly for VOCs **(Table 1-5).**

3.2.8.3 Monitoring Results

The primary VOCs associated with these portions of the plume are carbon tetrachloride, TCA, trichloroethylene (TCE), and DCE. Groundwater monitoring for these systems was initiated in 2004. Fourth quarter 2024 well data are posted on **Figure 3.2.8-1** and **Figure 3.2.8-2**. The complete analytical results are in **Appendix C.** Results for key monitoring wells and extraction wells are as follows:

LIPA Monitoring

- The Magothy monitoring wells located in the vicinity of extraction well EW-4L all had TVOC concentrations below 5 µg/L during 2024.
- All of the LIPA monitoring wells were below MCLs during 2024.

Airport Monitoring

- Monitoring wells 800-94 and 800-95, are approximately 1,500 feet north of extraction wells RTW-1A, RTW-2A, and RW-6A. In 2024, well 800-94 had a maximum TVOC concentration of 43 µg/L in December and well 800-95 had a maximum concentration of 20 µg/L in May. Both of these wells have had persistently elevated TVOC concentrations, although concentrations are trending down in the last few years. (**Figure 3.2.8-6**).
- Monitoring well 800-96 detected a maximum TVOC concentration of 49 µg/L in the second quarter of 2024 (**Figure 3.2.8-1**, **Figure 3.2.8-6**).
- None of the bypass wells installed downgradient of this area detected VOCs above their respective MCL.
- Well 800-92, located upgradient of extraction wells RTW-3A and RTW-4A had TVOC concentrations above the capture goal for several years, however, since 2022 concentrations have been below MCLs. This is a slug of contamination that was south of the North Street extraction wells prior to the system start-up, and appears to have migrated past this well and is now being observed in well 800-101.
- Well 800-101, located directly upgradient of extraction well RTW-4A, has shown TVOC concentrations above the capture goal for the past several years. The concentration was 46 µg/L in December. This warrants the continued operation of well RTW-4A, a Magothy extraction well (**Figure 3.2.8-1**).

3.2.8.4 System Operations

In 2024, the Airport and LIPA extraction wells were sampled quarterly. The influent, midpoint, and effluent of the carbon units were sampled monthly throughout the year. All system samples were analyzed for VOCs. Three of the Airport extraction wells (RTW-2A, RTW-3A, and RTW-5A) remained in standby per the recommendation in the *2019 Groundwater Status Report* (BNL, 2020c). Throughout 2024, wells RTW-1A, RTW-4A and RW-6A were pumped on a full-time basis. All four LIPA extraction wells remained in standby since TVOC concentrations remained below the capture goal of 50 µg/L. A summary of extraction well data is provided below:

- During 2024, TVOC concentrations for the LIPA Magothy extraction well EW-4L on Stratler Drive were between 4 µg/L and 7 µg/L, with all individual VOCs below MCLs. This well was shut down in January 2017 as it achieved its TVOC capture goal of 50 µg/L.
- All four LIPA extraction wells had VOC concentrations below MCLs in 2024. **Figure 3.2.8-3** plots the TVOC trends for the LIPA extraction wells.
- **Figure 3.2.8-4** plots the TVOC trends for the airport extraction wells. All six airport extraction wells had TVOC concentrations below the capture goal of 10 µg/L in 2024.

In addition, the system's extraction wells, influent, and effluent were sampled for PFAS and 1,4-dioxane starting in 2023 (**Section 3.5**). The following is a summary of the Airport/LIPA Treatment System operations for 2024:

January – September 2024

The Airport System was operational in the first three quarters with RTW-1A, RTW-4A and RW-6A operated on a full-time basis. Extraction wells RTW-2A, RTW-3A, RTW-5A, and all four LIPA extraction wells were in standby. The system was also down for two days in June for a scheduled carbon change out.

October – December 2024

The Airport portion of the treatment system operated normally, with RTW-1A, RTW-4A and RW-6A operating on a full-time basis. All four LIPA extraction wells were in standby.

Extraction Wells Operational Data

During 2024, approximately 210 million gallons of groundwater were treated by the Airport/LIPA system, with an average flow rate of 405 gpm (**Table 3.2.8-2**). **Table F-32** summarizes the system's mass removal. VOC concentrations for the Airport and LIPA extraction wells are provided in **Table F-33.**

Table 3.2.8-1
OU III LIPA/Airport Treatment System
2024 SPDES Equivalency Permit Levels

Parameters	Permit Level (µg/L)	Max. Measured Value (µg/L)
pH (SU)	5.5–7.5	5.55-5.90
carbon tetrachloride	5	ND
chloroform	7	0.90
1,1-dichloroethane	5	ND
1,1-dichloroethylene	5	ND
methylene chloride	5	2.0J
1,1,1-trichloroethane	5	ND
trichloroethylene	10	ND

Notes:
ND = Not detected above method detection limit
Sampling required on a monthly basis
SU= Standard Units
J= The associated numerical value is an estimated quantity.

3.2.8.5 System Operational Data

System Influent and Effluent

VOC concentrations for the influent and effluent in 2024 are summarized in **Tables F-34** and **F-35,** respectively.

The carbon vessels for the system effectively removed the contaminants from the influent groundwater. System effluent samples were below the regulatory limit specified in the SPDES equivalency permit (**Table 3.2.8-1**).

Cumulative Mass Removal

The mass of VOCs removed from the aquifer by the Airport/LIPA Treatment System was calculated using the average flow rates for each monitoring period (**Table F-32**) in combination with the TVOC concentration in the carbon unit's

influent, to calculate the pounds per month removed. The plot of cumulative mass of VOCs removed vs. time shows that six pounds of VOCs were removed during 2024, with a total of 511 pounds removed since system start-up (**Figure 3.2.8-5)**.

3.2.8.6 System Evaluation

The Airport/LIPA system performance can be evaluated based on the decision rules identified for this system resulting from the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

No, there were no unusual or unexpected VOC concentrations observed in the monitoring wells for the LIPA/Airport Treatment System during 2024. However, PFAS and 1,4-dioxane were detected in the system, as detailed in **Section 3.5**.

2. Has the downgradient migration of the plume been controlled?

Yes. The monitoring data clearly show that the capture goal of 50 µg/L TVOC at the LIPA Upper Glacial and Magothy wells has been met. No TVOC concentrations above the 10 µg/L capture goal have been detected in the bypass monitoring wells at the Airport. Based upon these data, plume migration is being controlled.

3. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

Yes, the LIPA system was approved for closure in December 2024. Three of the six Airport extraction wells are shut down. Two small areas of VOC contamination remain that are associated with the Airport Treatment System and warrant the continued operation of the treatment system. One area to the west associated with monitoring wells 800-94 and 800-95, and one area to the east associated with well 800-101.

4. Are TVOC concentrations in plume core wells above or below 50 µg/L for LIPA and 10 ug/L for the Airport?

TVOC concentrations are below 50 µg/L for all of the LIPA monitoring wells, and individual VOC concentrations in each of these wells were below MCLs in 2024. Several Airport core wells are above a TVOC concentration of 10 µg/L. Well 800-96 located in the vicinity of well RW-6A continues to show TVOC concentrations up to 49 µg/L. Wells 800-94 and 800-95 showed maximum TVOC concentrations of 43 µg/L and 20 µg/L, respectively. Well 800-101 is located immediately upgradient of well RTW-4A and showed a peak TVOC concentration of 46 µg/L.

4a. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

No, a rebound in concentrations was not observed. During 2024, all four LIPA and three Airport extraction wells that are shut down had VOC concentrations below MCLs in 2024.

5. Has the groundwater cleanup goal of meeting MCLs been achieved?

The cleanup goal has not been met for the Airport System. However, the LIPA system has reached its cleanup goals, and the Petition for Closure – OU III LIPA Groundwater Treatment System (BNL, 2024e) was approved by the regulators.

3.2.8.7 Recommendations

The following recommendations are made for the LIPA/Airport Treatment System and groundwater monitoring program:

- Continue full-time operation of wells RTW-1A, RTW-4A and RW-6A. Keep wells RTW-2A, RTW-3A and RTW-5A in standby mode. If concentrations above the capture goal of 10 µg/L TVOC are observed in any of the extraction wells or the monitoring wells adjacent to wells that are not operating, the well(s) will be put back into full-time or pulsed pumping operation.
- Maintain the LIPA program extraction wells EW-1L, EW-2L, EW-3L and EW-4L in an operationally ready state pending the completion of the OU X RI/FS.
- No changes to the current monitoring schedule are recommended at this time for the Airport System. For the LIPA System, begin annual post closure monitoring for wells 000-130, 000-131, 000-425, 000-448, 000-449 and 000-452.

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3.2.9 Magothy Monitoring

This section provides a brief summary of the Magothy Aquifer Groundwater Monitoring and Cleanup Program and the remedial approach for addressing VOC contamination. The OU III ROD/ESD states that the cleanup goal for the Magothy aquifer is to reach MCLs by 2065. The original forty-five monitoring wells and nine extraction wells used to monitor the Magothy are shown on **Figure 3.2.9-1**. Fifteen of these wells are no longer sampled as VOC concentrations are below the MCLs. However, they may be used in the future for other monitoring programs.

Detailed descriptions of the monitoring well analytical results and remediation progress are presented in the following sections of this report: Western South Boundary, Middle Road, LIPA/Airport, North Street, OU III South Boundary, and Industrial Park. A brief summary of the results is provided in **Table 3.2.9-1** and **Figure 3.2.9-2**.

Table 3.2.9-1. Magothy Aquifer Contamination (Historical and 2024)

	Max. TVOC (in µg/L)			
Location	**2024**	**Historical**	**Primary VOCs**	**Results**
Western South Boundary	<1	1	None	Magothy not impacted. Monitoring well 130-04 is located near the southwest site boundary and was non-detect for VOCs in 2024.
William Floyd Well Field Sentinel	NS	3.9	DCA	Wells 109-12 and 109-13 served as outpost sentinel wells for the former William Floyd Well Field Magothy well. Since the SCWA Magothy supply well is now out of service and all data from these wells are below MCLs they are no longer sampled based upon the 2021 recommendation in the Groundwater Status Report.
Middle Road to South Boundary	51	340	PCE, CCl_4	VOCs identified in upper 20 to 40 feet of the Magothy at the Middle Road area where Magothy brown clay is absent (**Figure 3.2-2**). Well 113-09 had 51 µg/L TVOC in May, and well 113-19 had 19 µg/L TVOC in May 2024. VOCs not detected at the South Boundary beneath the Magothy Brown clay.
Industrial Park	35	268	PCE, TCA	VOCs detected in the upper Magothy south of the OU III South Boundary system. Two Magothy extraction wells were installed in the Industrial Park in 2014 to capture and treat this contamination. TVOC concentrations in well 000-537 at 35 µg/L and well 000-541 at 35 µg/L in the fourth quarter of 2024.
North Street to Airport	46	123	TCE, DCA	VOCs have been detected in localized areas in the upper 30 feet of the Magothy aquifer along North Street and downgradient near Vita Drive (**Figure 3.2.6-2**). The leading edge of this contamination is at the eastern portion of the Airport system, with 46 µg/L TVOC in well 800-101 in December, which is adjacent to Airport extraction well RTW-4A. Low VOC concentrations have been detected from the BNL South Boundary to North Street below the Magothy brown clay, at approximately 40 to 150 feet into the upper Magothy.
South Boundary to Industrial Park East	11	570	TCA, CCl_4	TVOC concentrations were up to 11 µg/L in well 122-05 at the South Boundary and off site in the Industrial Park East area, where the Magothy brown clay is absent. Magothy and Upper Glacial contamination is continuous in the Industrial Park area.
South of Carleton Drive	16	7,200	CCl_4	Historically high VOC concentrations just south of Carleton Drive where the Magothy brown clay is absent. However, data shows high concentrations are no longer present in this area. Contamination is continuous between the Magothy and Upper Glacial aquifers. Well 000-130 which had 7,200 µg/L in 1998, showed a maximum TVOC concentration of <1 µg/L in December. Well 000-544 showed a maximum TVOC concentration of 16 µg/L in April 2024. This well is located downgradient of the extraction well IP-EW-9. These concentrations have declined significantly from the historical highs.

The Magothy remedy identified in the *OU III Explanation of Significant Differences* (BNL, 2005a) document calls for the following:

1. Reaching MCLs in the Magothy aquifer by 2065 by active groundwater treatment and monitored natural attenuation.
2. Operation of the nine extraction wells until cleanup objectives are met as part of the treatment systems that provide capture of Magothy VOC contamination at Middle Road (RW-7 and RW-3, in operation), South Boundary (EW-17, in operation and EW-8, shutdown), Airport (RTW-3A, shutdown in 2020; and RTW-4A, in operation), Industrial Park (IP-EW-8 and IP-EW-9, both shutdown in 2019), and LIPA (EW-4L, shut down).
3. Continued evaluation of monitoring well data to ensure protectiveness. **Table 3.2.9-2** describes how each of the Magothy investigation areas is addressed by the selected Magothy aquifer remedy.
4. Institutional controls and five-year reviews.

Table 3.2.9-2. Magothy Remedy

Area Investigated	Status of Selected Remedy
Western South Boundary	Continue monitoring and evaluate data. Continue operation of well WSB-6.
William Floyd Well Field Sentinel Monitoring	Discontinued in 2013. **See Section 3.2.10**
Middle Road to South Boundary	Continue operation of the Magothy extraction wells at Middle Road (RW-3 to be shutdown) and RW-7. Continue to monitor the three Magothy monitoring wells at Middle Road and five at the South Boundary until cleanup goals are met. Continue to operate South Boundary well EW-17.
North Street to Airport	The Airport extraction well RTW-4A should continue to operate to capture contaminants. Continue monitoring and evaluate data.
North Street East	Continue monitoring and evaluate data.
South Boundary to Industrial Park East	Continue monitoring and evaluate data.
South of Carleton Drive	The LIPA Magothy extraction well (EW-4L) on Stratler Drive has met cleanup goals and is in post-closure monitoring.
Industrial Park	The two Industrial Park extraction wells (IP-EW-8 and IP-EW-9) were placed in standby in 2019. Continue monitoring and data evaluation. Wells will be restarted if any significant rebound in concentrations is observed.

3.2.9.1 Monitoring Well Results

See the appropriate sections for detailed discussion of the monitoring well results.

3.2.9.2 Recommendations

The following are recommendations for the Magothy groundwater monitoring program:

- Continue pumping the Magothy extraction well RW-7 at Middle Road, South Boundary EW-17, and the Airport. The two Industrial Park extraction wells were placed in standby in July 2019 and continue to be monitored for rebound of VOCs.
- Place extraction well RW-3 in standby mode based on the recommendations found in the OUIII Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**).

- Wells no longer sampled are being maintained for potential future use for PFAS and 1,4-dioxane investigation as part of OU X and will be evaluated as part of the RI/FS.

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3.2.10 William Floyd Well Field Sentinel Monitoring

The Suffolk County Water Authority (SCWA) operates the William Floyd Parkway Well Field located west of the BNL site. The well field contains three Upper Glacial aquifer supply wells (one screened between 126 feet bls to 162 feet bls, another between 125 feet bls to 176 feet bls, and the third between 123 feet bls to 173 feet bls). In 2013, a Magothy aquifer supply well was taken out of service and replaced by a third Upper Glacial aquifer well (Well 3A). The pumping for these three supply wells is discussed in **Section 2.0**. Because the source water contributing area for this well field extends into the BNL property, two Upper Glacial aquifer monitoring wells were installed in 1996 (109-03 and 109-04) to serve as sentinel wells to monitor groundwater quality within the on-site portion of the contributing area. These wells have been sampled quarterly under a joint BNL-SCDHS program. From 2018 through 2021, Magothy wells 109-12 and 109-13 were also sampled by BNL as part of the monitoring program.

In 2021, BNL began to evaluate the downgradient migration of a high concentration PFAS plume segment and whether the migration pathway is being influenced by the William Floyd Well Field (**Section 3.5.1**).

To improve BNL's ability to evaluate the influence the William Floyd Well Field has on groundwater flow directions, 12 monitoring wells were installed in August and September 2021. Water level measurements were used to prepare groundwater contour maps. Water table data from these wells indicate the well field is impacting groundwater flow on the BNL site (See **Figure 3.2.10-1** for the groundwater flow directions).

Between December 2021 and March 2022, six temporary wells were installed upgradient of the William Floyd well field on BNL property to characterize the extent of the low-level PFAS detected in monitoring wells 117-01 and 117-02. These data were presented in the *2021 Groundwater Status Report* (BNL, 2022b). As a result of the temporary well monitoring results, the monitoring program was modified to include six wells: existing wells 109-03, 117-01, 117-02, and three new wells 117-04, 117-05, and 117-06. The screen depth for these wells range between 80 feet to 130 feet bls. The approximate depth to water in this area is 75 feet bls.

3.2.10.1 Groundwater Monitoring

Well Network

During 2024, the joint BNL-SCDHS monitoring program consisted of six wells, 109-03, 117-01, 117-02, 117-04, 117-05, and 117-06. These wells are sampled on a quarterly basis for VOCs, 1,4-dioxane, and PFAS and annually for tritium, gamma spectroscopy and Sr-90. As recommended in the *2021 Groundwater Status Report* (BNL, 2022b), wells 109-04, 109-12 and 109-13 were removed from the program since these were used to monitor impacts to the SCWA former Magothy aquifer supply well. During 2024, 15 additional vertical profile wells were installed to track the downgradient portion of the Building 170 and Current Firehouse plumes migrating south of Princeton Avenue **(Section 3.5.1).** Three of these western most vertical profiles were installed in an area of the zone of influence of the SCWA well field to further characterize groundwater in this area (**Figure 3.2.10-1**).

Sampling Frequency and Analysis

All six monitoring wells were jointly sampled by BNL and the SCDHS four times in 2024 for VOCs, 1,4-dioxane, PFAS and annually for gamma spectroscopy, tritium, Sr-90 (**Table 1-5**). Complete monitoring results are presented in **Appendix C**.

3.2.10.2 Monitoring Well Results

Monitoring results for 2024 are summarized below:

In 2024, only monitoring wells 117-01 and 117-02 detected PFAS compounds that exceed NYS AWQSs for Class GA groundwater of 2.6 ng/L for PFOS and 6.7 ng/L for PFOA, and the 10 ng/L MCLs for PFOS and PFOA. PFOS concentrations in well 117-01 during the first, third and fourth quarters were 15 ng/L, 10 ng/L and 7 ng/L, respectively. The PFOA concentration during the first quarter in well 117-01 was 7 ng/L. PFOS and PFOA concentrations in well 117-02 during the fourth quarter was 18 ng/L and 1.9 ng/L, respectively. 1,4-dioxane was detected in two monitoring wells during 2024. 1,4-dioxane was detected below the NYS AWQS of 0.35 µg/L during the fourth quarter in wells 117-05 and 117-06 at estimated concentrations of 0.14 µg/L and 0.05 µg/L, respectively.

Three additional temporary vertical profile wells were installed in the William Floyd well field area to help characterize groundwater. Results of OU10-VP-011 show shallow (85-90 ft bls) detections of PFOS and PFOA concentrations up to a maximum of 21 ng/L and 8.7 ng/L, respectively. Maximum 1,4-dioxane concentrations in this temporary well were detected at 0.34 µg/L at a depth of 185-190 ft bls. OU10-VP-012 also had shallow detections of PFOS and PFOA at concentrations up to a maximum of 12 ng/L and 9.6 ng/L, respectively. 1,4-dioxane concentrations in this temporary well were detected at an estimated 0.16 µg/L at a depth of 185-190 ft bls. The third temporary well OU10-VP-013 had a maximum detection of PFOA at 2.8 ng/L. The analytical results of these three temporary wells are consistent with PFAS detected as a result of the historical foam releases that occurred in the recreation area. The remaining analytes were non detect for the remainder of the samples analyzed at this location (**Figure 3.2.10-1** and **Table 3.5.1-5**).

Two VOCs were detected in the monitoring well network, chloroform and naphthalene. Chloroform was detected in all wells, at a maximum concentration of 3.03 µg/L in well 117-01. Naphthalene was detected in one well, 109-03, at an estimated concentration of 0.54 µg/L.

The remaining results for tritium, gamma spectroscopy and Sr-90 were all non-detect.

3.2.10.3 Groundwater Monitoring Program Evaluation

The evaluation of the William Floyd Well Field Sentinel Monitoring Program is based on the decision rule established for this program using the groundwater DQO process.

1. Have the SCWA William Floyd Wellfield sentinel wells remained below the MCLs?

During 2024, no VOCs or radionuclides were detected at concentrations exceeding the MCLs. However, PFOS and PFOA were detected above the AWQS in wells 117-01 and 117-02 at maximum concentrations of 18 ng/L and 7 ng/L, respectively, during 2024. 1,4-dioxane estimated concentrations detected during 2024 remained below both the AWQS and the MCL.

3.2.10.4 Recommendations

The following changes are recommended for the William Floyd Well Field Sentinel Monitoring Program:

- Maintain quarterly sampling of the six wells for VOCs, 1,4-dioxane, and PFAS and annual sampling for gamma spectroscopy, tritium, and Sr-90.

3.2.11 BGRR/WCF Strontium-90 Treatment System

The BGRR/ WCF Treatment System addresses the Sr-90 plumes in groundwater downgradient of these former facilities. Building 801 and the former Pile Fan Sump (PFS) are the location of an additional Sr-90 source for which the remedy is monitored natural attenuation (**Figure 3.2.11-1**).

3.2.11.1 System Description

This system began operation in January 2005 and was designed to capture Sr-90 contaminated groundwater emanating from source areas at the BGRR and WCF. There are two extraction wells (SR-1 and SR-2) located south of the former WCF, three extraction wells (SR-3, SR-4, and SR-5) located south of the former BGRR, and four extraction wells (SR-6, SR-7, SR-8, and SR-9) in the vicinity south of the HFBR.

Groundwater from the extraction wells is piped to an ion exchange treatment system inside Building 855 (within the BNL WMF). The vessels of ion exchange media are designed to treat groundwater contaminated with Sr-90 to below the DWS of 8 pCi/L. In addition, the influent is also treated for low-level concentrations (less than 10 µg/L) of VOCs using liquid-phase activated carbon.

Effluent is recharged to the Upper Glacial aquifer via three drywells located approximately 850 feet west of Building 855. A SPDES equivalency permit regulates this discharge. A complete description of the system is included in the *Operations and Maintenance Manual for the Sr-90 BGRR/ WCF/PFS/Building 801 Area Groundwater Treatment System* (BNL, 2012).

3.2.11.2 Groundwater Monitoring

Well Network

A network of 66 monitoring wells is used to monitor the Sr-90 plumes associated with the BGRR, former WCF, and PFS/Building 801 areas. Two temporary wells were installed in August 2023 south of Building 725 to supplement the permanent well network. Based on this temporary well data, a new monitoring well (085-415) was installed and added to the program (**Figure 3.2.11-1**). The well is located immediately south of Building 725.

Sampling Frequency and Analysis

The well samples are analyzed for Sr-90. As noted in **Table 1-5**, several of the wells are also monitored under other programs. Monitoring well results are tabulated in **Appendix C**. In 2024, the sampling frequency for all three of the Sr-90 plume segments (BGRR, PFS/Building 801 area and former WCF), was either annual or semiannual for most wells. Source area monitoring wells 075-701 and 075-664 were sampled monthly to monitor Sr-90 releases from underneath Building 701/Below Ground Ducts (BGDs) resulting from increased water table elevations.

3.2.11.3 Monitoring Well/Temporary Well Results

The Sr-90 plume distribution is shown on **Figure 3.2.11-1**. The distribution of Sr-90 throughout the BGRR, former WCF, and PFS/Building 801 areas is based on groundwater data obtained from the fourth quarter 2024 sampling round in conjunction with historical data. Hydrogeologic cross-sections drawn along the center line of each of the plumes from the three Sr-90 source areas are shown on **Figures 3.2.11-2**, **3.2.11-3**, and **3.2.11-4**. In addition, historical Sr-90 concentration trends for key wells are plotted on **Figure 3.2.11-5**. Sr-90 migrates in the aquifer at the rate of approximately 20 to 40 feet per year and the half-life of Sr-90 is 29 years.

Historically, the highest Sr-90 concentration (3,150 pCi/L) observed in these plumes was during 2003 in a temporary well installed approximately 185 feet south of Building 701, and just upgradient of extraction well SR-3. The highest historical Sr-90 concentration (1,560 pCi/L) in the former WCF area occurred in 2003 in a temporary well installed immediately downgradient of the six former USTs A/B Waste Lines, and approximately 25 feet northwest of the former WCF (Building 811). The highest historical Sr-90 concentration (566 pCi/L) associated with the former PFS/Building 801 occurred in 1997 in a temporary well installed immediately downgradient of this area.

A comparison of the plumes from 2004 through 2024 is provided on **Figure 3.2.11-10**. The three Sr-90 plumes were characterized extensively for the first time in 1998, primarily using temporary wells. The permanent monitoring well network was enhanced significantly in 2004 prior to the startup of groundwater treatment operations. Groundwater flow conditions have changed significantly in this area since the late 1990s. This is due to changes in supply, process, and remediation pumping and recharge in the east-central portion of the site. Flow has shifted from a southerly to southeasterly direction in response to these changes. As a result, a number of permanent wells are no longer positioned for monitoring Sr-90. Some older wells have been dropped from the monitoring network over the years and temporary wells are increasingly required to fill data gaps. The following is a summary of the 2024 monitoring data for the three Sr-90 plumes:

WCF Plume

Extraction wells SR-1 and SR-2 have been effective at capturing source area contamination and preventing any southward migration of the plume as can be viewed on **Figure 3.2.11-1**. Increased utilization of supply well 10 (located approximately 600 feet northeast of the WCF) over the previous several years, is resulting in an increased easterly component to groundwater flow in the WCF area.

- Monitoring well 065-175 has historically contained the highest Sr-90 concentrations immediately downgradient of the former WCF source area with a historical high concentration of 821 pCi/L in 2000. Sr-90 concentrations significantly declined over the years, with a concentration of 79 pCi/L observed during November 2024 (**Figure 3.2.11-5**). The removal of Building 811 and associated radiologically contaminated structures and soils in the WCF yard was completed in 2016. It is unclear whether the reduction of Sr-90 concentrations in this well are due to source area cleanup, an easterly shift to groundwater flow in this area, or some combination of both.

- Sr-90 concentrations in monitoring wells located immediately downgradient of extraction wells SR-1 and SR-2 have been below the 8 pCi/L DWS since 2018. This indicates the extraction wells are capturing Sr-90 migrating south/southeast from the source area.

- The 2022 temporary wells were installed to supplement the monitoring well network downgradient of the WCF. Per recommendations in the *2022 Annual Groundwater Status Report* (BNL, 2023c) supplemental temporary wells are installed every third year for this area with the next characterization planned in 2025.

BGRR (Building 701 Area) Plume

- Source area monitoring well 075-701 (screened across the water table from 35-55 ft. msl) has been sampled on a monthly basis since late 2012. The monthly data was collected to establish a correlation between water table elevation and Sr-90 concentration increases in the source area as shown on **Figure 3.2.11-6**. This figure plots water table elevation data from a nearby USGS monitoring well (S 6431) with 075-701 Sr-90 concentrations over time. The data shows a correlation between high water table events and increased Sr-90 concentrations in well 075-701. The water table had fluctuated within a two-foot range since 2021 but in 2024 the water table increased about four feet and subsequently an

increase in Sr-90 concentrations was observed in this well to over 100 pCi/L. The Sr-90 concentration during 2024 ranged from < MDC to 115 pCi/L in August.

- The BGRR cap monitoring wells have been in place for ten years. Sr-90 concentrations in monitoring wells 075-699 and 075-700 have been largely below the DWS during that time. Sr-90 concentrations in both wells were <MDC in 2024.

- The downgradient segment of the Building 701 Sr-90 plume continues to attenuate. This is demonstrated by the decrease in Sr-90 concentrations in well 085-403 from a maximum of 35 pCi/L in October 2019 to <1 pCi/L in November 2024 (**Figure 3.2.11-5**).

Former Pile Fan Sump/Building 801 Plume

- Sr-90 concentrations in well 065-325 remained stable in 2024 with a maximum concentration of 31 pCi/L. The highest Sr-90 concentration observed historically in well 065-325 (**Figure 3.2.11-5**) was 186 pCi/L in January 2020. The Sr-90 concentration in well 065-169 was 44 pCi/L in the November 2024 sample. This well is located immediately downgradient of Building 801. Well 065-170 had a Sr-90 concentration of 104 pCi/L in December 2024. This well is located approximately 50 feet downgradient of 065-169. Based on the Sr-90 results noted above, there appears to be residual Sr-90 beneath Building 801 acting as a continuing source.

- As recommended in the 2022 Groundwater Status Report, two temporary vertical profile wells were installed south of Building 725 to obtain data to characterize the appropriate depth to screen a new monitoring well. This well, 085-415, was installed and will serve as a sentinel monitoring well for the leading edge of Sr-90 migrating from the Building 801/PFS source area (**Figure 3.2.11-1**). In 2024 this well was sampled twice in June and November detecting Sr-90 at about 3 pCi/L in both samples.

3.2.11.4 System Operations

Extraction wells SR-1 and SR-2 continued to operate in 2024. The extraction wells (SR-4 through SR-9) remained off in standby mode in 2024. SR-3 has been utilized historically to address observed Sr-90 concentration increases in monitoring well 075-701. In October 2024, extraction well SR-3 was turned on due to an observed increase in Sr-90 levels in monitoring well 075-701.

In accordance with the SPDES equivalency permit, the required frequency for Sr-90 and VOC sampling is monthly for extraction wells that are operational and quarterly if they are in standby mode. The pH measurement is monthly. Extraction well Sr-90 concentrations from 2024 are summarized in **Table F-36**. System influent and effluent concentrations are summarized in **Tables F-37** and **F-38**. **Table F-39** contains the monthly Sr-90 cumulative mass removal totals for the system. In addition, the systems extraction wells, influent and effluent were sampled for PFAS and 1,4-dioxane starting in 2023 (**Section 3.5**).

Below is a summary of the system operations for 2024:

January – September 2024

From January to September 2024, wells SR-3 through SR-9 were in standby mode. Wells SR-1 and SR-2 ran normally during this period. The system treated approximately 4.4 million gallons of water during this period.

October – December 2024

From October to December 2024, wells SR-4 through SR-9 were in standby mode. Wells SR-1 and SR-2 ran normally during this period. Well SR-3 was turned on for full time operation on October 10 and ran the entirety of this period. The system treated approximately 2.2 million gallons of water during this period.

Extraction Well Operational Data

During 2024, approximately 6.6 million gallons of water was treated by the remediation system, with an average flow rate of 13 gpm. **Table 3.2.11-2** shows the monthly extraction well pumping rates while **Table F-36** shows Sr-90 concentrations.

3.2.11.5 System Operational Data

During 2024, system influent Sr-90 concentrations ranged from 1.6 pCi/L to 6.3 pCi/L. During 2024, Sr-90 was detected in the effluent at a maximum concentration of 3.7 pCi/L. There were no VOCs or Sr-90 detected above the SPDES Equivalency Permit discharge limits in the 2024 effluent samples (**Table 3.2.11-1**).

Extraction Wells

Maximum Sr-90 concentrations in each of the extraction wells during 2024:

- SR-1 41.5 pCi/L in August
- SR-2 3.3 pCi/L in May
- SR-3 8.9 pCi/L in November
- SR-4 4.3 pCi/L in July
- SR-5 Not Detected
- SR-6 0.8 pCi/L in July
- SR-7 2.0 pCi/L in October
- SR-8 2.0 pCi/L in October
- SR-9 1.4 pCi/L in January

Table 3.2.11-1
OU III BGRR Sr-90 Treatment System
2024 SPDES Equivalency Permit Levels

Parameter	Permit Level	Max. Measured Value
pH range	5.5–8.5 SU	6.2–6.6 SU
Sr-90	8.0 pCi/L	3.7
Chloroform	7.0 µg/L	1.3
1,1-Dichloroethane	5.0 µg/L	ND
Ethylbenzene	5.0 µg/L	ND
Methyl Chloride	5.0 µg/L	ND
Methylene Chloride	5.0 µg/L	0.6J
Toluene	5.0 µg/L	ND
1,2,3-Trichlorobenzene	5.0 µg/L	ND
1,1,1-Trichloroethane	5.0 µg/L	0.7J
1,2,4-Trimethylbenzene	5.0 µg/L	ND
Xylene, total	10.0 µg/L	ND

Notes:
SU = Standard Units
Required sampling frequency is monthly for Sr-90, VOCs, and pH.

Cumulative Mass Removal

Average flow rates for each monitoring period were used, in combination with the Sr-90 influent concentrations, to calculate the number of millicuries (mCi) removed. During 2024, the flow averaged 13 gpm. Approximately 0.1 mCi of Sr-90 were removed during 2024, for a total of 30 mCi removed since system start-up in 2005 (**Table F-39**). Cumulative mass removal of Sr-90 is shown on **Figure 3.2.11-7**. **Figures 3.2.11-8** and **3.2.11-9** show the Sr-90 concentrations over time for the extraction wells.

3.2.11.6 System Evaluation

The BGRR/WCF Strontium-90 Treatment System and Monitoring Program can be evaluated in the context of the decisions established for this program using the groundwater DQO process:

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

WCF Plume: Yes. Buildings 810 and 811, located in the eastern portion of the former WCF yard, were demolished in 2015. Contaminated piping and soils located underneath and adjacent to the buildings were also removed and sent to an approved disposal facility following the building demolition. Some paved areas were also removed. The excavated areas were backfilled in September 2016. This work marked the final phase of source area soil remediation. The maximum Sr-90 detection in source area monitoring well 065-175 was 821 pCi/L in 2000. Sr-90 concentrations in this well increased from 13 pCi/L in 2023 to 79 pCi/L in 2024. This increase may be attributed to the water table rise observed in 2024. Based on current groundwater monitoring data, it appears that there is some residual Sr-90 in the source area soils although the current concentrations are well below historic high values. The source area remains controlled by extraction wells SR-1 and SR-2.

BGRR Plume: Yes. The source area is capped by Building 701 and an engineered cap completed in 2011. Following the historical high-water table elevation in 2019, the water table decreased to normal long term average levels. Sr-90 concentrations in source area well 075-701 remained below 9 pCi/L throughout 2022 and 2023; however, in 2024, concentrations increased to 115 pCi/L in August due to a rise in the water table elevation (**Figure 3.2.11-6**). This resulted in the restart of extraction well SR-3 in October. Monitoring will continue in this area until the inventory of Sr-90 in the unsaturated zone beneath Building 701 and the below ground ducts has been depleted and flushing of Sr-90 (due to water table elevation increases) no longer results in significant concentrations in groundwater. Data from monitoring well 075-701 is a reliable indicator of new Sr-90 releases. The downgradient migration of the Sr-90 plume is controlled by extraction well SR-3. The operation of extraction well SR-3 will be managed going forward based on data from both monitoring well 075-701 and SR-3.

PFS/Building 801 Area Plume: Yes. There continues to be periodic increases in Sr-90 groundwater concentrations in area wells indicating a residual Sr-90 source beneath Building 801. A well network is in place to monitor the downgradient migration and attenuation of this Sr-90.

2. Were unexpected levels or types of contamination detected?

WCF Plume: No unexpected levels or types of contamination were detected.

BGRR Plume: No unexpected levels or types of contamination were detected.

PFS/Building 801 Area Plume: Yes. Sr-90 concentrations immediately downgradient of Building 801 continued to be elevated.

PFAS and 1,4-dioxane were detected in the system, as detailed in **Section 3.5**.

3. Has the downgradient migration of the plume been controlled?

WCF Plume: Yes. The source area segment of the plume is controlled by extraction wells SR-1 and SR-2. Based on source area concentrations, the plume is expected to attenuate and meet the ROD cleanup goals.

BGRR Plume: Yes. Extraction well SR-3 is positioned to capture the migration of periodic slugs of Sr-90 from the source area. This well was restarted in October 2024 following the increase in Sr-90 concentrations in source area well 075-701.

PFS/Building 801 Area Plume: This plume is not being actively remediated. Based on source area concentrations, the plume is expected to attenuate and meet the ROD cleanup goals.

4. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

WCF Plume: The cleanup goal has not been met. The extraction well SR-1 is capturing source area residual Sr-90 contamination immediately downgradient of the former WCF. Extraction well SR-2 has been below the DWS during 2024. Extraction wells SR-6, SR-7, SR-8, and SR-9 are all below the DWS and are currently in standby mode.

BGRR Plume: SR-3 was turned on in October 2024 due to the increase of Sr-90 concentrations in well 075-701. Extraction wells SR-4 and SR-5 will be maintained in standby mode.

PFS/Building 801 Area Plume: This plume is not being actively remediated.

5. Has the Groundwater Cleanup goal of meeting MCLs been achieved?

No. The groundwater cleanup goal of meeting MCLs has not been achieved for these plumes.

3.2.11.7 Recommendations

The following are recommendations for the BGRR/WCF Building 701 Groundwater Treatment System and Monitoring Program:

- Continue operating well SR-1 in full-time mode. Maintain wells SR-3, SR-4, SR-5, SR-6, SR-7, SR-8, and SR-9 in standby mode. Well SR-3 will be operated as necessary when Sr-90 concentrations in monitoring well 075-701 show elevated levels of Sr-90.
- Reduce the source area monitoring frequency for BGRR source area wells 075-701 and 075-664 from monthly to quarterly. If an increase in Sr-90 concentrations or a rise in groundwater elevation is observed in these wells, the monitoring frequency may be increased.
- Maintain the semiannual sampling frequency in well 065-169 to monitor the Sr-90 concentration increase in the vicinity of Building 801.
- In 2025, install supplemental temporary wells for the WCF area in 2025. Continue with this triennial characterization every third year (next in 2028).
- Shutdown well SR-2 due to continuously low concentrations of Sr-90. The extraction well will be restarted if concentrations of SR-90 increase significantly after shutdown.

3.2.12 Chemical/Animal Holes Strontium-90 Treatment System

This section summarizes the operational data from the Chemical/Animal Holes Strontium-90 Treatment System for 2024 and gives conclusions and recommendations for future operation. This system began operation in February 2003. Due to the declining Sr-90 concentrations, a *Petition for Shutdown of the OU III Chemical Holes Strontium-90 Groundwater Treatment System* (BNL, 2018a) was submitted to the regulators in March 2018 and subsequently approved. In July 2018, the system was placed in standby mode.

3.2.12.1 System Description

The Chemical/Animal Holes were formerly located in the south-central portion of the BNL property (**Figure 3.2.12-1**). The area consisted of 55 pits east of the Former Landfill that were used for the disposal of a variety of laboratory chemicals and animal remains. The buried waste was excavated in 1997.

The components of the Sr-90 groundwater remediation at the Chemical/Animal Holes are:

1. Three extraction wells pumping into an ion exchange treatment system to remove Sr-90 from the extracted groundwater, and on-site discharge of the clean water into two drywells.
2. Operation of the system to minimize plume growth, in conjunction with monitored natural attenuation to meet the 8 pCi/L DWS by 2040.
3. Continued monitoring and evaluation of the data to ensure protectiveness.

Details of operations are provided in the *Chemical/Animal Holes Strontium-90 Groundwater Treatment System Operation and Maintenance Manual* (BNL, 2008b).

3.2.12.2 Groundwater Monitoring

Well Network

The Chemical/Animal Holes monitoring network consists of 17 wells. **Figure 3.2.12-1** shows the monitoring well locations.

Sampling Frequency and Analysis

The sampling frequency for the monitoring wells was annual (standby phase) in 2024, except for three wells (097-313, 097-314 and 097-315) that monitor the former source area which were sampled semiannually (**Table 1-5**).

3.2.12.3 Monitoring Well Results

Figure 3.2.12-1 shows the Sr-90 plume distribution. The plume depiction is derived from third quarter 2024 monitoring well data. The area of highest Sr-90 concentration is located downgradient of the former source area and just south of extraction well EW-1. Overall, the plume concentrations have significantly decreased since 2008 with no significant rebound identified. To date, the highest Sr-90 concentration observed in groundwater in this area was 4,720 pCi/L at well 106-99 in 2005. See **Figure 3.2.12-2** for concentration trends of key monitoring wells and **Figure 3.2.12-3** for a cross-sectional view. The complete monitoring results for all wells in this program are in **Appendix C**.

A summary of key monitoring well data for 2024 follows:

- Sr-90 concentrations in plume core wells have declined over the past several years as shown in the trend charts. However, Sr-90 concentrations in well 097-314 increased to 72 pCi/L in July 2021. Strontium-90 concentrations in this well have since dropped off with a maximum

concentration detected in 2024 of 44.9 pCi/L. Concentrations in the other source area wells 097-313 and 097-315, remained below the DWS in 2024.

§ Sr-90 concentration trends in plume core wells 106-16, 106-94, 106-95 and 106-99 have significantly declined over time and have remained less than 42 pCi/L since 2016. These wells are located immediately upgradient of EW-1. As shown on the plume comparison on **Figure 3.2.12-6**, the plume has become discontinuous and Sr-90 concentrations have been significantly reduced as a result of the groundwater remediation efforts in this area.

§ Monitoring well 106-103, located immediately downgradient of EW-1 detected Sr-90 at 32 pCi/L in August 2022 and 53 pCi/L in July 2023. Concentrations fell below the DWS in 2024, to a concentration of 7.2 pCi/L, which is consistent with concentrations from 2015-2022. The increase, and subsequent decrease, in concentrations is likely from residual source area contamination migrating south.

3.2.12.4 System Operations

The system remained in standby mode in 2024. Therefore, the influent, midpoint, and effluent locations were not sampled (**Tables 3.2.12-1 and 3.2.12-2**). The three extraction wells were sampled quarterly for Sr-90 (**Table F-40**).

The maximum Sr-90 concentration in the extraction wells in 2024 was 18.5 pCi/L in EW-1. Sr-90 was not detected in EW-2 or EW-3 above the DWS in 2024.

Tables F-41 and F-42 contain no data since the system remained shut down since July 2018.

Table 3.2.12-1.
OU III Chemical Holes Sr-90 Treatment System
2024 SPDES Equivalency Permit Levels

Parameter	Permit Level	Max. Measured Value
pH range (SU)	5.0–8.5	NS
Sr-90 (pCi/L)	8.0	NS

pCi/L – picocuries per liter
NS – not sampled

3.2.12.5 System Operational Data

The maximum Sr-90 in EW-1 during 2024 was 18.5 pCi/L in January. Sr-90 concentrations in EW-2 have been below the DWS since April 2020. Sr-90 concentrations in EW-3 have remained below the DWS since 2014. **Figure 3.2.12-4** presents the Sr-90 extraction well data over time.

Cumulative Mass Removal

The system remained in standby mode in 2024. The cumulative total mass of Sr-90 removed during system operations from 2003 through July 2018 is 4.94 mCi (**Figure 3.2.12-5 and Table F-43**).

3.2.12.6 System Evaluation

The Chemical/Animal Holes Sr-90 Treatment System performance can be evaluated based on decisions identified for this system as part of the DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Yes, there is a low-level continuing source of Sr-90 based on extraction and monitoring well data. The former Chemical/Animal Holes located upgradient of extraction well EW-1 were excavated in 1997. The inventory of Sr-90 that remains in this area has been significantly reduced based on the monitoring data subsequent to remediation. Soil and temporary well groundwater samples obtained in this area in late 2015 as part of a post-remedial characterization, did not identify a continuing source of Sr-90. As shown by the trends on **Figures 3.2.12-2 and Figure 3.2.12-4**, Sr-90 concentrations in monitoring and extraction wells have declined significantly since approximately 2010. This is indicative of the remediation progress;

however, there was a slight increase in Sr-90 concentrations in source area well 097-314 starting in 2019 with a maximum of 72 pCi/L in July 2021. This may be associated with the significant rise in the water table in 2018 following three years of low precipitation conditions, resulting in flushing of Sr-90 from the vadose zone. Concentrations in this well subsequently decreased.

2. Were unexpected levels of Sr-90 contamination detected?

No. There were no unexpected levels of Sr-90 detected in 2024.

3. Has the downgradient migration of the plume been controlled?

Yes. While in operation, the system was effective in remediating the extent and migration of the Sr-90 plume. Following the placement of the system in standby mode, the combination of natural attenuation and radioactive decay is limiting downgradient migration of the plume. The maximum Sr-90 concentration observed in 2024 was 44.9 pCi/L in well 097-314. Based on a Sr-90 migration rate of 20-40 feet per year, a 29-year half-life, and dispersion/dilution of the plume in the aquifer as it moves south, this concentration is predicted to attenuate to levels below the drinking water standard after several hundred feet of migration from the source area. This is verified by Sr-90 concentrations observed in sentinel monitoring wells 106-120, 106-121, and 106-122 (located approximately 750 feet south of the source area) observed over the previous 18 years. In the three downgradient sentinel wells, the maximum detection over the period was 2.6 pCi/L observed in 2011.

4. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

Following regulatory approval, the system was shut down and placed in standby mode in July 2018 and will continue to be monitored for rebound.

4a. Are Sr-90 concentrations in plume core wells above or below 8 pCi/L?

Sr-90 concentrations in three of 17 core wells were above 8 pCi/L in 2024 with a maximum of 44.9 pCi/L in well 097-314.

4b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

As noted above, Sr-90 concentrations began increasing slightly in source area monitoring well 097-314 as well as extraction well EW-1 following system shutdown in July 2018. In the fourth quarter of 2022, there was a slight increase in Sr-90 in extraction well EW-1 to 36 pCi/L, followed by a decrease to 15 pCi/L in April 2023. Concentrations in this extraction well in 2024 remained similar to 2023 results, with a maximum concentration of 18.5 pCi/L. Monitoring will continue to evaluate for potential rebound and increasing trends.

5. Has the groundwater cleanup goal of meeting drinking water standards been achieved?

No. The DWS has not been achieved for Sr-90 in all plume core wells. Comparison of the current plume with a series of plume snapshots dating back to 2002 is provided on **Figure 3.2.12-6.**

3.2.12.7 Recommendations

The following are the recommendations for the Chemical/Animal Holes Strontium-90 Treatment System and groundwater monitoring program:

- Maintain the system in standby mode and quarterly sampling of the extraction wells. If significant rebound in either the extraction wells or monitoring wells is identified, the extraction wells may be restarted.

- Maintain the annual monitoring well sampling frequency (standby phase), except for source area wells 097-313, 097-314, 097-315, which will remain semiannual.
- In support of preparing of a petition for closure, perform updated groundwater modeling simulations based on current groundwater Sr-90 concentrations to predict the natural attenuation time frame.

3.2.13 HFBR Tritium Monitoring Program

In late 1996, tritium was detected in monitoring wells near the HFBR. The source of the release was traced to the HFBR spent fuel pool. In response, the fuel rods were removed, and the spent fuel pool was drained. In May 1997, a three-well groundwater pump and recharge system was constructed on the Princeton Avenue firebreak road, approximately 3,700 feet downgradient of the HFBR to ensure capture the leading edge of the tritium plume. Extracted water was recharged at the RA V Recharge Basin. The extraction system was placed in standby mode in September 2000, as groundwater monitoring data demonstrated that the plume was attenuating to concentrations below DWS in the vicinity of the extraction wells.

As described in the OU III ROD, the selected remedy to address the HFBR tritium plume included implementing monitoring and low-flow extraction programs to prevent or minimize plume growth. Beginning in June 2000 and ending April 2001, 20 low-flow extraction events removed 95,000 gallons of tritiated water with concentrations greater than 750,000 pCi/L. This water was sent off site for disposal.

The OU III ROD contingencies were defined as either a detection of tritium above 25,000 pCi/L in monitoring wells at the Chilled Water Facility Road, or above 20,000 pCi/L in monitoring wells along Weaver Drive. The OU III ROD contingency of exceeding 20,000 pCi/L at Weaver Drive was triggered with a detection of 21,000 pCi/L in November 2006. In 2007, extraction well EW-16 was installed approximately 500 feet north of Princeton Avenue to supplement the three existing extraction wells and the system was restarted in November 2007 as per the ROD contingency.

The *Petition For Shutdown, High Flux Beam Reactor, Tritium Plume Pump and Recharge System* (BNL, 2013c) was submitted to the regulatory agencies in March 2013 based on satisfaction of the criteria established in the *2008 Groundwater Status Report* (BNL, 2009c) and documented in the *Operations and Maintenance Manual for the High Flux Beam Reactor Tritium Plume Pump and Recharge System* (BNL, 2009b). The petition was approved by the regulatory agencies in May 2013, and the extraction wells were placed in standby mode. A *Petition for Closure* (BNL, 2018b) of this system was submitted to the regulators in July 2018 and approved in March 2019. The extraction wells are now shut down and the program consists of groundwater monitoring of the area immediately downgradient of the HFBR.

3.2.13.1 System Description

The system has been administratively closed since 2019. The system is being maintained in an operationally ready state, and will be decommissioned upon a determination that it will not be needed for use related to PFAS and 1,4-dioxane remediation.

3.2.13.2 Groundwater Monitoring

Well Network

A monitoring well network of 10 wells is utilized to monitor source area tritium concentrations immediately downgradient of the HFBR (**Figure 3.2.13-1**).

Sampling Frequency and Analysis

In 2019, plume monitoring was reduced to the area immediately south of the HFBR, based on the attenuation of the downgradient portion of the plume. The monitoring wells are sampled quarterly for tritium.

3.2.13.3 Monitoring Well Results

The fourth quarter 2024 monitoring well data are posted on **Figure 3.2.13-1**. The highest tritium concentration observed in 2024 was 12,639 pCi/L in well 075-805 in October, which is well below the 20,000 pCi/L DWS. **Appendix C** contains the complete set of monitoring well data.

Increased tritium concentrations in wells located immediately downgradient of the HFBR have been observed to correlate with high water table elevation events. This results in water table flushing of the remaining tritium inventory in the unsaturated zone beneath the HFBR. The correlation is evident when comparing water table elevations immediately downgradient of the HFBR with peak tritium concentrations in the monitoring wells located in this area as shown on **Figure 3.2.13-2**. The magnitude and frequency of peak tritium concentrations has diminished over the 25 years of monitoring. The water table fluctuated approximately four feet in 2024 and remained close to the long-term average elevation. Monitoring of the HFBR tritium plume has now encompassed two tritium half-lives (one half-life equals 12.3 years). Based on the decreasing tritium concentration trends in groundwater, the inventory of tritium present in soils beneath the HFBR appears to have significantly decreased over the past 25 years.

3.2.13.4 Monitoring Program Evaluation

The OU III HFBR Tritium Pump and Recharge System and Monitoring Program can be evaluated based on the decision rules established for this program using the groundwater DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Yes. However, the inventory of tritium that remains in the unsaturated zone beneath the HFBR building is decreasing based on groundwater monitoring data immediately downgradient of the building. The highest concentration observed in the source area during 2024 was 12,639 pCi/L in monitoring well 075-805. The long-term decline in the peak tritium concentration trend in wells immediately downgradient of the HFBR and water table elevations is shown on **Figure 3.2.13-2**.

2. Were unexpected levels of contamination detected?

There were no unusual levels of tritium observed in the monitoring wells during 2024. Tritium concentrations in monitoring wells have not exceeded the 20,000 pCi/L DWS since 2020. **Figure 3.2.13-2** demonstrates the decline in source area concentrations over the years.

3. Has the groundwater cleanup goal of meeting MCLs been achieved?

MCLs have not been exceeded since 2020. The area immediately downgradient of the HFBR remained below the 20,000 pCi/L MCL in 2024.

3.2.13.5 Recommendations

The following are recommendations for the HFBR Tritium Monitoring Program:

- Continue to monitor the source area with the ten wells located immediately downgradient of the HFBR. Reduce the sampling frequency from quarterly to semiannually.
- Maintain the downgradient monitoring wells and extraction wells until a determination is made on their utilization related to PFAS and 1,4-dioxane.

3.3 OPERABLE UNIT IV

This section summarizes the data from the Building 650 and Sump Outfall Strontium-90 Monitoring Program that monitors a Sr-90 plume and offers conclusions and recommendations for monitoring.

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3.3.1 Building 650 and Sump Outfall Strontium-90 Monitoring Program

The Building 650 and Sump Outfall Sr-90 Monitoring Program monitors Sr-90 in groundwater originating from a remediated source area known as the former Building 650 Sump Outfall Area. This source area consisted of a depression (Sump Outfall) at the terminus of a discharge pipe from the building. The pipe conveyed discharges from a concrete decontamination pad located approximately 800 feet to the west, where radioactively contaminated clothing and equipment were decontaminated beginning in 1959 (**Figure 3.3.1-1**).

3.3.1.1 Groundwater Monitoring

The monitoring well network consists of 24 wells used to monitor Sr-90 originating from Building 650 and the Building 650 Sump Outfall Area (**Figure 3.3.1-1**). During 2024, the monitoring wells were sampled annually for Sr-90 (**Table 1-5**).

3.3.1.2 Monitoring Well Results

The complete sampling results for monitoring wells can be found in **Appendix C**. The Sr-90 monitoring results indicated that the plume originating from the Sump Outfall continued to attenuate as it migrates away from the former Building 650 Sump Outfall Area. The locations of the monitoring wells and the Sr-90 concentrations are shown on **Figure 3.3.1-1**. The leading edge of the plume, as defined by the 8 pCi/L DWS, is presently located in an area near the northeast corner of the National Synchrotron Light Source (NSLS) II Facility.

Building 650

The Demolition and Decommissioning (D&D) of Building 650 was completed in 2021. The removal of Building 650 and the surrounding paved areas resulted in the exposure of soil from the surrounding paved areas. Wells 076-420 and 076-421 were installed prior to D&D of Building 650 to monitor potential impacts to groundwater from the D&D activities. Significant observations for key monitoring wells follow:

- Peak Sr-90 concentrations during 2024 in monitoring wells 076-420 and 076-421 were 1.1 pCi/L and 1.8 pCi/L, respectively.
- Monitoring well 076-25, located approximately 160 feet to the south-southeast of Building 650 has shown fluctuating Sr-90 concentrations from a high of 12 pCi/L in 2018 to 4.2 pCi/L in 2024.
- Monitoring well 076-28, located immediately north of the former Building 650 decontamination pad had a Sr-90 concentration of 4 pCi/L during 2024. This is a reduction from 2021 when the Sr-90 concentration was 17.3 pCi/L.

Building 650 Sump Outfall Area

Over the past several years there has been a shift in the groundwater flow direction to the southeast (**Figure 2-2**). This shift was attributed to the reduction of treated water discharging into the RA V basin. This shift could also be contributing to the decrease in Sr-90 concentrations in some monitoring wells (076-24, 076-182, and 076-416) over the past several years. Furthermore, it is probable a shift back towards the southwest will occur due to increased discharges to the RA V basin as a result of the operation of the PFAS groundwater treatment systems (**Figure 2-5**). Significant observations for key monitoring wells follow:

- Wells 076-418 and 076-419 were installed downgradient of the Sump Outfall Area at locations where data from 2019 indicated the need for permanent monitoring wells based on the eastward shift of the plume. The high Sr-90 concentrations obtained during 2024 were 5.3 pCi/L and 4.8 pCi/L, respectively. The Sr-90 concentrations in these wells have decreased since they were installed in 2020, and were below DWS in 2024.
- Sr-90 concentrations in source area wells 076-13 and 076-168 have remained below DWS since 2016. (**Figure 3.3.1-2**). This data indicates the Sr-90 groundwater contamination is attenuating as anticipated.
- Well 076-184, located to the east of wells 076-182 and 076-416, remains below its historical high of 52.6 pCi/L in August of 2021 with a result of 33.9 pCi/L in April 2024.

3.3.1.3 Groundwater Monitoring Program Evaluation

The monitoring program can be evaluated based on the decision rules identified from the groundwater DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Building 650: No, there is no continuing source of contamination. The source area was remediated in 2002, yet there still are detections of Sr-90 near the former Building 650 at levels near the DWS. Based on the Sr-90 concentrations in the monitoring wells, residual contamination that may remain at depth in the unsaturated zone above the water table appears to be minimal.

Building 650 Sump Outfall Area: No, there is no continuing source of contamination. The source area was remediated in 2002. Detections of Sr-90 in monitoring wells near the Sump Outfall Area have not exceeded the DWS since 2016. Based on the Sr-90 concentrations in source area monitoring wells, any residual contamination that may remain at depth in the unsaturated zone above the water table appears to be minimal.

2. Were unexpected levels or types of contamination detected?

No. Based upon the results for 2024, the Sr-90 detections were within the expected concentration range. Monitoring well 076-184 had a Sr-90 concentration of 33.9 pCi/L; however, this is not unexpected as the plume continues to migrate and attenuate downgradient.

3. Is the plume naturally attenuating as expected?

Yes. The groundwater modeling conducted in 2010 predicted that the plume will attenuate to below the 8 pCi/L DWS by approximately 2034. The leading edge of the plume, as defined by the DWS, was predicted to advance approximately 250 feet south of Brookhaven Avenue. This is consistent with current monitoring data.

4. Has the groundwater cleanup goal of meeting MCLs been achieved?

No. There was one monitoring well (076-184) exceeding the MCL/DWS in 2024. Therefore, the performance objectives have yet to be achieved. The groundwater plume continues to degrade due to natural attenuation (i.e., radioactive decay and dispersion).

3.3.1.4 Recommendations

The following are recommendations for the Building 650 and Sump Outfall Strontium-90 Monitoring Program:

- Maintain annual sampling frequency for the 24 monitoring wells in this program.
- Install several temporary wells downgradient of monitoring well 076-184 in an area south of Brookhaven Avenue.

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3.4 OPERABLE UNIT VI EDB TREATMENT SYSTEM

The OU VI EDB Treatment System addresses an EDB plume in groundwater currently located off-site from south of North Street, southward for approximately 2,500 feet. EDB was used during the 1970s as a fumigant for the BNL Biology Department's biology fields located in the southeastern portion of the site (**Figure 3.4-1**). In the mid-1990s, low levels of EDB were detected in groundwater near the fields. Higher levels were found migrating toward the southern site boundary and off-site to the south. In addition, the depth of the plume increased within the Upper Glacial aquifer to the south. EDB has not been detected on BNL property since 2009 and on-site monitoring was discontinued in 2016.

3.4.1 System Description

A groundwater remediation system to address the off-site EDB plume began routine operations in August 2004. The OU VI EDB Treatment System consisted of two extraction wells and two injection wells. A complete description of the system is included in the *Operations and Maintenance Manual for the OU VI EDB Groundwater Treatment System, Rev. 1* (BNL, 2025). Groundwater characterization and geologic data obtained in 2020 and 2021 identified that the plume is deeper in the Upper Glacial aquifer than originally understood. It was also determined at that time that the Gardiners Clay unit was not present south of well 000-209. In addition, a local silt and clay layer was identified in the deep Upper Glacial aquifer south of well 000-284. This is depicted on cross section Q–Q' (**Figure 3.4-2**).

In December 2023, the system was shut down to construct two new extraction wells (EW-3E and EW-4E). These new extraction wells were installed and screened at greater depths than the two existing wells to better capture the deeper portions of the EDB plume. Construction began on December 8, 2023, and was completed January 29, 2024, when the new extraction wells began full time operations. Extraction wells EW-1E and EW-2E were subsequently placed in standby mode. In June 2024 a one week pumping test was performed *to* evaluate the capture zone of the new extraction wells. The pumping test report (J.R.Holzmacher P.E., LLC, 2024) concluded that; "*The projected capture zone includes the entire horizontal width and vertical thickness of the plume having EDB concentrations above 0.05 ug/l within the Upper Glacial aquifer. The identified silt and clay layer approximately 15 feet above the new extraction wells may have varying permeability and thickness which may modify the future vertical travel path of the plume. It is recommended to continue closely monitoring EDB concentration levels in the two existing extraction wells EW-1E and EW-2E above the silt and clay layer to determine the effectiveness of plume capture of the new deeper extraction wells.*"

3.4.2 Groundwater Monitoring

Well Locations

A network of 26 wells monitors the EDB plume from North Street to locations on private property south of North Street and west of Weeks Avenue (**Figure 3.4-1**). Three new monitoring wells were installed in 2023 to enhance the monitoring network in relation to the new extraction wells. 000-580 and 000-581 are bypass wells to monitor downgradient of the new extraction wells. 000-582 is a plume core well, located just upgradient of the two new extraction wells.

Sampling Frequency and Analysis

The OU VI EDB plume monitoring program is shown in **Table 1-8**. The sampling frequency is documented in **Table 1-5**. Three perimeter wells located upgradient of the plume are sampled annually. The wells are analyzed for EDB using EPA Method 504 and EPA Method 8011. The federal DWS for EDB is 0.05 µg/L.

3.4.3 Monitoring Well Results

Appendix C contains the complete analytical results of the OU VI EDB monitoring well sampling program. The distribution of the EDB plume for the fourth quarter of 2024 is shown on **Figure 3.4-1**. See **Figure 3.4-3** for historical EDB trends for key monitoring wells. A summary of key monitoring well data for 2024 follows:

- The maximum EDB concentration detected in the plume in 2024 was 1 µg/L in well 000-570 in March. This well is located upgradient of eastern extraction well EW-4E. The highest concentration segment of the plume is located between well 000-571 and well 000-568 (a distance of approximately 700-feet).
- The western portion of the plume, upgradient of EW-3E, contains lower concentrations of EDB, although still exceeding the DWS. Monitoring well 000-572 is located immediately upgradient of EW-3E. The maximum EDB concentration detected in well 000-572 in 2024 was 0.2 µg/L in March.
- EDB concentrations have declined significantly in upgradient perimeter well 000-173 as shown on **Figure 3.4-3** indicating that the trailing edge of the plume has moved south of this location. The 2024 sample detected EDB at an estimated concentration of 0.01 µg/L. EDB concentrations in this well have been at or below the DWS since 2016. Concentrations in 000-175, located 200 feet northeast, have remained below the DWS since 2011.
- Well 000-283, located approximately 1,700 feet upgradient of extraction well EW-3E, detected the maximum historical EDB concentrations in the plume of 7.6 µg/L in 2001. This well has seen a steady drop in EDB concentrations since 2005, and the maximum concentration during 2024 sample events was 0.11 µg/L. Well 000-284, located east of 000-283, also continues to exhibit a significant drop in EDB concentrations from a high of 6.8 µg/L in 2003 to non-detect in 2024.
- Monitoring wells 000-567 and 000-568, installed in October 2020, have consistently detected EDB above the DWS with a maximum EDB concentration of 0.39 µg/L in 000-568 in June 2024. These wells were installed to monitor the centerline of the plume with 000-568 being the deeper of the two wells.
- Core well 000-520, located on the eastern edge of the plume near the OS-6 treatment building, had an EDB concentration in December 2024 of 0.05 µg/L.
- The three original and shallower bypass monitoring wells (000-508, 000-519, 000-527) have not detected EDB since they were installed in 2005. Two deeper bypass wells, 000-580 and 000-581, were installed in 2023 to monitor downgradient of the new extraction wells. EDB concentrations in 000-580 were below detectable levels in 2024. There was a detection of 0.07 µg/L in well 000-581 during February 2025.

The southern migration of the plume is observed by analyzing the trends on **Figure 3.4-3**. Comparing the plume's distribution from 1999 to 2024 (**Figure 3.4-4**), as well as the EDB concentrations in monitoring wells just south of North Street, helps to illustrate the southern movement of the plume as well as the reduction in plume extent. Overall, peak EDB concentrations declined from 7.6 µg/L in 2001 (in well 000-283) to 1 µg/L in 2024 (in well 000-570).

3.4.4 System Operational Data

The sampling frequency of the extraction wells is quarterly. In conformance with the SPDES equivalency permit, the sampling frequency for the influent and effluent is monthly. All OU VI system

samples were analyzed for VOCs and EDB, and the effluent sample was analyzed monthly for pH. **Table 3.4-1** provides the effluent limitations for meeting the requirements of the SPDES equivalency permit. During 2024, the equivalency permit limits were not exceeded. Starting in 2023, the system influent and effluent have been analyzed for PFAS and 1,4-dioxane (**Section 3.5**).

January – September 2024

In December 2023, the system was shut down to construct two new extraction wells (EW-3E and EW-4E). Construction began on December 8, 2023, and was completed January 29, 2024, when the new extraction wells began full time operations. Extraction wells EW-1E and EW-2E were subsequently placed in standby mode. The system was shut off from May 31 to June 4 to perform a pumping test. The system was off from June 18th to July 8th for a routine carbon change out. Well EW-4E was off from June 20th to July 8th to replace the pump and motor. The system treated approximately 97 million gallons of water during this period.

October – December 2024

Extraction wells EW-3E and EW-4E ran normally for the period. Extraction wells EW-1E and EW-2E remained in standby mode. The system treated approximately 37 million gallons of water for this period.

Extraction Wells

During 2024, the system treated approximately 134 million gallons of water, with an average flow rate of 258 gpm. **Table 2-2** contains the monthly pumping data for the two operating extraction wells, and **Table 3.4-2** shows the pumping rates. VOC concentrations for EW-1E through EW-4E are provided in **Table F-44**. In 2024, EDB was detected in all monthly samples in EW-3E and EW-4E. EDB was not detected in any of the quarterly samples in EW-1E or EW-2E. In 2024, EW-3E and EW-4E had maximum EDB detections of 0.19 µg/L and 0.92 µg/L, respectively. No other VOCs were detected in the extraction wells above the DWS.

Figure 3.4-5 shows the EDB concentrations in the extraction wells over time.

System Influent and Effluent

EDB was detected during all of the monthly sampling events of the system influent throughout 2024. The maximum influent concentration was 0.54 µg/L. During 2024, the system effluent was below the regulatory limits specified in the SPDES equivalency permit (**Table 3.4-1**). Influent and effluent results are reported in **Table F-45** and **Table F-46**, respectively.

Table 3.4-1
OU VI EDB Treatment System
2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit (µg/L)	Max. Measured Value (µg/L)
pH (range)	5.0 – 8.5 SU	5.1 – 6.2 SU
ethylene dibromide	0.03	<0.02
chloroform	7.0	0.48
1,1-dichloroethene	5.0	<0.5
1,1,1-trichloroethane	5.0	<0.5
methyl chloride	5.0	<0.5
methylene chloride	5.0	<0.5

Notes:
Required sampling frequency is monthly for VOCs and pH.
SU = Standard Units

Cumulative Mass Removal

Previously, no cumulative mass removal calculations were performed because of the low detections of EDB historically below the DWS in the system influent. However, since EW-3E and EW-4E became operational in January 2024, mass removal calculations are being performed due to the higher EDB concentrations. During 2024 the treatment system removed approximately 0.53 lbs of EDB.

3.4.5 System Evaluation

The OU VI EDB System performance can be evaluated based on decisions identified in the groundwater DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

There is no continuing source of EDB.

2. Were unexpected levels or types of contamination detected?

No. The EDB concentrations identified in the new monitoring wells are consistent with the levels identified previously. However, 1,4-dioxane was detected in the system, as detailed in **Section 3.5**.

3. Has the downgradient migration of the plume been controlled?

The installation of two new and deeper extraction wells is expected to control and remediate the leading edge of the plume. The data obtained from the monitoring well network will be utilized to verify this.

4. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

No, the system has not met all shutdown requirements. Although extraction wells EW-1E and EW-2E are now shutdown the EDB concentration's remain above the capture goal in numerous core monitoring wells and the two new extraction wells.

4a. Are EDB concentrations in plume core wells above or below 0.05 µg/L?

In the fourth quarter of 2024, 10 wells showed EDB concentrations greater than the DWS.

4b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

The OU VI EDB system has not been pulsed pumped. . However extraction wells EW-1E and EW-2E were shutdown when the two new extraction wells (EW-3E and EW-4E) began operations in January 2024. No rebound in concentrations has been observed in extraction wells EW-1E and EW-2E since they were shutdown.

5. Has the groundwater cleanup goal of meeting MCLs been achieved?

The MCL has not been achieved for EDB based on the data from plume core wells.

3.4.6 Recommendations

The following recommendations are made for the OU VI EDB Treatment System and groundwater monitoring program:

- Maintain full time operation of the extraction wells EW-3E and EW-4E, and continue quarterly sampling of the extraction wells.
- Reevaluate the cleanup time frame with the groundwater model utilizing updated information from the pump test and recent monitoring well data.

3.5 OPERABLE UNIT X

PFAS and the chemical 1,4-dioxane are emerging contaminants of concern. PFAS have been used in a wide variety of common household and commercial products, and in aqueous film forming foam (AFFF) used for fighting Class B fires. 1,4-dioxane has been broadly used in numerous commercial products, including as a chemical stabilizer for the chlorinated solvent TCA. PFAS chemicals have impacted groundwater quality at numerous sites across the nation, especially in areas where firefighting foam was used for training, fire suppression systems, and emergency response. In 2017, water samples from BNL's five active potable water supply wells were analyzed for the six PFAS compounds that were evaluated under the Third Unregulated Contaminant Monitoring Rule (UCMR3) program. PFAS were detected in samples from three of the five supply wells (BNL-6, BNL-10, and BNL-11). The combined concentrations of PFOS and PFOA were less than the 2016 EPA Lifetime Health Advisory Level (HAL) of 70 ng/L (USEPA, 2016). In August 2020, NYS established individual drinking water standards (referred to as MCLs) of 10 ng/L for PFOS and PFOA, and 1.0 µg/L for 1,4-dioxane. On June 15, 2022, the EPA proposed revised HALs for PFOA at 0.004 ng/L and PFOS at 0.02 ng/L (USEPA, 2022). The EPA also proposed establishing HALs for hexafluoropropylene oxide dimer acid (HFPO-DA) at 10 ng/L and perfluorobutane sulfonic acid (PFBS) at 2,000 ng/L. In early 2024, the EPA finalized National Primary Drinking Water Standards of 4 ng/L for PFOS and PFOA, of 10 ng/L for perfluorononanoic acid (PFNA), perfluorohexane sulfonic acid (PFHxS) and HFPO-DA known as GenX chemicals, and an MCL based Hazard Index calculation using Health Based Water Concentrations (HBWCs) for HFPO-DA, PFBS, PFNA and PFHxS.

At BNL, PFAS have impacted groundwater quality in areas where firefighting foam was used for training and fire suppression systems, the landfilling of PFAS-containing wastes, and discharges to the sanitary system; whereas, 1,4-dioxane has impacted groundwater quality as the result of historical releases of TCA to soils in several on-site areas and discharges to the sanitary system.

Since 2017, BNL has been investigating the impact that these chemicals are having on groundwater quality at the Laboratory and nearby off-site areas. The results of the investigations conducted from 2017 through early 2021 were summarized in the 2018 through 2021 *BNL Groundwater Status Reports* (BNL, 2019), (BNL, 2020c), (BNL, 2021c), and (BNL, 2022b). Results for characterization efforts conducted during 2020 through 2022 were also presented in the *Phase 4 Characterization Report* (BNL, 2021a) and the *Time Critical Removal Action Characterization Report* (BNL, 2023b). Data collected during 2024 are summarized in **Section 3.5.1**, **Section 3.5.2** and **Section 3.5.3** of this report.

To establish the appropriate CERCLA regulatory framework for potential future remedial actions for PFOS, PFOA and 1,4-dioxane, new AOCs 33 and 34 were established in 2021. During 2023, BNL prepared a draft OU X RI/FS Work Plan for regulatory agency review. BNL responded to regulatory agency comments, and the RI/FS Work Plan will be finalized once funding for the work has been secured. The AOCs identified below are now included under OU X:

AOC 33 – PFOS and PFOA groundwater and soil contamination:

- Sub-AOC 33A Former Bubble Chamber Experiment and Blockhouse Area
- Sub-AOC 33B Building 924 Area
- Sub-AOC 33C East of Building 902 (Former Bubble Chamber Test Area)
- Sub-AOC 33D Current Firehouse
- Sub-AOC 33E Former Firehouse
- Sub-AOC 33F Major Petroleum Facility

- Sub-AOC 33G Building 526 Area
- Sub-AOC 33H Recreation Center Area
- Sub-AOC 33I Sewage Treatment Plant
- Sub-AOC 33J Building 170 Area
- Sub-AOC 33K Current Landfill
- Sub-AOC 33L Water Treatment Plant

AOC 34 – 1,4-Dioxane groundwater contamination

Treatment System Discharge Standards

In March 2023, NYSDEC issued Ambient Groundwater Quality Guidance Values (AWQGVs), for PFOS, PFOA and 1,4-dioxane that are lower than the State drinking water standards. The guidance values are 2.7 ng/L for PFOS, 6.7 ng/L for PFOA, and 0.35 µg/L for 1,4-dioxane. These guidance values are also applied to industrial discharges that require a SPDES permit. Based upon the initial monitoring of groundwater treatment systems for these chemicals, it became apparent that the treatment system effluent for several of BNL's on-site and off-site systems exceeded the guidance values for 1,4-dioxane and PFOS (BNL, 2021a). In May and July 2023, meetings were held with NYSDEC, EPA and SCDHS regarding the currently operating groundwater treatment systems and potential impacts that the new discharge guidance values may have on their continued operation. Because of the limited amount of PFOS, PFOA and 1,4-dioxane data from the effluent of these systems, in July 2023, the NYSDEC approved BNL's plan to monitor select active treatment systems that had detectable levels of PFOS, PFOA and/or 1,4-dioxane on a quarterly frequency for one year (June 2023 through April 2024). The goal of the monitoring program was to provide sufficient baseline data needed to support decision making related to possible modifications of the systems to come into compliance with the new discharge guidance levels.

The effluent monitoring program included the sampling of the:

1) combined OU III Western South Boundary, Middle Road, and South Boundary system;
2) OU III LIPA/Airport system;
3) OU III North Street East system;
4) OU VI EDB system (for 1,4-dioxane only); and
5) the BGRR/WCF system.

During 2023, the first set of samples from the treatment system extraction wells, influent and effluent were collected during June-July, and treatment system influent and effluent samples were collected in October (**Table 3.5-1**). The results for the first two quarterly monitoring periods indicated that 1,4-dioxane levels exceeded the 0.35 µg/L discharge guidance value in the combined OU III Western South Boundary, Middle Road, and South Boundary system effluent at a maximum concentration of 2.8 µg/L, and PFOS exceeded the 2.7 ng/L guidance value with a maximum concentration of 5.24 ng/L. 1,4-dioxane concentrations in the effluent from both the LIPA/Airport and North Street East systems exceeded the guidance value, with maximum concentrations of 1.3 µg/L and 0.92 µg/L, respectively. The guidance value for 1,4-dioxane was not exceeded in either the OU VI or BGRR/WCF systems. However, PFOS was detected in the effluent for the BGRR/WCF treatment system at a maximum estimated concentration of 0.94 ng/L, and PFOA was detected at a maximum concentration of 3.24 ng/L.

During 2024, the treatment systems' extraction wells and effluent were sampled in January, and the treatment system effluent was sampled in April (**Table 3.5-1**). The results for the second two quarterly monitoring periods continued to indicate that 1,4-dioxane levels exceeded the 0.35 µg/L discharge guidance value in the combined OU III Western South Boundary, Middle Road, and South Boundary system effluent at a maximum concentration of 1.9 µg/L, and PFOS exceeded the 2.7 ng/L guidance value with a maximum concentration of 7.5 ng/L. 1,4-Dioxane concentrations in the effluent from both the LIPA/Airport and North Street East systems exceeded the guidance value, with maximum concentrations of 1.2 µg/L and 0.59 µg/L, respectively. The guidance value for 1,4-dioxane was not exceeded in either the OU VI or BGRR/WCF systems. However, PFOS was detected in the effluent for the BGRR/WCF treatment system at 5.2 ng/L.

At the completion of the four quarters of monitoring, BNL developed a plan that will allow for the active treatment systems to come into compliance with the discharge guidance values. The monitoring results and proposed modifications to the OU III WSB/Middle Road/South Boundary and Airport treatment systems, and more frequent GAC filter exchanges for the BGRR/WCF system, were documented in the *Groundwater Treatment System Discharge Compliance Plan* (BNL, 2024f). The compliance plan was approved by the regulatory agencies in early 2025. The compliance plan also recommended conducting routine quarterly monitoring of the treatment systems' effluent and semiannual monitoring of the systems' extraction wells. Additional system effluent samples were collected during the 4th Quarter of 2024, and effluent and extraction wells were sampled during the 1st Quarter of 2025 (**Table 3.5-1**). The analytical results were consistent with the previous data. The need to modify currently closed groundwater treatment systems will be evaluated during the OU X RI/FS.

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3.5.1 Operable Unit X Current Firehouse PFAS Treatment System

The Current Firehouse Treatment System was installed as a Time Critical Removal Action (TCRA) to address PFAS-contaminated groundwater associated with the Current Firehouse and Building 170 firefighter training areas (sub-AOC 33D and sub-AOC 33J, respectively).

3.5.1.1 System Description

The Current Firehouse PFAS groundwater remediation system began operations in October 2022. PFAS-contaminated water is withdrawn from the aquifer using nine extraction wells. Following treatment using GAC filters, the treated water is returned to the aquifer using the HP recharge basins that had previously been used to recharge cooling water from the former Medical Research Reactor. A complete description of the system is included in the *Operations and Maintenance Manual for the Current Firehouse Groundwater Treatment System* (BNL, 2023d).

3.5.1.2 Groundwater Monitoring

Well Locations

During 2024, 80 permanent wells, eight temporary Geoprobe® wells, and 15 temporary VP wells were used to monitor the PFAS plumes originating from the Current Firehouse and Building 170 source areas (**Figure 3.5.1-1**).

Sampling Frequency and Analysis

During 2024, a subset of 13 monitoring wells located immediately downgradient of the Current Firehouse and Building 170 source areas were monitored quarterly. The full network of 80 wells were monitored semiannually. Eight temporary Geoprobe® wells were installed north of West Princeton Avenue to evaluate an apparent shift in the position of the Current Firehouse and Building 170 plume segments, and 12 temporary VP wells were installed south of West Princeton Avenue to evaluate the southern extent of the combined Current Firehouse and Building 170 PFAS plume. Based upon VP well results, four new permanent monitoring wells were installed and sampled one time during the second half of the year (**Table 1-5**). Samples from all monitoring wells were analyzed for PFAS using EPA Method 1633, and samples from 17 wells were also analyzed for 1,4-dioxane using EPA Method 8270 SIM.

3.5.1.3 Monitoring Well Results

Appendix C contains the complete analytical results for the Current Firehouse and Building 170 plume monitoring wells that were sampled during 2024. The distribution of the PFOS/PFOA plume for the July-September sample period is shown on **Figure 3.5.1-1**. **Figure 3.5.1-3** provides trends in PFOS and PFOA concentrations for select monitoring wells. Key monitoring results are summarized below:

- At the Current Firehouse, the highest concentrations of PFAS in permanent monitoring wells used for long-term surveillance were detected in wells 073-28 and 073-31, which are located within and downgradient of the eastern (main) fire training area, respectively. Of the two wells, the highest PFOS and PFOA concentrations were detected in samples collected from well 073-28 in April following an approximately four foot springtime rise in the water table, with PFOS and PFOA concentrations of 9,100 ng/L and 295 ng/L, respectively. The highest PFOS and PFOA concentrations in well 073-31 were 5,990 ng/L and 240 ng/L, respectively. Variations in PFOS and PFOA concentrations in well 073-28 relative to changes in water table elevation are presented on **Figure 3.5.1-5**. Higher PFOS and PFOA concentrations of 16,000 ng/L and 1,200 ng/L were detected in temporary wells

OU10-CFH-GW-TB2 and OU10-CFH-GW-TB4, respectively (**Figure 3.5.1-6 and Table 3.5.1-3**). PFHxS was also detected at a concentration of 5,500 ng/L in the groundwater sample collected from OU10-CFH-GW-TB4. These wells were installed as part of an effort to evaluate the distribution of PFAS in unsaturated soil and in groundwater close to the water table. High concentrations of other PFAS were also detected in source area wells 073-28 and 073-31 during the year including: PFHxS up to 3,720 ng/L, PFHxA up to 174 ng/L, PFBS up to 75 ng/L, PFPeS up to 150 ng/L and PFHpS up to 342 ng/L. The plume segment with PFAS concentrations greater than 1,000 ng/L extends from the eastern training area approximately 1,500 feet south, where a PFOS concentration of 4,000 ng/L was detected in monitoring well 084-96 (**Figure 3.5.1-1**). **Figure 3.5.1-7** provides a plume cross section extending from the Current Firehouse source area to the BNL southwest boundary.

§ In the western training area of the Current Firehouse, the highest concentrations of PFAS were detected in well 073-26, which is located downgradient of the training area, and upgradient of extraction well CF-RW-B. During October, PFOS and PFOA concentrations were 1,610 ng/L and 31.9 ng/L, respectively.

§ In the Building 170 area, the highest PFOS, PFOA and PFHxS concentrations were detected in downgradient well 093-04 at 5,050 ng/L, 65 ng/L, and 873 ng/L, respectively. The plume segment with PFAS concentrations greater than 1,000 ng/L extends from the Building 170 training area approximately 1,000 feet south, where a PFOS concentration of 1,060 ng/L were detected in temporary well PFC-GP-196 which was installed near extraction well CF-RW-F (**Figure 3.5.1-1**). **Figure 3.5.1-8** provides a plume cross section extending from the Building 170 source area to the BNL southwest boundary.

§ **Figure 3.5.1-4** provides a comparison of the plume distributions for 2020-2021, 2023, and 2024. When comparing the plume distribution based upon the permanent well data to that based upon the temporary well data from the *TCRA Characterization Report* (BNL, 2023b), there appears to be a slight easterly shift in the downgradient portion of the Current Firehouse and Building 170 plume segments. A possible cause for this easterly shift is BNL's decision in June 2018 to suspend the use of supply well BNL-6 due to PFAS contamination and the lack of GAC filters at the well, and a significant reduction in the use of supply well BNL-7. Both of these actions appear to have resulted in a more southerly (and a general shift to the east) direction of groundwater flow. During 2024, BNL installed eight temporary Geoprobe® wells to evaluate an apparent easterly shift of the Building 170 and Current Firehouse PFAS plume segments (**Figure 3.5.1-1** and **Table 3.5.1-4**). Two temporary wells were installed east of extraction well CF-RW-E, three temporary wells were installed between extraction wells CF-RW-I and CF-RW-F, and three temporary wells were installed east of extraction well CF-RW-H. These results confirmed an easterly shift in the plume segments in the three areas, with the centerline of the Current Firehouse plume shifting slightly to the east, but still within the capture zones of CF-RW-E and CF-RW-H, and the centerline of the Building 170 plume segment shifting away from extraction well CF-RW-I and now centered on extraction well CF-RW-F (**Figure 3.5.1-1** and **Figure 3.5.1-4**).

§ During 2024 and early 2025, 12 temporary VP wells were installed to further characterize the downgradient extent of PFAS and 1,4-dioxane in the area between West Princeton Avenue and the BNL southwestern boundary, and three temporary wells were installed within the capture zone of the SCWA's William Floyd well field (**Figure 3.5.1-1** and **Table 3.5.1-5**). With these temporary wells, BNL was able to track the Current Firehouse/Building 170 PFAS plume to the southwestern boundary, where a maximum

PFOS concentration of 180 ng/L was detected in well OU10-VP-033, and an estimated maximum PFOA concentration of 120 ng/L was detected in well OU10-VP-034. 1,4-dioxane was detected in nine of the 12 temporary wells with a maximum concentration of 12 µg/L in OU10-VP-021.

§ Consistent with previous characterization results, low levels of PFAS were detected in the three temporary wells used to further characterize PFAS and 1,4-dioxane concentrations within the capture zone of the SCWA's William Floyd well field. PFOS was detected in temporary well OU10-VP-011 up to 21 ng/L and PFOA was detected up to 10 ng/L in temporary well OU10-VP-012. Trace levels of 1,4-dioxane were detected in all three wells, at a maximum concentration of 0.3 µg/L in well OU10-VP-011.

3.5.1.4 System Operational Data

The sampling frequency of the extraction wells is monthly. The sampling frequency for the influent and effluent is bi-monthly. All Current Firehouse treatment system samples were analyzed for PFAS, VOCs and the effluent sample was analyzed monthly for pH. Treatment system influent and effluent samples were also analyzed for 1,4-dioxane using EPA Method 8270 SIM and for VOCs using EPA Method 8260 Low Level. A summary of the influent concentrations for PFOS, PFOA and total PFAS is presented on **Figure 3.5.1-2**. **Table 3.5.1-1** provides the effluent limitations for meeting the requirements of the SPDES equivalency permit. During 2024, the equivalency permit limits were not exceeded.

January – September 2024

Wells CF-RW-C and CF-RW-F were in standby mode for the year due to low concentrations of PFAS The low PFAS concentrations in well CF-RW-C reflects that this well is now on the western edge of the Current Firehouse plume segment. Although the centerline of the Building 170 plume segment has shifted towards CF-RW-F, the low concentrations detected in this well is likely due to the deeper depth of the well screen relative to the shallower depth of the plume (**Figure 3.5.1-8**). The system was turned off and re-started the same day multiple times during this period to backwash the lead GAC vessel due to fouling. These were; January 30th, February 27th, April 3rd, April 22nd, May 14th, June 25th, July 15th and August 20th. Well CF-RW-A was off from March 1st through March 15th to replace the pump and motor. Well CF-RW-E was off from April 2nd through April 19th to replace the pump and motor. The system was shut off June 27th for a routine carbon change out and was re-started July 3rd. The system treated approximately 168 million gallons of water during this period.

October – December 2024

The system was shut off to backwash the lead GAC vessel on October 11th and December 18th. Well CF-RW-I was off from October 29th to November 19th to replace the pump and motor. Well CF-RW-H was off from November 5th to December 4th to replace the pump and motor. Wells CF-RW-C and CF-RW-RW-F remained in standby mode. The system ran normally for the rest of this period. The system treated approximately 47 million gallons of water for this period.

Extraction Wells Operational Data

During 2024, the system treated approximately 215 million gallons of water. The system average flow rate for the year was approximately 415 gpm. **Table 2-2** contains the monthly pumping data for the extraction wells, and **Table 3.5.1-2** shows the monthly pumping rates. During 2024, PFOS and PFOA were detected in all samples from all nine extraction wells (CF-RW-A through CF-RW-I) (**Table F-47**). The maximum PFOS and PFOA concentrations were detected in extraction well CF-RW-A at 1,200 ng/L and 36 ng/L, respectively. Furthermore, 1,4-dioxane was detected in extraction wells CF-

RW-C, CF-RW-D, CF-RW-E and CF-RW-H at concentrations up to 2.1 µg/L. Data for the extraction wells are presented in **Table F-47**.

System Influent and Effluent

PFOS and PFOA were detected in the system influent during all of 2024. A summary of influent concentrations for PFOS, PFOA and total PFAS is presented on **Figure 3.5.1-2**. The maximum influent concentrations for PFOS and PFOA were 360 ng/L and 9.1 ng/L, respectively. Furthermore, the maximum influent concentration for 1,4-dioxane was 0.19 µg/L and the maximum effluent concentration was 0.18 µg/L. During 2024, PFOS and PFOA were not detected in the system effluent, and 1,4-dioxane concentrations were below the 0.35 µg/L regulatory limit specified in the SPDES equivalency permit (**Table 3.5.1-1**). Influent and effluent results for PFAS and 1,4-dioxane are shown in **Table F-48**, and **Table F-49**.

Cumulative Mass Removal

During 2024, the treatment system removed approximately 0.53lbs of total PFAS. Since October 2022, the system has removed approximately 0.95 lbs of total PFAS. Data for mass removal is presented in **Table F-50**.

Table 3.5.1-1
OU X Current Firehouse PFAS Treatment System
2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit	Max. Measured Value
pH (range)	5.0 – 8.5 SU	5.6 – 7.3 SU
PFOS	2.7 ng/L	ND
PFOA	6.7 ng/L	ND
1,4-Dioxane	0.35 µg/L	0.18 µg/L
Chloroform	7.0 µg/L	ND
Carbon Tetrachloride	5.0 µg/L	ND
Methylene Chloride	5.0 µg/L	ND
Methyl Chloride	5.0 µg/L	ND

Notes:
Required sampling frequency following startup testing is monthly.
SU = Standard Units
ND = Not detected

3.5.1.5 System Evaluation

The Current Firehouse PFAS Treatment System performance can be evaluated based on decisions identified in the groundwater DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Yes. Groundwater monitoring results indicate that PFAS continues to be released from the Current Firehouse and Building 170 source areas at concentrations that exceed MCLs and AWQSGVs.

2. Were unexpected levels or types of contamination detected?

Yes. Higher than previously observed PFOS and PFOA concentrations of 16,000 ng/L and 1,200 ng/L respectively, were detected in groundwater samples collected close to the water table from temporary wells OU10-CFH-GW-TB2 and OU10-CFH-GW-TB4, which were installed within the Current Firehouse source area.

3. Has the downgradient migration of the plume been controlled?

No. The treatment system which was designed to remediate the high concentration plume segments has not been in operation long enough to make this determination and a complete characterization of the downgradient extent of the combined Current Firehouse and Building 170 PFAS plume has not been performed. Monitoring performed during 2024 indicates that the PFAS plume extends to the BNL site boundary, beyond the capture zones of the treatment system extraction wells.

4. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

No. The system is in its early stages of operation and has not met shutdown requirements.

4a. Are PFOS and PFOA concentrations in plume core wells above or below the 100 ng/L capture goal?

During 2024, 30 permanent and four temporary plume core wells had PFOS concentrations greater than the 100 ng/L capture goal. Three permanent wells and one temporary plume core well had PFOA concentrations >100 ng/L.

4b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

The Current Firehouse PFAS treatment system is in its early stage of operation and has not been pulsed pumped or shut down.

5. Has the groundwater cleanup goals been achieved?

Long-term cleanup goals for PFAS will be defined during the OU X RI/FS. Groundwater monitoring results indicate that contaminant concentrations continue to exceed NYS AWQSGVs for Class GA groundwater of 2.7 ng/L for PFOS and 6.7 ng/L for PFOA, and the 10 ng/L MCLs for PFOS and PFOA.

3.5.1.6 Recommendations

The following recommendations are made for the Current Firehouse PFAS Treatment System and groundwater monitoring program:

- Continue full-time treatment system operations, with extraction wells CF-RW-C and CF-RW-F in standby due to low PFAS concentrations. These extraction wells may be restarted if PFAS concentrations are observed to increase.
- Reduce sampling the treatment system influent, midpoint, and effluent from two times per month to monthly, as defined in the SPDES Equivalency Permit. Samples will be analyzed using EPA Method 1633 for PFAS, Method 8270 SIM for 1,4-dioxane, and EPA Method 8260 Low Level for VOCs.
- Reduce sampling frequency of the treatment system extraction wells from monthly to quarterly. Analyze the quarterly samples by EPA Method 1633 for PFAS and EPA Method 8270 SIM for 1,4-dioxane.
- Reduce sampling frequency of 13 Current Firehouse and Building 170 source area monitoring wells (073-26, 073-27, 073-28, 073-29, 073-30, 073-31, 073-32, 073-33, 074-135, 093-04, 093-93, 093-94, and 093-95) from quarterly to semiannual, and maintain semiannual sampling of remaining (67) Current Firehouse/Building 170 monitoring wells. Samples from all wells will be analyzed for PFAS using EPA Method 1633, and samples from 17 wells will also be analyzed for 1,4-dioxane using EPA Method 8270 SIM.
- Evaluate whether a new shallower extraction well is required at the location of CF-RW-F to effectively capture the high concentration segments of the Building 170 PFAS plume.
- Evaluate whether an additional shallower extraction well is required east of CF-RW-E to more effectively capture the high concentration segments of the Current Firehouse PFAS plume.

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3.5.2 Operable Unit X Former Firehouse PFAS Treatment System

The Former Firehouse Treatment System was installed as a TCRA to address PFAS-contaminated groundwater associated with the Former Firehouse firefighter training areas (sub-AOC 33E).

3.5.2.1 System Description

The Former Firehouse PFAS remediation system started operations in January 2023. PFAS-contaminated water is withdrawn from the aquifer using three extraction wells. Following treatment using GAC filters, the treated water is returned to the aquifer using the RA V recharge basin. A complete description of the system is included in the *Operations and Maintenance Manual for the Former Firehouse PFAS Source Areas Groundwater Treatment System* (BNL, 2023a).

3.5.2.2 Groundwater Monitoring

Well Locations

A network of 42 wells is used to monitor the PFAS plume from the Former Firehouse source areas to the area immediately south of East Princeton Avenue (**Figure 3.5.2-1**). During 2024, 29 monitoring wells associated with the OU III Middle Road, South Boundary and Industrial Park monitoring programs were used to better define the downgradient extent of the PFAS plume.

Sampling Frequency and Analysis

During 2024, The Former Firehouse monitoring well network of 42 wells was monitored semiannually. A subset of 10 monitoring wells located immediately downgradient of the Former Firehouse source areas were monitored quarterly. Additionally, 30 OU III wells were sampled once during the 4th quarter (**Table 1-5**). Samples from these monitoring wells were analyzed for PFAS using EPA Method 1633. Samples from a subset of 13 wells were analyzed semiannually for 1,4-dioxane using EPA Method 8270 SIM.

3.5.2.3 Monitoring Well Results

Appendix C contains the complete analytical results from the Former Firehouse and OU III monitoring wells that were sampled during 2024. The distribution of the PFOS/PFOA plume for the 3rd and 4th quarter monitoring periods is shown on **Figure 3.5.2-1**. **Figure 3.5.2-6** provides a plume cross section extending from the Former Firehouse source area to the off-site OU III Industrial Park treatment system area.

Figure 3.5.2-3 provides trends in PFOS and PFOA concentrations for select monitoring wells. Key monitoring results are summarized below:

- High concentrations of PFAS continued to be detected in three shallow wells (075-809, 075-810 and 075-811) located immediately downgradient of the Former Firehouse area and upgradient of extraction well FF-RW-A. The highest PFOS concentration was detected in well 075-809 at 24,000 ng/L during the July sample period following an almost four-foot springtime rise in the water table (**Figure 3.5.2-5**). The highest PFOA concentrations were detected in wells 075-809 and 075-811, each at 1,600 ng/L. High concentrations of other PFAS were also detected in these three wells including: PFHxS up to 15,000 ng/L, PFHxA up to 2,300 ng/L, PFBS up to an estimated 140 ng/L, PFBA up to an estimated 79 ng/L, PFOSAm up to 1,600 ng/L, PFPeS up to an estimated 83 ng/L and PFPeA up to an estimated 240 ng/L. By the October sample period, PFOS and PFOA concentrations in this area decreased to a maximum of 8,960 ng/L and 619 ng/L, respectively.

- Monitoring results for the 29 wells associated with the OU III Middle Road, South Boundary and Industrial Park monitoring programs indicate that the Former Firehouse PFAS plume extends past the OU III Southern Boundary and into the Industrial Park area. Along the southern boundary, the highest PFOS and PFOA concentrations were detected in wells 122-05 (at 23.3 ng/L and 15.3 ng/L, respectively) and 122-31 (at 58.1 ng/L and 29.9 ng/L, respectively). Within the Industrial Park area, the maximum PFOS concentration was 13 ng/L detected in well 000-528 and the maximum PFOA concentration was 9 ng/L in well 000-537. In January 2024, PFAS were also detected in the seven OU III Middle Road extraction wells and the seven OU III South Boundary extraction wells, with the highest PFOS and PFOA concentrations detected in South Boundary extraction well EW-8 at 28.1 ng/L and 7.9 ng/L, respectively (**Table 3.5-1**).
- During 2024, samples from three of the Former Firehouse source area monitoring wells located upgradient of extraction well FF-RW-A (075-809, 075-810, 075-811) were analyzed for Sr-90. Strontium-90 was not detected in these samples. As recommended in the *2023 Groundwater Status Report* (BNL, 2024b), these wells will no longer be sampled for Sr-90.
- **Figure 3.5.2-4** provides a comparison of the plume distributions for 2020-2021, 2023 and 2024. The 2024 plume distribution map based upon the permanent well data is consistent with the plume map prepared using the temporary well data presented the *TCRA Characterization Report* (BNL, 2023b).

3.5.2.4 System Operational Data

The sampling frequency of the extraction wells is monthly. The sampling frequency for the influent and effluent is bi-monthly. All Former Firehouse treatment system samples were analyzed for PFOS, VOCs and the effluent sample was analyzed monthly for pH. Treatment system influent and effluent samples were also analyzed for 1,4-dioxane using EPA Method 8270 SIM and for VOCs using EPA Method 8260 Low Level. A summary of the influent concentrations for PFOS, PFOA and total PFAS is presented on **Figure 3.5.2-2**. **Table 3.5.2-1** provides the effluent limitations for meeting the requirements of the SPDES equivalency permit. During 2024, the equivalency permit limits were not exceeded.

Table 3.5.2-1
OU X Former Firehouse PFAS Treatment System
2024 SPDES Equivalency Permit Levels

Parameters	Permit Limit	Max. Measured Value
pH (range)	5.0 – 8.5 SU	5.7-6.3 SU
PFOS	2.7 ng/L	ND
PFOA	6.7 ng/L	ND
1,4-Dioxane	0.35 µg/L	0.22 J µg/L
Chloroform	7.0 µg/L	ND
Methylene Chloride	5.0 µg/L	0.39 J µg/L

Notes:
Required sampling frequency is monthly following startup testing.
SU = Standard Units
J – Result is estimated.
ND = Not Detected

January – September 2024

The system was turned off on April 25th for a routine carbon change out and re-started on April 26th. Well FF-RW-C was off from June 20th to July 18th to replace the pump and motor. Well FF-RW-B was off from July 5th to July 17th to repair a hole in the drop pipe. Well FF-RW-A was off from July 17th to August 9th to replace the pump and motor. The system treated approximately 78 million gallons of water during this period.

October – December 2024

Well FF-RW-A was off from October 16th to October 22nd and again from December 9th to December 13th due to electrical issues. The system operated normally during the remainder of the period. The system treated approximately 29 million gallons of water during this period.

Extraction Wells Operational Data

During 2024, the system treated approximately 105 million gallons of water. The system average flow rate for the year was approximately 203 gpm. **Table 2-2** contains the monthly pumping data for the extraction wells, and **Table 3.5.2-2** shows the monthly pumping rates. During 2024, PFOS and PFOA were detected in all samples from all three extraction wells (FF-RW-A through FF-RW-C) (**Table F-51**). The maximum PFOS concentration was detected in extraction well FF-RW-A at 150 ng/L, and the maximum PFOA concentration was detected in extraction well FF-RW-B at 35 ng/L. Furthermore, 1,4-dioxane was detected in all three extraction wells at concentrations ranging from non-detect to an estimated 0.18 µg/L. Data for the extraction wells are presented in **Table F-51**.

System Influent and Effluent

A summary of the influent concentrations for PFOS, PFOA and total PFAS is presented on **Figure 3.5.2-2**. The maximum influent concentrations for PFOS and PFOA were 92 ng/L and 29 ng/L, respectively. Furthermore, the maximum influent concentration for 1,4-dioxane was an estimated 0.18 µg/L and the maximum effluent concentration was 0.22 µg/L. During 2024, PFOS and PFOA were not detected in the system effluent, and 1,4-dioxane concentrations were below the 0.35 µg/L regulatory limit specified in the SPDES equivalency permit (**Table 3.5.2-1**). Influent and effluent results for PFAS and 1,4-dioxane are shown in **Table F-52 and Table F-53**.

Cumulative Mass Removal

During 2024, the treatment system removed approximately 0.17 lbs of total PFAS. Since January 2023, the system has removed approximately 0.34 pounds of total PFAS. Data for mass removal is presented in **Table F-54**.

3.5.2.5 System Evaluation

The Former Firehouse PFAS Treatment System performance can be evaluated based on decisions identified in the groundwater DQO process.

1. Is there a continuing source of contamination? If present, has the source area been remediated or controlled?

Yes. PFAS continues to be detected in Former Firehouse source area monitoring wells at concentrations exceeding NYS AWQS.

2. Were unexpected levels or types of contamination detected?

Although the types of PFAS detected in the monitoring well samples were consistent with those observed during plume characterization, during 2024 significantly higher than typical concentrations of PFOS (up to 24,000 ng/L), PFOA (up to 1,600 ng/L), and PFHxS (up to 15,000 ng/L) were detected in source area wells.

3. Has the downgradient migration of the plume been controlled?

The treatment system has not been in operation long enough to make this determination and a complete characterization has not been performed.

4. Can individual extraction wells or the entire treatment system be shut down or placed in pulsed pumping operation?

No. The treatment system has not been in operation long enough to make this determination.

4a. Are PFOS and PFOA concentrations in plume core wells above or below the 100 ng/L capture goal?

During 2024, fourteen plume core wells had PFOS concentrations >100 ng/L capture goal. Five plume core wells had PFOA concentrations >100 ng/L.

4b. Is there a significant concentration rebound in core wells and/or extraction wells following shutdown?

The treatment system is in full-time operation.

5. Has the groundwater cleanup goals been achieved?

Long-term cleanup goals for PFAS will be defined during the OU X RI/FS. Groundwater monitoring results continue to indicate that contaminant concentrations continue to exceed NYS AWQSs for Class GA groundwater of 2.6 ng/L for PFOS and 6.7 ng/L for PFOA, and the 10 ng/L MCLs for PFOS and PFOA.

3.5.2.6 Recommendations

The following recommendations are made for the Former Firehouse PFAS Treatment System and groundwater monitoring program:

- Maintain full-time operation of the treatment system.
- Reduce sampling the treatment system influent, midpoint, and effluent from two times per month to monthly, as defined in the SPDES Equivalency Permit. Analyze the samples by EPA Method 1633 for PFAS, EPA Method 8270 SIM for 1,4-dioxane, and EPA Method 8260 Low Level for VOCs.
- Reduce sampling frequency of the treatment system extraction wells from monthly to quarterly. Analyze the quarterly samples by EPA Method 1633 for PFAS and EPA Method 8270 SIM for 1,4-dioxane.
- Reduce sampling frequency of 10 Former Firehouse source area monitoring wells (075-809, 075-810, 075-811, 085-404, 085-405, 085-406, 085-407, 085-408, 085-409, and 085-410) from quarterly to semiannual, and maintain semiannual sampling of remaining (32) Former Firehouse plume monitoring wells. Continue analyzing groundwater samples from 31 select OU III Middle Road, South Boundary and Industrial Park wells for PFAS during the 4th quarter monitoring period. Samples will be analyzed for PFAS using EPA Method 1633, and a select number of samples analyzed for 1,4-dioxane using EPA Method 8270 SIM.

3.5.3 1,4-Dioxane in Groundwater

The chemical 1,4-dioxane is an emerging contaminant of concern. It has been broadly used in numerous commercial and personal care products, including as a stabilizer for the solvent TCA. At BNL, past releases of TCA have impacted groundwater quality in several on- and off-site areas. In August 2020, New York State promulgated a DWS for 1,4-dioxane of 1.0 µg/L. To date, only trace levels of 1,4-dioxane below the DWS are periodically detected in samples from BNL's potable water supply wells. Following a request from the NYSDEC to obtain baseline data for 1,4-dioxane in groundwater, in 2017 BNL began a multiphase characterization effort.

In January 2017, twenty-two on- and off-site groundwater monitoring wells that have, or had, detectable levels of TCA were sampled (BNL, 2018d). Seventeen of the 22 samples collected had detectable levels of 1,4-dioxane, with a maximum concentration of 18.6 µg/L in the OU III Industrial Park monitoring well 000-530. In late 2017 and early 2018, BNL collected additional samples from groundwater treatment system effluent, the STP effluent, and from monitoring wells downgradient from the Former Landfill, the Current Landfill and the STP. The highest 1,4-dioxane concentration during this time period was 9.1 µg/L, detected in off-site monitoring well 000-122 located in the former OU V monitoring program area. 1,4-dioxane was detected in four of the five treatment system effluent samples, with a maximum concentration of 7.14 µg/L detected in the effluent from the OU III Industrial Park Treatment System. 1,4-dioxane was not detected in the STP effluent.

In early 2019, samples were collected from 33 permanent wells and 11 temporary wells positioned along the southern BNL boundary (BNL, 2019b). The highest 1,4-dioxane concentrations were detected in the OU III Western South Boundary area, with a maximum concentration of 15.2 µg/L in deep Upper Glacial monitoring well 126-18. In the OU III South Boundary area, the maximum 1,4-dioxane concentration was 6.2 µg/L in deep Upper Glacial monitoring well 121-47.

During the 2020 Phase 4 and TCRA characterization projects, samples collected from 360 permanent on- and off-site monitoring wells, 35 on-site temporary wells, extraction wells, and effluent samples from on- and off-site treatment systems were tested for 1,4-dioxane (BNL, 2021a) and (BNL, 2023b). 1,4-Dioxane was detected in several on-site and off-site areas at concentrations exceeding the 0.35 µg/L AWQS and the 1.0 µg/L MCL. The highest 1,4-dioxane concentration was detected in Western South Boundary monitoring well 119-11 at 23.9 µg/L.

3.5.3.1 Groundwater Monitoring

Well Network

A permanent monitoring program has not been established specifically for tracking 1,4-dioxane. During 2024 BNL tested for 1,4-dioxane in several of the established monitoring areas as described below.

Sampling Frequency and Analysis

During 2024, BNL collected groundwater samples for 1,4-dioxane analyses in five areas: 1) Current Firehouse and Building 170 PFAS Treatment System and select permanent and temporary monitoring wells; 2) southwestern area of BNL within the on-site portion of the source water contributing area for the SCWA's William Floyd Well Field; 3) Former Firehouse PFAS Treatment System and select permanent monitoring wells; 4) samples from active on- and off-site groundwater treatment system extraction wells, influent and effluent; and 5) BNL's four active water supply wells. The groundwater samples were analyzed for 1,4-dioxane by Method 8270 SIM. The water supply samples were analyzed for 1,4-dioxane using EPA drinking water Method 522.

3.5.3.2 Monitoring Results

1,4-Dioxane results for the five monitoring programs

- Current Firehouse and Building 170 PFAS Plume Monitoring Program: During 2024, nineteen permanent and 12 temporary monitoring wells were sampled for 1,4-dioxane.
    - Permanent Wells: During the 1st Quarter sample period, 1,4-dioxane concentrations exceeded the 0.35 µg/L AWQS in wells 083-41, 084-95, and 102-40, at a maximum concentration of 2.1 µg/L in monitoring well 084-95. During the 3rd Quarter sample period, 1,4-dioxane concentrations exceeded the 0.35 µg/L AWQS in wells 083-41, 085-95, 084-98, 102-40, 103-31, 103-32, and 103-34 with a maximum concentration of 5.7 µg/L in monitoring well 103-31.
    - Temporary Wells: 1,4-dioxane was detected in 12 temporary wells that were installed to characterize the downgradient extent of the PFAS and 1,4-dioxane south of West Princeton Avenue (**Figure 3.5.1-1**). 1,4-dioxane concentrations exceeded the 0.35 µg/L AWQS in nine of the temporary wells, with a maximum concentration of 10 µg/L in temporary well OU10-VP-020. 1,4-dioxane at concentrations above the 0.35 µg/L AWQS was tracked to the southern boundary in temporary wells OU10-VP-032, OU10-VP-033 and OU10-VP-034, with a maximum concentration of 9.6 µg/L in well OU10-VP-034.
- William Floyd Well Field Sentinel Well Area: Samples from six sentinel wells were tested for 1,4-dioxane during four sampling events (**Section 3.2.10**). Trace levels of 1,4-dioxane were detected in samples from three wells, with a maximum estimated concentration of 0.14 µg/L in well 117-05.
- Former Firehouse PFAS Plume Monitoring Program: During 2024, thirteen monitoring wells were sampled for 1,4-dioxane. During the 1st Quarter sampling period, 1,4-dioxane concentrations exceeded the 0.35 µg/L AWQS in wells 105-43, 105-73 and 105-76, with a maximum concentration of 0.68 µg/L in well 105-76. During the 3rd Quarter sample period, 1,4-dioxane was detected above the 0.35 µg/L AWQS in wells 096-129, 105-43, and 105-76, with a maximum concentration of 1.0 µg/L in well 096-129.
- During 2023-2024, discharges from active on- and off-site groundwater treatment systems were evaluated against recently established NYS effluent limits for 1,4-dioxane, PFOA and PFOS of 0.35 µg/L, 6.7 ng/L, and 2.7 ng/L, respectively. 1,4-Dioxane, which cannot be effectively removed by the conventional treatment methods employed by BNL (e.g., air stripping towers or GAC filtration), was detected in the combined OU III WSB/SB/MR system discharge up to 2.8 µg/L, in the OU III Airport system discharge up to 1.3 µg/L, and in the OU III North Street East EDB treatment system discharge up to 0.9 µg/L.
- Water Supply Wells: Trace levels of 1,4-dioxane continue to be detected in pre- and post-GAC treatment samples from water supply wells BNL-10, BNL-11, and BNL-12. Trace 1,4-dioxane concentrations were also detected in untreated water samples from BNL-7 and in post-Water Treatment Plant samples. None of the samples exceeded the 1.0 µg/L DWS. The maximum 1,4-dioxane concentration was detected in an untreated water sample from supply well BNL-7 at 0.12 µg/L.

3.5.3.3 Program Evaluation

The monitoring data were evaluated using the following general DQO statement.

1. Is there a continuing source of 1,4-dioxane contamination? If present, has the source been remediated or controlled?

BNL is still in the early stages of the 1,4-dioxane characterization effort. The 1,4-dioxane detected in groundwater is likely to have originated from the previously identified VOC source areas where the solvent TCA had been released. These source areas have been undergoing various remediation efforts for the past 30 years, and significant progress has been made in reducing or eliminating continued contaminant releases from these areas. Monitoring conducted since 2017 indicates that 1,4-dioxane concentrations in groundwater immediately downgradient of many of the former TCA source areas do not exceed the 0.35 µg/L AWQS. The need for source controls and/or remediation of 1,4-dioxane contaminated groundwater will be determined following completion of the planned OU X RI/FS, and discussions with the regulatory agencies.

3.5.3.4 Recommendations

The following are recommended for the 1,4-dioxane monitoring program:

- Monitoring requirements to track the extent of 1,4-dioxane contamination in on- and off-site areas will be defined following completion of the OU X RI/FS.
- Continue limited monitoring for 1,4-dioxane as part of the Current Firehouse/Building 170, Former Firehouse, and William Floyd Well Field Sentinel monitoring programs.
- Conduct routine testing of treatment system effluent for 1,4-dioxane as defined in the SPDES equivalency permits and *Groundwater Treatment System Discharge Compliance Plan* (BNL, 2024f).
- Establish groundwater monitoring programs for the OU III, RA V, and HS recharge basin areas to evaluate impacts from the discharge of treated groundwater with 1,4-dioxane concentrations that exceed the 0.35 µg/L AWQS.
- Continue monitoring BNL's water supply wells for 1,4-dioxane as required by the annual SCDHS *Minimum Monitoring Requirements* (SCDHS, 2024).

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3.6 SITE BACKGROUND MONITORING

Background water quality has been monitored since 1990. Historically, low levels of VOCs were routinely detected in several background wells that are screened in the deeper portions of the Upper Glacial aquifer. Background monitoring is used to define the quality of groundwater that is unaffected by BNL operations.

3.6.1 Groundwater Monitoring

Well Network

The 2024 program included nine wells in the northwestern portion of the BNL property (**Figure 1-2**) hydraulically upgradient of Laboratory operations.

Sampling Frequency and Analysis

The samples are collected annually and analyzed for VOCs (**Table 1-5**).

3.6.2 Monitoring Well Results

The complete groundwater analytical data are provided in **Appendix C**. Consistent with results for 2023, there was a low-level detection of Methyl tert-butyl ether (MTBE) in well 034-03 at an estimated concentration of 0.22 µg/L, well below the AWQS of 10 µg/L. Chloroform was detected in well 018-02 at an estimated concentration of 0.16 µg/L, which is well below the AWQS of 7 µg/L.

While radionuclides are no longer analyzed for in background well samples, historic results are presented for reference purposes. **Table 3.6-1** summarizes the range of radionuclide values detected in background wells from 1996 through 2001.

Table 3.6-1.
Radiological Background Monitoring, 1996 – 2001

Parameter	Activity Range (pCi/L)	Contract-Required Detection Limit (pCi/L)
Cesium-137	<MDC to 7.24	12.0
Gross alpha	<MDC to 2.66	2.0
Gross beta	<MDC to 6.41	4.0
Strontium-90	<MDC to 3.84	0.8
Tritium	<MDC to 835	500.0

Note:
<MDC = Less than minimum detectable activity

3.6.3 Groundwater Monitoring Program Evaluation

The program can be evaluated using the decision rule developed as part of the groundwater DQO process.

1. Were unexpected levels or types of contamination detected?

No. There were no VOCs detected in site background wells above AWQS during 2024.

3.6.4 Recommendation

The following are recommended for the Site Background Groundwater Monitoring Program:

- There are no changes proposed to the monitoring program.

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3.7 CURRENT AND FORMER LANDFILL GROUNDWATER MONITORING

Groundwater monitoring data from both the Current and Former Landfills are discussed in detail in the BNL *2024 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2025c). The complete groundwater monitoring results for these programs are included in **Appendix C**.

3.7.1 Current Landfill Summary

Groundwater data shows that in general, contaminant concentrations have been decreasing following the capping of the landfill in 1995. Since the landfill has been capped, groundwater quality has been slowly improving. The trend in the data suggests that the cap is effective in mitigating groundwater contamination. Groundwater monitoring wells for the Current Landfill are shown on **Figure 3.7-1**. Per the recommendations in the *2023 Groundwater Status Report* (BNL, 2024b) analysis of PFAS via EPA Method 1633 and analysis of 1,4-dioxane via EPA Method 8270 SIM were added to the analytical list of parameters for all twelve Current Landfill monitoring wells on an annual basis. The following is a summary of the results from the samples collected during 2024:

- Benzene was detected in downgradient well 087-11 and 088-110 at concentrations slightly above the AWQS (1 µg/L) with a concentration of 1.9 µg/L and 1.1 µg/L, respectively. The other VOCs detected above the AWQS were chloroethane and DCA. DCA was detected in monitoring well 088-109 above the standard of 5 µg/L, with a maximum concentration of 9.1 µg/L. Chloroethane was detected above the AWQS in well 088-109 with a maximum concentration of 24 µg/L, indicating that VOCs continue to emanate from the landfill. These VOCs naturally attenuate to below DWS by the time the groundwater reaches the site boundary (**Figure 3.1-1**).

- Concentrations of landfill water chemistry parameters and metals such as ammonia and iron in several downgradient wells were above background values. This suggests that leachate continues to emanate from the landfill into groundwater. Ammonia was detected above the AWQS of 2 milligram per liter (mg/L) in downgradient well 087-11 at a maximum concentration of 2.3 mg/L.

- During 2024, aluminum, antimony, arsenic, iron, manganese, and sodium in several downgradient wells were detected above their respective AWQS. These parameters and concentrations are consistent with historic values.

- Tritium and Sr-90 was not detected in any of the twelve wells sampled during 2024. Strontium-90 and tritium have not exceeded the DWS in the Current Landfill wells since 1998.

- 1,4-dioxane was detected above the AWQS of 0.35 µg/L in wells 087-11, 087-27, 088-23, 088-109, 088-110, and 098-99 with a maximum concentration of 3 µg/L in downgradient well 087-11.

- PFOS was detected above the AWQS of 2.7 ng/L in wells 087-11, 087-24, 087-26, 088-21, 088-22, 088-109, and 098-99 with a maximum concentration of 51.6 ng/L in downgradient well 088-22.

- PFOA was detected above the AWQS of 6.7 ng/L in well 087-11 with a maximum concentration of 17.9 ng/L.

- Although low levels of contaminants continue to be detected, the cap has been effective at improving the quality of groundwater downgradient of the landfill.

3.7.1.1 Current Landfill Recommendations

- Continue quarterly soil gas monitoring from soil gas wells. In addition, begin annual indoor ambient air quality screening at the National Weather Service (NWS) building concurrent with annual landfill gas sampling activities conducted during the summer.
- Continue monthly maintenance and inspections in accordance with the Operations and Maintenance manual.
- Continue with the current groundwater monitoring program for the Current Landfill.

3.7.2 Former Landfill Summary

By the end of 2024, the Former Landfill had been capped for 28 years. From January 1997 to 2021, groundwater quality at the Former Landfill area was monitored using 14 shallow monitoring wells (three background and 11 downgradient). Based upon data collected during the past two decades as evidence, it was recommended in the *2020 Environmental Monitoring Report, Current and Former Landfill Areas* (BNL, 2021e) that groundwater monitoring of the Former Landfill monitoring well network be discontinued. With NYSDEC acceptance of the *2020 Environmental Monitoring Report, Current and Former Landfill Areas*, these changes were implemented in calendar year 2021.

3.7.2.1 Former Landfill Recommendations

- Continue monthly maintenance and inspections in accordance with the Operations and Maintenance manual as well as continuing the annual soil-gas monitoring.

3.8 g-2 TRITIUM SOURCE AREA AND GROUNDWATER PLUME

In November 1999, tritium was detected in the groundwater near the former g-2 experiment within the Alternating Gradient Synchrotron (AGS) facility, at concentrations above the 20,000 pCi/L DWS. Sodium-22 was also detected in the groundwater, but at concentrations below the 400 pCi/L DWS. An investigation into the source of the contamination revealed that the tritium and sodium-22 originated from activated soil shielding located adjacent to the g-2 target building, where approximately five percent of the beam was inadvertently striking one of the beam line magnets (magnet VQ-12). Rainwater was able to infiltrate the activated soils and leach tritium and sodium-22 into the groundwater. To prevent additional rainwater infiltration into the activated soil shielding, a concrete cap was constructed over the area in December 1999. The g-2 experiment was decommissioned in April 2001. However, the structures and activated soil shielding associated with the experiment remain in place.

The *g-2/BLIP/former UST ROD* (BNL, 2007a) requires routine inspections and maintenance of the impermeable cap, and groundwater monitoring of the source area to verify the continued effectiveness of the stormwater controls. Monitoring of the source area will continue for as long as the activated soils have the potential to impact groundwater quality. Contingency actions would be developed if tritium levels in groundwater monitoring wells exceed 1,000,000 pCi/L.

3.8.1 g-2 Tritium Source Area and Plume Groundwater Monitoring

Well Network

The g-2 tritium source area is monitored using two upgradient wells (054-65 and 054-66) and six downgradient wells (054-07, 054-124, 054-126, 054-184, 054-185, and 064-95) approximately 200 feet downgradient of the source area near Building 912A. Several other nearby wells (054-67, 054-68, and 065-125) are used to monitor the effectiveness of the cap installed over the adjacent former g-2 beam stop, which is another area that contains activated soil shielding. Fourteen wells located approximately 600 feet downgradient of the source area near Building 912 are used to verify the attenuation of tritium released from the source area (**Figure 3.8-1**).

Sampling Frequency and Analysis

During 2024, the source area wells were monitored two times, and the samples were analyzed for tritium (**Table 1-6**). The wells monitoring the former beam stop area and those located near Building 912 were sampled once during the year, and the samples were analyzed for tritium. The water samples are preferentially tested for tritium because it is more leachable than sodium-22, migrates at the same rate as groundwater, and is therefore a better indicator of the effectiveness of the cap.

3.8.2 g-2 Tritium Source Area and Plume Monitoring Well Results

The estimated extent of the g-2 tritium plume during the fourth quarter of 2024 is depicted on **Figure 3.8-1**.

Source Area Monitoring Results

During the 2nd quarter of 2024, tritium was detected in source area wells 054-07 at a concentrations of 1,440 pCi/L. By the 4th quarter of 2024, the tritium concentration in well 054-07 increased to 12,400 pCi/L. **Figure 3.8-2** provides tritium trend charts for wells that monitor the g-2 source area.

Tritium that is likely to be traceable to the g-2 source area was detected in one monitoring well located downgradient of Building 912. Tritium was detected at 1,750 pCi/L in well 065-123.

3.8.3 g-2 Tritium Source Area and Plume Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statements.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Although the activated soil shielding remains a potential threat to groundwater quality, the overall reduction in tritium concentrations observed in the groundwater since 1999 indicates that the cap is effectively preventing rainwater from infiltrating the soil. A comparison of tritium levels in the source area monitoring wells and water-table elevation data suggests that periodic natural fluctuations in the water table continue to release residual tritium from the deep vadose zone. There appears to be good correlation between high tritium concentrations detected in monitoring wells immediately downgradient of the source area and the water-table elevation about one year before the sampling (**Figure 3.8-3** and **Figure 3.8-4**). It is believed that this tritium was mobilized to the deep vadose zone soil close to the water table before the cap was constructed in December 1999. Once the cap was in place, the lack of additional rainwater infiltration kept the tritium in the vadose zone from migrating into the groundwater until a significant rise in water table mobilized it. Over time, the amount of tritium remaining in the vadose zone near the water table will decrease by means of the natural water table flushing mechanism and by radioactive decay. Since April 2021, tritium concentrations in the closest downgradient well (054-07) have been less than the 20,000 pCi/L drinking water standard.

2. Were unexpected levels of tritium detected?

No, the observed tritium levels in the source area and former beam stop monitoring wells are consistent with previous surveillance results.

3. Is the plume naturally attenuating as expected?

Yes. Tritium concentrations in source area monitoring wells have decreased to below the 20,000 pCi/L drinking water standard. Residual tritium detected downgradient of the source area is attenuating as expected.

4. Has the groundwater cleanup goal of meeting MCLs been achieved?

Yes. However, the residual tritium in the source area soils and at the nearby beam stop remain a potential threat to groundwater quality. Continued maintenance of the g-2 cap and periodic monitoring of the groundwater is required.

3.8.4 g-2 Tritium Source Area and Plume Recommendations

The following are recommended for the g-2 tritium source area and groundwater monitoring program for 2025:

- Continue routine inspections of the g-2 cap.
- Continue semiannual monitoring of source area downgradient monitoring wells 054-07, 054-124, 054-126, 054-184, 054-185, and 064-95. If tritium concentrations during 2025 remain below the 20,000 pCi/L DWS, consider reducing the sampling frequency to annually starting in 2026.
- Discontinue routine sampling of upgradient well 054-65.

§ Continue the annual sampling frequency for the shallow groundwater monitoring wells located downgradient of Building 912, which are also used to track the downgradient migration of tritium from the g-2 area.

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3.9 BROOKHAVEN LINAC ISOTOPE PRODUCER (BLIP)

When the Brookhaven Linac Isotope Producer (BLIP) is operating, the Linear Accelerator (Linac) delivers a beam of protons that strike a series of metal targets positioned at the bottom of a 30-foot deep underground tank, referred to as the BLIP target vessel. The targets rest inside a water-filled, 18-inch-diameter shaft that runs the length of the tank, and are cooled by a 300-gallon, closed-loop primary cooling system. During irradiation of the targets, radionuclides are produced in the cooling water and the soil immediately outside the tank by the neutrons created at the target.

In 1998, tritium concentrations of 52,000 pCi/L and sodium-22 up to 151 pCi/L were detected in the groundwater approximately 40 feet downgradient of the BLIP target vessel. The drinking water standard for tritium is 20,000 pCi/L, and the standard for sodium-22 is 400 pCi/L. Due to the activation of the soil shielding surrounding the BLIP target vessel and the detection of tritium and sodium-22 in groundwater, the BLIP facility was designated as sub-AOC 16K under the IAG.

In 1998, BNL made improvements to the stormwater management program at BLIP in an effort to prevent rainwater infiltration into the activated soil below the building. In 2000, BNL undertook additional protective measures by injecting colloidal silica grout (also known as a Viscous Liquid Barrier) into the activated soil. The grout reduces the permeability of the soil, thus further reducing the ability of rainwater to leach tritium and sodium-22 from the activated soils should the primary stormwater controls fail.

In late 2004, BNL constructed a protective cap over the beam line that runs from the Linac to the BLIP facility. The cap was installed because direct soil measurements and beam loss calculations indicated that the tritium and sodium-22 concentrations in soils surrounding this beam line could result in stormwater leachate concentrations that exceed the criteria described in the Accelerator Safety SBMS subject area.[1] During 2015, this cap section was extended in several areas to provide protection of soil shielding that was expected to become activated following planned changes in beam line operations.

A ROD was signed in early 2007 (BNL, 2007a). The ROD requires continued routine inspection and maintenance of the impermeable cap, and groundwater monitoring to verify the continued effectiveness of the stormwater controls. Maintenance of the cap and groundwater monitoring will continue for as long as the activated soils have the potential to impact groundwater quality.

3.9.1 BLIP Groundwater Monitoring

Well Network

The monitoring well network for the BLIP facility consists of one upgradient and three downgradient wells (**Figure 3.9-1**).

Sampling Frequency and Analysis

During 2024, the three wells located immediately downgradient of the BLIP facility (064-47, 064-48, 064-67) were monitored twice, and the upgradient well (064-46) was sampled once. The groundwater samples are preferentially analyzed for tritium because it is more leachable than sodium-22, it migrates at the same rate as groundwater, and is the best early indicator of a possible release (**Table 1-6**).

[1] The BNL *Accelerator Safety* SBMS subject area requires stormwater controls where rainwater infiltration into activated soil shielding could result in leachate concentrations that exceed five percent of the drinking water standard for tritium (1,000 pCi/L) or 25 percent of the drinking water standard for sodium-22 (100 pCi/L).

3.9.2 BLIP Monitoring Well Results

Monitoring results indicate that the stormwater controls are effective in preventing the release of tritium from the activated soil surrounding the BLIP target vessel. Since April 2006, tritium levels have remained below the 20,000 pCi/L DWS (**Figure 3.9-1**). During 2024, tritium was detected during the second quarter sampling of downgradient monitoring wells 064-48 and 064-67 at a concentrations of 711 pCi/L and 770 pCi/L, respectively. During the fourth quarter sampling period, tritium concentrations in wells 064-48 and 064-67 declined to 361 pCi/L and 402 pCi/L, respectively.

3.9.3 BLIP Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statements.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Yes. Although low levels of tritium are periodically detected in the groundwater downgradient of BLIP, the tritium concentrations have remained below the 20,000 pCi/L DWS since early 2006. The decline in tritium concentrations indicates that the stormwater controls are effectively preventing the leaching of tritium from the activated soils.

2. Were unexpected levels of contamination detected?

No. With effective source controls, continued reductions in tritium concentrations were expected.

3. Has the groundwater cleanup goal of meeting MCLs been achieved?

Yes. However, the activated soil shielding below the BLIP facility needs to be protected from rainwater infiltration. Therefore, the cap needs to be maintained and groundwater surveillance is required to verify the continued effectiveness of the stormwater controls.

3.9.4 BLIP Recommendation

The following are recommended for the BLIP source area and groundwater monitoring program:

- Continue routine inspections of the cap
- Continue annual sampling of upgradient well 064-46 and semiannual of downgradient monitoring wells 064-47, 064-48, and 064-67.

4.0 FACILITY MONITORING PROGRAM SUMMARY

During 2024, the Facility Monitoring Program monitored groundwater quality at eight research and support facilities. New York State operating permits require groundwater monitoring at the Major Petroleum Facility, Waste Management Facility, and the Sewage Treatment Plant; the remaining research and support facilities are monitored in accordance with DOE Orders 458.1 (Radiation Protection of the Public and the Environment) and 436.1 (Departmental Sustainability) or CERCLA Records of Decision. DOE Orders require the Laboratory to establish environmental monitoring programs at facilities that can potentially impact environmental quality, and to demonstrate compliance with DOE requirements and applicable federal, state, and local laws and regulations. CERCLA Records of Decision define the monitoring requirements and remedial actions for the g-2 tritium source area and plume and the BLIP source area. BNL uses monitoring data to determine whether current engineered and administrative controls effectively protect groundwater quality, determine whether additional corrective actions are needed, and to determine the effectiveness of remedial actions.

During 2024, 108 groundwater monitoring wells were sampled during 141 sampling events for facility surveillance required by state operating permits and DOE Orders. Ten additional wells were sampled during 19 monitoring events for compliance with CERCLA monitoring requirements for the g-2 tritium source area and plume and the BLIP facility. **Table 1-6** summarizes the Facility Monitoring Program by project. Complete analytical results from groundwater samples collected in 2024 are provided in **Appendix D**. Monitoring results for the g-2 source area and tritium plume and the BLIP source area are presented in **Section 3.8** and **3.9**, respectively. Information on groundwater quality at each of the remaining monitored research and support facilities is described below.

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4.1 ALTERNATING GRADIENT SYNCHROTRON (AGS) COMPLEX

The structures that constitute the AGS Complex include the AGS Ring, Linear Accelerator (Linac), BLIP, Building 912, AGS Booster Beam Stop, 914 Transfer Tunnel, former g-2 experimental area, former E-20 Catcher, former U-Line Beam Target, and the J-10 Beam Stop. Activated soil has been created near a number of these areas as the result of secondary particles (primarily neutrons) produced at beam targets and beam stops. Radionuclides can be produced by the interaction of secondary particles with the soil that surrounds these experimental areas. Once produced in the soils, some of these radionuclides can be leached from the soils by rainwater and carried to the groundwater. Of the radionuclides formed in the soil, only tritium (half-life = 12.3 years) and sodium-22 (half-life = 2.6 years) are detected in groundwater. Of these two radionuclides, tritium is more easily leached from activated soils by rainwater, and once tritium enters the water table it migrates at the same rate as groundwater flow (approximately 0.75 feet per day). Sodium-22 does not leach out of the soil as readily as tritium and migrates at a slower rate in the aquifer. The DWS for tritium is 20,000 pCi/L, and the standard for sodium-22 is 400 pCi/L.

To prevent rainwater from leaching these radionuclides from the soil, impermeable caps have been constructed over the activated soil shielding areas that have the potential to impact groundwater quality. Specifications for evaluating potential impacts to groundwater quality and the need for impermeable caps over beam loss areas are defined in the BNL Accelerator Safety subject area.[2] BNL uses 57 groundwater monitoring wells to evaluate the impact of current and historical operations at the AGS beam stop and target areas (including the g-2 and BLIP areas discussed in **Sections 3.8** and **3.9,** respectively), and an additional 14 wells to monitor beam loss areas associated with the Relativistic Heavy Ion Collider (RHIC) (discussed in **Section 4.2**). The locations of monitoring wells are shown on **Figure 4.1-1**. The wells are routinely monitored for tritium because it is the best early indicator of a possible release, is more leachable than sodium-22, and it migrates at the same rate as groundwater.

In the late 1990's, BNL detected four tritium plumes that originated from activated soil shielding within the AGS complex: the former g-2 experimental area (**Section 3.8**), the BLIP facility (**Section 3.9**), the former U-Line beam stop (**Section 4.1.8**), and the former E-20 Catcher (**Section 4.1.4**). The subsequent installation of impermeable caps over these soil activation areas resulted in a reduction of tritium levels to less than the 20,000 pCi/L DWS.

Except for the operations of the Linac and the associated BLIP and NSRL facilities, operations at the remainder of the AGS facilities will be suspended starting in late 2025, as the Laboratory starts a multi-year transition to the Electron Ion Collider (EIC).

4.1.1 AGS Building 912

Building 912 consists of five interconnected structures that were used to house four experimental beam lines (A, B, C, and D lines). These beam line operations ended in 2002.

Beam losses at the target areas resulted in the activation of the adjacent floor, and probably the soil beneath the floor. The highest levels of soil activation beneath Building 912 are expected at the former C-Line target cave. Stormwater infiltration around the building is controlled by paving and stormwater drainage systems that direct most of the water to recharge basins located north of the AGS complex.

[2] The BNL *Accelerator Safety* SBMS subject area requires stormwater controls where rainwater infiltration into activated soil shielding could result in leachate concentrations that exceed five percent of the drinking water standard for tritium (i.e., 1,000 pCi/L) or 25 percent of the drinking water standard for sodium-22 (i.e., 100 pCi/L).

4.1.1.1 AGS Building 912 Groundwater Monitoring

Well Network

Twenty-three shallow Upper Glacial aquifer wells are positioned upgradient and downgradient of Building 912 (**Figure 4.1-1**). Upgradient wells are positioned to monitor potential tritium contamination from sources such as the g-2 area and the former U-Line experimental area. The downgradient wells are positioned to monitor the former beam stop and target areas in Building 912. Some of the downgradient wells are also used to track tritium originating from the g-2 source area that has migrated underneath Building 912 (**Section 3.8**).

Sampling Frequency and Analysis

During 2024, the Building 912 wells were sampled one time. The groundwater samples were analyzed for tritium (**Table 1-6**).

4.1.1.2 AGS Building 912 Monitoring Well Results

As in past years, tritium that is traceable to the g-2 source area is periodically detected in some of the wells located downgradient of Building 912 (**Figure 4.1-1**). During 2024, tritium, which is likely from the g-2 plume, was detected in well 065-123 at 1,750 pCi/L. Tritium was not detected at concentrations above minimum detectable concentrations (MDCs) in the groundwater samples collected from the remainder of the Building 912 area wells.

4.1.1.3 AGS Building 912 Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Activated soils are present below the floor slab at Building 912. Other than the low level of tritium that is likely associated with the g-2 source area, there were no detections of tritium that could be directly linked to activated soil located at Building 912. This indicates that the building and associated stormwater management operations are effectively preventing rainwater infiltration into the activated soil below the experimental hall.

4.1.1.4 AGS Building 912 Recommendations

The following is recommended for the AGS Building 912 groundwater monitoring program:

- Based upon over 10 years of monitoring results that indicate non-detectable levels of tritium, discontinue annual sampling of upgradient monitoring wells 054-69, 055-14, 055-29, 055-30, and downgradient wells 055-31, 055-32, 065-192, 065-193, 065-194, and 065-195. Maintain annual sampling of the remaining thirteen downgradient monitoring wells.

4.1.2 AGS Booster Beam Stop

The AGS Booster is a circular accelerator that is connected to the northwest portion of the main AGS Ring and to the Linac. The AGS Booster, which has been in operation since 1994, is used to accelerate protons and heavy ions before injecting them into the main AGS ring. To dispose of the beam during studies, a beam stop system was originally constructed at the 10 to 11 o'clock portion of the Booster. In 1999, the beam stop was repositioned to the south side (6 o'clock section) of the Booster ring to allow for the construction of the NASA Space Radiation Laboratory (NSRL) tunnel. A geomembrane cap was constructed over the original beam stop region to prevent stormwater infiltration into the activated soil.

When the beam stop was repositioned to the 6 o'clock region of the Booster, a coated concrete cap was constructed over the area.

4.1.2.1 AGS Booster Groundwater Monitoring

Well Network

Two shallow Upper Glacial aquifer monitoring wells (064-51 and 064-52) are used to monitor the Booster beam stop area (**Figure 4.1-1**).

Sampling Frequency and Analysis

During 2024, the Booster area monitoring wells were sampled one time, and the samples were analyzed for tritium (**Table 1-6**).

4.1.2.2 AGS Booster Monitoring Well Results

Although low levels of tritium were detected in the Booster area wells during 2001 and 2002 (up to 1,340 pCi/L in well 064-52), tritium has not been detected above MDCs in these wells since that time (**Figure 4.1-2**).

4.1.2.3 AGS Booster Groundwater Monitoring Program Evaluation

The groundwater monitoring results were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Activated soil shielding is present in the areas of the current and former Booster beam stops. The low levels of tritium detected in groundwater during 2001 and 2002 were related to a short-term uncovering of activated soil shielding near the former booster beam stop during the construction of the tunnel leading from the Booster to the NSRL facility. This work, which began in September 1999 and was completed by October 1999, allowed rainwater to infiltrate the low-level activated soil shielding.[3] Because tritium has not been detected at concentrations above MDCs in the Booster area monitoring wells since 2002, it is apparent that the caps have been effectively preventing rainwater infiltration into the activated soil shielding.

4.1.2.4 AGS Booster Recommendation

The following is recommended for the AGS Booster groundwater monitoring program:

- Continue the annual sampling frequency for the Booster area monitoring wells.

4.1.3 NASA Space Radiation Laboratory (NSRL)

The NSRL is jointly managed by the U.S. Department of Energy and NASA's Johnson Space Center. The NSRL uses beams of heavy ions extracted from Booster accelerator for radiobiology studies. NSRL became operational in 2003. Although the secondary particle interactions with the surrounding soil shielding are expected to result in only a minor level of soil activation, a geomembrane cap was

[3] Before construction of the NSRL tunnel commenced, soil samples were collected by drilling through the tunnel wall near the former booster beam stop to verify that the tritium and sodium-22 levels were within acceptable limits for worker safety and environmental protection.

constructed over the entire length of the beam line and the beam stop region to prevent stormwater infiltration into the soil shielding.

4.1.3.1 NSRL Groundwater Monitoring

Well Network

This facility is monitored by shallow Upper Glacial aquifer monitoring wells 054-08, 054-62 and 054-191 (**Figure 4.1-1**).

Sampling Frequency and Analysis

During 2024, the NSRL monitoring wells were sampled one time, and the samples were analyzed for tritium (**Table 1-6**).

4.1.3.2 NSRL Monitoring Well Results

During 2024, tritium was not detected in the NSRL monitoring wells.

4.1.3.3 NSRL Groundwater Monitoring Program Evaluation

The groundwater monitoring results were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Activated soil shielding at the NSRL is being protected by an impermeable cap. Based on monitoring conducted to date, NSRL beam line operations have not impacted groundwater quality in the area.

4.1.3.4 NSRL Recommendation

The following is recommended for the NSRL groundwater monitoring program:

- Continue the annual sampling frequency for the NSRL area monitoring wells.

4.1.4 Former AGS E-20 Catcher

The E-20 Catcher was located at the 5 o'clock portion of the AGS ring and was in operation from 1984 to 1999 (**Figure 4.1-1**). The E-20 Catcher was used to pick up or "scrape" protons that moved out of acceptable pathways.

Following the installation of monitoring wells in late 1999 and early 2000, tritium and sodium-22 were detected at levels greater than their applicable DWS, with concentrations up to 40,400 pCi/L and 704 pCi/L, respectively. In April 2000, a temporary impermeable cap was installed over the E-20 Catcher area, and a permanent cap was constructed by October 2000. Tritium and sodium-22 concentrations in groundwater dropped to below the DWS soon after the cap was installed.

4.1.4.1 Former AGS E-20 Catcher Groundwater Monitoring

Well Network

To verify the continued effectiveness of the impermeable cap over the former E-20 Catcher, the area is monitored by shallow Upper Glacial aquifer wells 064-55, 064-56, and 064-80 (**Figure 4.1-1**).

Sampling Frequency and Analysis

During 2024, the former E-20 Catcher wells 064-56 and 064-80 were monitored one time, and the samples were analyzed for tritium (**Table 1-6**). Well 064-55 was not sampled due to site access issues.

4.1.4.2 Former AGS E-20 Catcher Monitoring Well Results

Following the installation of the cap in 2000, tritium decreased to levels below applicable DWS. During 2024, tritium was not detected in samples from wells 064-56 and 064-80 (**Figure 4.1-3**).

4.1.4.3 Former AGS E-20 Catcher Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Activated soil shielding at the former E-20 Catcher is being protected by an impermeable cap. The reduction in tritium concentrations since the impermeable cap was constructed in 2000 indicates that the cap has been effective in preventing rainwater infiltration into the activated soil that surrounds this portion of the AGS tunnel.

4.1.4.4 Former AGS E-20 Catcher Recommendation

The following is recommended for the AGS E-20 Catcher groundwater monitoring program:

- Continue the annual sampling frequency for the E-20 Catcher area monitoring wells .

4.1.5 AGS Building 914

Building 914 houses the beam transfer line between the AGS Ring and the Booster. Due to beam loss near the facility's extraction (kicker) magnet, the extraction area of Building 914 is heavily shielded with iron. Because the extraction area is housed in a large building, most soil activation is expected to be below the floor of the building, where it is protected from rainwater infiltration.

4.1.5.1 AGS Building 914 Groundwater Monitoring

Well Network

Groundwater quality downgradient of the AGS Building 914 transfer line area is monitored by shallow Upper Glacial aquifer wells 064-03, 064-53, and 064-54 (**Figure 4.1-1**).

Sampling Frequency and Analysis

During 2024, the AGS Building 914 area wells were monitored one time, and samples were analyzed for tritium (**Table 1-6**).

4.1.5.2 AGS Building 914 Monitoring Well Results

Tritium was not detected above MDCs in the samples collected during 2024. Tritium has not been detected in the Building 914 groundwater monitoring wells since 2008 (**Figure 4.1-4**).

4.1.5.3 AGS Building 914 Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

The lack of detectable levels of tritium since 2008 indicates that the building structure and associated stormwater controls are effectively preventing rainwater infiltration into activated soil below the building. Continued surveillance of groundwater quality in the Building 914 area is required.

4.1.5.4 AGS Building 914 Recommendation

The following is recommended for the AGS Building 914 groundwater monitoring program:

- Continue the annual sampling frequency for the Building 914 area monitoring wells.

4.1.6 Former g-2 Beam Stop

The g-2 experiment operated from April 1997 until April 2001. The g-2 Beam Stop is composed of iron and is covered by soil shielding. To prevent rainwater from infiltrating the soil surrounding the beam stop, BNL installed a gunite cap over the stop area before the start of beam line operations.

In November 1999, tritium and sodium-22 were detected in groundwater monitoring wells approximately 200 feet downgradient of the g-2 beam stop area (see **Section 3.8**). An investigation into the source of the contamination revealed that the tritium originated from activated soil shielding adjacent to the g-2 beam stop. This section of the beam line was not a designed beam loss area, and therefore was not protected by the gunite cap installed over the beam stop. In December 1999, an impermeable cap was installed over the activated soil shielding, and joined to the beam stop cap. The monitoring program for the g-2 tritium source area and plume are described in **Section 3.8**.

4.1.6.1 Former g-2 Beam Stop Groundwater Monitoring

Well Network

Groundwater quality downgradient of the former g-2 beam stop is monitored using wells 054-67, 054-124, 054-125, and 054-126 (**Figure 4.1-1**). Wells 054-124 and 054-126 are also used to monitor the g-2 tritium source area **Section 3.8**.

Sampling Frequency and Analysis

During 2024, former g-2 Beam Stop wells 054-67 and 054-125 were monitored once, and the samples were analyzed for tritium. Wells 054-124 and 054-126 were sampled twice for tritium under the g-2 tritium plume source area program (**Table 1-6**).

4.1.6.2 Former g-2 Beam Stop Monitoring Well Results

During 2024, tritium was not detected in any of the g-2 beam stop monitoring wells.

4.1.6.3 Former g-2 Beam Stop Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Overall monitoring results indicate that the cap over the former beam stop is effectively preventing rainwater from infiltrating the activated soil shielding. The tritium previously detected in beam stop area

wells 054-124 and 054-126 (e.g., see *2022 Groundwater Status Report* (BNL, 2023c)) is likely to have originated from the nearby g-2 source area and reflects periodic changes in groundwater flow directions due to increased use of water supply wells 10, 11 and 12 located to the east of the g-2 area.

4.1.6.4 Former g-2 Beam Stop Recommendation

The following is recommended for the former g-2 beam stop groundwater monitoring program:

- Continue the annual sampling frequency for the former g-2 beam stop monitoring wells 054-67 and 054-125. Wells 054-124 and 054-126 will continue to be monitored semiannually under the g-2 tritium plume source area program.

4.1.7 AGS J-10 Beam Stop

In 1998, BNL established a beam stop at the J-10 (12 o'clock) section of the AGS Ring, replacing the E-20 Catcher as the preferred repository for any beam that might be lost in the AGS Ring (**Figure 4.1-1**). The J-10 beam stop area of the AGS Ring is covered by layers of soil-crete (a sand and concrete mixture), which reduce the ability of rainwater to infiltrate the potentially activated soil shielding. A gunite cap was constructed over a small section of the J-10 region that did not have a soil-concrete cover before beam stop operations began.

4.1.7.1 AGS J-10 Beam Stop Groundwater Monitoring

Well Network

The monitoring well network for the J-10 beam stop consists of downgradient wells 054-63 and 054-64 (**Figure 4.1-1**).

Sampling Frequency and Analysis

During 2024, the J-10 beam stop wells were monitored one time and the samples were analyzed for tritium (**Table 1-6**).

4.1.7.2 AGS J-10 Beam Stop Monitoring Well Results

During 2024, tritium was not detected above MDCs in the J-10 area wells (**Figure 4.1-5**).

4.1.7.3 AGS J-10 Beam Stop Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Groundwater monitoring results indicate that the engineered controls in place at J-10 are preventing significant rainwater infiltration into the activated soil shielding. Continued groundwater monitoring is required to verify the long-term effectiveness of the controls.

4.1.7.4 AGS J-10 Beam Stop Recommendation

The following is recommended for the AGS J-10 Beam Stop groundwater monitoring program:

- Continue the annual sampling frequency for the J-10 Beam Stop area monitoring wells.

4.1.8 Former AGS U-Line Beam Target and Stop Areas

The U-Line beam target area was in operation from 1974 through 1986. The entire assembly was in a ground-level tunnel covered with an earthen berm. Although the U-Line beam target has not been in operation since 1986, the associated tunnel, shielding, and overlying soil remain in place.

In late 1999, BNL installed monitoring wells downgradient of the former U-Line target area to evaluate whether residual activated soil shielding was impacting groundwater quality. Low levels of tritium and sodium-22 were detected, but at concentrations well below the applicable DWS. In early 2000, temporary wells were installed downgradient of the former U-Line beam stop, which is approximately 200 feet north of the target area. Tritium was detected at concentrations up to 71,600 pCi/L. Sodium-22 was not detected in any of the samples. During 2000, an impermeable cap was installed over the former U-Line beam stop area to prevent rainwater infiltration and the continued leaching of radionuclides out of the soil shielding.

4.1.8.1 Former AGS U-Line Groundwater Monitoring

Well Network

The former U-Line area is monitored by one upgradient well (054-127), three downgradient wells that monitor the former U-Line target area (054-66, 054-129, and 054-130), and three wells that monitor downgradient of the former U-Line beam stop area (054-128, 054-168, and 054-169) (**Figure 4.1-1**).

Sampling Frequency and Analysis

During 2024, the former U-Line area wells were monitored one time, and the samples were analyzed for tritium (**Table 1-6**).

4.1.8.2 Former AGS U-Line Groundwater Monitoring Well Results

Former U-Line Target Area

During 2024, tritium was not detected in the former U-Line Target area wells (**Figure 4.1-6**).

Former U-Line Beam Stop Area

During 2024, tritium was not detected in the former U-Line Beam Stop area wells (**Figure 4.1-7**).

4.1.8.3 Former AGS U-Line Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

The significant decrease in tritium concentrations in groundwater since 2000 indicates that the impermeable cap installed over the former U-Line Beam Stop has been effective in stopping rainwater infiltration into the residual activated soil.

4.1.8.4 Former AGS U-Line Recommendation

The following is recommended for the former AGS U-Line groundwater monitoring program:

- Discontinue the annual sampling of upgradient well 054-127.
- Continue with the annual sampling frequency for the remainder of the former U-Line area monitoring wells.

4.2 RELATIVISTIC HEAVY ION COLLIDER (RHIC)

Beam line interactions at the RHIC Collimators and Beam Stops produce secondary particles that interact with soil surrounding the 8 o'clock and 10 o'clock portions of the RHIC tunnel and the W-Line Stop (**Figure 4.2-1**). These interactions can result in the production of tritium and sodium-22 in the nearby soil shielding, which can be leached out of the soil by rainwater. Although the level of soil activation is expected to be minor, before RHIC operations began in 2000 BNL installed impermeable caps over these beam loss areas to prevent impacts to groundwater quality.

Operations at the RHIC facility will be suspended starting in late 2025, as the Laboratory starts a multi-year transition from RHIC operations to the Electron Ion Collider (EIC).

4.2.1 RHIC Groundwater Monitoring

Well Network

Thirteen shallow wells are used to verify that the impermeable caps at the RHIC beam stops and collimators are effective in protecting groundwater quality. Six of the monitoring wells are located in the 10 o'clock beam stop area, six wells are in the collimator area, and one well is downgradient of the W-Line Beam Stop (**Figure 4.2-1**). As part of BNL's Environmental Surveillance program, surface water samples are also collected semiannually from the Peconic River downstream of the beam stop area at sample location HV (sample location 026-03). These monitoring results are used to verify that potentially contaminated groundwater is not entering the Peconic River stream bed as base flow during high water-table conditions.

Sampling Frequency and Analysis

During 2024, groundwater samples were collected from the RHIC monitoring wells on a semiannual schedule, and the samples were analyzed for tritium (**Table 1-6**). Routine analysis for sodium-22 was discontinued starting in 2002 because tritium is the best indicator of possible cap failure (i.e., tritium is more leachable than sodium-22, and it migrates at the same rate as groundwater). Annual surface water samples collected at location HV were analyzed for tritium and by gamma spectroscopy.

4.2.2 RHIC Monitoring Well Results

During 2024, tritium was not detected in any of the RHIC monitoring well samples. Furthermore, neither tritium or sodium-22 were detected in the surface water sample collected from downstream location HV (026-03).

4.2.3 RHIC Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Has the source of potential contamination been controlled?

Groundwater and surface water monitoring data continue to demonstrate that the impermeable caps installed over the RHIC beam stop and collimator areas are effectively preventing rainwater infiltration into the activated soil shielding.

4.2.4 RHIC Recommendation

The following is recommended for the RHIC groundwater monitoring program:

- Starting in 2025, the sampling frequency for the RHIC monitoring wells will be reduced to annually. Surface water samples will also continue to be collected as part of the Environmental Surveillance program.

4.3 BROOKHAVEN MEDICAL RESEARCH REACTOR (BMRR)

The Brookhaven Medical Research Reactor (BMRR) was a 3-megawatt light water reactor used for biomedical research. Research operations at the BMRR ended in December 2000. All fuel was removed in 2003 and the primary cooling water system was drained.

When it was operating, the BMRR primary cooling water system contained 2,550 gallons of water that contained approximately 5 curies (Ci) of tritium. Unlike the HFBR, the BMRR did not have a spent fuel storage canal or pressurized imbedded piping systems that contained radioactive liquids. Historically, fuel elements that required storage were either stored within the reactor vessel, or they were transferred to the HFBR spent fuel canal. The BMRR primary cooling water system piping is fully exposed in the containment structure and was accessible for routine visual inspections while it was operating.

In 1997, tritium was detected in groundwater downgradient of the BMRR. The maximum tritium concentration observed during 1997 was 11,800 pCi/L, almost one-half of the 20,000 pCi/L DWS. The highest observed tritium concentration since the start of groundwater monitoring was 17,100 pCi/L in October 1999. The tritium detected in groundwater is believed to have originated from the historical discharge of small amounts of BMRR primary cooling water to a basement floor drain and sump system that may have leaked. Although the last discharge of primary cooling water to the floor drain system occurred in 1987, the floor drains continued to be used for secondary (non-radioactive) cooling water until 1997. The infiltration of this water may have promoted the movement of residual tritium from the soil surrounding the floor drain piping system to the groundwater. The floor drains were permanently sealed in 1998.

4.3.1 BMRR Groundwater Monitoring

Well Network

The monitoring well network for the BMRR facility consists of one upgradient and three downgradient wells (**Figure 4.3-1**).

Sampling Frequency and Analysis

Following the recommendations described in the *2022 Groundwater Status Report* (BNL, 2023c), sampling of the BMRR wells for tritium was discontinued starting in 2023. However, monitoring well 084-28 has been incorporated into the Current Firehouse/Building 170 PFAS monitoring program.

4.3.2 BMRR Monitoring Well Results

Monitoring conducted since 1997 has shown that tritium concentrations in the BMRR wells have always been below the 20,000 pCi/L DWS (**Figure 4.3-2**). Previous analyses for gamma, gross alpha, and gross beta did not indicate the presence of any other reactor-related radionuclides.

4.3.3 BMRR Groundwater Monitoring Program Evaluation

Monitoring data were evaluated using the following DQO statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Tritium concentrations in groundwater downgradient of the BMRR have never exceeded the 20,000 pCi/L DWS. Tritium concentrations were <5,000 pCi/L from September 2000 through 2010, <600 pCi/L during the 2012, 2014 and 2016 sample periods, and tritium was not detected during the 2018, 2020 and 2022 sample periods. Groundwater monitoring results indicate that the BMRR structure is effectively

preventing rainwater infiltration into the underlying soils, and/or that the amount of residual tritium in the vadose zone has been significantly reduced by natural radioactive decay**.**

4.3.4 BMRR Recommendation

The following is recommended for the BMRR groundwater monitoring program:

- Continue to sample well 084-28 under the Current Firehouse/Building 170 PFAS groundwater monitoring program.
- Maintain the monitoring wells until the completion of the OU X RI/FS.

4.4 SEWAGE TREATMENT PLANT (STP)

The STP processes sanitary wastewater from BNL research and support facilities. Until October 2014, treated effluent from the STP was discharged to the Peconic River under a NYSDEC SPDES permit (NY-0005835). Treated wastewater from the STP is now released to nearby groundwater recharge basins (SPDES Outfall 001) (**Figure 4.4-1**).

On average, 0.5 million gallons per day (MGD) of wastewater are processed during the summer and 0.3 MGD of water are processed during the rest of the year. Before discharge into the recharge basins, the sanitary waste stream is treated by: 1) primary clarification to remove settleable solids and floatable materials; 2) aerobic oxidation for secondary removal of the biological matter and nitrification of ammonia; 3) secondary clarification; and 4) filtration for final effluent polishing. Oxygen levels are regulated during the treatment process to remove nitrogen biologically, using nitrate-bound oxygen for respiration. As required by the SPDES permit, monitoring wells are used to evaluate groundwater quality near the recharge basins.

Two emergency hold-up ponds are located east of the former sand filter beds. The hold-up ponds are used to store sanitary waste in the event of mechanical problems at the plant, or if the influent contains contaminants in concentrations exceeding BNL administrative limits and/or SPDES permit effluent release criteria. The hold-up ponds have a combined holding capacity of nearly six million gallons of water and provide BNL with the ability to divert all sanitary system effluent for approximately one week. The hold-up ponds are equipped with fabric-reinforced plastic liners that are heat-welded along all seams. In 2001, improvements were made with the addition of new primary liners and a leak detection system. The older liners now serve as secondary containment. There were no diversions to the hold-up ponds during 2024.

4.4.1 STP Groundwater Monitoring

Well Network

In addition to the comprehensive influent and effluent monitoring program at the STP, the groundwater monitoring program is designed to provide a secondary means of verifying that STP operations are not impacting groundwater quality. One upgradient well (039-87) and six downgradient wells (039-88, 039-89, 039-115, 048-08, 048-09 and 048-10) are used to monitor groundwater quality in the recharge basin area (**Figure 4.4-1**). Monitoring results from three wells (039-88 and 039-89 are also used to evaluate groundwater quality in the holding pond area, when necessary.

Sampling Frequency and Analysis

In accordance with the SPDES permit, the STP recharge basin area monitoring wells are sampled annually (**Table 1-6**). Samples were collected in November 2024. As required by the permit, the samples are analyzed for the following metals: copper, iron, lead, nickel, silver, zinc and mercury.

With the discontinued use of the corrosion inhibitor tolyltriazole (TTA), during 2022 and 2023 the STP recharge basin monitoring wells were not sampled for this chemical.

4.4.2 STP Monitoring Well Results

Most metals concentrations tracked under the SPDES permit were below the applicable AWQS. However, iron was detected in well 048-10 at 0.513 mg/L, which exceeded the 0.3 mg/L AWQS. As in previous years, sodium was detected at concentrations above the 20 mg/L AWQS in most of the STP recharge basin area wells. During 2024, sodium levels exceeded 20 mg/L in six wells, with maximum concentration of 87 mg/L in well 039-115.

4.4.3 STP Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following Data Quality Objective statement.

1. Are STP operations impacting groundwater quality?

Sodium continues to be detected in most of the STP monitoring wells at concentrations above the 20 mg/L AWQS, and iron is occasionally detected at concentrations that exceed the 0.3 mg/L AWQS. Because TTA was being detected in the STP effluent at concentrations exceeding permitted limits, in 2022 BNL discontinued the use of this chemical for corrosion control. During 2023 and 2024, TTA was not detected in STP discharge samples collected as part of the SPDES monitoring program.

4.4.4 STP Recommendation

For 2025, the following is recommended for the STP groundwater monitoring program:

- In accordance with the SPDES permit, the STP groundwater monitoring wells will be sampled annually, and the samples will be analyzed for the metals specified in the permit.

4.5 MOTOR POOL AREA

The Motor Pool (Building 423) consists of a five-bay automotive repair shop, which includes office and storage spaces (**Figure 4.5-1**). The facility has been used continuously since 1947.

Potential environmental concerns at the Motor Pool include: 1) the use of two 8,000-gallon capacity USTs for gasoline; 2) a 3,000-gallon capacity UST for No. 2 heating oil; 3) an outdoor aboveground storage tank (AST) used for used motor oil; 4) hydraulic fluids used for lift stations; and 5) the use of solvents for parts cleaning. The gasoline and fuel oil USTs, pump islands, and associated piping conform to Suffolk County Article 12 requirements for secondary containment, leak detection devices, and overfill alarms. The Motor Pool facility has five vehicle-lift stations. The hydraulic fluid reservoirs for the lifts and new motor oil are stored in above ground storage containers with secondary containment located inside of Building 423. Used motor oil is stored in an outdoor AST that has secondary containment. Diesel fuel is stored in three outdoor ASTs at Building 651, which is approximately 300 feet west of Building 423 (**Figure 4.5-1**). The diesel ASTs are located within a secondary containment structure.

4.5.1 Motor Pool Area Groundwater Monitoring

Well Network

The groundwater monitoring program for the Motor Pool area is used to confirm that the current engineered and institutional controls for the USTs are effective in preventing contamination of the aquifer. Shallow Upper Glacial aquifer wells 102-05 and 102-06 are used to monitor for potential contaminant releases from the UST area (**Figure 4.5-1**).

Sampling Frequency and Analysis

During 2024, the two UST area wells were monitored one time, and the samples were analyzed for VOCs (**Table 1-6**). The wells were also checked for the presence of floating petroleum hydrocarbons. The remaining Building 423 monitoring wells were not sampled.

4.5.2 Motor Pool Monitoring Well Results

Underground Storage Tank Area

During 2024, only trace levels (<0.28 µg/L) of chloroform were detected in samples from wells 102-05 and 102-06. As in previous years, no floating product was detected in the wells.

4.5.3 Motor Pool Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

During 2024, there were no reported gasoline or fuel oil spills from the USTs, diesel spills, or oil spills that could affect groundwater quality. Furthermore, all waste oils and used solvents generated from current operations are being properly stored and recycled. The gasoline and fuel oil USTs have electronic leak detection systems, and for the gasoline USTs there is a daily product reconciliation (i.e., an accounting of the volume of gasoline stored in USTs and volume of gasoline dispensed).

4.5.4 Motor Pool Recommendations

The following are recommendations for the Motor Pool area monitoring program for 2025:

- The sampling frequency for the UST area wells 102-05 and 102-06 will continue to be annually.

4.6 ON-SITE SERVICE STATION

Building 630 was a commercial automobile service station, privately operated under a contract with BNL. The station was built in 1966 and was used for automobile repair and gasoline sales until January 2018. Potential environmental concerns at the Service Station included the use of USTs for the storage of gasoline and waste oil, hydraulic fluids used for lift stations, and the use of solvents for parts cleaning. In August 1989, the USTs, pump islands, and associated piping were upgraded to conform to Suffolk County Article 12 requirements for secondary containment, leak detection devices, and overfill alarms. The tank inventory included three 8,000-gallon USTs for storing unleaded gasoline and one 500-gallon UST used for waste oil. The facility had three hydraulic vehicle-lift stations. In early 2018, the USTs were emptied of their contents, and hydraulic oils were drained from the lift stations. In September 2018, the USTs were excavated and removed from the site for proper disposal. During the removal of the USTs, there were no reported gasoline or motor oil losses or spills that could affect groundwater quality. Furthermore, no contaminants were detected in end-point soil samples at concentrations above 6 NYCRR Part 375 cleanup guidelines.

4.6.1 Service Station Groundwater Monitoring

Well Network

Groundwater quality in the service station area was historically monitored using four shallow Upper Glacial wells. The monitoring program was used to confirm that the engineered and institutional controls in place are effective in preventing contamination of the aquifer and to evaluate continued impacts from historical spills (**Figure 4.6-1**).

Sampling Frequency and Analysis

No groundwater samples were collected during 2024.

4.6.2 Service Station Monitoring Well Results

Although groundwater water quality at the Service Station had been impacted by a variety of VOCs that were related to historical vehicle maintenance and refueling operations, monitoring conducted during 2015 through 2017 indicated a significant reduction in VOC concentrations. During 2017, the highest VOC concentration was detected in well 085-17, with PCE at 3.7 µg/L, which was below the NYS AWQS of 5 µg/L.

4.6.3 Service Station Groundwater Monitoring Program Evaluation

Monitoring data collected to date were evaluated using the following Data Quality Objective statement.

1. Is there a continuing source of contamination? If present, has the source been remediated or controlled?

Based upon the last set of monitoring data collected in 2017, VOC concentrations for individual compounds have declined to less than applicable AWQS. During the removal of the USTs, there were no reported gasoline or motor oil losses or spills that could affect groundwater quality. Furthermore, no contaminants were detected in end-point soil samples at concentrations above 6 NYCRR Part 375 cleanup guidelines.

4.6.4 Service Station Groundwater Monitoring Program Recommendation

§ Because the Service Station facility has been decommissioned, and groundwater monitoring results indicated that VOC concentrations declined to less than the NYS AWQS, the monitoring program was discontinued in 2018. The monitoring wells will be retained for possible future use.

4.7 MAJOR PETROLEUM FACILITY (MPF)

The MPF is the storage area for fuel oil used at the Central Steam Facility (CSF). The fuel oil is held in a network of six above ground storage tanks, which have a combined capacity of up to 1.7 million gallons of No. 6 fuel oil and 60,000 gallons of No. 2 fuel oil. The tanks are connected to the CSF by above ground pipelines that have secondary containment and leak detection devices. The fuel storage tanks are positioned in bermed containment areas that have a capacity to hold >110 percent of the volume of the largest tank located there. The bermed areas have bentonite clay liners (consisting of bentonite clay sandwiched between geotextile material) or bentonite clay mixed into the native soil to form an impervious soil/clay layer. Fuel-unloading operations occur in a centralized building that has secondary containment features. The MPF is operated under NYSDEC Permit #1-1700 and, as required by law, a Spill Prevention Control and Countermeasures (SPCC) Plan and a Facility Response Plan have been developed for the facility. Groundwater quality near the MPF has been impacted by several oil and solvent spills, and PFAS: 1) the 1977 fuel oil/solvent spill east of the MPF that was remediated under the FFA (OU IV); 2) a historical fuel/solvent spill discovered in 2013 near MPF storage tank #3; 3) historical solvent spills near the CSF; 4) solvent spills that occurred in the Building 650 area; and 5) firefighter training with PFAS containing foam occurred near several of the storage tanks.

4.7.1 MPF Groundwater Monitoring

Well Network

Eight shallow Upper Glacial aquifer wells are used to confirm that the engineered and institutional controls in place are effective in preventing contamination of the aquifer (**Figure 4.7-1**).

Sampling Frequency and Analysis

Groundwater contaminants from the fuel oil products stored at the MPF can travel both as free product and in dissolved form in groundwater. Based upon these factors, the NYSDEC Special License Conditions for the MPF requires semiannual monitoring for VOCs (using EPA Method 8260) and SVOCs (using EPA Method 8270) and monthly monitoring for floating petroleum (**Table 1-6**).

4.7.2 MPF Monitoring Well Results

During 2024, PCE (at a maximum concentration of 2.1 µg/L), and chloroform (estimated concentration of 0.3 µg/L) continue to be detected in upgradient well 076-25 (**Figure 4.7-1**). The PCE and chloroform concentration in upgradient well 076-25 were below the AWQSs of 5 µg/L and 7 µg/L, respectively. In the downgradient wells, PCE was detected in well 076-380 at 6.9 µg/L and chloroform was detected in well 076-18 at a maximum concentration of 0.46 µg/L. The SVOC phenol was detected in downgradient well 076-378, at an estimated concentration of 1.9 µg/L, well below the 50 µg/L NYS guidance value for this chemical. The VOCs detected in the groundwater at the MPF are believed to originate from historic solvent spills that occurred near the Central Steam Facility and at an adjacent upgradient facility (Building 650). As in previous monitoring periods, no floating petroleum was detected in the MPF monitoring wells. Monitoring conducted in 2020 indicated that PFAS, including PFOS and PFOA, are present in the groundwater downgradient of the MPF, with PFOS at concentrations >10 ng/L DWS. No sampling for PFAS in MPF area wells has been conducted since that time.

4.7.3 MPF Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Are the potential sources of contamination being controlled?

During 2024, there were no reported fuel oil leaks or spills, and, groundwater monitoring at the MPF continues to show that current fuel storage and distribution operations are not impacting groundwater quality. Low levels of VOCs and SVOCs that are periodically detected in the groundwater are likely to have originated from historical spills at the MPF, near the Central Steam Facility, and near the Building 650 area to the north. Several historical spill sites near the CSF were identified during the 1990s, and the contaminated soils were excavated and disposed of in accordance with regulatory requirements. The historical use of firefighting foam in the MPF area has also impacted groundwater quality. Long-term impacts from PFAS use at the MPF will be evaluated during the planned OU X RI/FS.

4.7.4 MPF Recommendation

- For 2025, monitoring will continue as required by the NYS operating permit issued March 22, 2022, with semiannual monitoring for VOCs (using EPA Method 8260) and SVOCs (using EPA Method 8270), and monthly monitoring for floating product.

4.8 WASTE MANAGEMENT FACILITY (WMF)

The WMF is designed to safely handle, repackage, and temporarily store BNL-derived wastes prior to shipment to off-site disposal or treatment facilities. The WMF is a state-of-the-art facility, with administrative and engineered controls that meet all applicable federal, state, and local environmental protection requirements. The WMF consists of three buildings: the Operations Building, Reclamation Building (for radioactive waste), and the RCRA Building.

Groundwater monitoring is a requirement of the RCRA Part B permit issued for WMF operations. The groundwater monitoring program for the WMF is designed to supplement the engineered and institutional controls by providing additional means of detecting potential contaminant releases from the facility. Furthermore, because of the close proximity of the WMF to BNL potable supply wells BNL-11 and BNL-12, it is imperative that the engineered and institutional controls implemented at the WMF are effective in ensuring that waste handling operations do not degrade the quality of the soil and groundwater in this area.

4.8.1 WMF Groundwater Monitoring

Well Network

During 2024, groundwater quality at the WMF was monitored using nine shallow Upper Glacial aquifer wells. Two wells (055-03 and 055-10) were used to monitor background water quality, and seven wells were used to monitor groundwater quality near the two main waste handling and storage facilities. Wells 056-21, 066-220 and 066-221 are located near the RCRA Building, and wells 056-22, 056-23, 066-222 and 066-223 are located near the Reclamation Building. Periodically adjustments are made to the list of downgradient wells that are monitored due to transient changes in groundwater flow directions caused by the operations of the nearby supply wells (BNL-11 and BNL-12). BNL discontinued sampling of well 066-224 following the 2012 closure of the former Mixed Waste Building. Locations of the monitoring wells are shown on **Figure 4.8-1**.

Sampling Frequency and Analysis

During 2024, the WMF wells were sampled in February and August. Groundwater samples were analyzed twice for VOCs, tritium, gamma spectroscopy, gross alpha, and gross beta, and one time for strontium-90, metals and anions (e.g., chlorides, sulfates, and nitrates) (**Table 1-6**).

4.8.2 WMF Monitoring Well Results

Radiological Analyses

Gross alpha and beta levels in samples from both upgradient and downgradient monitoring wells were consistent with background concentrations. During 2024, Sr-90 was not detected in any of the downgradient monitoring wells. The only operation at the WMF that could potentially contribute Sr-90 to the environment is the BGRR/WCF groundwater treatment system located in Building 855. However, the pipeline in the WMF area is double lined, and is monitored by a leak detector. There are no indications that this piping system has leaked.

Non-Radiological Analyses

All anions (chlorides, sulfates, and nitrates) and most metals concentrations were below applicable ambient AWQS or DWS. As in previous years, sodium was detected at concentrations above the 20 mg/L AWQS. Sodium was detected at concentrations above the standard in both upgradient wells at a maximum of 110 mg/L in well 055-10, and in two downgradient wells with a maximum concentration of 40 mg/L in well 066-221. The elevated sodium concentrations are likely the result of road salting

operations. Low levels of chloroform (up to 0.57 µg/L) were detected in upgradient well 055-10 which is below the 7 µg/L AWQS. Low levels of chloroform were also detected in downgradient wells 056-21, 066-222, and 066-223 at a maximum concentration of 1.3 µg/L.

4.8.3 WMF Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Are potential sources of contamination within the WMF being controlled?

Groundwater monitoring results for 2024 continued to show that WMF operations are not affecting groundwater quality. Furthermore, there were no outdoor or indoor spills at the facility that could have affected soil or groundwater quality.

4.8.4 WMF Recommendation

The following are recommended for 2025:

- Continue monitoring the wells at a semiannual frequency as required by the RCRA Part B Permit.

4.9 NATIONAL SYNCHROTRON LIGHT SOURCE II (NSLS-II)

The NSLS-II is an electron accelerator that began full-time operations in 2014. High-energy particle interactions in water, air, and soil can produce radioactivity from spallation reactions or neutron capture in nitrogen, oxygen, or other materials. In high-energy proton accelerators, such as BNL's AGS, BLIP and RHIC, these interactions can produce significant activation of the soil shielding. However, electron accelerators such as the NSLS-II have significantly reduced potential for environmental impacts and can produce only about one to five percent of the induced activity of a proton accelerator. As required by the BNL SBMS *Accelerator Safety* subject area, analyses were conducted to estimate the rate of formation of tritium and sodium-22 in the surrounding soils during the operation of the NSLS-II's Linac, Booster, and Storage Ring. The results of these analyses indicated that interactions of neutrons with the soils below the tunnel floor and surrounding soil shielding (berm) have the potential to create very low levels of tritium and sodium-22 in the soil. However, because the soil beneath the concrete floor will not be exposed to rainfall, the potential leaching of radioactive isotopes from the soil to the water table at these locations will be minimal. There is also the potential to create very low levels of tritium in the water used to cool the magnets and other accelerator components.

4.9.1 NSLS-II Groundwater Monitoring

Well Network

Four monitoring wells are located downgradient of the facility's Linear Accelerator (Linac), Booster and Storage Ring area where beam line operations may result in low level activation of the surrounding soil shielding (**Figure 4.9-1**). Two nearby Major Petroleum Facility monitoring wells (076-18 and 076-19) can be used as upgradient/background wells for the NSLS-II facility, as required.

Sampling Frequency and Analysis

During 2024, the four NSLS-II monitoring wells were sampled once, and the samples were analyzed for tritium (**Table 1-6**). The background wells at the MPF were not sampled. The water samples are preferentially tested for tritium because it is more leachable than sodium-22, migrates at the same rate as groundwater, and is therefore a better indicator of the effectiveness of the administrative and engineered controls.

4.9.2 NSLS-II Monitoring Well Results

As in past years, tritium was not detected in the groundwater samples collected during 2024.

4.9.3 NSLS-II Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Are the engineered and operational controls effective at preventing or reducing the leaching of radionuclides from activated soils to the groundwater?

Monitoring results for 2024 indicate that NSLS-II beam line operations are not impacting groundwater quality.

4.9.4 NSLS-II Recommendations

- For 2025, the four NSLS-II monitoring wells will continue to be monitored annually for tritium.

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4.10 RECHARGE BASIN HN

Recharge basins are used for the discharge of wastewaters that are suitable for direct replenishment of the aquifer. These discharges include once-through cooling water, stormwater, and cooling tower blowdown, and are regulated under SPDES permits. One of the recharge basins known as basin HN, is located at the six o'clock area of the RHIC facility (**Figure 4.10-1**). Basin HN receives once-through cooling water from the AGS and RHIC facilities, as well as cooling tower blowdown and stormwater runoff. Due to exceedances of the SPDES permit discharge limit for the corrosion inhibitor TTA, in late 2021 and early 2022 BNL conducted a limited characterization effort to determine whether TTA is impacting groundwater quality downgradient of basin HN and the Sewage Treatment Plant (see **Section 4.4**).

4.10.1 Basin HN Groundwater Monitoring

Well Network

A permanent groundwater monitoring program for basin HN has not been established. During October-November 2021, BNL installed three temporary wells approximately 800 feet downgradient of basin HN to evaluate potential impacts to groundwater quality. This was followed by the December 2021 and January 2022 sampling of five permanent wells located between 2,000 and 2,500 feet downgradient of the basin (wells 055-01, 055-06, 055-10, 056-01 and 056-03). The results of this effort were reported in the *2021 BNL Groundwater Status Report* (BNL, 2022b).

Sampling Frequency and Analysis

In February 2024, pre- and post- GAC filter samples collected from supply wells BNL-10, BNL-11, and BNL-12 were tested for TTA.

4.10.2 Basin HN Area Monitoring Results

All three supply wells located downgradient of the basin HN currently have operating GAC filters. During 2022, 2023 and 2024 TTA was not detected in any of the pre- and post-GAC filter samples that were collected at the three supply wells (MDL = 0.05 mg/L). Column studies performed by BNL's supplier of GAC demonstrated that GAC can effectively remove TTA. Because TTA was detected in the discharges to basin HN at concentrations exceeding permitted limits, BNL discontinued the use of this chemical for corrosion control. After stopping its use, TTA was not detected in the water discharges to basin HN during 2022, 2023, or 2024.

4.10.3 Basin HN Area Groundwater Monitoring Program Evaluation

The 2024 monitoring data were evaluated using the following DQO statement.

1. Are Basin HN operations impacting groundwater quality?

Monitoring results for 2021 and 2022 indicated that TTA has impacted groundwater quality downgradient of basin HN. The groundwater monitoring wells used for this evaluation were not sampled during 2023 or 2024.

2. Is TTA impacting water quality at supply wells BNL-10, BNL-11, and BNL-12?

Although TTA was detected in several monitoring wells located within the source water contributing area of the supply wells at concentrations exceeding the NYS AWQS, TTA is not measurable in the pre- or post-GAC filter samples from potable supply wells BNL-10, BNL-11, or BNL-12.

4.10.4 Basin HN Recommendation

The following is recommended for 2025:

- Continue to collect pre- and post-GAC filter samples from supply wells BNL-10, BNL-11, and BNL-12 for TTA on an annual basis.

5.0 SUMMARY OF RECOMMENDATIONS

This section is provided as a quick reference to recommendations for monitoring and remediation program changes described in **Sections 3** and **4**. **Table 5-1** summarizes the changes to the monitoring well sampling programs.

OU I SOUTH BOUNDARY TREATMENT SYSTEM

- Maintain the VOC post-closure groundwater monitoring program of annual sample collection from post-closure wells: 107-40, 107-41, 115-13, 115-16, and 115-51. Maintain quarterly sampling of Current Landfill sentinel well 098-99.
- Install temporary wells as needed to fill monitoring data gaps and characterize extent of the Sr-90 plume. Install a temporary well to the west of OU I -Sr-90-GP-74 to verify the western extent of this higher concentration plume segment.

BUILDING 96 TREATMENT SYSTEM

- RTW-1 and area wells will be monitored for any significant rebound of concentrations over the system capture goal and place RTW-1 in standby if the TVOC concentration remains below the capture goal for several consecutive quarters.
- Maintain treatment wells RTW-2, RTW-3, and RTW-4 in standby mode, and restart the wells if extraction or monitoring well data indicate that TVOC concentrations exceed 50 µg/L.
- Reduce the sampling frequency in upgradient monitoring wells 085-382, 085-383, and 085-386 from semiannual to annual sampling.

MIDDLE ROAD TREATMENT SYSTEM

- Maintain extraction wells RW-1, RW-4, RW-5 and RW-6 in standby mode. Restart the well(s) if extraction or monitoring well data indicate that TVOC concentrations exceed the 50 µg/L capture goal.
- Continue full-time operation of RW-2 and RW-7.
- Place extraction well RW-3 in standby mode based on the recommendations found in the OUIII Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**).
- Deep Upper Glacial aquifer VOC concentrations in this area of the site are not declining at a rate that will definitively meet the ROD cleanup goal of MCLs by 2030. Therefore, as per the OUIII Middle Road/South Boundary Groundwater Modeling Assessment recommendations, install two additional extraction wells in the approximate locations of monitoring wells 105-80 and 105-81 in order to expedite the cleanup timeframe for the Middle Road portion of the plume.

OU III SOUTH BOUNDARY TREATMENT SYSTEM

- Maintain wells EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, and EW-12 in standby mode. The system's extraction wells will continue to be sampled on a quarterly basis, with the exception of EW-12. The wells will be restarted if extraction or monitoring well data indicate TVOC concentrations exceed the 50 µg/L capture goal.
- Continue to operate extraction EW-17 on a full-time basis.

- Deep Upper Glacial aquifer VOC concentrations in this area of the site are not declining at a rate that will definitively meet the ROD cleanup goal of MCLs by 2030. Therefore, per the OUIII Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**) recommendations, install one additional extraction well in the approximate location of monitoring well 121-57 in order to expedite the cleanup timeframe for the South Boundary portion of the plume.

WESTERN SOUTH BOUNDARY TREATMENT SYSTEM

- Based on the TVOC concentrations below the capture goal of 20 µg/L in WSB-1 and WSB-2, maintain these extraction wells in standby mode. If TVOC concentrations greater than 20 µg/L are observed in WSB-2 or the adjacent monitoring wells, extraction well WSB-2 may be put back into full-time operation.
- Continue the current pulse pumping of the remaining four operating extraction wells until a petition for shutdown is submitted and approved. The pulsed pumping should continue on the current schedule of wells WSB- 3 and WSB-5 on one month while wells WSB-4 and WSB-6 are off. The following month, wells WSB-4 and WSB-6 should be on while wells WSB-3 and WSB-5 are off.
- Based upon the TVOC concentrations in both the monitoring and extraction wells it is recommended that a petition for shutdown will be submitted in 2025.
- Continue the current monitoring frequency for the WSB monitoring wells as shown in **Table 1-5**.

INDUSTRIAL PARK TREATMENT SYSTEM

- Maintain the seven UVB wells in standby. If TVOC concentrations exceed the 50 µg/L capture goal in these UVB wells or associated monitoring wells, they may be restarted.
- Maintain IP-EW-8 and IP-EW-9 in standby and continue to monitor for rebound of VOCs. If TVOC concentrations approach the capture goal of 50 µg/L in the vicinity of the extraction wells the system will be evaluated for restart.
- Continue to monitor the plume core wells. As per recommendation in the *2023 Groundwater Status Report*, since TVOC concentrations in wells 000-537 and 00-541 remained below the capture goal during 2024, and the remainder of the plume core wells also remained below the capture goal over the same period.
- Prepare a petition for closure of the Industrial Park Treatment System.

NORTH STREET TREATMENT SYSTEM

- NS-1 and NS-2 will remain shut down until the OU X RI/FS characterization (**Section 3.5**) is completed. After the completion of this characterization, a determination of the future use of these wells will be made.
- Continue monitoring the seven wells on an annual monitoring schedule until the results for individual VOCs are consistently below MCLs. The remaining 11 monitoring wells will be retained until the completion of the OU X RI/FS characterization.

NORTH STREET EAST EDB TREATMENT SYSTEM

- § Prepare a petition for shutdown, as EDB concentrations remained below the DWS through 2024.
- § Continue pulsed pumping (one month on and one month off) until a petition for shutdown is approved by the regulators.
- § Maintain the quarterly sampling frequency for the 12 EDB monitoring wells using Method 8011, except for upgradient perimeter well 115-42 which is sampled semiannually. Maintain annual VOC sampling using Method 8260 Low Level for all wells except for 115-42 and 000-138.

LIPA/AIRPORT TREATMENT SYSTEM

- § Continue full-time operation of wells RTW-1A, RTW-4A and RW-6A. Keep wells RTW-2A, RTW-3A and RTW-5A in standby mode. If concentrations above the capture goal of 10 µg/L TVOC are observed in any of the extraction wells or the monitoring wells adjacent to wells that are not operating, the well(s) will be put back into full-time or pulsed pumping operation.
- § Maintain the LIPA program extraction wells EW-1L, EW-2L, EW-3L and EW-4L in an operationally ready state pending the completion of the OU X RI/FS.
- § No changes to the current monitoring schedule are recommended at this time for the Airport System. Begin annual post closure monitoring for wells 000-130, 000-131, 000-425, 000-448, 000-449, and 000-452.

MAGOTHY MONITORING

- § Continue pumping the Magothy extraction wells at Middle Road, South Boundary EW-17 and the Airport. The two Industrial Park extraction wells were placed in standby in July 2019 and continue to be monitored for rebound of VOCs.
- § Place extraction well RW-3 in standby mode based on the recommendations found in the OUIII Middle Road/South Boundary Groundwater Modeling Assessment (**Appendix H**).
- § Wells no longer sampled are being maintained for potential future use for PFAS and 1,4-dioxane as part of OU X and will be evaluated as part of the RI/FS.

WILLIAM FLOYD WELL FIELD SENTINEL MONITORING

- § Maintain quarterly sampling of the six wells for VOCs, 1,4-dioxane, and PFAS, and annual sampling for gamma spectroscopy, tritium, and Sr-90.

BGRR/WCF STRONTIUM-90 TREATMENT SYSTEM

- § Continue operating well SR-1 in full-time mode. Maintain wells SR-3, SR-4, SR-5, SR-6, SR-7, SR-8, and SR-9 in standby mode. Well SR-3 will be operated as necessary when Sr-90 concentrations in monitoring well 075-701 show elevated levels of Sr-90.
- § Reduce the source area monitoring frequency for BGRR source area wells 075-701 and 075-664 from monthly to quarterly. If an increase in Sr-90 concentrations or a rise in groundwater elevation is observed in these wells, the monitoring frequency may be increased.

- Maintain the semiannual sampling frequency in well 065-169 to monitor the Sr-90 concentration increase in the vicinity of Building 801.
- In 2025, install supplemental temporary wells for the WCF area in 2025. Continue with this triennial characterization every third year (next in 2028).
- Shutdown well SR-2 due to continuously low concentrations of Sr-90. The well will be restarted if concentrations of SR-90 increase significantly after shutdown.

CHEMICAL/ANIMAL HOLES STRONTIUM-90 TREATMENT SYSTEM

- Maintain the system in standby mode and quarterly sampling of the extraction wells. If significant rebound in either the extraction wells or monitoring wells is identified, the extraction wells may be restarted.
- Maintain the annual monitoring well sampling frequency (standby phase), except for source area wells 097-313, 097-314, 097-315, which will remain semiannual.
- In support of preparing a petition for closure, perform updated groundwater modeling simulations based on current groundwater Sr-90 concentrations to predict the natural attenuation time frame.

HFBR TRITIUM PUMP AND RECHARGE SYSTEM

- Continue to monitor the source area with the ten wells located immediately downgradient of the HFBR. Reduce sampling frequency from quarterly to semiannually.
- Maintain the downgradient monitoring wells and extraction wells until a determination is made on their utilization related to PFAS and 1,4-dioxane.

BUILDING 650 (SUMP OUTFALL) STRONTIUM-90 MONITORING

- Maintain annual sampling frequency for the 24 monitoring wells in this program.
- Install several temporary wells downgradient of monitoring well 076-184 in an area south of Brookhaven Avenue.

OPERABLE UNIT VI EDB TREATMENT SYSTEM

- Maintain full time operation of the extraction wells EW-3E and EW-4E, and continue quarterly sampling of the extraction wells.
- Reevaluate the cleanup time frame with the groundwater model utilizing updated information from the pump test and recent monitoring well data.

OPERABLE UNIT X CURRENT FIREHOUSE PFAS TREATMENT SYSTEM

- Continue full-time treatment system operations, with extraction wells CF-RW-C and CF-RW-F in standby due to low PFAS concentrations. These extraction wells may be restarted if PFAS concentrations are observed to increase.
- Reduce sampling treatment system influent, midpoint, and effluent from two times per month to monthly, as defined in the SPDES Equivalency Permit. Samples will be analyzed for PFAS

using EPA Method 1633 for PFAS, Method 8270 SIM for 1,4-dioxane, and EPA Method 8260 Low Level for VOCs.

- Reduce sampling frequency of the treatment system extraction wells from monthly to quarterly. Analyze the quarterly samples by EPA Method 1633 for PFAS and EPA Method 8270 SIM for 1,4-dioxane.
- Discontinue quarterly sampling of 13 Current Firehouse and Building 170 source area monitoring wells (073-26, 073-27, 073-28, 073-29, 073-30, 073-31, 073-32, 073-33, 074-135, 093-04, 093-93, 093-94, and 093-95) and maintain semiannual sampling of all 80 Current Firehouse/Building 170 monitoring wells. Samples from all wells will be analyzed for PFAS using EPA Method 1633, and samples from 17 wells will also be analyzed for 1,4-dioxane using EPA Method 8270 SIM.
- Evaluate whether a new shallower extraction well is required at the location of CF-RW-F to effectively capture the high concentration segments of the Building 170 PFAS plume.
- Evaluate whether an additional shallower extraction well is required east of CF-RW-E to more effectively capture the high concentration segments of the Current Firehouse PFAS plume.

OPERABLE UNIT X FORMER FIREHOUSE PFAS TREATMENT SYSTEM

- Maintain full-time operation of the treatment system.
- Reduce sampling the treatment system influent, midpoint, and effluent from two times per month to monthly, as defined in the SPDES Equivalency Permit. Analyze the samples by EPA Method 1633 for PFAS, EPA Method 8270 SIM for 1,4-dioxane, and EPA Method 8260 Low Level for VOCs.
- Reduce sampling frequency of the treatment system extraction wells from monthly to quarterly. Analyze the quarterly samples by EPA Method 1633 for PFAS and EPA Method 8270 SIM for 1,4-dioxane.
- Discontinue quarterly sampling of 10 Former Firehouse source area monitoring wells (075-809, 075-810, 075-811, 085-404, 085-405, 085-406, 085-407, 085-408, 085-409, and 085-410) and maintain semiannual sampling of all 42 Former Firehouse monitoring wells. Continue analyzing groundwater samples from 31 select OU III Middle Road, South Boundary and Industrial Park wells for PFAS during the 4th quarter monitoring period. Samples will be analyzed for PFAS using EPA Method 1633, and a select number of samples analyzed for 1,4-dioxane using EPA Method 8270 SIM.

1,4-DIOXANE IN GROUNDWATER

- Monitoring requirements to track the extent of 1,4-dioxane contamination in on-site and off-site areas will be defined following completion of the OU X RI/FS.
- Continue limited monitoring for 1,4-dioxane as part of the Current Firehouse/Building 170, Former Firehouse and William Floyd Well Field Sentinel monitoring programs.
- Conduct routine testing of treatment system effluent for 1,4-dioxane as defined in the SPDES equivalency permits and *Groundwater Treatment System Discharge Compliance Plan* (BNL, 2024f).

- Establish groundwater monitoring programs for the OU III, RA V, and HS recharge basin areas to evaluate impacts from the discharge of treated groundwater with 1,4-dioxane concentrations that exceed the 0.35 µg/L AWQS.
- Continue monitoring BNL's water supply wells for 1,4-dioxane as required by the annual SCDHS *Minimum Monitoring Requirements* (SCDHS, 2024) .

SITE BACKGROUND MONITORING

- There are no changes proposed to the monitoring program.

CURRENT LANDFILL GROUNDWATER MONITORING

- Continue quarterly soil gas monitoring from soil gas wells. In addition, begin annual indoor ambient air quality screening at the National Weather Service (NWS) building concurrent with annual landfill gas sampling activities conducted during the summer.
- Continue monthly maintenance and inspections in accordance with the Operations and Maintenance manual.
- Continue with the current groundwater monitoring program for the Current Landfill.

FORMER LANDFILL GROUNDWATER MONITORING

- Continue monthly maintenance and inspections in accordance with the Operations and Maintenance manual as well as continuing the annual soil-gas monitoring.

G-2 TRITIUM SOURCE AREA AND GROUNDWATER PLUME

- Continue routine inspections of the g-2 cap.
- Continue semiannual monitoring of source area downgradient monitoring wells 054-07, 054-124, 054-126, 054-184, 054-185, and 064-95. If tritium concentrations during 2025 remain below the 20,000 pCi/L DWS, consider reducing sampling frequency to annually starting in 2026.
- Discontinue routine sampling of upgradient well 054-65.
- Continue the annual sampling frequency for the shallow groundwater monitoring wells located downgradient of Building 912, which are also used to track the downgradient migration of tritium from the g-2 area.

BROOKHAVEN LINAC ISOTOPE PRODUCER (BLIP) FACILITY

- Continue routine inspections of the BLIP cap.
- Continue annual sampling of upgradient well 064-46 and semiannual of downgradient monitoring wells 064-47, 064-48, and 064-67.

ALTERNATING GRADIENT SYNCROTRON (AGS)

- For the Building 912 monitoring program, discontinue annual sampling of upgradient monitoring wells 054-69, 055-14, 055-29, 055-30, and downgradient wells 055-31, 055-32,

065-192, 065-193, 065-194, and 065-195. Maintain annual sampling of the remaining thirteen downgradient monitoring wells.

- For the former U-Line monitoring program, discontinue sampling of upgradient monitoring well 054-127.
- Continue the annual sampling frequency for the AGS facility monitoring wells.

RELATIVISTIC HEAVY ION COLLIDER (RHIC) FACILITY

- Starting in 2025, the sampling frequency for the RHIC monitoring wells will be reduced to annually. Surface water samples will continue to be collected as part of the Environmental Surveillance program.

BROOKHAVEN MEDICAL RESEARCH REACTOR (BMRR) FACILITY

- Continue to sample well 084-28 under the Current Firehouse/Building 170 PFAS groundwater monitoring program.
- Maintain the monitoring wells until the completion of the OU X RI/FS.

SEWAGE TREATMENT PLANT (STP) FACILITY

- In accordance with the SPDES permit, the STP groundwater monitoring wells will be sampled annually, and the samples will be analyzed for the metals specified in the permit.

MOTOR POOL AREA

- The sampling frequency for the UST area wells 102-05 and 102-06 will continue to be annually.

MAJOR PETROLEUM FACILITY (MPF) AREA

- For 2025, monitoring will continue as required by the NYS operating permit issued March 22, 2022, with semiannual monitoring for VOCs (using EPA Method 8260) and SVOCs (using EPA Method 8270), and monthly monitoring for floating product.

WASTE MANAGEMENT FACILITY (WMF)

- Continue monitoring the wells at a semiannual frequency as required by the RCRA Part B Permit.

NATIONAL SYNCHROTRON LIGHT SOURCE II (NSLS-II)

- For 2025, the four NSLS-II monitoring wells will continue to be monitored annually for tritium.

RECHARGE BASIN HN

- Continue to collect pre- and post-GAC filter samples from supply wells BNL-10, BNL-11, and BNL-12 for TTA on an annual basis.

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REFERENCES

Aronson, D., & Seaburn, G. (1974). *Appraisal of the Operating Efficiency of Recharge Basins on Long Island, NY in 1969.* USGS Supply Paper 2001-D.

BNL. (2000a). *Operable Unit III Record of Decision.* Upton, NY: Brookhaven National Laboratory.

BNL. (2005a). *OU III Explanation of Significatnt Differences.* Upton, NY: Brookhaven National Laboratory.

BNL. (2005b). *Operations and Maintenance Manual for the OU I South Boundary Treatment Facility.* Upton, NY: Brookhaven National Laboratory.

BNL. (2007a). *Record of Decision for Area of Concernt 16T g-2 Tritium Source Area and Groundwater Plume, Area of Concern 16K Brookhaven Linac Isotope Producer, and Area of Concern 12 Former Underground Storage Tanks.* Upton, NY: Brookhaven National Laboratory.

BNL. (2007b). *Operations and Maintenance Manual for the OU III Offsite Remvoal Action.* Upton, NY: Brookhaven National Laboratory.

BNL. (2008a). *Operations and Maintenance Manual for the LIPA/Airport Groundwater Treatment System, Revision 2.* Upton, NY: Brookhaven National Laboratory.

BNL. (2008b). *Chemical/Animal Holes Strontium-90 Groundwater Treatment Systems Operations and Maintenance Manual.* Upton, NY: Brookhaven National Laboratory.

BNL. (2009b). *Operations and Maintenance Plan for the High Flux Beam Reactor Tritium Plume Pump and Recharge System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2009c). *2008 Site Environmental Report, Volume II. Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2012). *Operations and Maintenance Manual for the Sr-90 BGRR/WCF/PFS Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2013a). *Petition for Shutdown, OU III Industrial Park Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2013b). *Petition for Shutdown OU III North Street Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2013c). *Petition for Shutdown, High Flux Beam Reactor, Tritium Plume Pump and Recharge System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2014a). *Operations and Maintenance Manual for the OU III Middle Road and South Boundary Groundwater Treatment Systems, Revision 2.* Upton, NY: Brookhaven National Laboratory.

BNL. (2014b). *Petition for Shutdown OU III North Street East Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2015). *Operations and Mainteance Manual for the OU III Modification to the Industrial Park Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2018a). *Petition for Shutdown of the OU III Chemical Holes Strontium-90 Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2018b). *Petition for Closure, High Flux Beam Reactor Tritium Plume Pump and Recharge System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2018c). *Modification to Western South Boundary Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2018d). *2017 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2019). *BNL 2018 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2019b). *Addendum to the Phase 3 Work Plan, Testing for Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater Treatment Systems, Sewage Treatment Plant Effluent, and Landfill Monitoring Wells, Southern Boundary Monitoring Wells, and OU V Monitoring Wells.* Upton, NY: Brookhaven National Laboratory.

BNL. (2020a). *Petition for Closure for the OU III North Street Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2020b). *Operations and Maintenance Manual for Western South Boundary Treatment System, Rev. 3.* Upton, NY: Brookhaven National Laboratory.

BNL. (2020c). *BNL 2019 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2020d). *Operations and Maintenance Manual for the North Street/North Street East Offsite Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2021a). *Phase 4 Characterization Report, Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane in On-Site and Off-Site Monitoring Wells, Extraction Wells and Treatment Systems.* Upton, NY: Brookhaven National Laboratory.

BNL. (2021b). *2021 CERCLA Five-Year Review Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2021c). *BNL 2020 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2021d). *BNL Spill Prevention, Control and Countermeasure Plan.* Upton, NY: Brookhaven National Laboratory.

BNL. (2021e). *2020 Environmental Monitoring Report, Current and Former Landfill Areas.* Upton, NY: Brookhaven National Laboratory.

BNL. (2022b). *2021 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2022b). *BNL Land Use Controls Management Plan.* Upton, NY: Brookhaven National Laboratory.

BNL. (2023a). *Operations and Maintenance Manual, U.S. Department of Energy, Brookhaven National Laboratory, Former Firehouse PFAS Source Areas Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2023b). *Time Critical Removal Action for Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater Downgradient of the Current Firehouse, Former Firehouse and Building 170*

Firefighter Training Areas, Revised Plume Characterization Report. Upton, NY: Brookhaven National Laboratory.

BNL. (2023c). *2022 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, NY: Brookhaven National Laboratory.

BNL. (2023d). *Operations and Maintenance Manual, U.S. Department of Energy, Brookhaven National Laboratory, Current Firehouse PFAS Source Areas Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2023e). *Remediation System Startup and Testing Report, U.S. Department of Energy, Brookhaven National Laboratory, Upton, NY, Current Firehouse PFAS Source Areas Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2023f). *Remediation System Startup and Testing Report, U.S. Department of Energy, Brookhaven National Laboratory, Upton, NY, Former Firehouse PFAS Source Areas Groundwater Treatment System.* Upton, NY: U.S. Department of Energy.

BNL. (2023g). *2023 Environmental Monitoring Plan.* Upton, NY: Brookhaven National Laboratory.

BNL. (2024a). *2023 Environmental Monitoring Report, Current and Former Landfill Areas.* Upton, NY: Brookhaven National Laboratory.

BNL. (2024b). *2023 Site Environmental Report, Volume II, Groundwater Status Report.* Upton, New York: Brookhaven National Laboratory.

BNL. (2024c). *Operations and Maintenance Manual for the Building 96 Groundwater Source Control Treatment System, Rev. 2.* Upton, NY: Brookhaven National Laboratory.

BNL. (2024d). *Environmental Monitoring Plan.* Upton, NY: Brookhaven National Laboratory.

BNL. (2024e). *Petition for Closure - OU III LIPA Groundwater Treatment System.* Upton, NY: Brookhaven National Laboratory.

BNL. (2024f). *Groundwater Treatment Systems Discharge Compliance Plan.* Upton, NY: Brookhaven National Laboratory.

BNL. (2025). *Operations and Maintenance Manual for the OU VI EDB Groundwater Treatment Systems, Rev. 1.* Upton, NY: Brookhaven National Laboratory.

BNL. (2025c). *2024 Environmental Monitoring Report, Current and Former Landfill Areas.* Upton, NY: Brookhaven National Laboratory.

deLaguna, W. (1963). *Geology of Brookhaven National Laboratory and Vicinity, Suffolk Coutny, New York.*

DOE. (2011a). *Order 458.1, Radiation Protection of the Public and the Environment.* Washington, DC: U.S. Department of Energy.

DOE. (2011b). *Order 436.1 Departmental Sustainability.* Washington, DC: U.S. Department of Energy.

DOE. (2021). *DOE Standard, Derived Concentration Technical Standard. DOE-STD-1196-2021.* Washington, DC: U.S. Department of Energy.

Franke, O., & McClymonds, P. (1972). *Summary of the Hydrologic Situation on Long Island, NY, as a Guide to Water Management Alternatives.* USGS Professional Paper 627-F.

J.R.Holzmacher P.E., LLC. (2024). *OU VI EDB Aquifer Pumpint Test Report.* Upton, NY: BNL.

P.W.Grosser. (2024a). *OU III - Building 96 Source Area Optimization Work Plan.* Upton, NY: BNL.

P.W.Grosser. (2024b). *OU III - Building 96 Source Area Optimization Report.* Upton, NY: BNL.

SCDHS. (2024). *2024 Minimum Monitoring Requirements Brookhaven National Laboratory.* Yaphank, NY: Suffolk County Department of Health Services, Division of Environmental Quality - Office of Water Resources.

Scorca, M., Dorsch, W., & Paquette, D. (1999). *Stratigraphy and Hydraulic Conditions at the Brookhaven National Laboratory and Vicinity, Suffolk County, NY 1994-97.* U.S. Geologic Survey Water Resources Investigations Report 99-4086.

U.S. EPA. (1992). *1992 Interagency Agreement, Administrative Docket Number: II-CERCLA-FFA-00201.* U.S. Environmental Protection Agency.

APPENDIX A

SITEWIDE GROUNDWATER ELEVATION MEASUREMENTS

Sitewide Groundwater Elevation Measurements

2024 Sitewide Groundwater Monitoring Report
Environmental Protection Division
Brookhaven National Laboratory

BNL Well ID	M.P. Elevation (ft. above m.s.l.)	Depth To Water (ft. below M.P.)	Map Aquifer	Date	Water Table Elev.
000-100	103.35	72.40	SG	08/15/24	30.95
000-106	117.03	85.14	SG	08/15/24	31.89
000-109	68.71	35.50	SG	08/12/24	33.21
000-111	51.67	18.51	SG	08/12/24	33.16
000-113	74.35	40.30	SG	08/15/24	34.05
000-115	93.61	61.21	SD	08/15/24	32.40
000-137	60.94	26.05	SG	08/12/24	34.89
000-147	42.51	8.12	SG	08/16/24	34.39
000-148	68.32	37.20	SG	08/16/24	31.12
000-37	45.32	8.01	SG	08/15/24	37.31
000-99	99.62	70.30	SG	08/15/24	29.32
007-03	57.63	16.07	SG	08/13/24	41.56
013-01	71.16	27.88	SD	08/13/24	43.28
017-01	65.14	16.29	SG	08/13/24	48.85
018-01	55.97	8.06	SG	08/13/24	47.91
021-01	62.73	20.50	SG	08/13/24	42.23
022-01	60.71	19.94	SG	08/13/24	40.77
025-02	76.63	27.64	SG	08/13/24	48.99
025-06	57.80	9.57	SG	08/16/24	48.23
029-01	49.93	5.75	SG	08/13/24	44.18
030-01	54.58	13.15	SG	08/13/24	41.43
034-05	91.94	NM	SG	08/16/24	NA
037-01	68.41	23.34	SG	08/13/24	45.07
037-02	74.58	30.91	SG	08/13/24	43.67
038-01	56.70	12.13	SG	08/13/24	44.57
038-02	59.98	14.45	SG	08/14/24	45.53
039-06	49.47	6.36	SG	08/14/24	43.11
039-07	58.67	17.52	SG	08/14/24	41.15
039-08	60.89	19.85	SG	08/16/24	41.04
039-11	44.67	2.15	SG	08/14/24	42.52
039-89	50.59	10.04	SG	08/16/24	40.55
040-04	50.03	10.56	SG	08/16/24	39.47
040-05	50.39	10.49	SG	08/14/24	39.90
042-01	75.51	27.38	SG	08/13/24	48.13
044-13	84.47	36.84	SG	08/13/24	47.63
046-02	88.27	45.02	SG	08/13/24	43.25
047-01	63.16	15.26	SG	08/14/24	47.90
048-02	55.28	15.03	SG	08/14/24	40.25
048-08	57.57	16.56	SG	08/14/24	41.01
048-09	55.29	14.61	SG	08/14/24	40.68
048-10	51.65	11.18	SG	08/14/24	40.47
049-02	52.18	12.12	SG	08/14/24	40.06
049-04	49.62	10.37	SG	08/14/24	39.25
053-03	73.45	26.50	SG	08/13/24	46.95
053-05	75.60	28.76	SG	08/13/24	46.84
054-07	72.02	26.41	SG	08/13/24	45.61
054-09	69.81	23.24	SG	08/13/24	46.57
054-10	76.26	29.69	SG	08/13/24	46.57
054-62	69.14	23.13	SG	08/16/24	46.01
054-64	94.22	48.68	SG	08/13/24	45.54

Sitewide Groundwater Elevation Measurements

2024 Sitewide Groundwater Monitoring Report
Environmental Protection Division
Brookhaven National Laboratory

BNL Well ID	M.P. Elevation (ft. above m.s.l.)	Depth To Water (ft. below M.P.)	Map Aquifer	Date	Water Table Elev.
054-69	67.06	21.63	SG	08/13/24	45.43
054-124	72.24	26.93	SG	08/13/24	45.31
054-128	71.67	26.20	SG	08/13/24	45.47
054-184	74.95	29.60	SG	08/13/24	45.35
055-03	89.08	45.87	SG	08/13/24	43.21
055-04	90.26	45.90	SG	08/13/24	44.36
055-05	84.28	39.77	SG	08/13/24	44.51
055-15	67.49	22.60	SG	08/13/24	44.89
055-30	71.54	26.51	SG	08/13/24	45.03
056-04	82.29	40.07	SG	08/14/24	42.22
057-01	53.04	11.45	SG	08/16/24	41.59
060-01	44.76	7.15	SG	08/15/24	37.61
061-07	40.67	3.71	SG	08/15/24	36.96
063-02	71.78	25.97	SG	08/13/24	45.81
063-04	70.87	24.74	SG	08/13/24	46.13
063-06	76.49	29.92	SG	08/13/24	46.57
064-01	86.24	41.69	SG	08/13/24	44.55
064-03	82.81	37.16	SG	08/13/24	45.65
064-50	82.99	37.25	SG	08/13/24	45.74
064-54	86.24	40.47	SG	08/13/24	45.77
064-55	72.82	28.00	SG	08/13/24	44.82
064-67	99.49	53.61	SG	08/13/24	45.88
065-01	90.72	47.43	SG	08/13/24	43.29
065-120	75.27	30.53	SG	08/13/24	44.74
065-121	69.93	NM	SG	08/16/24	NA
065-125	67.97	23.21	SG	08/16/24	44.76
065-124	67.93	23.23	SG	08/16/24	44.70
065-162	90.14	46.18	SG	08/13/24	43.96
065-167	109.28	64.73	SG	08/13/24	44.55
065-173	85.42	40.96	SG	08/13/24	44.46
065-38	105.89	62.42	SG	08/13/24	43.47
065-42	94.68	51.72	SG	08/13/24	42.96
066-07	90.30	47.03	SG	08/14/24	43.27
066-08	89.72	46.58	SG	08/14/24	43.14
066-83	86.94	44.50	SG	08/15/24	42.44
069-10	55.29	17.04	SG	08/16/24	38.25
070-01	59.96	22.24	SG	08/16/24	37.72
072-01	83.09	38.13	SG	08/14/24	44.96
072-03	70.19	24.70	SG	08/14/24	45.49
072-04	69.96	24.49	SG	08/14/24	45.47
073-01	77.75	32.18	SG	08/15/24	45.57
073-26	83.91	39.46	SG	08/15/24	44.45
073-29	87.73	43.43	SG	08/15/24	44.30
074-135	91.06	46.87	SG	08/15/24	44.19
075-01	88.71	45.48	SG	08/16/24	43.23
075-188	82.84	39.44	SG	08/16/24	43.40
075-198	76.60	33.80	SG	08/13/24	42.80
075-202	79.29	36.20	SG	08/13/24	43.09
075-288	87.96	45.18	SG	08/13/24	42.78
075-291	83.41	40.73	SG	08/13/24	42.68

Sitewide Groundwater Elevation Measurements

2024 Sitewide Groundwater Monitoring Report
Environmental Protection Division
Brookhaven National Laboratory

BNL Well ID	M.P. Elevation (ft. above m.s.l.)	Depth To Water (ft. below M.P.)	Map Aquifer	Date	Water Table Elev.
075-810	73.41	31.00	SG	08/13/24	42.41
075-418	77.44	34.99	SG	08/13/24	42.45
076-10	79.48	37.35	SG	08/14/24	42.13
076-122	78.03	35.45	SG	08/16/24	42.58
076-13	80.95	38.23	SG	08/16/24	42.72
076-16	82.50	40.08	SG	08/16/24	42.42
076-183	79.75	37.58	SG	08/14/24	42.17
076-19	77.83	35.35	SG	08/16/24	42.48
076-24	77.53	34.60	SG	08/13/24	42.93
076-25	80.48	37.83	SG	08/16/24	42.65
076-29	70.49	27.75	SG	08/13/24	42.74
076-173	85.46	42.94	SG	08/15/24	42.52
076-258	82.44	39.78	SG	08/16/24	42.66
076-373	82.77	40.00	SG	08/16/24	42.77
076-380	75.90	33.35	SG	08/16/24	42.55
077-02	74.39	33.20	SG	08/15/24	41.19
080-02	51.88	15.32	SG	08/16/24	36.56
082-01	84.21	39.90	SG	08/20/24	44.31
083-02	94.73	50.87	MG	08/15/24	43.86
083-03	85.50	41.33	SG	08/15/24	44.17
083-05	109.78	66.80	SG	08/15/24	42.98
083-06	88.40	44.18	SG	08/14/24	44.22
083-33	92.52	48.61	SG	08/15/24	43.91
083-44	106.83	63.66	SG	08/15/24	43.17
083-47	94.02	50.57	SG	08/14/24	43.45
084-12	103.52	60.84	SG	08/16/24	42.68
084-87	97.66	53.88	SG	08/15/24	43.78
084-90	96.47	53.09	SG	08/15/24	43.38
084-96	110.89	67.94	SG	08/15/24	42.95
085-235	79.71	37.46	SG	08/14/24	42.25
085-287	72.45	30.15	SG	08/13/24	42.30
085-289	72.61	30.52	SG	08/13/24	42.09
085-379	64.11	21.81	SG	08/16/24	42.30
085-67	70.52	28.30	SG	08/16/24	42.22
085-76	68.21	26.61	SG	08/16/24	41.60
085-404	70.57	28.51	SG	08/13/24	42.06
085-416	63.53	21.06	SG	08/14/24	42.47
086-123	74.38	32.85	SG	08/14/24	41.53
086-42	79.25	38.55	SG	08/14/24	40.70
087-09	67.70	27.34	SG	08/15/24	40.36
087-22	87.37	47.46	SG	08/14/24	39.91
087-23	72.46	33.34	SG	08/15/24	39.12
088-109	51.83	12.28	SG	08/15/24	39.55
089-14	49.81	12.35	SG	08/15/24	37.46
090-02	53.31	17.27	SG	08/20/24	36.04
090-10	45.61	8.98	SG	08/15/24	36.63
092-01	84.61	41.00	SG	08/14/24	43.61
092-02	90.78	47.12	SG	08/16/24	43.66
093-02	110.87	68.94	SG	08/14/24	41.93
093-04	89.87	46.22	SG	08/14/24	43.65

Sitewide Groundwater Elevation Measurements

2024 Sitewide Groundwater Monitoring Report
Environmental Protection Division
Brookhaven National Laboratory

BNL Well ID	M.P. Elevation (ft. above m.s.l.)	Depth To Water (ft. below M.P.)	Map Aquifer	Date	Water Table Elev.
093-05	81.13	37.57	SG	08/14/24	43.56
093-89	110.26	67.87	SG	08/14/24	42.39
093-93	93.90	50.60	SG	08/14/24	43.30
093-94	85.68	42.71	SG	08/20/24	42.97
093-96	89.15	46.43	SG	08/14/24	42.72
093-97	92.57	50.30	SG	08/16/24	42.27
094-01	97.26	54.97	SG	08/16/24	42.29
094-277	112.76	70.56	SG	08/15/24	42.20
095-67	86.61	45.14	SG	08/16/24	41.47
095-68	83.50	42.26	SG	08/16/24	41.24
095-171	63.02	22.21	SG	08/14/24	40.81
096-52	68.00	27.95	SG	08/16/24	40.05
096-122	67.60	26.76	SG	08/14/24	40.84
096-128	67.90	27.52	SG	08/14/24	40.38
097-14	60.10	21.52	SG	08/15/24	38.58
097-276	82.96	43.98	SG	08/14/24	38.98
098-104	54.94	17.03	SG	08/15/24	37.91
098-42	52.22	14.40	SG	08/15/24	37.82
099-01	51.05	13.45	SG	08/15/24	37.60
100-10	46.81	10.60	SG	08/15/24	36.21
101-01	91.08	48.80	SG	08/16/24	42.28
101-09	103.87	63.01	SG	08/16/24	40.86
101-10	86.61	45.17	SG	08/16/24	41.44
102-01	85.61	44.32	SG	08/15/24	41.29
102-12	93.28	51.86	SG	08/16/24	41.42
102-25	80.53	39.84	SG	08/15/24	40.69
102-29	89.60	48.40	SG	08/15/24	41.20
102-37	91.57	49.83	SG	08/15/24	41.74
102-38	83.57	42.07	SG	08/15/24	41.50
103-01	82.46	42.05	SG	08/16/24	40.41
103-02	91.24	47.85	SG	08/16/24	43.39
103-10	102.53	61.02	SG	08/15/24	41.51
104-01	66.08	26.32	SG	08/14/24	39.76
104-26	84.37	dry	SG	08/16/24	NA
105-02	70.31	30.57	SG	08/14/24	39.74
105-05	60.85	22.12	SG	08/14/24	38.73
105-74	66.64	27.43	SG	08/14/24	39.21
106-16	72.73	34.80	SG	08/15/24	37.93
106-21	68.52	31.35	SG	08/14/24	37.17
107-14	69.62	32.90	SG	08/15/24	36.72
108-08	65.18	28.85	SG	08/15/24	36.33
108-15	59.98	23.76	SG	08/15/24	36.22
109-03	114.80	76.83	SG	08/15/24	37.97
109-29	124.78	85.73	SG	08/15/24	39.05
110-26	91.60	51.22	SG	08/16/24	40.38
110-27	96.19	57.21	SG	08/16/24	38.98
111-01	75.68	36.93	SG	08/16/24	38.75
113-10	72.32	34.80	SG	08/14/24	37.52
114-02	64.12	28.14	SG	08/14/24	35.98
115-32	67.17	31.38	SG	08/14/24	35.79

Sitewide Groundwater Elevation Measurements

2024 Sitewide Groundwater Monitoring Report
Environmental Protection Division
Brookhaven National Laboratory

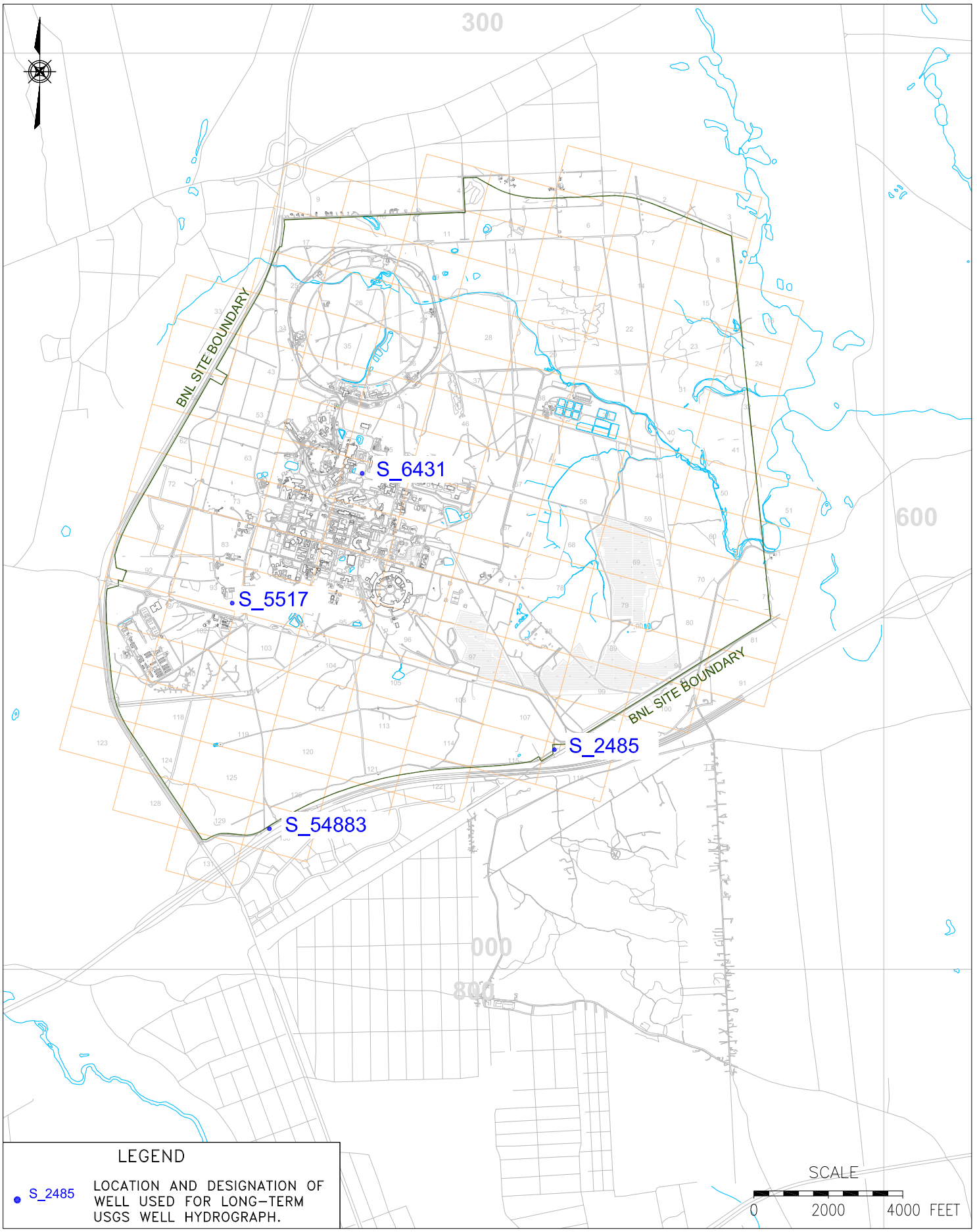
BNL Well ID	M.P. Elevation (ft. above m.s.l.)	Depth To Water (ft. below M.P.)	Map Aquifer	Date	Water Table Elev.
115-41	56.30	20.67	SG	08/13/24	35.63
116-14	68.59	32.80	SG	08/15/24	35.79
117-01	116.14	79.60	SG	08/15/24	36.54
117-02	112.30	77.04	SG	08/15/24	35.26
117-04	112.56	76.89	MG	08/15/24	35.67
117-05	111.29	76.03	MG	08/15/24	35.26
117-06	111.73	75.92	MG	08/15/24	35.81
117-07	105.12	68.66	SG	08/15/24	36.46
118-01	84.86	46.90	SG	08/16/24	37.96
118-04	113.03	74.50	SG	08/16/24	38.53
119-01	81.85	44.87	SG	08/16/24	36.98
119-03	82.70	44.85	SG	08/16/24	37.85
121-06	69.00	33.07	SG	08/14/24	35.93
122-01	61.81	25.87	SG	08/14/24	35.94
124-01	99.26	63.32	SG	08/20/24	35.94
124-04	117.05	80.60	SG	08/16/24	36.45
126-01	83.61	48.53	SG	08/16/24	35.08
600-18	47.61	12.90	SG	08/15/24	34.71
600-19	43.27	9.82	SG	08/12/24	33.45
600-22	49.51	18.00	SG	08/12/24	31.51
600-25	43.63	11.28	SG	08/12/24	32.35
800-26	45.54	19.90	SG	08/12/24	25.64
800-29	55.61	38.22	SG	08/15/24	17.39
800-39	80.25	55.98	SG	08/15/24	24.27
800-42	78.86	53.50	SG	08/16/24	25.36
800-51	86.17	60.10	SG	08/15/24	26.07

NA - Not Available
NM - Not Measured

APPENDIX B

2024 LONG TERM WELL

HYDROGRAPHS



Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

LOCATIONS OF BNL AND USGS HYDROGRAPH WELLS

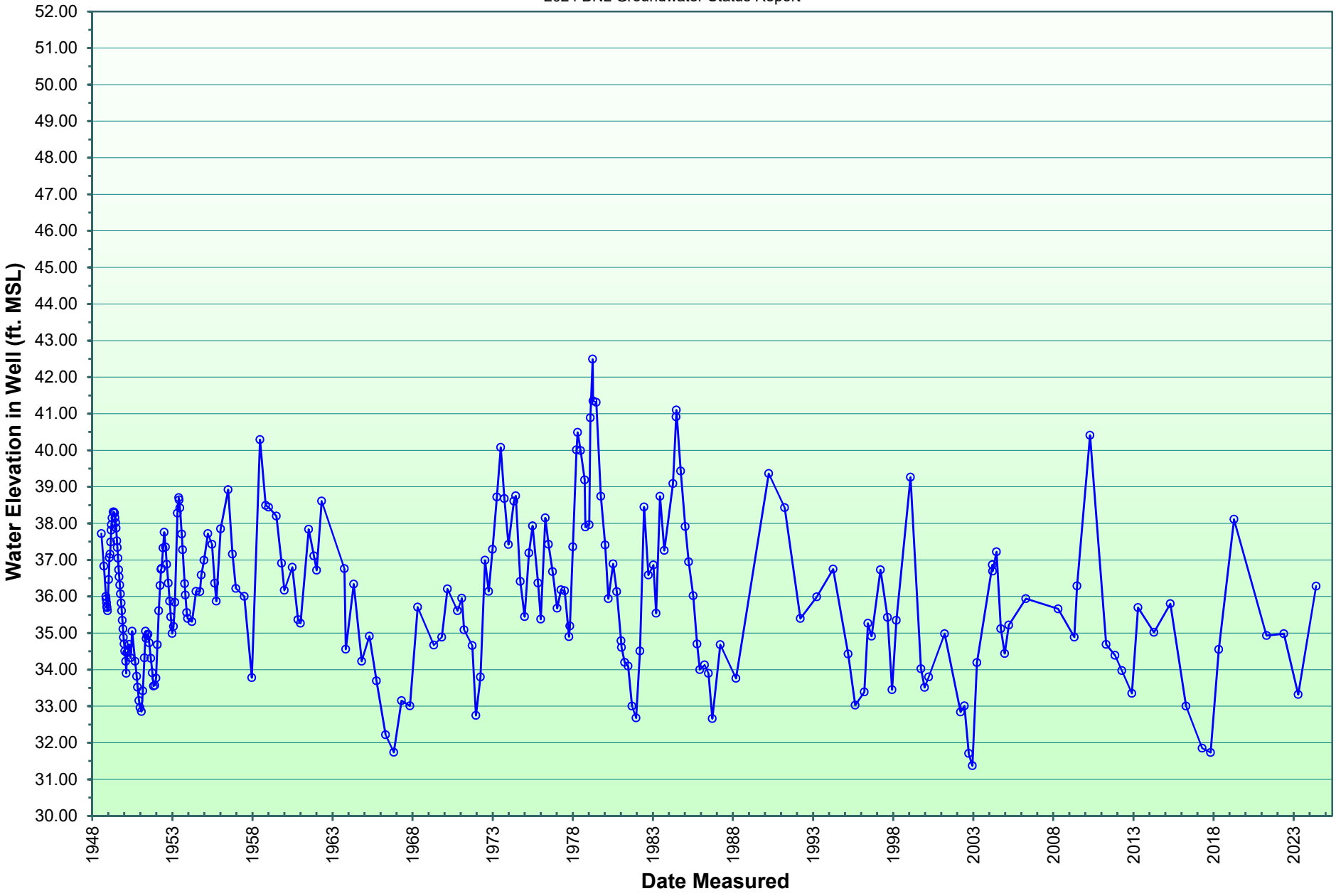
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	–	–

FIGURE NO.: B–1

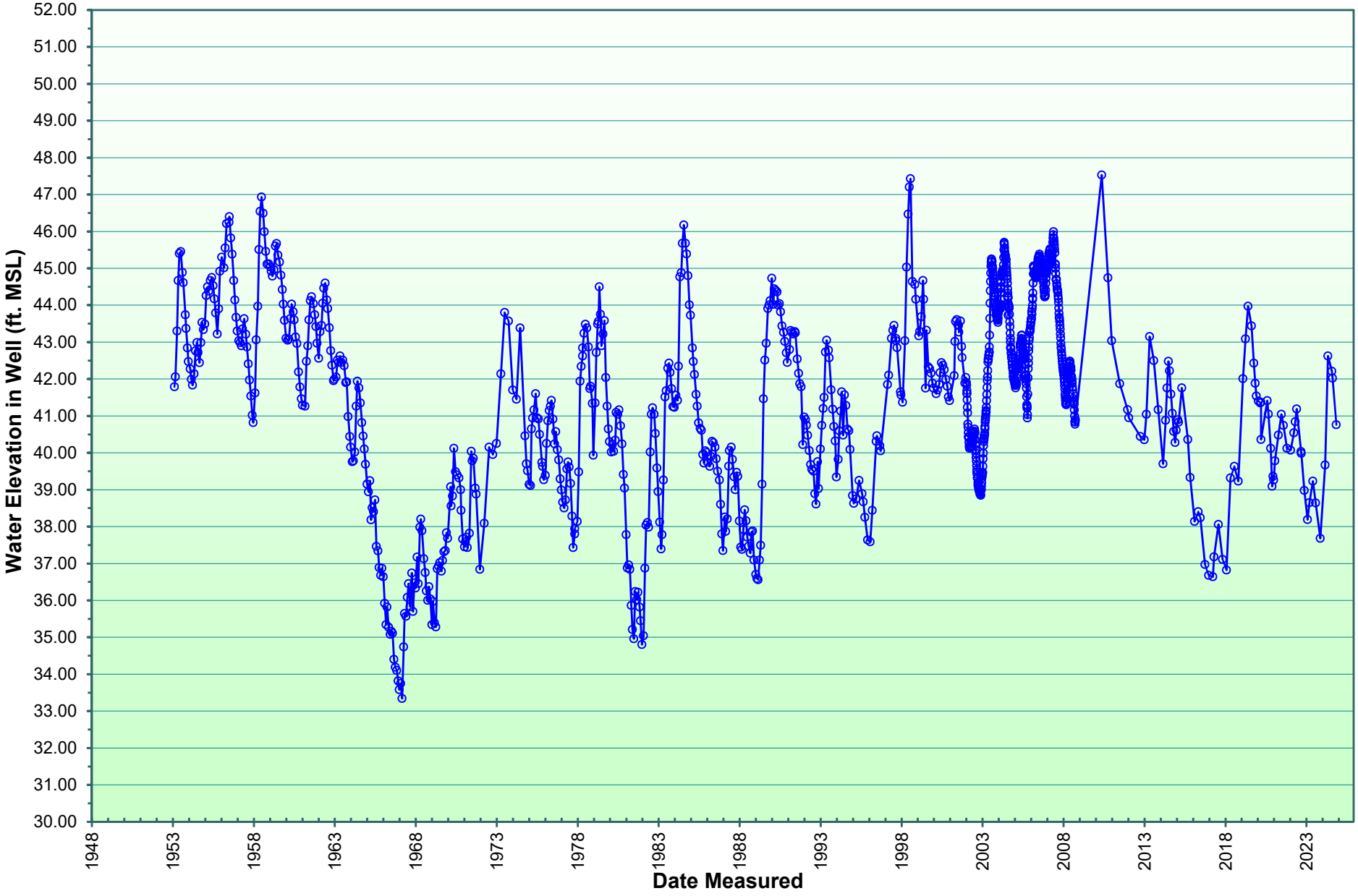
Long Term Hydrograph
for USGS Well No. S 2485. 1 (116-14) (Well Depth 75ft BLS)

2024 BNL Groundwater Status Report



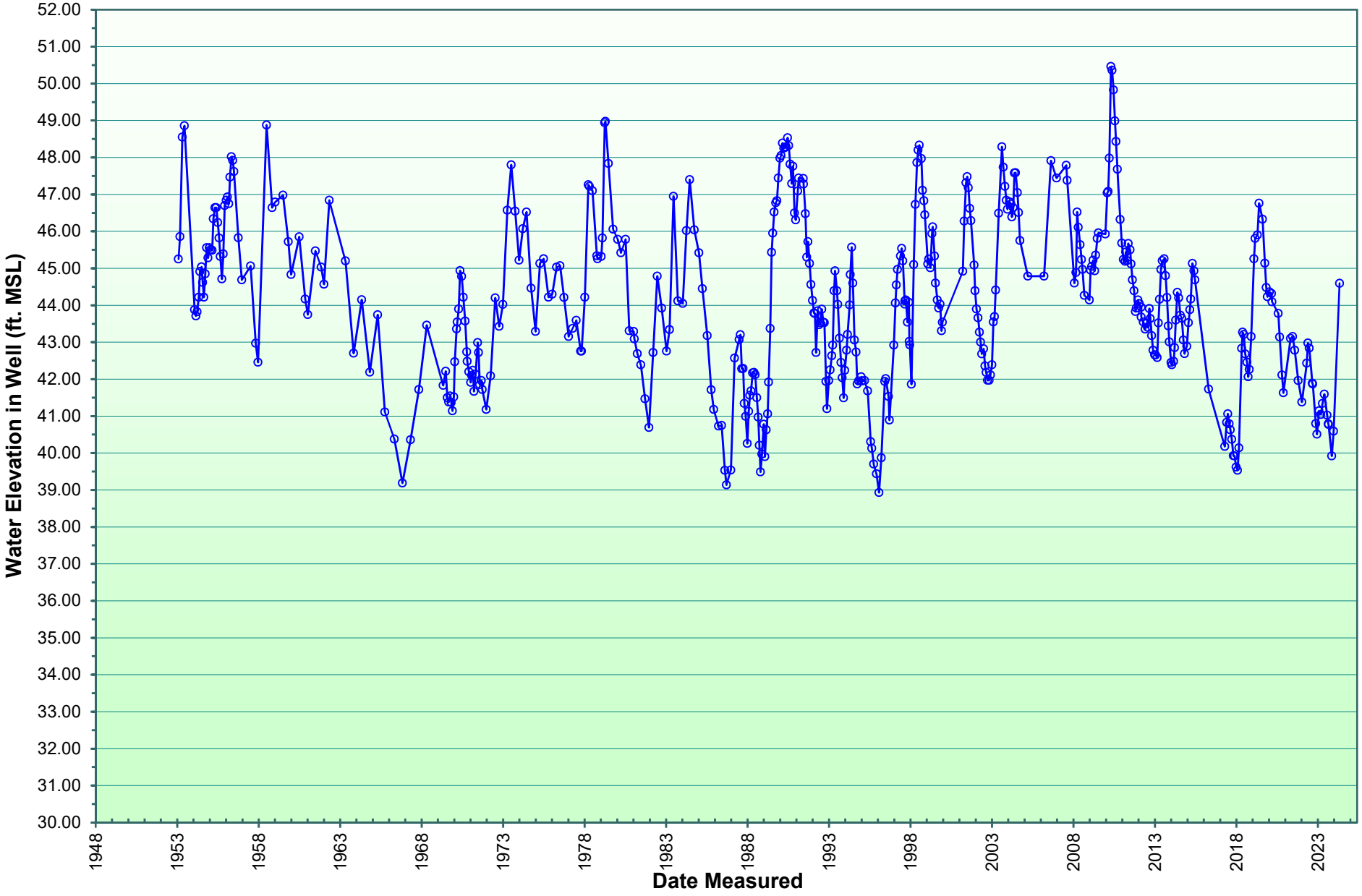
Long Term Hydrograph
for USGS Well No. S 5517. 1 (093-03) (Well Depth 91ft BLS)

2024 BNL Groundwater Status Report



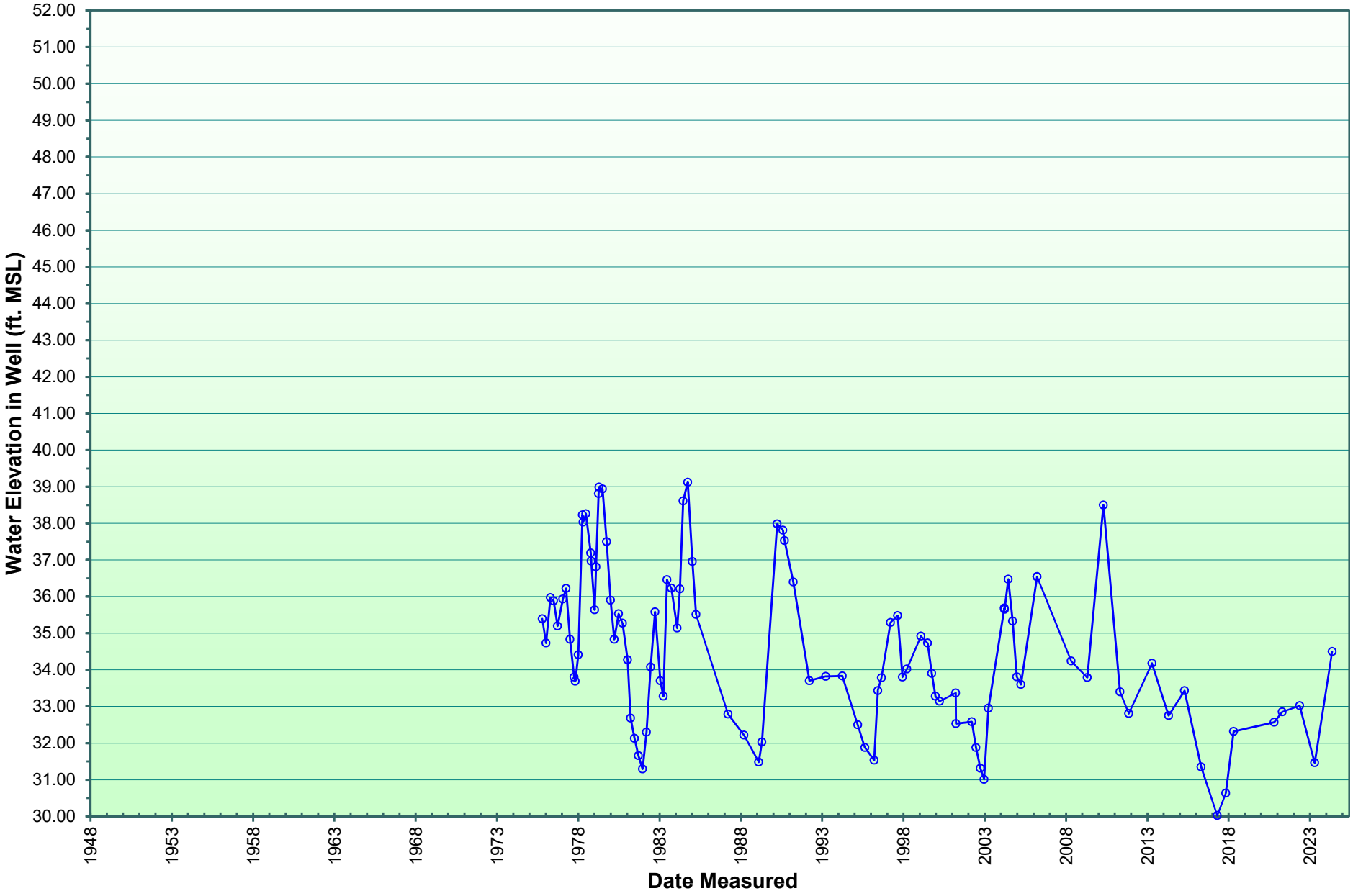
Long Term Hydrograph
for USGS Well No. S 6431. 1 (065-14) (Well Depth 125ft BLS)

2024 BNL Groundwater Status Report



Long Term Hydrograph
for USGS Well No. S 54883. 1 (130-06) (Well Depth 66ft BLS)

2024 BNL Groundwater Status Report



APPENDIX C

2024 CERCLA GROUNDWATER

RESULTS

OU I (South Boundary)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU I South Boundary VOCs

Analyte	098-99 Depth : 44.50 03/12/2024 ug/L		098-99 Depth : 44.50 05/29/2024 ug/L		098-99 Depth : 44.50 09/06/2024 ug/L		098-99 Depth : 44.50 11/14/2024 ug/L		107-40 Depth : 145.00 09/19/2024 ug/L		107-41 Depth : 133.00 09/16/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	**1.9**		**2.3**		**2.1**		**1.04**		**0.67**	J	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane							**0.73**					
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.4	J	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	**0.98**	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	3	U	3	U	3	U
8260 TVOC	1.9		2.3		2.1		1.04		1.07		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU I South Boundary VOCs

Analyte	115-13 Depth : 145.00 09/24/2024 ug/L		115-16 Depth : 130.00 09/24/2024 ug/L		115-51 Depth : 140.00 09/24/2024 ug/L							
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethane	0.5	U	**1.21**		0.5	U						
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U						
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U						
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U						
1,4-Dioxane												
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
Benzene	0.5	U	0.5	U	0.5	U						
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U						
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U						
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U						
Bromobenzene	0.5	U	0.5	U	0.5	U						
Bromodichloromethane	0.5	U	0.5	U	0.5	U						
Bromoform	0.5	U	0.5	U	0.5	U						
Carbon tetrachloride	0.5	U	0.5	U	0.5	U						
Chlorobenzene	0.5	U	0.5	U	0.5	U						
Chlorobromomethane	0.5	U	0.5	U	0.5	U						
Chloroethane	0.5	U	**0.94**	J	0.5	U						
Chloroform	**0.53**	J	0.5	U	0.5	U						
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U						
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Cymene	0.5	U	0.5	U	0.5	U						
DBCP	0.5	U	0.5	U	0.5	U						
Dibromochloromethane	0.5	U	0.5	U	0.5	U						
Dibromomethane	0.5	U	0.5	U	0.5	U						
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U						
EDB	0.5	U	0.5	U	0.5	U						
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U						
Ethylbenzene	0.5	U	0.5	U	0.5	U						
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U						
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
m/p xylene	0.5	U	0.5	U	0.5	U						
Methyl bromide	0.5	U	0.5	U	0.5	U						
Methyl chloride	0.5	U	0.5	U	0.5	U						
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U						
Methylene chloride	0.5	U	0.5	U	0.5	U						
n-Butylbenzene	0.5	U	0.5	U	0.5	U						
n-Propylbenzene	0.5	U	0.5	U	0.5	U						
Naphthalene	0.5	U	0.5	U	0.5	U						
o-Chlorotoluene	0.5	U	0.5	U	0.5	U						
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
o-Xylene	0.5	U	0.5	U	0.5	U						
p-Chlorotoluene	0.5	U	0.5	U	0.5	U						
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
sec-Butylbenzene	0.5	U	0.5	U	0.5	U						
Styrene	0.5	U	0.5	U	0.5	U						
tert-Butylbenzene	0.5	U	0.5	U	0.5	U						
Tetrachloroethylene	0.5	U	0.5	U	0.5	U						
Toluene	0.5	U	0.5	U	0.5	U						
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Trichloroethylene	0.5	U	0.5	U	0.5	U						
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U						
Vinyl chloride	0.5	U	0.5	U	0.5	U						
Xylene (total)	3	U	3	U	3	U						
8260 TVOC	0.53		2.15		0							

OU III (Building 96)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-293 Depth : 50.00 10/02/2024 ug/L		085-335 Depth : 35.00 04/10/2024 ug/L		085-335 Depth : 0.00 08/27/2024 ug/L		085-335 Depth : 35.00 10/08/2024 ug/L		085-335 Depth : 0.00 11/05/2024 ug/L		085-347 Depth : 22.50 04/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U			0.5	U			0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.29	U	0.5	U	0.29	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.34	U	0.5	U	0.34	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.4	U	0.5	U	0.4	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.31	U	0.5	U	0.31	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U			0.5	U			0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U			0.5	U			0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U			0.5	U			0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U			0.5	U			0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.47	U	0.5	U	0.47	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.46	U	0.5	U	0.46	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U			0.5	U			0.5	U
2,2-Dichloropropane	0.5	U	0.5	U			0.5	U			0.5	U
2-Hexanone					0.55	U			0.55	U		
Acetone					2.4	U			2.4	U		
Benzene	0.5	U	0.5	U	0.38	U	0.5	U	0.38	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U			0.5	U			0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U			0.5	U			0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U			0.5	U			0.5	U
Bromobenzene	0.5	U	0.5	U			0.5	U			0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.28	U	0.5	U
Bromoform	0.5	U	0.5	U	0.22	U	0.5	U	0.22	U	0.5	U
Carbon disulfide					0.28	U			0.28	U		
Carbon tetrachloride	0.5	U	0.5	U	0.24	U	0.5	U	0.24	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.3	U	0.5	U	0.3	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U			0.5	U			0.5	U
Chloroethane	0.5	U	0.5	U	0.37	U	0.5	U	0.37	U	0.5	U
Chloroform	0.35	J	0.5	U	0.38	U	0.5	U	0.38	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.17	U	0.5	U	0.17	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.34	U	0.5	U	0.34	U	0.5	U
Cymene	0.5	U	0.5	U			0.5	U			0.5	U
DBCP	0.5	U	0.5	U			0.5	U			0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.27	U	0.5	U	0.27	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.23	U	0.5	U	0.23	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U			0.5	U			0.5	U
EDB	0.5	U	0.5	U			0.5	U			0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.33	U	0.5	U	0.33	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.28	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U			0.5	U			0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.27	U	0.5	U	0.27	U	0.5	U
m/p xylene	1	U	1	U	0.3	U	1	U	0.3	U	1	U
Methyl bromide	0.5	U	0.5	U	1.2	U	0.5	U	1.2	U	0.5	U
Methyl chloride	0.5	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Methyl ethyl ketone					1	U			1	U		
Methyl isobutyl ketone (MIBK)					0.19	U			0.19	U		
Methyl tert-butyl ether	0.5	U	0.5	U			0.5	U			0.5	U
Methylene chloride	0.5	U	0.5	U	0.56	U	0.5	U	0.56	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U			0.5	U			0.5	U
n-Propylbenzene	0.5	U	0.5	U			0.5	U			0.5	U
Naphthalene	0.5	U	0.5	U			0.5	U			0.5	U
o-Chlorotoluene	0.5	U	0.5	U			0.5	U			0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.28	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.34	U	0.5	U	0.34	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U			0.5	U			0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.29	U	0.5	U	0.29	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U			0.5	U			0.5	U
Styrene	0.5	U	0.5	U	0.37	U	0.5	U	0.37	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U			0.5	U			0.5	U
Tetrachloroethylene	0.5	U	**7.8**		**3.7**		**3.7**		**4.8**		**3.7**	
Toluene	0.5	U	0.5	U	0.31	U	0.5	U	0.31	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.31	U	0.5	U	0.31	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.33	U	0.5	U	0.33	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.28	U	0.5	U
Vinyl acetate					0.41	U			0.41	U		
Vinyl chloride	0.5	U	0.5	U	0.38	U	0.5	U	0.38	U	0.5	U
Xylene (total)	1.5	U	1.5	U	0.3	U	1.5	U	0.3	U	1.5	U

8260 TVOC	0.35		7.8				3.7			3.7	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-347 Depth : 0.00 04/15/2024 ug/L		085-347 Depth : 0.00 08/26/2024 ug/L		085-347 Depth : 22.50 10/04/2024 ug/L		085-347 Depth : 0.00 11/05/2024 ug/L		085-348 Depth : 34.50 02/09/2024 ug/L		085-348 Depth : 34.50 04/12/2024 ug/L	
1,1,1,2-Tetrachloroethane					0.5	U			0.5	U	0.5	U
1,1,1-Trichloroethane	0.29	U	0.29	U	0.5	U	0.29	U	0.5	U	0.24	J
1,1,2,2-Tetrachloroethane	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.34	U	0.34	U	0.5	U	0.34	U	0.5	U	0.5	U
1,1-Dichloroethane	0.4	U	0.4	U	0.5	U	0.4	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.31	U	0.31	U	0.5	U	0.31	U	0.5	U	0.5	U
1,1-Dichloropropene					0.5	U			0.5	U	0.5	U
1,2,3-Trichlorobenzene					0.5	U			0.5	U	0.16	J
1,2,3-Trichloropropane					0.5	U			0.5	U	0.5	U
1,2,4-Trichlorobenzene					0.5	U			0.5	U	0.5	U
1,2-Dichloroethane	0.47	U	0.47	U	0.5	U	0.47	U	0.5	U	0.5	U
1,2-Dichloropropane	0.46	U	0.46	U	0.5	U	0.46	U	0.5	U	0.5	U
1,3-Dichloropropane					0.5	U			0.5	U	0.5	U
2,2-Dichloropropane					0.5	U			0.5	U	0.5	U
2-Hexanone	0.55	U	0.55	U			0.55	U				
Acetone	2.4	U	2.4	U			2.4	U				
Benzene	0.38	U	0.38	U	0.5	U	0.38	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl					0.5	U			0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-					0.5	U			0.5	U	0.5	U
Benzene, 1-methylethyl-					0.5	U			0.5	U	0.5	U
Bromobenzene					0.5	U			0.5	U	0.5	U
Bromodichloromethane	0.28	U	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U
Bromoform	0.22	U	0.22	U	0.5	U	0.22	U	0.5	U	0.5	U
Carbon disulfide	0.28	U	0.28	U			0.28	U				
Carbon tetrachloride	0.24	U	0.24	U	0.5	U	0.24	U	0.5	U	0.5	U
Chlorobenzene	0.3	U	0.3	U	0.5	U	0.3	U	0.5	U	0.5	U
Chlorobromomethane					0.5	U			0.5	U	0.5	U
Chloroethane	0.37	U	0.37	U	0.5	U	0.37	U	0.5	U	0.5	U
Chloroform	0.38	U	0.38	U	0.5	U	0.38	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.17	U	0.17	U	0.5	U	0.17	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.34	U	0.34	U	0.5	U	0.34	U	0.5	U	0.5	U
Cymene					0.5	U			0.5	U	0.5	U
DBCP					0.5	U			0.5	U	0.5	U
Dibromochloromethane	0.27	U	0.27	U	0.5	U	0.27	U	0.5	U	0.5	U
Dibromomethane	**0.33**	J	0.23	U	0.5	U	0.23	U	0.5	U	0.5	U
Dichlorodifluoromethane					0.5	U			0.5	U	0.5	U
EDB					0.5	U			0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.33	U	0.33	U	0.5	U	0.33	U	0.5	U	0.5	U
Ethylbenzene	0.28	U	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U
Hexachlorobutadiene					0.5	U			0.5	U	0.5	U
m-Dichlorobenzene	0.27	U	0.27	U	0.5	U	0.27	U	0.5	U	0.5	U
m/p xylene	0.3	U	0.3	U	1	U	0.3	U	1	U	1	U
Methyl bromide	1.2	U	1.2	U	0.5	U	1.2	U	0.5	U	0.5	U
Methyl chloride	1	U	1	U	0.5	U	1	U	0.5	U	0.2	J
Methyl ethyl ketone	1	U	1	U			1	U				
Methyl isobutyl ketone (MIBK)	0.19	U	0.19	U			0.19	U				
Methyl tert-butyl ether					0.5	U			0.5	U	0.5	U
Methylene chloride	0.56	U	0.56	U	0.5	U	0.56	U	0.5	U	0.5	U
n-Butylbenzene					0.5	U			0.5	U	0.5	U
n-Propylbenzene					0.5	U			0.5	U	0.5	U
Naphthalene					0.5	U			0.5	U	0.5	U
o-Chlorotoluene					0.5	U			0.5	U	0.5	U
o-Dichlorobenzene	0.28	U	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U
o-Xylene	0.34	U	0.34	U	0.5	U	0.34	U	0.5	U	0.5	U
p-Chlorotoluene					0.5	U			0.5	U	0.5	U
p-Dichlorobenzene	0.29	U	0.29	U	0.5	U	0.29	U	0.5	U	0.5	U
sec-Butylbenzene					0.5	U			0.5	U	0.5	U
Styrene	0.37	U	0.37	U	0.5	U	0.37	U	0.5	U	0.5	U
tert-Butylbenzene					0.5	U			0.5	U	0.5	U
Tetrachloroethylene	**3.2**		**2**		**2.5**		**2.6**		**19**		**19**	
Toluene	0.31	U	0.31	U	0.5	U	0.31	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.31	U	0.31	U	0.5	U	0.31	U	0.5	U	0.5	U
Trichloroethylene	0.33	U	0.33	U	0.5	U	0.33	U	0.5	U	0.5	U
Trichlorofluoromethane	0.28	U	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U
Vinyl acetate	0.41	U	0.41	U			0.41	U				
Vinyl chloride	0.38	U	0.38	U	0.5	U	0.38	U	0.5	U	0.5	U
Xylene (total)	0.3	U	0.3	U	1.5	U	0.3	U	1.5	U	1.5	U

8260 TVOC					2.5				19		19.6	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-348 Depth : 0.00 04/15/2024 ug/L		085-348 Depth : 0.00 08/26/2024 ug/L		085-348 Depth : 34.50 09/04/2024 ug/L		085-348 Depth : 34.50 10/04/2024 ug/L		085-348 Depth : 0.00 11/05/2024 ug/L		085-349 Depth : 22.50 04/11/2024 ug/L	
1,1,1,2-Tetrachloroethane					0.5	U	0.5	U			0.5	U
1,1,1-Trichloroethane	0.29	U	0.29	U	0.5	U	0.5	U	0.29	U	0.5	U
1,1,2,2-Tetrachloroethane	0.2	U	0.2	U	0.5	U	0.5	U	0.2	U	0.5	U
1,1,2-Trichloroethane	0.34	U	0.34	U	0.5	U	0.5	U	0.34	U	0.5	U
1,1-Dichloroethane	0.4	U	0.4	U	0.5	U	0.5	U	0.4	U	0.5	U
1,1-Dichloroethylene	0.31	U	0.31	U	0.5	U	0.5	U	0.31	U	0.5	U
1,1-Dichloropropene					0.5	U	0.5	U			0.5	U
1,2,3-Trichlorobenzene					0.5	U	0.5	U			0.5	U
1,2,3-Trichloropropane					0.5	U	0.5	U			0.5	U
1,2,4-Trichlorobenzene					0.5	U	0.5	U			0.5	U
1,2-Dichloroethane	0.47	U	0.47	U	0.5	U	0.5	U	0.47	U	0.5	U
1,2-Dichloropropane	0.46	U	0.46	U	0.5	U	0.5	U	0.46	U	0.5	U
1,3-Dichloropropane					0.5	U	0.5	U			0.5	U
2,2-Dichloropropane					0.5	U	0.5	U			0.5	U
2-Hexanone	0.55	U	0.55	U					0.55	U		
Acetone	2.4	U	2.4	U					2.4	U		
Benzene	0.38	U	0.38	U	0.5	U	0.5	U	0.38	U	0.5	U
Benzene, 1,2,4-trimethyl					0.5	U	0.5	U			0.5	U
Benzene, 1,3,5-trimethyl-					0.5	U	0.5	U			0.5	U
Benzene, 1-methylethyl-					0.5	U	0.5	U			0.5	U
Bromobenzene					0.5	U	0.5	U			0.5	U
Bromodichloromethane	0.28	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
Bromoform	0.22	U	0.22	U	0.5	U	0.5	U	0.22	U	0.5	U
Carbon disulfide	0.28	U	0.28	U					0.28	U		
Carbon tetrachloride	0.24	U	0.24	U	0.5	U	0.5	U	0.24	U	0.5	U
Chlorobenzene	0.3	U	0.3	U	0.5	U	0.5	U	0.3	U	0.5	U
Chlorobromomethane					0.5	U	0.5	U			0.5	U
Chloroethane	0.37	U	0.37	U	0.5	U	0.5	U	0.37	U	0.5	U
Chloroform	0.38	U	**0.42**	J	0.22	J	0.2	J	0.38	U	0.5	U
cis-1,2-Dichloroethylene	0.17	U	0.17	U	0.5	U	0.5	U	0.17	U	0.5	U
cis-1,3-Dichloropropene	0.34	U	0.34	U	0.5	U	0.5	U	0.34	U	0.5	U
Cymene					0.5	U	0.5	U			0.5	U
DBCP					0.5	U	0.5	U			0.5	U
Dibromochloromethane	0.27	U	0.27	U	0.5	U	0.5	U	0.27	U	0.5	U
Dibromomethane	**0.3**	J	**0.34**	J	0.5	U	0.5	U	0.23	U	0.5	U
Dichlorodifluoromethane					0.5	U	0.5	U			0.5	U
EDB					0.5	U	0.5	U			0.5	U
Ethene, 1,2-dichloro-, (E)-	0.33	U	0.33	U	0.5	U	0.5	U	0.33	U	0.5	U
Ethylbenzene	0.28	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
Hexachlorobutadiene					0.5	U	0.5	U			0.5	U
m-Dichlorobenzene	0.27	U	0.27	U	0.5	U	0.5	U	0.27	U	0.5	U
m/p xylene	0.3	U	0.3	U	1	U	1	U	0.3	U	1	U
Methyl bromide	1.2	U	1.2	U	0.5	U	0.5	U	1.2	U	0.5	U
Methyl chloride	1	U	1	U	0.5	U	0.5	U	1	U	0.23	J
Methyl ethyl ketone	1	U	1	U					1	U		
Methyl isobutyl ketone (MIBK)	0.19	U	0.19	U					0.19	U		
Methyl tert-butyl ether					0.5	U	0.5	U			0.5	U
Methylene chloride	0.56	U	0.56	U	0.5	U	0.5	U	0.56	U	0.5	U
n-Butylbenzene					0.5	U	0.5	U			0.5	U
n-Propylbenzene					0.5	U	0.5	U			0.5	U
Naphthalene					0.5	U	0.5	U			0.5	U
o-Chlorotoluene					0.5	U	0.5	U			0.5	U
o-Dichlorobenzene	0.28	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
o-Xylene	0.34	U	0.34	U	0.5	U	0.5	U	0.34	U	0.5	U
p-Chlorotoluene					0.5	U	0.5	U			0.5	U
p-Dichlorobenzene	0.29	U	0.29	U	0.5	U	0.5	U	0.29	U	0.5	U
sec-Butylbenzene					0.5	U	0.5	U			0.5	U
Styrene	0.37	U	0.37	U	0.5	U	0.5	U	0.37	U	0.5	U
tert-Butylbenzene					0.5	U	0.5	U			0.5	U
Tetrachloroethylene	**22**		**6.4**		**15**		**9.8**		**6.5**		**1.2**	
Toluene	0.31	U	0.31	U	0.5	U	0.5	U	0.31	U	0.5	U
trans-1,3-Dichloropropene	0.31	U	0.31	U	0.5	U	0.5	U	0.31	U	0.5	U
Trichloroethylene	0.33	U	0.33	U	0.5	U	0.5	U	0.33	U	0.5	U
Trichlorofluoromethane	0.28	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
Vinyl acetate	0.41	U	0.41	U					0.41	U		
Vinyl chloride	0.38	U	0.38	U	0.5	U	0.5	U	0.38	U	0.5	U
Xylene (total)	0.3	U	0.3	U	1.5	U	1.5	U	0.3	U	1.5	U

8260 TVOC					15.22		10				1.43	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Building 96)

Analyte	085-349 Depth : 22.50 10/02/2024 ug/L		085-350 Depth : 34.50 04/11/2024 ug/L		085-350 Depth : 34.20 10/02/2024 ug/L		085-351 Depth : 22.50 04/10/2024 ug/L		085-351 Depth : 22.50 10/02/2024 ug/L		085-352 Depth : 34.50 04/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.22	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	**5.1**		0.5	U	0.5	U	0.5	U	0.2	J	0.5	U
Benzene, 1,2,4-trimethyl	**2.4**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	**0.57**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	**2**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	**7.1**		1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	**0.75**		0.5	U	0.5	U	0.5	U	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.32	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	**3.8**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	**0.65**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**0.68**		**3.8**		**2.9**		**2.1**		**3.3**		**11**	
Toluene	**11**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	**11**		1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	44.62		4.55		2.9		2.1		3.5		11.22	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-352 Depth : 0.00 08/27/2024 ug/L		085-352 Depth : 34.50 10/02/2024 ug/L		085-352 Depth : 0.00 11/05/2024 ug/L		085-354 Depth : 22.50 04/11/2024 ug/L		085-354 Depth : 22.50 10/07/2024 ug/L		085-378 Depth : 23.50 04/10/2024 ug/L	
1,1,1,2-Tetrachloroethane			0.5	U			0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.29	U	0.19	J	0.29	U	0.26	J	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.34	U	0.5	U	0.34	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.4	U	0.5	U	0.4	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.31	U	0.5	U	0.31	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene			0.5	U			0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene			0.5	U			0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane			0.5	U			0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene			0.5	U			0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.47	U	0.5	U	0.47	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.46	U	0.5	U	0.46	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane			0.5	U			0.5	U	0.5	U	0.5	U
2,2-Dichloropropane			0.5	U			0.5	U	0.5	U	0.5	U
2-Hexanone	0.55	U			0.55	U						
Acetone	2.4	U			2.4	U						
Benzene	0.38	U	0.5	U	0.38	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl			0.5	U			0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-			0.5	U			0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-			0.5	U			0.5	U	0.5	U	0.5	U
Bromobenzene			0.5	U			0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
Bromoform	0.22	U	0.5	U	0.22	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	0.28	U			0.28	U						
Carbon tetrachloride	0.24	U	0.5	U	0.24	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.3	U	0.5	U	0.3	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane			0.5	U			0.5	U	0.5	U	0.5	U
Chloroethane	0.37	U	0.5	U	0.37	U	0.5	U	0.5	U	0.5	U
Chloroform	0.38	U	0.5	U	0.38	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.17	U	0.5	U	0.17	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.34	U	0.5	U	0.34	U	0.5	U	0.5	U	0.5	U
Cymene			0.5	U			0.5	U	0.5	U	0.5	U
DBCP			0.5	U			0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.27	U	0.5	U	0.27	U	0.5	U	0.5	U	0.5	U
Dibromomethane	**0.31**	J	0.5	U	0.23	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane			0.5	U			0.5	U	0.5	U	0.5	U
EDB			0.5	U			0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.33	U	0.5	U	0.33	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene			0.5	U			0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.27	U	0.5	U	0.27	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.3	U	1	U	0.3	U	1	U	1	U	1	U
Methyl bromide	1.2	U	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U
Methyl chloride	1	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U
Methyl ethyl ketone	1	U			1	U						
Methyl isobutyl ketone (MIBK)	0.19	U			0.19	U						
Methyl tert-butyl ether			0.5	U			0.5	U	0.5	U	0.5	U
Methylene chloride	0.56	U	0.5	U	0.56	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene			0.5	U			0.5	U	0.5	U	0.5	U
n-Propylbenzene			0.5	U			0.5	U	0.5	U	0.5	U
Naphthalene			0.5	U			0.5	U	0.5	U	0.5	U
o-Chlorotoluene			0.5	U			0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.34	U	0.5	U	0.34	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene			0.5	U			0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.29	U	0.5	U	0.29	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene			0.5	U			0.5	U	0.5	U	0.5	U
Styrene	0.37	U	0.5	U	0.37	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene			0.5	U			0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**12**		**9.6**		**9.9**		**6.8**		**3.8**		0.5	U
Toluene	0.31	U	0.5	U	0.31	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.31	U	0.5	U	0.31	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.33	U	0.5	U	0.33	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.28	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.41	U			0.41	U						
Vinyl chloride	0.38	U	0.5	U	0.38	U	0.5	U	0.5	U	0.5	U
Xylene (total)	0.3	U	1.5	U	0.3	U	1.5	U	1.5	U	1.5	U

8260 TVOC			9.79				7.06		3.8		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-378 Depth : 23.50 09/04/2024 ug/L		085-378 Depth : 23.50 10/03/2024 ug/L		085-379 Depth : 26.00 02/09/2024 ug/L		085-379 Depth : 20.00 04/11/2024 ug/L		085-379 Depth : 0.00 04/15/2024 ug/L		085-379 Depth : 0.00 08/26/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.36	J	**0.37**	J	0.29	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.34	U	0.34	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U	0.4	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.31	U	0.31	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.47	U	0.47	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.46	U	0.46	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
2-Hexanone									0.55	U	0.55	U
Acetone									2.4	U	**7.4**	J
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.38	U	0.38	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.22	U	0.22	U
Carbon disulfide									0.28	U	**0.46**	J
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.24	U	0.24	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U	0.3	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.37	U	0.37	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.38	U	0.38	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.17	U	0.17	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.34	U	0.34	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U				
DBCP	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.27	U	0.27	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	**0.3**	J	**0.26**	J
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
EDB	0.5	U	0.5	U	0.5	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.33	U	0.33	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U				
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.27	U	0.27	U
m/p xylene	1	U	1	U	1	U	1	U	0.3	U	0.3	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	1.2	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	1	U	1	U
Methyl ethyl ketone									1	U	**2.8**	J
Methyl isobutyl ketone (MIBK)									0.19	U	0.19	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U				
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.56	U	0.56	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.34	U	0.34	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.29	U	0.29	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.37	U	0.37	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Tetrachloroethylene	0.5	U	0.5	U	**40**		**88**	E	**81**		0.26	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.31	U	0.31	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.31	U	0.31	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.27	J	0.33	U	0.33	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U
Vinyl acetate									0.41	U	0.41	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.38	U	0.38	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	0.3	U	0.3	U

8260 TVOC	0		0		40		88.63					

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-379 Depth : 26.00 09/04/2024 ug/L		085-379 Depth : 22.00 10/07/2024 ug/L		085-379 Depth : 0.00 11/05/2024 ug/L		085-382 Depth : 37.50 04/12/2024 ug/L		085-382 Depth : 37.50 10/07/2024 ug/L		085-383 Depth : 37.50 04/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.29	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.4	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.47	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.46	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2-Hexanone					0.55	U						
Acetone					**5.7**	J						
Benzene	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.22	U	0.5	U	0.5	U	0.5	U
Carbon disulfide					**0.5**	J						
Carbon tetrachloride	0.5	U	0.5	U	0.24	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.3	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.37	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.21	J	0.17	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.27	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.23	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.33	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.27	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	0.3	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	1.2	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	**1.2**	J	0.37	J	0.5	U	0.35	J
Methyl ethyl ketone					1	U						
Methyl isobutyl ketone (MIBK)					0.19	U						
Methyl tert-butyl ether	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.56	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.29	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.37	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.26	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.33	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.5	U
Vinyl acetate					0.41	U						
Vinyl chloride	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	0.3	U	1.5	U	1.5	U	1.5	U

8260 TVOC	0		0.21				0.37		0		0.35	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	085-383 Depth : 37.50 10/08/2024 ug/L		085-386 Depth : 47.50 04/10/2024 ug/L		085-386 Depth : 47.50 10/08/2024 ug/L		085-416 Depth : 0.00 04/15/2024 ug/L		085-416 Depth : 0.00 08/26/2024 ug/L		085-416 Depth : 0.00 11/05/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.29	U	0.29	U	0.29	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U	0.2	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.34	U	0.34	U	0.34	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.4	U	0.4	U	0.4	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.31	U	0.31	U	0.31	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U						
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.47	U	0.47	U	0.47	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.46	U	0.46	U	0.46	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U						
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
2-Hexanone							0.55	U	0.55	U	0.55	U
Acetone							2.4	U	**4.9**	J	2.4	U
Benzene	0.5	U	0.5	U	0.5	U	0.38	U	0.38	U	0.38	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U						
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U						
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U						
Bromobenzene	0.5	U	0.5	U	0.5	U						
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U	0.28	U
Bromoform	0.5	U	0.5	U	0.5	U	0.22	U	0.22	U	0.22	U
Carbon disulfide							0.28	U	0.28	U	**0.46**	J
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.24	U	0.24	U	0.24	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.3	U	0.3	U	0.3	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U						
Chloroethane	0.5	U	0.5	U	0.5	U	0.37	U	0.37	U	0.37	U
Chloroform	0.5	U	0.5	U	0.5	U	0.38	U	0.38	U	0.38	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.17	U	0.17	U	0.17	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.34	U	0.34	U	0.34	U
Cymene	0.5	U	0.5	U	0.5	U						
DBCP	0.5	U	0.5	U	0.5	U						
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.27	U	0.27	U	0.27	U
Dibromomethane	0.5	U	0.5	U	0.5	U	**0.33**	J	**0.26**	J	0.23	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U						
EDB	0.5	U	0.5	U	0.5	U						
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.33	U	0.33	U	0.33	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U	0.28	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U						
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.27	U	0.27	U	0.27	U
m/p xylene	1	U	1	U	1	U	0.3	U	0.3	U	0.3	U
Methyl bromide	0.5	U	0.5	U	0.5	U	1.2	U	1.2	U	1.2	U
Methyl chloride	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Methyl ethyl ketone							1	U	1	U	1	U
Methyl isobutyl ketone (MIBK)							0.19	U	0.19	U	0.19	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U						
Methylene chloride	0.5	U	0.5	U	0.5	U	0.56	U	0.56	U	0.56	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U						
n-Propylbenzene	0.5	U	0.5	U	0.5	U						
Naphthalene	0.5	U	0.5	U	0.5	U						
o-Chlorotoluene	0.5	U	0.5	U	0.5	U						
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U	0.28	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.34	U	0.34	U	0.34	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U						
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.29	U	0.29	U	0.29	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U						
Styrene	0.5	U	0.5	U	0.5	U	0.37	U	0.37	U	0.37	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U						
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	**18**		**11**		**18**	
Toluene	0.5	U	0.5	U	0.5	U	0.31	U	0.31	U	0.31	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.31	U	0.31	U	0.31	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.33	U	0.33	U	0.33	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.28	U	0.28	U	0.28	U
Vinyl acetate							0.41	U	0.41	U	0.41	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.38	U	0.38	U	0.38	U
Xylene (total)	1.5	U	1.5	U	1.5	U	0.3	U	0.3	U	0.3	U

8260 TVOC	0		0		0						

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-159 Depth : 50.00 02/12/2024 ug/L		095-159 Depth : 50.00 04/10/2024 ug/L		095-159 Depth : 0.00 08/27/2024 ug/L		095-159 Depth : 50.00 09/04/2024 ug/L		095-159 Depth : 50.00 10/03/2024 ug/L		095-159 Depth : 0.00 11/06/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U			0.5	U	0.5	U		
1,1,1-Trichloroethane	0.36	J	0.45	J	**0.57**	J	**0.75**		0.5	U	0.29	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U
1,1-Dichloroethane	0.5	U	0.5	U	0.4	U	0.5	U	0.5	U	0.4	U
1,1-Dichloroethylene	0.5	U	0.17	J	0.31	U	0.19	J	0.5	U	0.31	U
1,1-Dichloropropene	0.5	U	0.5	U			0.5	U	0.5	U		
1,2,3-Trichlorobenzene	0.5	U	0.5	U			0.5	U	0.5	U		
1,2,3-Trichloropropane	0.5	U	0.5	U			0.5	U	0.5	U		
1,2,4-Trichlorobenzene	0.5	U	0.5	U			0.5	U	0.5	U		
1,2-Dichloroethane	0.5	U	0.5	U	0.47	U	0.5	U	0.5	U	0.47	U
1,2-Dichloropropane	0.5	U	0.5	U	0.46	U	0.5	U	0.5	U	0.46	U
1,3-Dichloropropane	0.5	U	0.5	U			0.5	U	0.5	U		
2,2-Dichloropropane	0.5	U	0.5	U			0.5	U	0.5	U		
2-Hexanone					0.55	U					0.55	U
Acetone					2.4	U					2.4	U
Benzene	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U			0.5	U	0.5	U		
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U			0.5	U	0.5	U		
Benzene, 1-methylethyl-	0.5	U	0.5	U			0.5	U	0.5	U		
Bromobenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Bromodichloromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
Bromoform	0.5	U	0.5	U	0.22	U	0.5	U	0.5	U	0.22	U
Carbon disulfide					0.28	U					0.28	U
Carbon tetrachloride	0.5	U	0.5	U	0.24	U	0.5	U	0.5	U	0.24	U
Chlorobenzene	0.5	U	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U
Chlorobromomethane	0.5	U	0.5	U			0.5	U	0.5	U		
Chloroethane	0.5	U	0.5	U	0.37	U	0.5	U	0.5	U	0.37	U
Chloroform	0.27	J	0.26	J	0.38	U	0.5	U	0.5	U	0.38	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.17	U	0.5	U	0.5	U	0.17	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U
Cymene	0.5	U	0.5	U			0.5	U	0.5	U		
DBCP	0.5	U	0.5	U			0.5	U	0.5	U		
Dibromochloromethane	0.5	U	0.5	U	0.27	U	0.5	U	0.5	U	0.27	U
Dibromomethane	0.5	U	0.5	U	0.23	J	0.5	U	0.5	U	0.23	U
Dichlorodifluoromethane	0.5	U	0.5	U			0.5	U	0.5	U		
EDB	0.5	U	0.5	U			0.5	U	0.5	U		
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.33	U	0.5	U	0.5	U	0.33	U
Ethylbenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
Hexachlorobutadiene	0.5	U	0.5	U			0.5	U	0.5	U		
m-Dichlorobenzene	0.5	U	0.5	U	0.27	U	0.5	U	0.5	U	0.27	U
m/p xylene	1	U	1	U	0.3	U	1	U	1	U	0.3	U
Methyl bromide	0.5	U	0.5	U	1.2	U	0.5	U	0.5	U	1.2	U
Methyl chloride	0.5	U	0.5	U	1	U	0.5	U	0.5	U	1	U
Methyl ethyl ketone					1	U					1	U
Methyl isobutyl ketone (MIBK)					0.19	U					0.19	U
Methyl tert-butyl ether	0.5	U	0.5	U			0.5	U	0.5	U		
Methylene chloride	0.5	U	0.5	U	0.56	U	0.5	U	0.5	U	0.56	U
n-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
n-Propylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Naphthalene	0.5	U	0.5	U			0.5	U	0.5	U		
o-Chlorotoluene	0.5	U	0.5	U			0.5	U	0.5	U		
o-Dichlorobenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
o-Xylene	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U
p-Chlorotoluene	0.5	U	0.5	U			0.5	U	0.5	U		
p-Dichlorobenzene	0.5	U	0.5	U	0.29	U	0.5	U	0.5	U	0.29	U
sec-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Styrene	0.5	U	0.5	U	0.37	U	0.5	U	0.5	U	0.37	U
tert-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Tetrachloroethylene	**26**		**35**		**68**		**97**	D	0.5	U	**37**	
Toluene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U
Trichloroethylene	0.5	U	0.5	U	0.33	U	0.5	U	0.5	U	0.33	U
Trichlorofluoromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
Vinyl acetate					0.41	U					0.41	U
Vinyl chloride	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U
Xylene (total)	1.5	U	1.5	U	0.3	U	1.5	U	1.5	U	0.3	U

8260 TVOC	26.63		35.88				97.94		0		

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-162 Depth : 50.00 02/09/2024 ug/L		095-162 Depth : 50.00 04/10/2024 ug/L		095-162 Depth : 50.00 09/04/2024 ug/L		095-162 Depth : 50.00 10/02/2024 ug/L		095-163 Depth : 50.00 02/09/2024 ug/L		095-163 Depth : 50.00 04/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.64**		**0.6**		0.47	J	**0.64**		0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.17	J	0.5	U	0.5	U	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.25	J	**3.6**		**1.1**		**1.3**		**3.9**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	0.64		0.85		4.24		1.74		1.3		3.9	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-163 Depth : 50.00 09/03/2024 ug/L		095-163 Depth : 50.00 10/01/2024 ug/L		095-165 Depth : 50.00 10/01/2024 ug/L		095-166 Depth : 50.00 10/01/2024 ug/L		095-168 Depth : 50.00 10/01/2024 ug/L		095-169 Depth : 50.00 10/01/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.19	J	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.2	J	**0.58**		**1**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.21	J	0.5	U	0.5	U	0.5	U	0.23	J	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**4.7**		**1.1**		**2.6**		**21**		**0.64**		0.5	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	4.91		1.1		2.6		21.39		1.45		1.5	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Building 96)

Analyte	095-170 Depth : 50.00 10/01/2024 ug/L		095-172 Depth : 50.00 02/09/2024 ug/L		095-172 Depth : 50.00 04/10/2024 ug/L		095-172 Depth : 50.00 09/03/2024 ug/L		095-172 Depth : 50.00 10/03/2024 ug/L		095-294 Depth : 30.00 04/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.2**		**1.3**		**0.87**		**0.52**		**0.81**		0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.22	J	0.5	U	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.17	J	0.2	J	0.49	J	**0.68**		0.48	J	**2.4**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	1.37		1.5		1.36		1.42		1.29		2.4	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-294 Depth : 30.00 10/03/2024 ug/L		095-305 Depth : 22.50 02/09/2024 ug/L		095-305 Depth : 22.50 04/11/2024 ug/L		095-305 Depth : 22.50 09/03/2024 ug/L		095-305 Depth : 22.50 10/04/2024 ug/L		095-306 Depth : 34.50 02/09/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.26	J	0.5	U	0.5	U	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**2.5**		**3.6**		**1.6**		**0.79**		**0.91**		**15**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	2.5		3.6		1.86		0.79		0.91		15	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-306 Depth : 34.50 04/11/2024 ug/L		095-306 Depth : 0.00 08/26/2024 ug/L		095-306 Depth : 34.50 09/03/2024 ug/L		095-306 Depth : 34.30 10/04/2024 ug/L		095-306 Depth : 0.00 11/06/2024 ug/L		095-307 Depth : 32.50 04/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U			0.5	U	0.5	U			0.5	U
1,1,1-Trichloroethane	0.5	U	0.29	U	0.5	U	0.5	U	0.29	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U	0.5	U
1,1-Dichloroethane	0.5	U	0.4	U	0.5	U	0.5	U	0.4	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U	0.5	U
1,1-Dichloropropene	0.5	U			0.5	U	0.5	U			0.5	U
1,2,3-Trichlorobenzene	0.5	U			0.5	U	0.5	U			0.5	U
1,2,3-Trichloropropane	0.5	U			0.5	U	0.5	U			0.5	U
1,2,4-Trichlorobenzene	0.5	U			0.5	U	0.5	U			0.5	U
1,2-Dichloroethane	0.5	U	0.47	U	0.5	U	0.5	U	0.47	U	0.5	U
1,2-Dichloropropane	0.5	U	0.46	U	0.5	U	0.5	U	0.46	U	0.5	U
1,3-Dichloropropane	0.5	U			0.5	U	0.5	U			0.5	U
2,2-Dichloropropane	0.5	U			0.5	U	0.5	U			0.5	U
2-Hexanone			0.55	U					0.55	U		
Acetone			2.4	U					2.4	U		
Benzene	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U			0.5	U	0.5	U			0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U			0.5	U	0.5	U			0.5	U
Benzene, 1-methylethyl-	0.5	U			0.5	U	0.5	U			0.5	U
Bromobenzene	0.5	U			0.5	U	0.5	U			0.5	U
Bromodichloromethane	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
Bromoform	0.5	U	0.22	U	0.5	U	0.5	U	0.22	U	0.5	U
Carbon disulfide			0.28	U					0.28	U		
Carbon tetrachloride	0.5	U	0.24	U	0.5	U	0.5	U	0.24	U	0.5	U
Chlorobenzene	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U	0.5	U
Chlorobromomethane	0.5	U			0.5	U	0.5	U			0.5	U
Chloroethane	0.5	U	0.37	U	0.5	U	0.5	U	0.37	U	0.5	U
Chloroform	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.17	U	0.5	U	0.5	U	0.17	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U	0.5	U
Cymene	0.5	U			0.5	U	0.5	U			0.5	U
DBCP	0.5	U			0.5	U	0.5	U			0.5	U
Dibromochloromethane	0.5	U	0.27	U	0.5	U	0.5	U	0.27	U	0.5	U
Dibromomethane	0.5	U	**0.27**	J	0.5	U	0.5	U	0.23	U	0.5	U
Dichlorodifluoromethane	0.5	U			0.5	U	0.5	U			0.5	U
EDB	0.5	U			0.5	U	0.5	U			0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.33	U	0.5	U	0.5	U	0.33	U	0.5	U
Ethylbenzene	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
Hexachlorobutadiene	0.5	U			0.5	U	0.5	U			0.5	U
m-Dichlorobenzene	0.5	U	0.27	U	0.5	U	0.5	U	0.27	U	0.5	U
m/p xylene	1	U	0.3	U	1	U	1	U	0.3	U	1	U
Methyl bromide	0.5	U	1.2	U	0.5	U	0.5	U	1.2	U	0.5	U
Methyl chloride	0.45	J	1	U	0.5	U	0.5	U	1	U	0.21	J
Methyl ethyl ketone			1	U					1	U		
Methyl isobutyl ketone (MIBK)			0.19	U					0.19	U		
Methyl tert-butyl ether	0.5	U			0.5	U	0.5	U			0.5	U
Methylene chloride	0.5	U	0.56	U	0.5	U	0.5	U	0.56	U	0.5	U
n-Butylbenzene	0.5	U			0.5	U	0.5	U			0.5	U
n-Propylbenzene	0.5	U			0.5	U	0.5	U			0.5	U
Naphthalene	0.5	U			0.5	U	0.5	U			0.5	U
o-Chlorotoluene	0.5	U			0.5	U	0.5	U			0.5	U
o-Dichlorobenzene	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
o-Xylene	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U	0.5	U
p-Chlorotoluene	0.5	U			0.5	U	0.5	U			0.5	U
p-Dichlorobenzene	0.5	U	0.29	U	0.5	U	0.5	U	0.29	U	0.5	U
sec-Butylbenzene	0.5	U			0.5	U	0.5	U			0.5	U
Styrene	0.5	U	0.37	U	0.5	U	0.5	U	0.37	U	0.5	U
tert-Butylbenzene	0.5	U			0.5	U	0.5	U			0.5	U
Tetrachloroethylene	**11**		**11**		**12**		**10**		**10**		**2.4**	
Toluene	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U	0.5	U
Trichloroethylene	0.5	U	0.33	U	0.5	U	0.5	U	0.33	U	0.5	U
Trichlorofluoromethane	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U	0.5	U
Vinyl acetate			0.41	U					0.41	U		
Vinyl chloride	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U	0.5	U
Xylene (total)	1.5	U	0.3	U	1.5	U	1.5	U	0.3	U	1.5	U

8260 TVOC	11.45				12		10				2.61	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-307 Depth : 32.50 10/03/2024 ug/L		095-308 Depth : 37.50 04/10/2024 ug/L		095-308 Depth : 37.50 10/03/2024 ug/L		095-312 Depth : 50.00 02/09/2024 ug/L		095-312 Depth : 50.00 04/10/2024 ug/L		095-312 Depth : 50.00 09/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.36	J	0.32	J	0.2	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.34	J	0.5	U	0.5	U	0.5	U	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.6**		**1.7**		**1.9**		0.5	U	**0.57**		**7.4**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	1.6		2.04		1.9		0.36		0.89		7.6	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-312 Depth : 50.00 10/03/2024 ug/L		095-313 Depth : 52.50 04/11/2024 ug/L		095-313 Depth : 52.50 10/03/2024 ug/L		095-318 Depth : 65.00 10/08/2024 ug/L		095-325 Depth : 45.00 02/09/2024 ug/L		095-325 Depth : 45.00 04/11/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone												
Acetone												
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide												
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.26	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**1.1**		**0.67**	
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	**0.55**		0.5	U	0.5	U	0.5	U	0.5	U
Methyl ethyl ketone												
Methyl isobutyl ketone (MIBK)												
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**11**		**2.8**		**2.9**		**2.7**		**19**		**35**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate												
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

8260 TVOC	11.26		3.35		2.9		2.7		20.1		35.67	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-325 Depth : 45.00 09/03/2024 ug/L		095-325 Depth : 45.00 10/08/2024 ug/L		095-325 Depth : 0.00 11/06/2024 ug/L		095-84 Depth : 26.00 02/12/2024 ug/L		095-84 Depth : 23.60 04/12/2024 ug/L		095-84 Depth : 0.00 08/27/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U			0.5	U	0.5	U		
1,1,1-Trichloroethane	0.19	J	0.5	U	0.29	U	0.5	U	0.5	U	0.29	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U
1,1-Dichloroethane	0.5	U	0.5	U	0.4	U	0.5	U	0.5	U	0.4	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U
1,1-Dichloropropene	0.5	U	0.5	U			0.5	U	0.5	U		
1,2,3-Trichlorobenzene	0.5	U	0.5	U			0.5	U	0.5	U		
1,2,3-Trichloropropane	0.5	U	0.5	U			0.5	U	0.5	U		
1,2,4-Trichlorobenzene	0.5	U	0.5	U			0.5	U	0.5	U		
1,2-Dichloroethane	0.5	U	0.5	U	0.47	U	0.5	U	0.5	U	0.47	U
1,2-Dichloropropane	0.5	U	0.5	U	0.46	U	0.5	U	0.5	U	0.46	U
1,3-Dichloropropane	0.5	U	0.5	U			0.5	U	0.5	U		
2,2-Dichloropropane	0.5	U	0.5	U			0.5	U	0.5	U		
2-Hexanone					0.55	U					0.55	U
Acetone					2.4	U					2.4	U
Benzene	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U			0.5	U	0.5	U		
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U			0.5	U	0.5	U		
Benzene, 1-methylethyl-	0.5	U	0.5	U			0.5	U	0.5	U		
Bromobenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Bromodichloromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
Bromoform	0.5	U	0.5	U	0.22	U	0.5	U	0.5	U	0.22	U
Carbon disulfide					0.28	U					0.28	U
Carbon tetrachloride	0.5	U	0.5	U	0.24	U	0.5	U	0.5	U	0.24	U
Chlorobenzene	0.5	U	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U
Chlorobromomethane	0.5	U	0.5	U			0.5	U	0.5	U		
Chloroethane	0.5	U	0.5	U	0.37	U	0.5	U	0.5	U	0.37	U
Chloroform	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U
cis-1,2-Dichloroethylene	0.34	J	0.15	J	0.17	U	0.5	U	0.5	U	0.17	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U
Cymene	0.5	U	0.5	U			0.5	U	0.5	U		
DBCP	0.5	U	0.5	U			0.5	U	0.5	U		
Dibromochloromethane	0.5	U	0.5	U	0.27	U	0.5	U	0.5	U	0.27	U
Dibromomethane	0.5	U	0.5	U	0.23	U	0.5	U	0.5	U	**0.26**	J
Dichlorodifluoromethane	0.5	U	0.5	U			0.5	U	0.5	U		
EDB	0.5	U	0.5	U			0.5	U	0.5	U		
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.33	U	0.5	U	0.5	U	0.33	U
Ethylbenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
Hexachlorobutadiene	0.5	U	0.5	U			0.5	U	0.5	U		
m-Dichlorobenzene	0.5	U	0.5	U	0.27	U	0.5	U	0.5	U	0.27	U
m/p xylene	1	U	1	U	0.3	U	1	U	1	U	0.3	U
Methyl bromide	0.5	U	0.5	U	1.2	U	0.5	U	0.5	U	1.2	U
Methyl chloride	0.5	U	0.5	U	1	U	0.5	U	0.27	J	1	U
Methyl ethyl ketone					1	U					1	U
Methyl isobutyl ketone (MIBK)					0.19	U					0.19	U
Methyl tert-butyl ether	0.5	U	0.5	U			0.5	U	0.5	U		
Methylene chloride	0.5	U	0.5	U	0.56	U	0.5	U	0.5	U	0.56	U
n-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
n-Propylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Naphthalene	0.5	U	0.5	U			0.5	U	0.5	U		
o-Chlorotoluene	0.5	U	0.5	U			0.5	U	0.5	U		
o-Dichlorobenzene	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
o-Xylene	0.5	U	0.5	U	0.34	U	0.5	U	0.5	U	0.34	U
p-Chlorotoluene	0.5	U	0.5	U			0.5	U	0.5	U		
p-Dichlorobenzene	0.5	U	0.5	U	0.29	U	0.5	U	0.5	U	0.29	U
sec-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Styrene	0.5	U	0.5	U	0.37	U	0.5	U	0.5	U	0.37	U
tert-Butylbenzene	0.5	U	0.5	U			0.5	U	0.5	U		
Tetrachloroethylene	**34**		**25**		**25**		**17**		**19**		**10**	
Toluene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.31	U	0.5	U	0.5	U	0.31	U
Trichloroethylene	0.5	U	0.5	U	0.33	U	0.5	U	0.5	U	0.33	U
Trichlorofluoromethane	0.5	U	0.5	U	0.28	U	0.5	U	0.5	U	0.28	U
Vinyl acetate					0.41	U					0.41	U
Vinyl chloride	0.5	U	0.5	U	0.38	U	0.5	U	0.5	U	0.38	U
Xylene (total)	1.5	U	1.5	U	0.3	U	1.5	U	1.5	U	0.3	U

8260 TVOC	34.53		25.15				17		19.27			

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Building 96)

Analyte	095-84 Depth : 35.00 09/04/2024 ug/L		095-84 Depth : 25.00 10/02/2024 ug/L		095-84 Depth : 0.00 11/06/2024 ug/L		095-85 Depth : 95.00 10/02/2024 ug/L					
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U			0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.29	U	0.5	U				
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.2	U	0.5	U				
1,1,2-Trichloroethane	0.5	U	0.5	U	0.34	U	0.5	U				
1,1-Dichloroethane	0.5	U	0.5	U	0.4	U	0.5	U				
1,1-Dichloroethylene	0.5	U	0.5	U	0.31	U	0.5	U				
1,1-Dichloropropene	0.5	U	0.5	U			0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U			0.5	U				
1,2,3-Trichloropropane	0.5	U	0.5	U			0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U			0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.47	U	0.5	U				
1,2-Dichloropropane	0.5	U	0.5	U	0.46	U	0.5	U				
1,3-Dichloropropane	0.5	U	0.5	U			0.5	U				
2,2-Dichloropropane	0.5	U	0.5	U			0.5	U				
2-Hexanone					0.55	U						
Acetone					2.4	U						
Benzene	0.5	U	0.5	U	0.38	U	0.5	U				
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U			0.5	U				
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U			0.5	U				
Benzene, 1-methylethyl-	0.5	U	0.5	U			0.5	U				
Bromobenzene	0.5	U	0.5	U			0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.28	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.22	U	0.5	U				
Carbon disulfide					0.28	U						
Carbon tetrachloride	0.5	U	0.5	U	0.24	U	0.5	U				
Chlorobenzene	0.5	U	0.5	U	0.3	U	0.5	U				
Chlorobromomethane	0.5	U	0.5	U			0.5	U				
Chloroethane	0.5	U	0.5	U	0.37	U	0.5	U				
Chloroform	0.5	U	0.5	U	0.38	U	0.34	J				
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.17	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.34	U	0.5	U				
Cymene	0.5	U	0.5	U			0.5	U				
DBCP	0.5	U	0.5	U			0.5	U				
Dibromochloromethane	0.5	U	0.5	U	0.27	U	0.5	U				
Dibromomethane	0.5	U	0.5	U	0.23	U	0.5	U				
Dichlorodifluoromethane	0.5	U	0.5	U			0.5	U				
EDB	0.5	U	0.5	U			0.5	U				
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.33	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.28	U	0.5	U				
Hexachlorobutadiene	0.5	U	0.5	U			0.5	U				
m-Dichlorobenzene	0.5	U	0.5	U	0.27	U	0.5	U				
m/p xylene	1	U	1	U	0.3	U	1	U				
Methyl bromide	0.5	U	0.5	U	1.2	U	0.5	U				
Methyl chloride	0.5	U	0.5	U	1	U	0.5	U				
Methyl ethyl ketone					1	U						
Methyl isobutyl ketone (MIBK)					0.19	U						
Methyl tert-butyl ether	0.5	U	0.5	U			0.5	U				
Methylene chloride	0.5	U	0.5	U	0.56	U	0.5	U				
n-Butylbenzene	0.5	U	0.5	U			0.5	U				
n-Propylbenzene	0.5	U	0.5	U			0.5	U				
Naphthalene	0.5	U	0.5	U			0.5	U				
o-Chlorotoluene	0.5	U	0.5	U			0.5	U				
o-Dichlorobenzene	0.5	U	0.5	U	0.28	U	0.5	U				
o-Xylene	0.5	U	0.5	U	0.34	U	0.5	U				
p-Chlorotoluene	0.5	U	0.5	U			0.5	U				
p-Dichlorobenzene	0.5	U	0.5	U	0.29	U	0.5	U				
sec-Butylbenzene	0.5	U	0.5	U			0.5	U				
Styrene	0.5	U	0.5	U	0.37	U	0.5	U				
tert-Butylbenzene	0.5	U	0.5	U			0.5	U				
Tetrachloroethylene	**8**		**7.6**		**5.6**		0.16	J				
Toluene	0.5	U	0.5	U	0.31	U	0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.31	U	0.5	U				
Trichloroethylene	0.5	U	0.5	U	0.33	U	0.5	U				
Trichlorofluoromethane	0.5	U	0.5	U	0.28	U	0.5	U				
Vinyl acetate					0.41	U						
Vinyl chloride	0.5	U	0.5	U	0.38	U	0.5	U				
Xylene (total)	1.5	U	1.5	U	0.3	U	1.5	U				

8260 TVOC	8		7.6				0.5				

OU III (Western South Boundary)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	000-558 Depth : 165.00 03/01/2024 ug/L		000-558 Depth : 165.00 05/22/2024 ug/L		000-558 Depth : 165.00 07/11/2024 ug/L		000-558 Depth : 165.00 11/07/2024 ug/L		000-559 Depth : 215.00 03/01/2024 ug/L		000-559 Depth : 215.00 05/22/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.97**	J	**1.4**		1.86	U	**1.26**		0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.45	J	**0.69**	J	**0.77**	J	**0.63**	J	0.5	U	0.5	U
1,1-Dichloroethylene	**1.62**		**2.69**		**2.22**		**2.48**		0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.41**		**1.92**		**2.06**		**1.73**		0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	**2.6**		**4.25**		**4.81**		**5.44**		**1.23**		**1.15**	
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**2.17**		**2.72**		**3.09**		**2.52**		0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	9.22		13.67		12.95		14.06		1.23		1.15	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	000-559 Depth : 215.00 07/11/2024 ug/L		000-559 Depth : 215.00 11/07/2024 ug/L		000-560 Depth : 159.50 03/04/2024 ug/L		000-560 Depth : 159.50 05/22/2024 ug/L		000-560 Depth : 159.50 07/11/2024 ug/L		000-560 Depth : 159.50 11/19/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	**0.75**	J	**0.99**	J	1.3	U	**1.19**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.45	J	**0.53**	J	0.46	J	**0.66**	J
1,1-Dichloroethylene	0.5	U	0.5	U	**1.22**		**1.6**		**1.39**		**2.12**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	**2.23**		**2.35**		**2.12**		**2.45**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	**2.06**		**2.17**		**1.12**		**1.34**		**1.39**		**2.73**	
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2.15	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	**1.44**		**1.9**		**1.69**		**2.68**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	2.06		2.17		7.21		8.71		7.05		11.83	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	103-15 Depth : 200.00 03/01/2024 ug/L		103-15 Depth : 200.00 05/28/2024 ug/L		103-15 Depth : 200.00 09/09/2024 ug/L		103-15 Depth : 200.00 10/29/2024 ug/L		103-18 Depth : 170.00 03/27/2024 ug/L		103-18 Depth : 170.00 05/31/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	**2.24**		**3.66**		**2.95**		**3.23**		**1.1**		**1.31**	
1,1-Dichloroethylene	**3.94**		**6.78**		**5.03**		**5.08**		**1.49**		**2.02**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	**2.54**		**3.2**		**2.14**		**2.3**		**1.73**		**1.73**	
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**3.84**		**5.42**		**4.5**		**4.73**		**2.55**		**2.82**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	12.56		19.06		14.62		15.34		6.87		7.88	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	103-18 Depth : 170.00 07/15/2024 ug/L		103-18 Depth : 170.00 10/29/2024 ug/L		103-19 Depth : 170.00 03/27/2024 ug/L		103-19 Depth : 170.00 05/31/2024 ug/L		103-19 Depth : 170.00 09/09/2024 ug/L		103-19 Depth : 170.00 10/29/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	**1.21**		**1.14**		**0.91**	J	**1.18**		**0.92**	J	**1.01**	
1,1-Dichloroethylene	**1.7**		**1.49**		**0.88**	J	**1.33**		**0.98**	J	**0.92**	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	**1.63**		**1.47**		**0.69**	J	**0.75**	J	**0.59**	J	**0.6**	J
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	1.01	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**2.78**		**2.67**		**2.03**		**2.42**		**2.02**		**2.26**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	7.32		6.77		4.51		5.68		4.51		4.79	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	111-15 Depth : 175.00 03/04/2024 ug/L		111-15 Depth : 175.00 05/29/2024 ug/L		111-15 Depth : 175.00 09/04/2024 ug/L		111-15 Depth : 175.00 10/23/2024 ug/L		111-16 Depth : 173.00 03/04/2024 ug/L		111-16 Depth : 173.00 06/05/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.45	J	**0.51**	J
1,1-Dichloroethylene	0.45	J	**0.65**	J	0.48	J	**0.62**	J	**0.78**	J	**0.91**	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.75**	J	**1.33**		**0.96**	J	**1.01**		0.42	J	**0.76**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**0.62**	J	**0.73**	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.2		1.98		1.44		1.63		2.27		2.91	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	111-16 Depth : 173.00 09/04/2024 ug/L		111-16 Depth : 173.00 10/23/2024 ug/L		119-06 Depth : 130.00 03/05/2024 ug/L		119-06 Depth : 130.00 05/23/2024 ug/L		119-06 Depth : 130.00 09/04/2024 ug/L		119-06 Depth : 130.00 10/24/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.34	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.73**	J	**1.04**		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	**0.66**	J	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.41	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.98		1.04		0		0		0.66		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	119-10 Depth : 200.00 03/05/2024 ug/L		119-10 Depth : 200.00 05/23/2024 ug/L		119-10 Depth : 200.00 09/04/2024 ug/L		119-10 Depth : 200.00 10/24/2024 ug/L		119-11 Depth : 180.00 03/27/2024 ug/L		119-11 Depth : 180.00 05/23/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**1.92**		**2.02**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	**1.24**		**0.83**	J	**0.91**	J	**0.77**	J	**2.31**		**2.41**	
1,1-Dichloroethylene	**0.83**	J	**0.72**	J	**0.72**	J	**0.7**	J	**10.6**		**11.4**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	**1**		**0.61**	J	0.5	U	0.49	J	0.39	J	0.37	J
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	**0.67**	J	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**0.93**	J	**1.15**		**1.07**		**1**		**2.49**		**2.57**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	4		3.31		3.37		2.96		17.71		18.77	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Western South Boundary)

Analyte	119-11 Depth : 180.00 09/04/2024 ug/L		119-11 Depth : 180.00 10/30/2024 ug/L		119-12 Depth : 179.00 03/05/2024 ug/L		119-12 Depth : 179.00 05/23/2024 ug/L		119-12 Depth : 179.00 09/09/2024 ug/L		119-12 Depth : 179.00 10/30/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.61**		**1.52**		**1.38**		**0.83**	J	**1.01**		**0.86**	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	**1.76**		**1.8**		**0.58**	J	**1.13**		**0.83**	J	0.49	J
1,1-Dichloroethylene	**7.74**		**8.63**		**1.47**		**2.45**		**2.1**		**1.3**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	**0.67**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**2.51**		**2.64**		**2.13**		**2.57**		**2.56**		**2.09**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	14.29		14.59		5.56		6.98		6.5		4.74	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	121-42 Depth : 155.00 05/24/2024 ug/L		121-42 Depth : 155.00 10/30/2024 ug/L		126-01 Depth : 65.00 10/30/2024 ug/L		126-11 Depth : 155.00 05/31/2024 ug/L		126-11 Depth : 155.00 10/30/2024 ug/L		126-13 Depth : 155.00 05/31/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	**0.61**	J	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	**0.92**	J	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0		0.92		0.61		0		0		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	126-13 Depth : 155.00 10/29/2024 ug/L		126-14 Depth : 155.00 03/08/2024 ug/L		126-14 Depth : 155.00 06/04/2024 ug/L		126-14 Depth : 155.00 09/10/2024 ug/L		126-14 Depth : 155.00 10/29/2024 ug/L		126-15 Depth : 155.00 06/04/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	**2.33**		**2.41**		**1.95**		**1.8**		0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	**1.01**		**1**		**0.77**	J	**0.54**	J	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**3.24**	
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	1.29	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	**1.48**		**1.36**		**1.06**		**1.12**		0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0		4.82		4.77		3.78		3.46		3.24	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	126-15 Depth : 155.00 10/30/2024 ug/L		126-16 Depth : 135.00 03/04/2024 ug/L		126-16 Depth : 135.00 05/20/2024 ug/L		126-16 Depth : 135.00 07/16/2024 ug/L		126-16 Depth : 135.00 11/07/2024 ug/L		126-17 Depth : 140.00 03/27/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	**1.34**		**1.46**		**1.35**		**1.35**		0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	**0.87**	J	**0.91**	J	**0.95**	J	**0.78**	J	0.5	U
1,1-Dichloroethylene	0.5	U	**2.39**		**2.82**		**2.92**		**2.4**		0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	**2.64**		**2.9**		**2.86**		**2.58**		0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	**2.93**		**1.87**		**1.72**		**1.96**		**1.83**		0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	1.98	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.37	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	**2.69**		**2.73**		**2.78**		**2.56**		0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	3.3		11.8		12.54		12.82		11.5		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	126-17 Depth : 140.00 06/04/2024 ug/L		126-17 Depth : 195.00 09/04/2024 ug/L		126-17 Depth : 140.00 09/10/2024 ug/L		126-17 Depth : 140.00 10/29/2024 ug/L		126-18 Depth : 165.00 03/08/2024 ug/L		126-18 Depth : 165.00 06/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	**1.59**		0.5	U	0.5	U	0.5	U	0.35	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	**2.37**		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	**3.49**		0.5	U	0.5	U	0.48	J	**0.51**	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	**1.44**		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	**0.81**	J	0.5	U	0.5	U	1.24	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0		9.7		0		0		0.48		0.86	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Western South Boundary)

Analyte	126-18 Depth : 165.00 09/10/2024 ug/L		126-18 Depth : 165.00 10/29/2024 ug/L		126-19 Depth : 195.00 03/06/2024 ug/L		126-19 Depth : 195.00 06/03/2024 ug/L		126-19 Depth : 195.00 10/30/2024 ug/L		126-20 Depth : 140.00 03/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	**1.27**		**1.57**		**1.75**		**1.22**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	**2.23**		**3.13**		**2.7**		0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	**3.01**		**4.34**		**4.69**		**1**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	**1.02**		**1.12**		**1.86**		0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	**2.85**		**2.83**		**2.3**		0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	**7.29**		**2.77**		0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.48	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	7.29		2.77		10.38		12.99		13.3		2.7	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	126-20 Depth : 140.00 06/04/2024 ug/L		126-20 Depth : 140.00 09/10/2024 ug/L		126-20 Depth : 140.00 10/29/2024 ug/L		126-21 Depth : 204.00 03/15/2024 ug/L		126-21 Depth : 204.00 06/04/2024 ug/L		126-21 Depth : 204.00 09/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.04**		**0.72**	J	**0.68**	J	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**1.03**		**0.75**	J	**0.59**	J	0.35	J	0.37	J	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	**0.74**	J	**0.94**	J	0.47	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.37	J
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.37	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.43	J	0.5	U	0.5	U	0.37	J	0.5	J	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	2.87		1.47		1.27		1.46		1.81		0.84	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	126-21 Depth : 204.00 10/29/2024 ug/L		127-04 Depth : 155.00 05/24/2024 ug/L		127-04 Depth : 155.00 10/30/2024 ug/L		127-06 Depth : 155.00 05/24/2024 ug/L		127-06 Depth : 155.00 10/30/2024 ug/L		127-07 Depth : 157.00 03/04/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.94**	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.36	J	0.5	U	0.5	U	0.5	U	0.5	U	**0.89**	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	**0.73**	J	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.68**	J	0.5	U	0.5	U	0.5	U	0.5	U	**0.71**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	**0.65**	J	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	**2.06**		0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.35	J	0.45	J	0.5	U	0.5	U	0.5	U	**1.76**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.39		0.45		0		0		3.44		4.3	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	127-07 Depth : 151.00 05/20/2024 ug/L		127-07 Depth : 151.00 07/16/2024 ug/L		127-07 Depth : 151.00 11/07/2024 ug/L		130-02 Depth : 115.00 06/03/2024 ug/L		130-02 Depth : 115.00 10/25/2024 ug/L		130-03 Depth : 162.50 06/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.85**	J	**0.65**	J	**0.55**	J	0.5	U	0.5	U	**1.66**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**0.8**	J	**0.61**	J	0.37	J	0.5	U	0.5	U	**2.12**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.56**	J	0.42	J	0.34	J	**0.7**	J	**0.58**	J	**1.73**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.38	J	0.39	J	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	1.47	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.51**	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**2.15**		**1.98**		**1.88**		0.5	U	0.5	U	**0.97**	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	4.74		4.05		3.14		0.7		0.58		6.99	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	130-03 Depth : 162.50 10/25/2024 ug/L		130-04 Depth : 287.50 10/25/2024 ug/L		130-08 Depth : 150.00 03/04/2024 ug/L		130-08 Depth : 150.00 05/20/2024 ug/L		130-08 Depth : 150.00 07/16/2024 ug/L		130-08 Depth : 150.00 11/08/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.09**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**1.59**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.2**		0.5	U	**0.9**	J	**0.75**	J	**0.65**	J	**0.51**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	1.17	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.35	J	0.5	U	0.39	J	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	**1.94**		0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**0.57**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	4.8		0		1.29		0.75		2.59		0.51	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	130-09 Depth : 140.00 03/05/2024 ug/L		130-09 Depth : 140.00 05/21/2024 ug/L		130-09 Depth : 140.00 07/15/2024 ug/L		130-09 Depth : 140.00 11/12/2024 ug/L		130-10 Depth : 155.00 03/05/2024 ug/L		130-10 Depth : 155.00 05/21/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.79**		0.38	J	0.5	U	0.5	U	**1.7**		**1.14**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	1.11	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.79		0.38		0		0		1.7		1.14	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	130-10 Depth : 155.00 07/15/2024 ug/L		130-10 Depth : 155.00 11/12/2024 ug/L		130-11 Depth : 200.00 03/05/2024 ug/L		130-11 Depth : 200.00 05/21/2024 ug/L		130-11 Depth : 200.00 07/15/2024 ug/L		130-11 Depth : 200.00 11/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	**0.78**	J	0.38	J	**0.68**	J	**0.81**	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.49	J	0.47	J
1,1-Dichloroethylene	0.5	U	0.5	U	**1.44**		**0.76**	J	**1.65**		**2.09**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.58**	J
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.37	J
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.81**	J	0.5	U	**1.19**		**0.89**	J	**1.08**		**1.19**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.49	J	0.42	J
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	1.08	U	0.5	U	0.5	U	0.5	U	0.89	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.86**	J
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	**0.52**	J	**0.52**	J	**0.95**	J	**1.12**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0.81		0		3.93		2.55		5.34		7.91	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Western South Boundary)

Analyte	130-14 Depth : 208.00 03/06/2024 ug/L		130-14 Depth : 208.00 06/03/2024 ug/L		130-14 Depth : 208.00 09/11/2024 ug/L		130-14 Depth : 208.00 10/30/2024 ug/L					
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethane	**0.85**	J	**1.1**		**0.77**	J	**0.96**	J				
1,1-Dichloroethylene	0.5	J	**0.79**	J	**0.53**	J	**0.67**	J				
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U				
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U				
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U				
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Cymene	0.5	U	0.5	U	0.5	U	0.5	U				
DBCP	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dichlorodifluoromethane	**8.19**		**9.38**		**6.95**		**10.7**					
EDB	0.5	U	0.5	U	0.5	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U				
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U				
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U				
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U	0.5	U				
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
Toluene	0.5	U	0.5	U	0.5	U	0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Xylene (total)	3	U	3	U	3	U	3	U				
8260 TVOC	9.54		11.27		8.25		12.33					

OU III (Middle Road)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	095-322 Depth : 180.00 02/21/2024 ug/L		095-322 Depth : 180.00 05/03/2024 ug/L		095-322 Depth : 180.00 08/22/2024 ug/L		095-322 Depth : 180.00 10/10/2024 ug/L		095-323 Depth : 205.00 02/21/2024 ug/L		095-323 Depth : 205.00 05/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.52**		**1.99**		**1.63**		**1.46**		**1.1**		**1.41**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**1.08**		**0.98**	J
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.46	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**3.39**		**4.29**		**3.62**		**3.82**		**0.63**	J	**0.78**	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	J	**0.65**	J	**0.84**	J	**0.7**	J	**0.65**	J	**0.8**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.57	U	0.5	U	**3.37**	J	0.5	U	0.62	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**16.6**		**16**		**11.8**		**13.2**		**8.5**		**8.55**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**7.74**		**7.72**		**5.84**		**6.92**		**3.65**		**3.88**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)			3	U	3	U	3	U			3	U
8260 TVOC	29.75		31.11		27.1		26.1		15.61		16.4	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	095-323 Depth : 205.00 09/05/2024 ug/L		095-323 Depth : 205.00 10/10/2024 ug/L		095-92 Depth : 121.00 05/03/2024 ug/L		095-92 Depth : 121.00 10/10/2024 ug/L		104-11 Depth : 190.00 04/29/2024 ug/L		104-11 Depth : 190.00 10/14/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.87**	J	**1.06**		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	**0.9**	J	**0.91**	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	J	**0.66**	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.57**	J	**0.73**	J	0.5	U	0.5	U	**0.63**	J	0.47	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**6.49**		**7.91**		0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**2.9**		**3.73**		0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	12.23		15		0		0		0.63		0.47	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	104-36 Depth : 136.00 04/30/2024 ug/L		104-36 Depth : 136.00 10/14/2024 ug/L		104-37 Depth : 209.00 02/21/2024 ug/L		104-37 Depth : 209.00 04/30/2024 ug/L		104-37 Depth : 209.00 08/28/2024 ug/L		104-37 Depth : 209.00 10/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	**1.27**		**1.36**		**1.04**		**1.06**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	**0.96**	J	**0.81**	J	**0.86**	J	**0.63**	J
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	**1.62**		**1.53**		**1.11**		**1.3**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	**1.67**		**2.41**		**2.36**		**2.16**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.49	J	0.37	J	**0.59**	J	**0.71**	J	**0.8**	J	**0.73**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.57	U	0.5	U	0.5	U	1.61	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	**68.2**		**61.8**		**57.3**		**54.3**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	**3.52**		**3.33**		**2.92**		**3.35**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U			3	U	3	U	3	U
8260 TVOC	0.49		0.37		77.83		71.95		66.39		63.53	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	104-38 Depth : 205.00 04/29/2024 ug/L		104-38 Depth : 205.00 10/14/2024 ug/L		105-23 Depth : 180.00 03/01/2024 ug/L		105-23 Depth : 180.00 05/06/2024 ug/L		105-23 Depth : 180.00 08/28/2024 ug/L		105-23 Depth : 180.00 10/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.69**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.41	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.42	J	**0.58**	J	0.48	J	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.52**	J	0.4	J	0.37	J	**0.52**	J	0.47	J	0.46	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.74	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.01**		**0.78**	J	**9.73**		**11.9**		**14.5**		**10.6**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.38	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	3.01		1.18		10.52		13		15.45		11.06	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	105-25 Depth : 147.50 05/02/2024 ug/L		105-25 Depth : 147.50 10/21/2024 ug/L		105-42 Depth : 147.50 05/06/2024 ug/L		105-42 Depth : 147.50 10/15/2024 ug/L		105-44 Depth : 152.50 05/02/2024 ug/L		105-44 Depth : 152.50 10/21/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	**0.71**	J	0.42	J
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.34	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	1.77	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**0.52**	J	0.5	U	0.39	J	0.5	U	**1.44**		**1.15**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0.52		0		0.39		0		2.49		1.57	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	105-53 Depth : 175.00 05/21/2024 ug/L		105-53 Depth : 175.00 10/15/2024 ug/L		105-66 Depth : 184.00 02/21/2024 ug/L		105-66 Depth : 184.00 05/01/2024 ug/L		105-66 Depth : 184.00 08/23/2024 ug/L		105-66 Depth : 184.00 10/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	**0.78**	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Benzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Bromoform	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	**3.6**	DJ	**4.65**	DJ	**3.2**	DJ	**3.95**	
Chlorobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Chloroform	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.48	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Cymene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
DBCP	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
EDB	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Methylene chloride	0.5	U	1.32	U	2.88	U	0.5	DU	0.5	DU	1.44	U
n-Butylbenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Styrene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Tetrachloroethylene	0.5	U	0.35	J	**126**	D	**122**	D	**115**	D	**116**	D
Toluene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Trichloroethylene	0.5	U	0.5	U	**3.84**	DJ	**3.5**	DJ	**2.9**	DJ	**3.33**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	DU	0.5	DU	0.5	DU	0.5	U
Xylene (total)	3	U	3	U			15	DU	15	DU	3	U
8260 TVOC	0		0.35		133.44		130.15		121.1		124.54	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	105-67 Depth : 185.00 03/01/2024 ug/L		105-67 Depth : 185.00 05/01/2024 ug/L		105-67 Depth : 185.00 08/23/2024 ug/L		105-67 Depth : 185.00 10/15/2024 ug/L		105-68 Depth : 205.00 02/21/2024 ug/L		105-68 Depth : 205.00 04/23/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,1,1-Trichloroethane	**1.96**		**3.14**	D	**2.42**	D	**3.14**		**0.57**	J	0.5	DU
1,1,2,2-Tetrachloroethane	0.49	J	0.5	DU	0.5	DU	**0.58**	J	**2.47**		**1.9**	DJ
1,1,2-Trichloroethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,1-Dichloroethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,1-Dichloroethylene	**1.46**		**2.34**	D	**2.22**	D	**2.3**		**0.82**	J	0.5	DU
1,1-Dichloropropene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,2,3-Trichlorobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,2,3-Trichloropropane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,2,4-Trichlorobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,2-Dichloroethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,2-Dichloropropane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
1,3-Dichloropropane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
2,2-Dichloropropane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Benzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Benzene, 1,2,4-trimethyl	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Benzene, 1-methylethyl-	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Bromobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Bromodichloromethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Bromoform	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Carbon tetrachloride	0.5	U	0.5	DU	0.5	DU	0.5	U	**3.78**		**3.1**	DJ
Chlorobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Chlorobromomethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Chloroethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Chloroform	0.45	J	**0.68**	DJ	0.5	DU	**0.65**	J	**0.84**	J	0.5	DU
cis-1,2-Dichloroethylene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
cis-1,3-Dichloropropene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Cymene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
DBCP	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Dibromochloromethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Dibromomethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Dichlorodifluoromethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
EDB	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Ethylbenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Hexachlorobutadiene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
m-Dichlorobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
m/p xylene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Methyl bromide	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Methyl chloride	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Methyl tert-butyl ether	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Methylene chloride	0.5	U	0.5	DU	0.5	DU	0.5	U	0.68	U	0.5	DU
n-Butylbenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
n-Propylbenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Naphthalene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
o-Chlorotoluene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
o-Dichlorobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
o-Xylene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
p-Chlorotoluene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
p-Dichlorobenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
sec-Butylbenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Styrene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
tert-Butylbenzene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Tetrachloroethylene	**133**	D	**118**	D	**104**	D	**97.5**		**135**	D	**92.5**	D
Toluene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
trans-1,3-Dichloropropene	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Trichloroethylene	**1.18**		**1.6**	DJ	**1.44**	DJ	**1.77**		**12.1**		**8.05**	D
Trichlorofluoromethane	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Vinyl chloride	0.5	U	0.5	DU	0.5	DU	0.5	U	0.5	U	0.5	DU
Xylene (total)	3	U	6	DU	6	DU	3	U			15	DU
8260 TVOC	138.54		125.76		110.08		105.94		155.58		105.55	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	105-68 Depth : 205.00 09/05/2024 ug/L		105-68 Depth : 205.00 10/16/2024 ug/L		105-80 Depth : 180.00 05/02/2024 ug/L		105-80 Depth : 180.00 09/05/2024 ug/L		105-80 Depth : 180.00 10/16/2024 ug/L		105-81 Depth : 193.00 05/02/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.42	J	**0.52**	J	**0.71**	J	0.48	J	**0.58**	J	**0.9**	J
1,1,2,2-Tetrachloroethane	**1.94**		**1.66**		0.5	U	0.5	U	0.5	U	**0.69**	J
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.35	J
1,1-Dichloroethylene	**0.54**	J	**0.55**	J	0.38	J	0.43	J	0.45	J	**1.71**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.38	J	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**2.31**		**3.08**		**62.6**		**30.4**		**37.1**		**1.34**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.75**	J	**1.07**		**4.11**		**1.98**		**2.72**		**0.73**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	1.48	U	0.5	U	0.5	U	1.29	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.49	J	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**108**	R	**88**		**169**	D	**171**	J	**150**	D	**34.9**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**7.1**		**7.91**		**0.81**	J	**0.67**	J	**0.78**	J	**3.25**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	13.06		103.66		237.61		33.96		191.63		43.87	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	105-81 Depth : 193.00 09/05/2024 ug/L		105-81 Depth : 193.00 10/17/2024 ug/L		106-56 Depth : 165.00 05/14/2024 ug/L		106-58 Depth : 205.00 05/14/2024 ug/L		106-58 Depth : 205.00 10/16/2024 ug/L		106-62 Depth : 72.00 05/14/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.54**	J	**0.73**	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	**0.6**	J	0.49	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.38	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**1.28**		**1.7**		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**0.66**	J	**0.91**	J	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	J	**0.63**	J	0.5	U	**0.53**	J	0.43	J	**1.08**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	1.33	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**22.9**	J	**18.5**		0.5	U	**0.85**	J	**0.94**	J	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**1.81**		**1.73**		0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	5.39		25.07		0		1.38		1.37		1.08	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	106-62 Depth : 72.00 10/21/2024 ug/L		113-07 Depth : 99.00 10/11/2024 ug/L		113-08 Depth : 142.00 05/03/2024 ug/L		113-08 Depth : 142.00 10/11/2024 ug/L		113-09 Depth : 222.00 05/02/2024 ug/L		113-09 Depth : 222.00 10/11/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**0.77**	J	**0.57**	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**0.82**	J	**0.69**	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.92**	J	0.5	U	**0.64**	J	**1.17**		0.4	J	0.37	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.45	J	**1.04**		**0.63**	J	**46.4**		**37.5**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**2.94**		**2.66**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0.92		0.45		1.68		1.8		51.33		41.79	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	113-11 Depth : 201.00 05/06/2024 ug/L		113-11 Depth : 201.00 10/14/2024 ug/L		113-17 Depth : 177.00 02/20/2024 ug/L		113-17 Depth : 177.00 05/21/2024 ug/L		113-17 Depth : 177.00 08/27/2024 ug/L		113-17 Depth : 177.00 10/17/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.38	J	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.37	J	0.36	J	**0.71**	J	**0.52**	J	0.41	J	0.37	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	1.55	U	0.56	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**2.97**		**3.71**		**18.9**		**14.5**		**12.9**		**12.3**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	**0.56**	J	**0.53**	J	0.46	J	**0.74**	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U			3	U	3	U	3	U
8260 TVOC	3.34		4.07		20.17		15.55		14.15		13.41	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	113-18 Depth : 152.00 10/17/2024 ug/L		113-19 Depth : 230.00 02/20/2024 ug/L		113-19 Depth : 230.00 05/22/2024 ug/L		113-19 Depth : 230.00 08/26/2024 ug/L		113-19 Depth : 230.00 10/17/2024 ug/L		113-22 Depth : 240.00 05/21/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	**5.73**		**5.72**		**5.69**		**5.27**		0.36	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	**1.03**		**1.08**		**1.12**		**1.05**		0.5	U
1,1-Dichloroethylene	0.5	U	**3.23**		**3.53**		**3.64**		**2.91**		0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	**3.44**		**3.53**		**3.72**		**3.54**		**8.33**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	**0.57**	J	**0.6**	J	**0.61**	J	**0.63**	J	**0.89**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.64	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	**4.11**		**4.1**		**3.6**		**3.28**		0.41	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U			3	U	3	U	3	U	3	U
8260 TVOC	0		18.11		18.56		18.38		16.68		9.99	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	113-22 Depth : 240.00 10/23/2024 ug/L		113-29 Depth : 190.00 02/21/2024 ug/L		113-29 Depth : 190.00 05/03/2024 ug/L		113-29 Depth : 190.00 08/23/2024 ug/L		113-29 Depth : 190.00 10/14/2024 ug/L		113-30 Depth : 190.00 02/21/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**6.04**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.63**	J	0.5	U	0.42	J	**0.6**	J	**0.78**	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.61	U	0.5	U	0.5	U	1.48	U	0.64	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	**1.28**		**1.33**		**1.09**		0.43	J	**3**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U			3	U	3	U	3	U		
8260 TVOC	6.67		1.28		1.75		1.69		1.21		3	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	113-30 Depth : 190.00 05/06/2024 ug/L		113-30 Depth : 190.00 08/27/2024 ug/L		113-30 Depth : 190.00 10/15/2024 ug/L		113-31 Depth : 190.00 02/21/2024 ug/L		113-31 Depth : 190.00 04/30/2024 ug/L		113-31 Depth : 190.00 08/28/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	**0.96**	J	**1.37**		**1.21**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.34	J	0.45	J	0.45	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.38	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	1.31	U	0.68	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**2.81**		**2.28**		**2.3**		0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	**0.51**	J	**0.59**	J	**0.64**	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U			3	U	3	U
8260 TVOC	3.19		2.28		2.3		1.81		2.41		2.3	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Middle Rd)

Analyte	113-31 Depth : 190.00 10/23/2024 ug/L		114-12 Depth : 155.00 02/21/2024 ug/L		114-12 Depth : 155.00 05/21/2024 ug/L		114-12 Depth : 155.00 08/27/2024 ug/L		114-12 Depth : 155.00 10/16/2024 ug/L		121-45 Depth : 199.00 02/23/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.79**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	**0.87**	J	0.5	U	0.41	J	**0.69**	J	0.37	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.55	U	0.5	U	0.5	U	1.42	U	0.64	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**3.48**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.43	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U			3	U	3	U	3	U		
8260 TVOC	1.22		0.87		0		0.41		0.69		3.85	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	121-45 Depth : 199.50 05/22/2024 ug/L		121-45 Depth : 199.50 08/26/2024 ug/L		121-45 Depth : 199.50 10/23/2024 ug/L		121-53 Depth : 229.00 02/23/2024 ug/L		121-53 Depth : 229.00 04/25/2024 ug/L		121-53 Depth : 229.00 05/14/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	**1.66**	DJ	**2**		**2.29**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.38	J
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	**1.74**	DJ	**1.9**		**2.68**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	**10.3**	D	**19.4**		**17.3**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Chloroform	0.38	J	0.42	J	0.5	U	**0.84**	DJ	**1.22**		**1.18**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Methylene chloride	0.5	U	**0.8**	J	0.5	U	2.06	U	0.58	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Tetrachloroethylene	**2.88**		**3.25**		**2.22**		**132**	D	**131**	D	**137**	D
Toluene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.34	J	0.5	U	**3**	D	**3.12**		**3.35**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	6	DU	3	U	3	U
8260 TVOC	3.26		4.81		2.22		149.54		158.64		164.18	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	121-53 Depth : 229.00 08/26/2024 ug/L		121-53 Depth : 229.00 10/22/2024 ug/L		121-54 Depth : 220.00 02/23/2024 ug/L		121-54 Depth : 220.00 04/25/2024 ug/L		121-54 Depth : 220.00 05/14/2024 ug/L		121-54 Depth : 220.00 08/26/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**2.44**		**1.48**	DJ	0.5	U	**0.54**	J	0.45	J	0.38	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**2.71**		**1.52**	DJ	0.35	J	0.49	J	0.44	J	0.5	U
1,1-Dichloropropene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	DU	0.5	U	0.48	J	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**17.4**		**10.1**	D	**4.06**		**6.61**		**5.42**		**3.85**	
Chlorobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.13**		0.5	DU	0.45	J	**0.58**	J	**0.62**	J	**0.58**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	DU	1.76	U	0.5	U	0.5	U	**0.72**	J
n-Butylbenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**153**	D	**113**	D	**53.3**		**65.8**		**48.9**		**48.5**	
Toluene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**3.43**		**2.32**	DJ	**0.72**	J	**1**		**0.82**	J	**0.72**	J
Trichlorofluoromethane	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	12	DU	3	U	3	U	3	U	3	U
8260 TVOC	180.11		128.42		58.88		75.5		56.65		54.75	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Middle Rd)

Analyte	121-54 Depth : 220.00 10/22/2024 ug/L											
1,1,1,2-Tetrachloroethane	0.5	U										
1,1,1-Trichloroethane	0.5	U										
1,1,2,2-Tetrachloroethane	0.5	U										
1,1,2-Trichloroethane	0.5	U										
1,1-Dichloroethane	0.5	U										
1,1-Dichloroethylene	0.5	U										
1,1-Dichloropropene	0.5	U										
1,2,3-Trichlorobenzene	0.5	U										
1,2,3-Trichloropropane	0.5	U										
1,2,4-Trichlorobenzene	0.5	U										
1,2-Dichloroethane	0.5	U										
1,2-Dichloropropane	0.5	U										
1,3-Dichloropropane	0.5	U										
2,2-Dichloropropane	0.5	U										
Benzene	0.5	U										
Benzene, 1,2,4-trimethyl	0.5	U										
Benzene, 1,3,5-trimethyl-	0.5	U										
Benzene, 1-methylethyl-	0.5	U										
Bromobenzene	0.5	U										
Bromodichloromethane	0.5	U										
Bromoform	0.5	U										
Carbon tetrachloride	**2.68**											
Chlorobenzene	0.5	U										
Chlorobromomethane	0.5	U										
Chloroethane	0.5	U										
Chloroform	0.43	J										
cis-1,2-Dichloroethylene	0.5	U										
cis-1,3-Dichloropropene	0.5	U										
Cymene	0.5	U										
DBCP	0.5	U										
Dibromochloromethane	0.5	U										
Dibromomethane	0.5	U										
Dichlorodifluoromethane	0.5	U										
EDB	0.5	U										
Ethene, 1,2-dichloro-, (E)-	0.5	U										
Ethylbenzene	0.5	U										
Hexachlorobutadiene	0.5	U										
m-Dichlorobenzene	0.5	U										
m/p xylene	0.5	U										
Methyl bromide	0.5	U										
Methyl chloride	0.5	U										
Methyl tert-butyl ether	0.5	U										
Methylene chloride	0.5	U										
n-Butylbenzene	0.5	U										
n-Propylbenzene	0.5	U										
Naphthalene	0.5	U										
o-Chlorotoluene	0.5	U										
o-Dichlorobenzene	0.5	U										
o-Xylene	0.5	U										
p-Chlorotoluene	0.5	U										
p-Dichlorobenzene	0.5	U										
sec-Butylbenzene	0.5	U										
Styrene	0.5	U										
tert-Butylbenzene	0.5	U										
Tetrachloroethylene	**36**											
Toluene	0.5	U										
trans-1,3-Dichloropropene	0.5	U										
Trichloroethylene	**0.58**	J										
Trichlorofluoromethane	0.5	U										
Vinyl chloride	0.5	U										
Xylene (total)	3	U										
8260 TVOC	39.69											

OU III (South Boundary) Analytical Results

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	114-07 Depth : 205.00 10/16/2024 ug/L		121-06 Depth : 45.00 09/03/2024 ug/L		121-08 Depth : 185.00 05/06/2024 ug/L		121-08 Depth : 185.00 09/03/2024 ug/L		121-08 Depth : 185.00 10/18/2024 ug/L		121-10 Depth : 165.00 04/25/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.35	J	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.44	J	0.5	J	0.43	J	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
Chloroform	0.5	U	**0.89**	J	0.5	U	0.5	U	0.5	U	0.38	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.57	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.37	J	0.39	J	0.41	J	**8.73**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	**0.88**	J	**0.75**	J	**0.72**	J	**0.57**	J
Trichlorofluoromethane	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0		0.89		1.69		1.99		1.56		9.68	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	121-10 Depth : 165.00 10/15/2024 ug/L		121-11 Depth : 205.00 04/25/2024 ug/L		121-11 Depth : 205.00 10/15/2024 ug/L		121-12 Depth : 50.00 09/04/2024 ug/L		121-14 Depth : 195.00 05/06/2024 ug/L		121-14 Depth : 195.00 10/21/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	**2.55**		**3.27**		0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	UJ	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.39	J	0.39	J	**1.58**		0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	**0.66**	J	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	1.09	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.41	J	**11.8**		**10**		0.5	U	0.37	J	0.45	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	**0.63**	J	**0.6**	J	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	UJ	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0.41		15.37		14.92		1.58		0.37		0.45	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	121-18 Depth : 70.00 09/06/2024 ug/L		121-20 Depth : 190.00 10/21/2024 ug/L		121-21 Depth : 70.00 09/06/2024 ug/L		121-23 Depth : 190.00 10/18/2024 ug/L		121-43 Depth : 195.00 05/20/2024 ug/L		121-43 Depth : 195.00 11/07/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.13**		0.5	U	**0.63**	J	0.35	J	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	**6.15**		0.5	U	**0.51**	J	**0.77**	J	**0.68**	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.13		6.15		0.63		0.86		0.77		0.68	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	121-45 Depth : 199.00 02/23/2024 ug/L		121-45 Depth : 199.50 05/22/2024 ug/L		121-45 Depth : 199.50 08/26/2024 ug/L		121-45 Depth : 199.50 10/23/2024 ug/L		121-47 Depth : 229.00 05/06/2024 ug/L		121-47 Depth : 229.00 10/18/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**2.12**		**1.26**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**0.98**	J	**0.64**	J
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**2.71**		**2.08**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
Chloroform	0.37	J	0.38	J	0.42	J	0.5	U	**1.16**		**0.9**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.64	U	0.5	U	**0.8**	J	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**3.48**		**2.88**		**3.25**		**2.22**		0.48	J	0.49	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.34	J	0.5	U	**1.04**		**0.67**	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)			3	U	3	U	3	U	3	U	3	U
8260 TVOC	3.85		3.26		4.81		2.22		8.49		6.04	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	121-48 Depth : 228.00 05/22/2024 ug/L		121-48 Depth : 228.00 10/18/2024 ug/L		121-49 Depth : 215.00 02/28/2024 ug/L		121-49 Depth : 215.00 05/06/2024 ug/L		121-49 Depth : 215.00 09/04/2024 ug/L		121-49 Depth : 215.00 10/21/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**2.79**		**1.76**		0.5	U	0.39	J	0.39	J	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**3.1**		**1.91**		0.5	U	0.37	J	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**1.41**		**1.06**		**0.8**	J	**1.56**		**0.75**	J	**0.84**	J
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.74**	J	**0.61**	J	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.41	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.89**		**1.99**		**65**		**55.6**		**44.1**		**44.4**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**3.38**		**2.46**		**0.76**	J	**0.85**	J	**0.76**	J	**0.61**	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	13.72		9.79		66.56		58.77		46		45.85	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	121-53 Depth : 229.00 02/23/2024 ug/L		121-53 Depth : 229.00 04/25/2024 ug/L		121-53 Depth : 229.00 05/14/2024 ug/L		121-53 Depth : 229.00 08/26/2024 ug/L		121-53 Depth : 229.00 10/22/2024 ug/L		121-54 Depth : 220.00 02/23/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,1,1-Trichloroethane	**1.66**	DJ	**2**		**2.29**		**2.44**		**1.48**	DJ	0.5	U
1,1,2,2-Tetrachloroethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,1,2-Trichloroethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,1-Dichloroethane	0.5	DU	0.5	U	0.38	J	0.5	U	0.5	DU	0.5	U
1,1-Dichloroethylene	**1.74**	DJ	**1.9**		**2.68**		**2.71**		**1.52**	DJ	0.35	J
1,1-Dichloropropene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,2,3-Trichlorobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,2,3-Trichloropropane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,2,4-Trichlorobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,2-Dichloroethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,2-Dichloropropane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
1,3-Dichloropropane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
2,2-Dichloropropane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Benzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Benzene, 1,2,4-trimethyl	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Benzene, 1-methylethyl-	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Bromobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Bromodichloromethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Bromoform	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Carbon tetrachloride	**10.3**	D	**19.4**		**17.3**		**17.4**		**10.1**	D	**4.06**	
Chlorobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Chlorobromomethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Chloroethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Chloroform	**0.84**	DJ	**1.22**		**1.18**		**1.13**		0.5	DU	0.45	J
cis-1,2-Dichloroethylene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
cis-1,3-Dichloropropene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Cymene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
DBCP	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Dibromochloromethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Dibromomethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Dichlorodifluoromethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
EDB	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Ethylbenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Hexachlorobutadiene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
m-Dichlorobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
m/p xylene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Methyl bromide	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Methyl chloride	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Methyl tert-butyl ether	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Methylene chloride	2.06	U	0.58	U	0.5	U	0.5	U	0.5	DU	1.76	U
n-Butylbenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
n-Propylbenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Naphthalene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
o-Chlorotoluene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
o-Dichlorobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
o-Xylene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
p-Chlorotoluene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
p-Dichlorobenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
sec-Butylbenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Styrene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
tert-Butylbenzene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Tetrachloroethylene	**132**	D	**131**	D	**137**	D	**153**	D	**113**	D	**53.3**	
Toluene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
trans-1,3-Dichloropropene	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Trichloroethylene	**3**	D	**3.12**		**3.35**		**3.43**		**2.32**	DJ	**0.72**	J
Trichlorofluoromethane	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Vinyl chloride	0.5	DU	0.5	U	0.5	U	0.5	U	0.5	DU	0.5	U
Xylene (total)	6	DU	3	U	3	U	3	U	12	DU	3	U
8260 TVOC	149.54		158.64		164.18		180.11		128.42		58.88	

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Analyte	121-54 Depth : 220.00 04/25/2024 ug/L		121-54 Depth : 220.00 05/14/2024 ug/L		121-54 Depth : 220.00 08/26/2024 ug/L		121-54 Depth : 220.00 10/22/2024 ug/L		121-57 Depth : 217.00 05/13/2024 ug/L		121-57 Depth : 217.00 09/23/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.54**	J	0.45	J	0.38	J	0.5	U	**2.21**		**2.54**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.49	J	0.44	J	0.5	U	0.5	U	**2.59**		**2.49**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.48	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**6.61**		**5.42**		**3.85**		**2.68**		**16.7**		**21**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.58**	J	**0.62**	J	**0.58**	J	0.43	J	**0.98**	J	**1.13**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	**0.72**	J	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**65.8**		**48.9**		**48.5**		**36**		**182**	D	**242**	D
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**1**		**0.82**	J	**0.72**	J	**0.58**	J	**3.55**		**3.92**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	75.5		56.65		54.75		39.69		208.03		273.08	

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Analyte	121-57 Depth : 217.00 10/18/2024 ug/L		122-04 Depth : 202.50 10/15/2024 ug/L		122-05 Depth : 271.50 05/23/2024 ug/L		122-05 Depth : 271.50 10/15/2024 ug/L		122-10 Depth : 154.50 09/23/2024 ug/L		122-17 Depth : 210.00 05/24/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.83**		0.5	U	0.38	J	0.5	J	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**1.79**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**16.3**		0.5	U	0.5	U	0.5	U	0.5	U	**0.71**	J
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	UJ	0.5	UJ	0.5	U	0.5	UJ	0.5	U	0.5	U
Chloroform	**0.97**	J	0.5	U	0.5	U	0.5	U	**0.55**	J	**0.64**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	**6.81**		**3.31**		0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**211**	D	**0.95**	J	**2.36**		**1.98**		0.5	U	**1.47**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**3.06**		0.5	U	**1.28**		**0.96**	J	0.5	U	**1.19**	
Trichlorofluoromethane	0.5	UJ	0.5	UJ	0.5	U	0.5	UJ	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	234.95		0.95		10.83		6.75		0.55		4.01	

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Analyte	122-17 Depth : 210.00 11/19/2024 ug/L		122-19 Depth : 200.00 10/17/2024 ug/L		122-20 Depth : 260.00 10/17/2024 ug/L		122-21 Depth : 185.00 10/16/2024 ug/L		122-22 Depth : 205.00 10/16/2024 ug/L		122-32 Depth : 205.00 10/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	**0.9**	J	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**0.55**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Chloroform	**0.61**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	**0.6**	J	**0.66**	J	**8.2**		**1.88**		0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	**2.04**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.45**		**1.65**		**1.4**		**2.07**		**0.51**	J	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**1.17**		0.4	J	**1.34**		**0.52**	J	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	5.82		2.65		4.3		10.79		2.39		0	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (South Boundary)

Analyte	122-33 Depth : 180.00 10/16/2024 ug/L		122-34 Depth : 200.00 11/08/2024 ug/L		122-35 Depth : 205.00 11/08/2024 ug/L							
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,1-Trichloroethane	0.5	U	**1.3**		0.5	U						
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethylene	0.5	U	0.35	J	0.5	U						
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U						
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U						
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
Benzene	0.5	U	0.5	U	0.5	U						
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U						
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U						
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U						
Bromobenzene	0.5	U	0.5	U	0.5	U						
Bromodichloromethane	0.5	U	0.5	U	0.5	U						
Bromoform	0.5	U	0.5	U	0.5	U						
Carbon tetrachloride	0.5	U	0.5	U	0.5	U						
Chlorobenzene	0.5	U	0.5	U	0.5	U						
Chlorobromomethane	0.5	U	0.5	U	0.5	U						
Chloroethane	0.5	UJ	0.5	U	0.5	U						
Chloroform	0.5	U	0.5	U	0.5	U						
cis-1,2-Dichloroethylene	0.5	U	0.5	U	**1.1**							
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Cymene	0.5	U	0.5	U	0.5	U						
DBCP	0.5	U	0.5	U	0.5	U						
Dibromochloromethane	0.5	U	0.5	U	0.5	U						
Dibromomethane	0.5	U	0.5	U	0.5	U						
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U						
EDB	0.5	U	0.5	U	0.5	U						
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U						
Ethylbenzene	0.5	U	0.5	U	0.5	U						
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U						
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
m/p xylene	0.5	U	0.5	U	0.5	U						
Methyl bromide	0.5	U	0.5	U	0.5	U						
Methyl chloride	0.5	U	0.5	U	0.5	U						
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U						
Methylene chloride	0.5	U	0.5	U	0.5	U						
n-Butylbenzene	0.5	U	0.5	U	0.5	U						
n-Propylbenzene	0.5	U	0.5	U	0.5	U						
Naphthalene	0.5	U	0.5	U	0.5	U						
o-Chlorotoluene	0.5	U	0.5	U	0.5	U						
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
o-Xylene	0.5	U	0.5	U	0.5	U						
p-Chlorotoluene	0.5	U	0.5	U	0.5	U						
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
sec-Butylbenzene	0.5	U	0.5	U	0.5	U						
Styrene	0.5	U	0.5	U	0.5	U						
tert-Butylbenzene	0.5	U	0.5	U	0.5	U						
Tetrachloroethylene	0.5	U	0.5	U	0.5	U						
Toluene	0.5	U	0.5	U	0.5	U						
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Trichloroethylene	0.5	U	0.5	U	0.5	U						
Trichlorofluoromethane	0.5	UJ	0.5	U	0.5	U						
Vinyl chloride	0.5	U	0.5	U	0.5	U						
Xylene (total)	3	U	3	U	3	U						
8260 TVOC	0		1.65		1.1							

OU III (Industrial Park)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-112 Depth : 180.00 04/29/2024 ug/L		000-112 Depth : 180.00 10/22/2024 ug/L		000-114 Depth : 135.00 10/22/2024 ug/L		000-245 Depth : 212.00 11/05/2024 ug/L		000-248 Depth : 232.50 10/28/2024 ug/L		000-249 Depth : 264.00 04/18/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**4.3**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.74**		**0.63**		**0.95**		**0.86**		**0.76**		**1**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.41	J
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.22	J	0.3	J	0.5	U	0.5	U	0.36	J	0.4	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.32	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.96		0.93		0.95		0.86		1.12		6.43	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Industrial Park)

Analyte	000-249 Depth : 264.00 10/17/2024 ug/L		000-250 Depth : 298.00 10/17/2024 ug/L		000-252 Depth : 171.50 10/18/2024 ug/L		000-253 Depth : 225.50 04/18/2024 ug/L		000-253 Depth : 225.50 10/18/2024 ug/L		000-255 Depth : 167.50 10/28/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**0.84**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.65**		0.5	U	**1.1**		**1.3**		**1.2**		**1.1**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	**0.54**		0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**0.84**		0.5	U	0.5	U	0.25	J	0.33	J	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.28	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	2.61		0		1.1		2.09		1.53		1.1	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Industrial Park)

Analyte	000-256 Depth : 222.50 04/19/2024 ug/L		000-256 Depth : 222.50 10/28/2024 ug/L		000-259 Depth : 202.50 04/19/2024 ug/L		000-259 Depth : 202.50 10/17/2024 ug/L		000-261 Depth : 132.50 10/25/2024 ug/L		000-262 Depth : 182.50 04/17/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.38	J	0.29	J	0.5	U	0.34	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.31	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	**0.62**		**0.52**		0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.2**		**1.3**		0.43	J	0.4	J	0.4	J	0.49	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.72**	
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.37	J	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**0.59**		0.4	J	**6**		**5.3**		0.5	U	**1.4**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	**0.54**		0.43	J	0.5	U	0.36	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	1.79		1.7		8.34		6.94		0.4		3.62	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Industrial Park)

Analyte	000-262 Depth : 182.50 10/25/2024 ug/L		000-265 Depth : 212.50 10/24/2024 ug/L		000-267 Depth : 160.50 10/08/2024 ug/L		000-268 Depth : 215.50 04/17/2024 ug/L		000-268 Depth : 215.50 10/08/2024 ug/L		000-271 Depth : 215.50 04/17/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.47	J	0.5	U	0.5	U	0.41	J	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.4	J	0.5	U	0.5	U	0.38	J	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.17	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.54**		0.47	J	0.5	U	**0.78**		0.68	U	0.35	J
cis-1,2-Dichloroethylene	**0.62**		0.39	J	0.5	U	**1.7**		**0.79**		0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.38	J	0.5	U	0.17	J
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.7**		0.5	U	0.5	U	**0.96**		**0.83**		0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.42	J	0.35	J	0.5	U	0.5		0.48	J	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	4.32		1.21		0		5.11		2.1		0.52	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-271 Depth : 215.50 10/08/2024 ug/L		000-272 Depth : 191.00 10/07/2024 ug/L		000-273 Depth : 185.00 04/30/2024 ug/L		000-273 Depth : 185.00 11/04/2024 ug/L		000-274 Depth : 242.00 04/30/2024 ug/L		000-274 Depth : 242.00 11/04/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	**0.51**		**0.68**		**1.2**		**0.84**	
cis-1,2-Dichloroethylene	0.24	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.19	J	0.2	J	0.28	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.24		0		0.51		0.87		1.4		1.12	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-275 Depth : 134.00 04/30/2024 ug/L		000-275 Depth : 134.00 11/01/2024 ug/L		000-276 Depth : 164.00 04/30/2024 ug/L		000-276 Depth : 164.00 11/01/2024 ug/L		000-277 Depth : 147.00 04/29/2024 ug/L		000-277 Depth : 147.00 11/05/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.19	J	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0.19		0		0		0	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Industrial Park)

Analyte	000-278 Depth : 194.00 04/29/2024 ug/L		000-278 Depth : 189.00 11/05/2024 ug/L		000-279 Depth : 193.00 04/16/2024 ug/L		000-279 Depth : 193.00 10/24/2024 ug/L		000-431 Depth : 260.00 04/29/2024 ug/L		000-431 Depth : 260.00 10/28/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.59**		**0.56**		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5		0.24	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.35	J	0.4	J	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.56**		0.44	J	**0.92**		**0.94**		**1.1**		**1.1**	
cis-1,2-Dichloroethylene	**1.4**		0.48	J	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.3**		**0.98**		**1**		**0.84**		0.21	J	0.2	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**1.3**		**1.3**		0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	6		4.4		1.92		1.78		1.31		1.3	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-432 Depth : 230.00 04/30/2024 ug/L		000-432 Depth : 230.00 11/01/2024 ug/L		000-528 Depth : 220.00 04/16/2024 ug/L		000-528 Depth : 220.00 10/24/2024 ug/L		000-529 Depth : 215.00 02/22/2024 ug/L		000-529 Depth : 215.00 04/19/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**3.2**		**2.7**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**1.9**		**1.8**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	**0.96**		**0.71**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.36	J	0.38	J	0.33	J	0.33	J	**0.56**		**0.73**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.16	J
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.25	J	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	**1.5**		**1.1**		**5.7**		**4.7**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**1.7**		**1.5**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.36		0.38		2.08		1.43		14.02		12.3	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-529 Depth : 215.00 07/08/2024 ug/L		000-529 Depth : 215.00 11/04/2024 ug/L		000-530 Depth : 210.00 02/22/2024 ug/L		000-530 Depth : 210.00 04/26/2024 ug/L		000-530 Depth : 210.00 07/10/2024 ug/L		000-530 Depth : 210.00 10/18/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.7**		**1.8**		**7.8**		**7.6**		**6.3**		**5.4**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	**2**		**1.5**		**3**		**2.6**	
1,1-Dichloroethylene	**1**		**0.98**		**6**		**4.9**		**6.1**		**5.2**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.44	J	**0.56**		0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5		0.41	J	0.17	J	0.22	J	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.16	J	0.19	J	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**2.9**		**3.4**		0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**0.93**		**1.2**		**1**		**0.91**		**0.83**		**0.75**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	7.47		8.35		16.97		15.29		16.42		13.95	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Industrial Park)

Analyte	000-531 Depth : 205.00 02/22/2024 ug/L		000-531 Depth : 205.00 04/17/2024 ug/L		000-531 Depth : 205.00 07/10/2024 ug/L		000-531 Depth : 205.00 10/25/2024 ug/L		000-532 Depth : 253.00 01/12/2024 ug/L		000-532 Depth : 253.00 04/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**1.2**		**1.2**		**1.1**		**0.86**		0.26	J	**0.62**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.21	J	0.27	J
1,1-Dichloroethylene	**1.4**		**1.2**		**1.3**		**0.91**		0.5	U	0.47	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**3.1**		**2.6**		**2.8**		**2**		0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.82**		**0.94**		**0.8**		**0.78**		0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.33	J	0.41	J	0.28	J	0.26	J	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.34	J	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.45	J	0.43	J	0.46	J	0.41	J	0.5	U	0.23	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**4.4**		**3.7**		**3.2**		**2.9**		0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	11.7		10.82		9.94		8.12		0.47		1.59	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-532 Depth : 253.00 07/10/2024 ug/L		000-532 Depth : 253.00 10/10/2024 ug/L		000-533 Depth : 243.00 01/12/2024 ug/L		000-533 Depth : 243.00 04/10/2024 ug/L		000-533 Depth : 243.00 07/10/2024 ug/L		000-533 Depth : 243.00 10/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.38	J	**1.3**		**0.79**		**0.88**		0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.26	J	0.29	J	**0.53**		**0.67**		0.45	J	**0.82**	
1,1-Dichloroethylene	0.24	J	0.35	J	**1.7**		**1.6**		**1.5**		**1.5**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.46	J	0.29	J	0.31	J	0.31	J
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.31	J	0.31	J	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.33	J	0.22	J	0.2	J	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.81		1.33		4.32		3.57		3.34		2.63	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-537 Depth : 245.00 02/08/2024 ug/L		000-537 Depth : 245.00 04/16/2024 ug/L		000-537 Depth : 245.00 07/08/2024 ug/L		000-537 Depth : 245.00 10/07/2024 ug/L		000-538 Depth : 215.00 02/08/2024 ug/L		000-538 Depth : 215.00 04/16/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**4.5**		**4**		**4.2**		**4.3**		**2.4**		**2.7**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**1.7**		**1.6**		**1.7**		**1.5**		**0.98**		**1.1**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**0.82**		**0.76**		**0.8**		**0.78**		**0.55**		**0.64**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.59**		**0.51**		0.47	J	0.5	U	0.42	J	**0.56**	
cis-1,2-Dichloroethylene	**0.55**		**0.57**		0.49	J	0.49	J	0.29	J	0.44	J
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.21	J	0.5	U	0.5	U	0.5	U	0.2	J
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.24	J	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**24**		**28**		**20**		**22**		**6.2**		**6.7**	
Toluene	0.5	U	0.5	U	**0.63**		0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**5.6**		**5.2**		**5.1**		**5.7**		**3.3**		**4.6**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	37.76		41.09		33.39		34.77		14.14		16.94	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-538 Depth : 215.00 07/08/2024 ug/L		000-538 Depth : 215.00 10/07/2024 ug/L		000-541 Depth : 235.00 02/22/2024 ug/L		000-541 Depth : 235.00 04/29/2024 ug/L		000-541 Depth : 235.00 07/15/2024 ug/L		000-541 Depth : 235.00 11/04/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**2.7**		**2.3**		**1.3**		**1.3**		**1.5**		**1.7**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.23	J	0.36	J	**0.53**	
1,1-Dichloroethylene	**1.2**		**0.73**		**1**		**1.3**		**1.4**		**1.4**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**0.6**		**0.55**		**14**		**12**		**11**		**12**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.46	J	0.5	U	**1.6**		**1.5**		**2.1**		**2.5**	
cis-1,2-Dichloroethylene	0.32	J	0.31	J	0.5	U	0.18	J	0.23	J	0.2	J
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**5.7**		**4.6**		0.5	U	**7.7**		**6.9**		**7.1**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**3.8**		**3.8**		**8**		**7.9**		**8.2**		**9.7**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	14.78		12.29		25.9		32.11		31.69		35.13	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-542 Depth : 235.00 04/26/2024 ug/L		000-542 Depth : 235.00 10/22/2024 ug/L		000-543 Depth : 230.00 04/17/2024 ug/L		000-543 Depth : 230.00 10/25/2024 ug/L		000-544 Depth : 230.00 04/29/2024 ug/L		000-544 Depth : 230.00 11/05/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**6.6**		**6**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**4.9**		**3.4**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	**3**		**2.6**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5		**0.51**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.19	J	0.15	J
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.24	J	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.31	J	0.23	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0.24		0		15.5		12.89	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	000-548 Depth : 235.00 02/22/2024 ug/L		000-548 Depth : 235.00 04/16/2024 ug/L		000-548 Depth : 235.00 07/08/2024 ug/L		000-548 Depth : 235.00 10/17/2024 ug/L		127-08 Depth : 240.00 02/22/2024 ug/L		127-08 Depth : 240.00 04/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**5.4**		**5.6**		**4.4**		**4.5**		**0.59**		**0.62**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**2.3**		**2.5**		**1.9**		**2**		0.37	J	0.39	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**2**		**2**		**1.7**		**1.5**		**4.8**		**4.1**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.32	J	0.48	J	0.38	J	0.36	J	**0.86**		**0.96**	
cis-1,2-Dichloroethylene	0.5	U	0.22	J	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**0.85**		**0.89**		**0.81**		**0.65**		**15**		**15**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**7**		**6.9**		**5.1**		**5.1**		**1.5**		**1.6**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	17.87		18.59		14.29		14.11		23.12		22.67	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Industrial Park)

Analyte	127-08 Depth : 240.00 07/08/2024 ug/L		127-08 Depth : 240.00 10/07/2024 ug/L		127-09 Depth : 225.00 04/15/2024 ug/L		127-09 Depth : 225.00 10/07/2024 ug/L					
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,1-Trichloroethane	**0.51**		0.5	U	0.5	U	0.5	U				
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethylene	0.26	J	0.31	J	0.5	U	0.5	U				
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U				
Carbon tetrachloride	**4.3**		**4.1**		0.33	J	**1**					
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroform	**0.89**		0.98	U	0.47	J	0.5	U				
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Cymene	0.5	U	0.5	U	0.5	U	0.5	U				
DBCP	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
EDB	0.5	U	0.5	U	0.5	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U				
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
m/p xylene	1	U	1	U	1	U	1	U				
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U				
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U				
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U	0.5	U				
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Tetrachloroethylene	**12**		**12**		**4.5**		**4.4**					
Toluene	0.5	U	0.5	U	0.5	U	0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Trichloroethylene	**1.2**		**1.3**		0.5	U	0.22	J				
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U				
8260 TVOC	19.16		17.71		5.3		5.62					

OU III (North Street)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (North Street)

Analyte	000-108 Depth : 220.00 12/16/2024 ug/L		000-154 Depth : 198.00 12/11/2024 ug/L		000-212 Depth : 205.00 12/18/2024 ug/L		000-343 Depth : 330.00 06/12/2024 ug/L		000-343 Depth : 330.00 12/18/2024 ug/L		000-465 Depth : 190.00 12/11/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.46	J	0.5	U	**0.62**	J	**0.7**	J	0.35	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	**2.05**		**2.45**		0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**5.42**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.4	J	**0.59**	J	**0.96**	J	0.5	U	0.5	U	**1.33**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.37	J	0.41	J	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	**4.3**		0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.46	J	0.5	U	0.5	U	0.5	U	**1.19**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0.4		1.51		5.26		3.04		3.56		8.29	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (North Street)

Analyte	000-472 Depth : 211.00 01/10/2025 ug/L		000-474 Depth : 200.00 12/16/2024 ug/L									
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U								
1,1,1-Trichloroethane	**1.53**		**0.6**	J								
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U								
1,1,2-Trichloroethane	0.5	U	0.5	U								
1,1-Dichloroethane	0.5	U	0.5	U								
1,1-Dichloroethylene	**0.77**	J	0.5	U								
1,1-Dichloropropene	0.5	U	0.5	U								
1,2,3-Trichlorobenzene	0.5	U	0.5	U								
1,2,3-Trichloropropane	0.5	U	0.5	U								
1,2,4-Trichlorobenzene	0.5	U	0.5	U								
1,2-Dichloroethane	0.5	U	0.5	U								
1,2-Dichloropropane	0.5	U	0.5	U								
1,3-Dichloropropane	0.5	U	0.5	U								
2,2-Dichloropropane	0.5	U	0.5	U								
Benzene	0.5	U	0.5	U								
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U								
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U								
Benzene, 1-methylethyl-	0.5	U	0.5	U								
Bromobenzene	0.5	U	0.5	U								
Bromodichloromethane	0.5	U	0.5	U								
Bromoform	0.5	U	0.5	U								
Carbon tetrachloride	0.39	J	0.5	U								
Chlorobenzene	0.5	U	0.5	U								
Chlorobromomethane	0.5	U	0.5	U								
Chloroethane	0.5	U	0.5	U								
Chloroform	**2.13**		**2.49**									
cis-1,2-Dichloroethylene	0.5	U	0.5	U								
cis-1,3-Dichloropropene	0.5	U	0.5	U								
Cymene	0.5	U	0.5	U								
DBCP	0.5	U	0.5	U								
Dibromochloromethane	0.5	U	0.5	U								
Dibromomethane	0.5	U	0.5	U								
Dichlorodifluoromethane	0.5	U	0.5	U								
EDB	0.5	U	0.5	U								
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U								
Ethylbenzene	0.5	U	0.5	U								
Hexachlorobutadiene	0.5	U	0.5	U								
m-Dichlorobenzene	0.5	U	0.5	U								
m/p xylene	0.5	U	0.5	U								
Methyl bromide	0.5	U	0.5	U								
Methyl chloride	0.5	U	0.5	U								
Methyl tert-butyl ether	0.5	U	0.5	U								
Methylene chloride	4.5	U	0.5	U								
n-Butylbenzene	0.5	U	0.5	U								
n-Propylbenzene	0.5	U	0.5	U								
Naphthalene	0.5	U	0.5	U								
o-Chlorotoluene	0.5	U	0.5	U								
o-Dichlorobenzene	0.5	U	0.5	U								
o-Xylene	0.5	U	0.5	U								
p-Chlorotoluene	0.5	U	0.5	U								
p-Dichlorobenzene	0.5	U	0.5	U								
sec-Butylbenzene	0.5	U	0.5	U								
Styrene	0.5	U	0.5	U								
tert-Butylbenzene	0.5	U	0.5	U								
Tetrachloroethylene	**5.63**		**5.02**									
Toluene	0.5	U	0.5	U								
trans-1,3-Dichloropropene	0.5	U	0.5	U								
Trichloroethylene	**1.14**		**1.01**									
Trichlorofluoromethane	0.5	U	0.5	U								
Vinyl chloride	0.5	U	0.5	U								
Xylene (total)	3	U	3	U								
8260 TVOC	11.59		9.12									

OU III (North Street East)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-138 Depth : 168.00 03/05/2024 ug/L		000-138 Depth : 168.00 06/03/2024 ug/L		000-138 Depth : 168.00 07/24/2024 ug/L		000-138 Depth : 168.00 12/18/2024 ug/L		000-394 Depth : 178.00 03/11/2024 ug/L		000-394 Depth : 178.00 06/12/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.011	U	0.011	U	0.0191	U	0.02	U	0.01	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	0.011	U	0.011	U	0.0191	U	0.02	U	**0.011**		0.01	U
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-394 Depth : 178.00 07/24/2024 ug/L		000-394 Depth : 178.00 12/17/2024 ug/L		000-551 Depth : 175.00 03/07/2024 ug/L		000-551 Depth : 175.00 06/03/2024 ug/L		000-551 Depth : 175.00 07/23/2024 ug/L		000-551 Depth : 175.00 12/18/2024 ug/L	
1,1,1,2-Tetrachloroethane			0.5	U							0.5	U
1,1,1-Trichloroethane			0.5	U							0.5	U
1,1,2,2-Tetrachloroethane			0.5	U							0.5	U
1,1,2-Trichloroethane			0.5	U							0.5	U
1,1-Dichloroethane			0.5	U							0.5	U
1,1-Dichloroethylene			0.5	U							0.5	U
1,1-Dichloropropene			0.5	U							0.5	U
1,2,3-Trichlorobenzene			0.5	U							0.5	U
1,2,3-Trichloropropane			0.5	U							0.5	U
1,2,4-Trichlorobenzene			0.5	U							0.5	U
1,2-Dichloroethane			0.5	U							0.5	U
1,2-Dichloropropane			0.5	U							0.5	U
1,3-Dichloropropane			0.5	U							0.5	U
2,2-Dichloropropane			0.5	U							0.5	U
Benzene			0.5	U							0.5	U
Benzene, 1,2,4-trimethyl			0.5	U							0.5	U
Benzene, 1,3,5-trimethyl-			0.5	U							0.5	U
Benzene, 1-methylethyl-			0.5	U							0.5	U
Bromobenzene			0.5	U							0.5	U
Bromodichloromethane			0.5	U							0.5	U
Bromoform			0.5	U							0.5	U
Carbon tetrachloride			0.5	U							0.5	U
Chlorobenzene			0.5	U							0.5	U
Chlorobromomethane			0.5	U							0.5	U
Chloroethane			0.5	U							0.5	U
Chloroform			**0.61**								0.45	J
cis-1,2-Dichloroethylene			0.5	U							0.5	U
cis-1,3-Dichloropropene			0.5	U							0.5	U
Cymene			0.5	U							0.5	U
DBCP	0.0189	U	0.02	U	0.01	U	0.01	U	0.0192	U	0.02	U
Dibromochloromethane			0.5	U							0.5	U
Dibromomethane			0.5	U							0.5	U
Dichlorodifluoromethane			0.5	U							0.5	U
EDB	0.0189	U	0.02	U	0.01	U	0.01	U	0.0192	U	0.02	U
Ethene, 1,2-dichloro-, (E)-			0.5	U							0.5	U
Ethylbenzene			0.5	U							0.5	U
Hexachlorobutadiene			0.5	U							0.5	U
m-Dichlorobenzene			0.5	U							0.5	U
m/p xylene			1	U							1	U
Methyl bromide			0.5	U							0.5	U
Methyl chloride			0.5	U							0.5	U
Methyl tert-butyl ether			0.5	U							0.5	U
Methylene chloride			0.5	U							0.5	U
n-Butylbenzene			0.5	U							0.5	U
n-Propylbenzene			0.5	U							0.5	U
Naphthalene			0.5	U							0.5	U
o-Chlorotoluene			0.5	U							0.5	U
o-Dichlorobenzene			0.5	U							0.5	U
o-Xylene			0.5	U							0.5	U
p-Chlorotoluene			0.5	U							0.5	U
p-Dichlorobenzene			0.5	U							0.5	U
sec-Butylbenzene			0.5	U							0.5	U
Styrene			0.5	U							0.5	U
tert-Butylbenzene			0.5	U							0.5	U
Tetrachloroethylene			**6.3**								**0.88**	
Toluene			0.5	U							0.5	U
trans-1,3-Dichloropropene			0.5	U							0.5	U
Trichloroethylene			0.5	U							0.18	J
Trichlorofluoromethane			0.5	U							0.5	U
Vinyl chloride			0.5	U							0.5	U
Xylene (total)			1.5	U							1.5	U
8260 TVOC			6.91								1.51	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-552 Depth : 155.00 03/08/2024 ug/L		000-552 Depth : 155.00 05/22/2024 ug/L		000-552 Depth : 155.00 07/22/2024 ug/L		000-552 Depth : 155.00 12/17/2024 ug/L		000-553 Depth : 175.00 03/08/2024 ug/L		000-553 Depth : 175.00 05/22/2024 ug/L	
1,1,1,2-Tetrachloroethane							0.5	U				
1,1,1-Trichloroethane							0.5	U				
1,1,2,2-Tetrachloroethane							0.5	U				
1,1,2-Trichloroethane							0.5	U				
1,1-Dichloroethane							0.5	U				
1,1-Dichloroethylene							0.5	U				
1,1-Dichloropropene							0.5	U				
1,2,3-Trichlorobenzene							0.5	U				
1,2,3-Trichloropropane							0.5	U				
1,2,4-Trichlorobenzene							0.5	U				
1,2-Dichloroethane							0.5	U				
1,2-Dichloropropane							0.5	U				
1,3-Dichloropropane							0.5	U				
2,2-Dichloropropane							0.5	U				
Benzene							0.5	U				
Benzene, 1,2,4-trimethyl							0.5	U				
Benzene, 1,3,5-trimethyl-							0.5	U				
Benzene, 1-methylethyl-							0.5	U				
Bromobenzene							0.5	U				
Bromodichloromethane							0.5	U				
Bromoform							0.5	U				
Carbon tetrachloride							0.5	U				
Chlorobenzene							0.5	U				
Chlorobromomethane							0.5	U				
Chloroethane							0.5	U				
Chloroform							0.29	J				
cis-1,2-Dichloroethylene							0.5	U				
cis-1,3-Dichloropropene							0.5	U				
Cymene							0.5	U				
DBCP	0.01	U	0.01	U	0.019	U	0.02	U	0.011	U	0.01	U
Dibromochloromethane							0.5	U				
Dibromomethane							0.5	U				
Dichlorodifluoromethane							0.5	U				
EDB	0.0085	J	0.01	U	0.019	U	0.02	U	0.011	U	0.01	U
Ethene, 1,2-dichloro-, (E)-							0.5	U				
Ethylbenzene							0.5	U				
Hexachlorobutadiene							0.5	U				
m-Dichlorobenzene							0.5	U				
m/p xylene							1	U				
Methyl bromide							0.5	U				
Methyl chloride							0.5	U				
Methyl tert-butyl ether							0.5	U				
Methylene chloride							0.5	U				
n-Butylbenzene							0.5	U				
n-Propylbenzene							0.5	U				
Naphthalene							0.5	U				
o-Chlorotoluene							0.5	U				
o-Dichlorobenzene							0.5	U				
o-Xylene							0.5	U				
p-Chlorotoluene							0.5	U				
p-Dichlorobenzene							0.5	U				
sec-Butylbenzene							0.5	U				
Styrene							0.5	U				
tert-Butylbenzene							0.5	U				
Tetrachloroethylene							**3.3**					
Toluene							0.5	U				
trans-1,3-Dichloropropene							0.5	U				
Trichloroethylene							0.5	U				
Trichlorofluoromethane							0.5	U				
Vinyl chloride							0.5	U				
Xylene (total)							1.5	U				
8260 TVOC							3.59					

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (North Street East-EDB)

Analyte	000-553 Depth : 175.00 07/22/2024 ug/L		000-553 Depth : 175.00 12/17/2024 ug/L		000-554 Depth : 195.00 03/11/2024 ug/L		000-554 Depth : 195.00 06/13/2024 ug/L		000-554 Depth : 195.00 07/23/2024 ug/L		000-554 Depth : 195.00 12/17/2024 ug/L	
1,1,1,2-Tetrachloroethane			0.5	U							0.5	U
1,1,1-Trichloroethane			0.5	U							0.5	U
1,1,2,2-Tetrachloroethane			0.5	U							0.5	U
1,1,2-Trichloroethane			0.5	U							0.5	U
1,1-Dichloroethane			0.5	U							0.5	U
1,1-Dichloroethylene			0.5	U							0.5	U
1,1-Dichloropropene			0.5	U							0.5	U
1,2,3-Trichlorobenzene			0.5	U							0.5	U
1,2,3-Trichloropropane			0.5	U							0.5	U
1,2,4-Trichlorobenzene			0.5	U							0.5	U
1,2-Dichloroethane			0.5	U							0.5	U
1,2-Dichloropropane			0.5	U							0.5	U
1,3-Dichloropropane			0.5	U							0.5	U
2,2-Dichloropropane			0.5	U							0.5	U
Benzene			0.5	U							0.5	U
Benzene, 1,2,4-trimethyl			0.5	U							0.5	U
Benzene, 1,3,5-trimethyl-			0.5	U							0.5	U
Benzene, 1-methylethyl-			0.5	U							0.5	U
Bromobenzene			0.5	U							0.5	U
Bromodichloromethane			0.5	U							0.5	U
Bromoform			0.5	U							0.5	U
Carbon tetrachloride			0.5	U							0.5	U
Chlorobenzene			0.5	U							0.5	U
Chlorobromomethane			0.5	U							0.5	U
Chloroethane			0.5	U							0.5	U
Chloroform			0.42	J							**0.67**	
cis-1,2-Dichloroethylene			0.5	U							0.5	U
cis-1,3-Dichloropropene			0.5	U							0.5	U
Cymene			0.5	U							0.5	U
DBCP	0.019	U	0.02	U	0.01	U	0.01	U	0.019	U	0.02	U
Dibromochloromethane			0.5	U							0.5	U
Dibromomethane			0.5	U							0.5	U
Dichlorodifluoromethane			0.5	U							0.5	U
EDB	0.019	U	0.02	U	**0.018**		0.01	U	0.00885	J	0.02	U
Ethene, 1,2-dichloro-, (E)-			0.5	U							0.5	U
Ethylbenzene			0.5	U							0.5	U
Hexachlorobutadiene			0.5	U							0.5	U
m-Dichlorobenzene			0.5	U							0.5	U
m/p xylene			1	U							1	U
Methyl bromide			0.5	U							0.5	U
Methyl chloride			0.5	U							0.5	U
Methyl tert-butyl ether			0.5	U							0.5	U
Methylene chloride			0.5	U							0.5	U
n-Butylbenzene			0.5	U							0.5	U
n-Propylbenzene			0.5	U							0.5	U
Naphthalene			0.5	U							0.5	U
o-Chlorotoluene			0.5	U							0.5	U
o-Dichlorobenzene			0.5	U							0.5	U
o-Xylene			0.5	U							0.5	U
p-Chlorotoluene			0.5	U							0.5	U
p-Dichlorobenzene			0.5	U							0.5	U
sec-Butylbenzene			0.5	U							0.5	U
Styrene			0.5	U							0.5	U
tert-Butylbenzene			0.5	U							0.5	U
Tetrachloroethylene			**1.9**								**0.52**	
Toluene			**21**								0.5	U
trans-1,3-Dichloropropene			0.5	U							0.5	U
Trichloroethylene			0.5	U							0.37	J
Trichlorofluoromethane			0.5	U							0.5	U
Vinyl chloride			0.5	U							0.5	U
Xylene (total)			1.5	U							1.5	U
8260 TVOC			23.32								1.56	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-555 Depth : 200.00 03/06/2024 ug/L		000-555 Depth : 200.00 06/13/2024 ug/L		000-555 Depth : 200.00 07/23/2024 ug/L		000-555 Depth : 200.00 12/17/2024 ug/L		000-563 Depth : 197.00 03/07/2024 ug/L		000-563 Depth : 197.00 06/13/2024 ug/L	
1,1,1,2-Tetrachloroethane							0.5	U				
1,1,1-Trichloroethane							0.5	U				
1,1,2,2-Tetrachloroethane							0.5	U				
1,1,2-Trichloroethane							0.5	U				
1,1-Dichloroethane							0.5	U				
1,1-Dichloroethylene							0.5	U				
1,1-Dichloropropene							0.5	U				
1,2,3-Trichlorobenzene							0.5	U				
1,2,3-Trichloropropane							0.5	U				
1,2,4-Trichlorobenzene							0.5	U				
1,2-Dichloroethane							0.5	U				
1,2-Dichloropropane							0.5	U				
1,3-Dichloropropane							0.5	U				
2,2-Dichloropropane							0.5	U				
Benzene							0.5	U				
Benzene, 1,2,4-trimethyl							0.5	U				
Benzene, 1,3,5-trimethyl-							0.5	U				
Benzene, 1-methylethyl-							0.5	U				
Bromobenzene							0.5	U				
Bromodichloromethane							0.5	U				
Bromoform							0.5	U				
Carbon tetrachloride							0.5	U				
Chlorobenzene							0.5	U				
Chlorobromomethane							0.5	U				
Chloroethane							0.5	U				
Chloroform							**1.6**					
cis-1,2-Dichloroethylene							0.5	U				
cis-1,3-Dichloropropene							0.5	U				
Cymene							0.5	U				
DBCP	0.01	U	0.01	U	0.0187	U	0.02	U	0.01	U	0.01	U
Dibromochloromethane							0.5	U				
Dibromomethane							0.5	U				
Dichlorodifluoromethane							0.5	U				
EDB	0.01	U	0.01	U	0.0187	U	0.02	U	0.01	U	0.01	U
Ethene, 1,2-dichloro-, (E)-							0.5	U				
Ethylbenzene							0.5	U				
Hexachlorobutadiene							0.5	U				
m-Dichlorobenzene							0.5	U				
m/p xylene							1	U				
Methyl bromide							0.5	U				
Methyl chloride							0.5	U				
Methyl tert-butyl ether							0.5	U				
Methylene chloride							0.5	U				
n-Butylbenzene							0.5	U				
n-Propylbenzene							0.5	U				
Naphthalene							0.5	U				
o-Chlorotoluene							0.5	U				
o-Dichlorobenzene							0.5	U				
o-Xylene							0.5	U				
p-Chlorotoluene							0.5	U				
p-Dichlorobenzene							0.5	U				
sec-Butylbenzene							0.5	U				
Styrene							0.5	U				
tert-Butylbenzene							0.5	U				
Tetrachloroethylene							0.5	U				
Toluene							0.5	U				
trans-1,3-Dichloropropene							0.5	U				
Trichloroethylene							0.5	U				
Trichlorofluoromethane							0.5	U				
Vinyl chloride							0.5	U				
Xylene (total)							1.5	U				
8260 TVOC							1.6					

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-563 Depth : 197.00 07/23/2024 ug/L		000-563 Depth : 197.00 12/17/2024 ug/L		000-564 Depth : 188.00 03/07/2024 ug/L		000-564 Depth : 188.00 06/12/2024 ug/L		000-564 Depth : 188.00 07/24/2024 ug/L		000-564 Depth : 188.00 12/17/2024 ug/L	
1,1,1,2-Tetrachloroethane			0.5	U							0.5	U
1,1,1-Trichloroethane			0.5	U							0.5	U
1,1,2,2-Tetrachloroethane			0.5	U							0.5	U
1,1,2-Trichloroethane			0.5	U							0.5	U
1,1-Dichloroethane			0.5	U							0.5	U
1,1-Dichloroethylene			0.5	U							0.5	U
1,1-Dichloropropene			0.5	U							0.5	U
1,2,3-Trichlorobenzene			0.5	U							0.5	U
1,2,3-Trichloropropane			0.5	U							0.5	U
1,2,4-Trichlorobenzene			0.5	U							0.5	U
1,2-Dichloroethane			0.5	U							0.5	U
1,2-Dichloropropane			0.5	U							0.5	U
1,3-Dichloropropane			0.5	U							0.5	U
2,2-Dichloropropane			0.5	U							0.5	U
Benzene			0.5	U							0.5	U
Benzene, 1,2,4-trimethyl			0.5	U							0.5	U
Benzene, 1,3,5-trimethyl-			0.5	U							0.5	U
Benzene, 1-methylethyl-			0.5	U							0.5	U
Bromobenzene			0.5	U							0.5	U
Bromodichloromethane			0.5	U							0.5	U
Bromoform			0.5	U							0.5	U
Carbon tetrachloride			0.5	U							0.5	U
Chlorobenzene			0.5	U							0.5	U
Chlorobromomethane			0.5	U							0.5	U
Chloroethane			0.5	U							0.5	U
Chloroform			**0.89**								**1.2**	
cis-1,2-Dichloroethylene			0.5	U							0.5	U
cis-1,3-Dichloropropene			0.5	U							0.5	U
Cymene			0.5	U							0.5	U
DBCP	0.0191	U	0.02	U	0.01	U	0.01	U	0.019	U	0.02	U
Dibromochloromethane			0.5	U							0.5	U
Dibromomethane			0.5	U							0.5	U
Dichlorodifluoromethane			0.5	U							0.5	U
EDB	0.0191	U	0.02	U	0.01	U	0.01	U	0.019	U	0.02	U
Ethene, 1,2-dichloro-, (E)-			0.5	U							0.5	U
Ethylbenzene			0.5	U							0.5	U
Hexachlorobutadiene			0.5	U							0.5	U
m-Dichlorobenzene			0.5	U							0.5	U
m/p xylene			1	U							1	U
Methyl bromide			0.5	U							0.5	U
Methyl chloride			0.5	U							0.5	U
Methyl tert-butyl ether			0.5	U							0.5	U
Methylene chloride			0.5	U							0.5	U
n-Butylbenzene			0.5	U							0.5	U
n-Propylbenzene			0.5	U							0.5	U
Naphthalene			0.5	U							0.5	U
o-Chlorotoluene			0.5	U							0.5	U
o-Dichlorobenzene			0.5	U							0.5	U
o-Xylene			0.5	U							0.5	U
p-Chlorotoluene			0.5	U							0.5	U
p-Dichlorobenzene			0.5	U							0.5	U
sec-Butylbenzene			0.5	U							0.5	U
Styrene			0.5	U							0.5	U
tert-Butylbenzene			0.5	U							0.5	U
Tetrachloroethylene			0.28	J							0.5	U
Toluene			0.5	U							0.5	U
trans-1,3-Dichloropropene			0.5	U							0.5	U
Trichloroethylene			**0.97**								0.35	J
Trichlorofluoromethane			0.5	U							0.5	U
Vinyl chloride			0.5	U							0.5	U
Xylene (total)			1.5	U							1.5	U
8260 TVOC			2.14								1.55	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-565 Depth : 210.00 03/06/2024 ug/L		000-565 Depth : 210.00 06/07/2024 ug/L		000-565 Depth : 210.00 07/22/2024 ug/L		000-565 Depth : 210.00 12/17/2024 ug/L		000-566 Depth : 210.00 03/06/2024 ug/L		000-566 Depth : 210.00 06/07/2024 ug/L	
1,1,1,2-Tetrachloroethane							0.5	U				
1,1,1-Trichloroethane							**2.2**					
1,1,2,2-Tetrachloroethane							0.5	U				
1,1,2-Trichloroethane							0.5	U				
1,1-Dichloroethane							0.5	U				
1,1-Dichloroethylene							**1.3**					
1,1-Dichloropropene							0.5	U				
1,2,3-Trichlorobenzene							0.5	U				
1,2,3-Trichloropropane							0.5	U				
1,2,4-Trichlorobenzene							0.5	U				
1,2-Dichloroethane							0.5	U				
1,2-Dichloropropane							0.5	U				
1,3-Dichloropropane							0.5	U				
2,2-Dichloropropane							0.5	U				
Benzene							0.5	U				
Benzene, 1,2,4-trimethyl							0.5	U				
Benzene, 1,3,5-trimethyl-							0.5	U				
Benzene, 1-methylethyl-							0.5	U				
Bromobenzene							0.5	U				
Bromodichloromethane							0.5	U				
Bromoform							0.5	U				
Carbon tetrachloride							0.33	J				
Chlorobenzene							0.5	U				
Chlorobromomethane							0.5	U				
Chloroethane							0.5	U				
Chloroform							**1.4**					
cis-1,2-Dichloroethylene							0.5	U				
cis-1,3-Dichloropropene							0.5	U				
Cymene							0.5	U				
DBCP	0.01	U	0.01	U	0.019	U	0.02	U	0.011	U	0.01	U
Dibromochloromethane							0.5	U				
Dibromomethane							0.5	U				
Dichlorodifluoromethane							0.5	U				
EDB	0.01	U	0.01	U	0.019	U	0.02	U	0.011	U	0.01	U
Ethene, 1,2-dichloro-, (E)-							0.5	U				
Ethylbenzene							0.5	U				
Hexachlorobutadiene							0.5	U				
m-Dichlorobenzene							0.5	U				
m/p xylene							1	U				
Methyl bromide							0.5	U				
Methyl chloride							0.5	U				
Methyl tert-butyl ether							**0.79**					
Methylene chloride							0.5	U				
n-Butylbenzene							0.5	U				
n-Propylbenzene							0.5	U				
Naphthalene							0.5	U				
o-Chlorotoluene							0.5	U				
o-Dichlorobenzene							0.5	U				
o-Xylene							0.5	U				
p-Chlorotoluene							0.5	U				
p-Dichlorobenzene							0.5	U				
sec-Butylbenzene							0.5	U				
Styrene							0.5	U				
tert-Butylbenzene							0.5	U				
Tetrachloroethylene							0.5	U				
Toluene							0.5	U				
trans-1,3-Dichloropropene							0.5	U				
Trichloroethylene							**1.4**					
Trichlorofluoromethane							0.5	U				
Vinyl chloride							0.5	U				
Xylene (total)							1.5	U				
8260 TVOC							7.42					

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (North Street East-EDB)

Analyte	000-566 Depth : 210.00 07/22/2024 ug/L		000-566 Depth : 210.00 12/17/2024 ug/L		115-42 Depth : 168.00 06/17/2024 ug/L		115-42 Depth : 168.00 12/20/2024 ug/L					
1,1,1,2-Tetrachloroethane			0.5	U								
1,1,1-Trichloroethane			0.5	U								
1,1,2,2-Tetrachloroethane			0.5	U								
1,1,2-Trichloroethane			0.5	U								
1,1-Dichloroethane			0.5	U								
1,1-Dichloroethylene			**0.55**									
1,1-Dichloropropene			0.5	U								
1,2,3-Trichlorobenzene			0.5	U								
1,2,3-Trichloropropane			0.5	U								
1,2,4-Trichlorobenzene			0.5	U								
1,2-Dichloroethane			0.5	U								
1,2-Dichloropropane			0.5	U								
1,3-Dichloropropane			0.5	U								
2,2-Dichloropropane			0.5	U								
Benzene			0.5	U								
Benzene, 1,2,4-trimethyl			0.5	U								
Benzene, 1,3,5-trimethyl-			0.5	U								
Benzene, 1-methylethyl-			0.5	U								
Bromobenzene			0.5	U								
Bromodichloromethane			0.5	U								
Bromoform			0.5	U								
Carbon tetrachloride			0.34	J								
Chlorobenzene			0.5	U								
Chlorobromomethane			0.5	U								
Chloroethane			0.5	U								
Chloroform			**1.2**									
cis-1,2-Dichloroethylene			0.5	U								
cis-1,3-Dichloropropene			0.5	U								
Cymene			0.5	U								
DBCP	0.0193	U	0.02	U	0.01	U	0.02	U				
Dibromochloromethane			0.5	U								
Dibromomethane			0.5	U								
Dichlorodifluoromethane			0.5	U								
EDB	0.0193	U	0.02	U	0.01	U	0.02	U				
Ethene, 1,2-dichloro-, (E)-			0.5	U								
Ethylbenzene			0.5	U								
Hexachlorobutadiene			0.5	U								
m-Dichlorobenzene			0.5	U								
m/p xylene			1	U								
Methyl bromide			0.5	U								
Methyl chloride			0.5	U								
Methyl tert-butyl ether			0.5	U								
Methylene chloride			0.5	U								
n-Butylbenzene			0.5	U								
n-Propylbenzene			0.5	U								
Naphthalene			0.5	U								
o-Chlorotoluene			0.5	U								
o-Dichlorobenzene			0.5	U								
o-Xylene			0.5	U								
p-Chlorotoluene			0.5	U								
p-Dichlorobenzene			0.5	U								
sec-Butylbenzene			0.5	U								
Styrene			0.5	U								
tert-Butylbenzene			0.5	U								
Tetrachloroethylene			0.33	J								
Toluene			0.5	U								
trans-1,3-Dichloropropene			0.5	U								
Trichloroethylene			0.41	J								
Trichlorofluoromethane			0.5	U								
Vinyl chloride			0.5	U								
Xylene (total)			1.5	U								
8260 TVOC			2.83									

OU III (LIPA)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (LIPA)

Analyte	000-101 Depth : 195.00 05/01/2024 ug/L		000-101 Depth : 195.00 12/30/2024 ug/L		000-102 Depth : 315.00 05/01/2024 ug/L		000-102 Depth : 315.00 12/30/2024 ug/L		000-104 Depth : 205.00 05/07/2024 ug/L		000-104 Depth : 205.00 11/22/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.21	J	0.25	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.21	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.15	J	0.17	J
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.2**		**1**		0.5	U	0.5	U	0.35	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.1**		**0.71**		0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.18	J	0.24	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	2.3		1.71		0		0		0.89		0.87	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (LIPA)

Analyte	000-105 Depth : 285.00 05/07/2024 ug/L		000-105 Depth : 285.00 11/22/2024 ug/L		000-130 Depth : 280.00 05/09/2024 ug/L		000-130 Depth : 280.00 12/04/2024 ug/L		000-131 Depth : 227.50 05/02/2024 ug/L		000-131 Depth : 227.50 11/19/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**1.2**		**1.6**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**1.8**		**2.3**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.29	J	0.33	J
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.26	J	0.27	J
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.21	J	0.5	U	0.36	J	**0.51**		**0.8**		0.88	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.33	J	0.3	J	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**0.72**		**0.52**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.21		0		0.69		0.81		5.07		5.02	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (LIPA)

Analyte	000-425 Depth : 315.00 05/03/2024 ug/L		000-445 Depth : 219.00 05/03/2024 ug/L		000-445 Depth : 219.00 12/02/2024 ug/L		000-446 Depth : 212.00 05/03/2024 ug/L		000-446 Depth : 212.00 12/04/2024 ug/L		000-447 Depth : 219.00 05/08/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.2	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.24	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.63**		**0.61**		0.31	J	0.29	J	0.35	J	**0.6**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**1.6**		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**0.65**		0.5	U	0.5	U	0.5	U	0.5	U	0.17	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	3.32		0.61		0.31		0.29		0.35		0.77	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (LIPA)

Analyte	000-447 Depth : 219.00 12/03/2024 ug/L		000-448 Depth : 212.00 05/07/2024 ug/L		000-448 Depth : 212.00 11/22/2024 ug/L		000-449 Depth : 193.00 05/02/2024 ug/L		000-449 Depth : 193.00 12/13/2024 ug/L		000-450 Depth : 208.00 05/07/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	**1.3**		**0.51**		0.5	U	0.18	J	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	**1.1**		0.24	J	0.28	J	0.22	J	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.29	J	0.5	U	0.5	U	0.19	J	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.23	J	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.48	J	0.44	J	0.65	U	**0.71**		**0.55**		**1.1**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	**0.76**		**0.67**		0.39	J	0.32	J	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.48		4.12		1.42		1.38		1.46		1.1	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (LIPA)

Analyte	000-450 Depth : 208.00 12/04/2024 ug/L		000-451 Depth : 193.00 05/02/2024 ug/L		000-451 Depth : 193.00 11/19/2024 ug/L		000-452 Depth : 217.00 05/01/2024 ug/L		000-452 Depth : 217.00 12/04/2024 ug/L		000-458 Depth : 301.00 05/08/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	**0.6**		0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.36	J	**0.74**		0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.3**		**1.4**		1.2	U	**1.1**		**0.94**		0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	**0.58**		0.48	J	**0.59**		0.4	J	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	1.3		2.34		1.82		1.69		1.34		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (LIPA)

Analyte	000-458 Depth : 301.00 12/03/2024 ug/L		000-459 Depth : 304.00 05/08/2024 ug/L		000-459 Depth : 304.00 12/03/2024 ug/L							
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U						
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U						
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U						
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
Benzene	0.5	U	0.5	U	0.5	U						
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U						
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U						
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U						
Bromobenzene	0.5	U	0.5	U	0.5	U						
Bromodichloromethane	0.5	U	0.5	U	0.5	U						
Bromoform	0.5	U	0.5	U	0.5	U						
Carbon tetrachloride	0.5	U	0.5	U	0.5	U						
Chlorobenzene	0.5	U	0.5	U	0.5	U						
Chlorobromomethane	0.5	U	0.5	U	0.5	U						
Chloroethane	0.5	U	0.5	U	0.5	U						
Chloroform	0.5	U	0.5	U	0.5	U						
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U						
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Cymene	0.5	U	0.5	U	0.5	U						
DBCP	0.5	U	0.5	U	0.5	U						
Dibromochloromethane	0.5	U	0.5	U	0.5	U						
Dibromomethane	0.5	U	0.5	U	0.5	U						
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U						
EDB	0.5	U	0.5	U	0.5	U						
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U						
Ethylbenzene	0.5	U	0.5	U	0.5	U						
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U						
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
m/p xylene	1	U	1	U	1	U						
Methyl bromide	0.5	U	0.5	U	0.5	U						
Methyl chloride	0.5	U	0.5	U	0.5	U						
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U						
Methylene chloride	0.5	U	0.5	U	0.5	U						
n-Butylbenzene	0.5	U	0.5	U	0.5	U						
n-Propylbenzene	0.5	U	0.5	U	0.5	U						
Naphthalene	0.5	U	0.5	U	0.5	U						
o-Chlorotoluene	0.5	U	0.5	U	0.5	U						
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
o-Xylene	0.5	U	0.5	U	0.5	U						
p-Chlorotoluene	0.5	U	0.5	U	0.5	U						
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
sec-Butylbenzene	0.5	U	0.5	U	0.5	U						
Styrene	0.5	U	0.5	U	0.5	U						
tert-Butylbenzene	0.5	U	0.5	U	0.5	U						
Tetrachloroethylene	0.5	U	0.5	U	0.5	U						
Toluene	0.5	U	0.5	U	0.5	U						
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Trichloroethylene	0.5	U	0.5	U	0.5	U						
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U						
Vinyl chloride	0.5	U	0.5	U	0.5	U						
Xylene (total)	1.5	U	1.5	U	1.5	U						
8260 TVOC	0		0		0							

OU III (Airport)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Airport)

Analyte	000-428 Depth : 293.00 05/21/2024 ug/L		000-428 Depth : 298.00 12/13/2024 ug/L		800-100 Depth : 214.00 05/17/2024 ug/L		800-100 Depth : 214.00 12/13/2024 ug/L		800-101 Depth : 280.00 05/16/2024 ug/L		800-101 Depth : 280.00 12/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**3.9**		**4.2**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**4.6**		**3.8**	
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.28	J
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**4.5**		**5.1**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**1.1**		**1.2**	
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	**3.4**		**2.9**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.42	J	0.44	J	**9.5**		**14**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.19	J
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**15**		**14**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0.42		0.44		42		45.67	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-102 Depth : 304.00 05/16/2024 ug/L		800-102 Depth : 304.00 12/12/2024 ug/L		800-103 Depth : 225.00 05/16/2024 ug/L		800-103 Depth : 225.00 12/12/2024 ug/L		800-104 Depth : 170.00 05/16/2024 ug/L		800-104 Depth : 170.00 12/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.3	J	0.22	J	**0.78**		**0.52**		0.29	J	0.23	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.3		0.22		0.78		0.52		0.29		0.23	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-105 Depth : 233.00 05/16/2024 ug/L		800-105 Depth : 233.00 12/12/2024 ug/L		800-106 Depth : 217.00 05/21/2024 ug/L		800-106 Depth : 217.00 12/11/2024 ug/L		800-108 Depth : 216.00 02/29/2024 ug/L		800-108 Depth : 216.00 05/17/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**2.2**		**2**		0.5	U	0.34	J	0.5	U	**0.75**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	0.5	U	0.5	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	3	U	3	U	1.5	U
8260 TVOC	2.2		2		0		0.34		0		0.75	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-108 Depth : 216.00 07/18/2024 ug/L		800-108 Depth : 216.00 12/12/2024 ug/L		800-126 Depth : 175.00 02/28/2024 ug/L		800-126 Depth : 175.00 05/15/2024 ug/L		800-126 Depth : 175.00 07/18/2024 ug/L		800-126 Depth : 175.00 12/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.35	J	**0.8**		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	0.5	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	3	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.35		0.8		0		0		0		0	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Airport)

Analyte	800-127 Depth : 175.00 02/28/2024 ug/L		800-127 Depth : 175.00 05/15/2024 ug/L		800-127 Depth : 175.00 07/18/2024 ug/L		800-127 Depth : 175.00 12/13/2024 ug/L		800-128 Depth : 180.00 02/29/2024 ug/L		800-128 Depth : 180.00 05/14/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	1	U	1	U	1	U	0.5	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	1.5	U	1.5	U	1.5	U	3	U	1.5	U
8260 TVOC	0		0		0		0		0		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-128 Depth : 180.00 07/17/2024 ug/L		800-128 Depth : 180.00 12/05/2024 ug/L		800-129 Depth : 180.00 05/14/2024 ug/L		800-129 Depth : 180.00 12/05/2024 ug/L		800-130 Depth : 185.00 05/14/2024 ug/L		800-130 Depth : 185.00 12/05/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.27	J	0.34	J	**1.6**		**1.9**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.32	J	**0.53**		**0.59**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**6.9**		**5**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0.27		0.66		9.03		7.49	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-131 Depth : 194.00 02/28/2024 ug/L		800-131 Depth : 194.00 05/14/2024 ug/L		800-131 Depth : 194.00 07/16/2024 ug/L		800-131 Depth : 194.00 12/05/2024 ug/L		800-133 Depth : 225.00 02/29/2024 ug/L		800-133 Depth : 225.00 05/17/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	J
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**3.3**		**4.7**		**4**		**3.3**		**4.12**		**4.9**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.23	J	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.4	J	0.31	J	0.34	J	**1.22**		**1.3**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	1	U	1	U	1	U	0.5	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	1.5	U	1.5	U	1.5	U	3	U	1.5	U
8260 TVOC	3.3		5.1		4.54		3.64		5.34		6.5	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-133 Depth : 225.00 07/18/2024 ug/L		800-133 Depth : 225.00 12/13/2024 ug/L		800-138 Depth : 250.00 05/10/2024 ug/L		800-138 Depth : 250.00 12/04/2024 ug/L		800-43 Depth : 157.00 05/13/2024 ug/L		800-43 Depth : 157.00 12/09/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.3	J	0.22	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**5**		**7.8**		0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.3**		**1.3**		1.2		**1.1**		**0.94**		**0.73**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	8.13	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	1		**0.98**		0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	3	U
8260 TVOC	6.6		9.32		2.2		2.08		0.94		0.73	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-44 Depth : 212.00 05/13/2024 ug/L		800-44 Depth : 212.00 12/09/2024 ug/L		800-50 Depth : 205.00 05/13/2024 ug/L		800-50 Depth : 205.00 12/09/2024 ug/L		800-59 Depth : 208.00 05/10/2024 ug/L		800-59 Depth : 208.00 12/04/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.29	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.31	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**9.2**		**6.68**		**0.51**		0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.47	J	0.41	J	**0.81**		**0.65**	J	0.5	J	0.36	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	0.5	U	1	U	0.5	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	3	U	1.5	U	3	U	1.5	U	1.5	U
8260 TVOC	10.27		7.09		1.32		0.65		0.5		0.36	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Airport)

Analyte	800-60 Depth : 210.00 02/29/2024 ug/L		800-60 Depth : 210.00 05/13/2024 ug/L		800-60 Depth : 210.00 07/18/2024 ug/L		800-60 Depth : 210.00 12/09/2024 ug/L		800-63 Depth : 206.00 05/09/2024 ug/L		800-63 Depth : 206.00 12/11/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	J	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Chloroform	**0.52**	J	**0.57**		**0.64**		**0.68**	JH	0.54		0.29	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
m/p xylene	0.5	U	1	U	1	U	0.5	UH	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	UH	0.69		0.28	J
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	UH	0.5	U	0.5	U
Xylene (total)	3	U	1.5	U	1.5	U	3	UH	1.5	U	1.5	U
8260 TVOC	0.52		0.57		0.64		0		1.73		0.57	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Airport)

Analyte	800-90 Depth : 255.00 05/09/2024 ug/L		800-90 Depth : 255.00 12/03/2024 ug/L		800-92 Depth : 200.00 05/09/2024 ug/L		800-92 Depth : 200.00 12/03/2024 ug/L		800-94 Depth : 185.00 05/10/2024 ug/L		800-94 Depth : 185.00 12/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	**1.7**		**2.3**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**3.1**		**3.7**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.3	J	0.42	J
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.39	J	0.33	J	0.5	J	0.5	U	**19**		**16**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.2**		**1.3**		0.95		**0.92**		**0.83**		**0.91**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	**0.62**		**0.63**	
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**0.6**		**0.55**		0.98		**0.79**		**17**		**19**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	2.19		2.18		2.43		1.71		42.55		42.96	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU III (Airport)

Analyte	800-95 Depth : 187.00 05/10/2024 ug/L		800-95 Depth : 187.00 12/11/2024 ug/L		800-96 Depth : 189.00 05/14/2024 ug/L		800-96 Depth : 189.00 12/05/2024 ug/L		800-97 Depth : 199.00 05/15/2024 ug/L		800-97 Depth : 199.00 12/05/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.84		**0.68**	J	**0.88**		**1.2**		0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	1.6		**1.34**		**1.4**		**2.2**		0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	J	0.5	U	0.17	J	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	9.7		**5.9**		**19**		**21**		**2.6**		**3.3**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.74		**0.56**	J	**0.79**		**0.89**		0.4	J	**0.53**	
cis-1,2-Dichloroethylene	0.5	J	0.5	U	**0.56**		**0.82**		0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	0.5	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	6.1		**4.73**		**26**		**20**		0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	3	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	19.98		13.21		48.8		46.11		3		3.83	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Airport)

Analyte	800-98 Depth : 184.00 05/09/2024 ug/L		800-98 Depth : 184.00 12/03/2024 ug/L		800-99 Depth : 248.00 05/13/2024 ug/L		800-99 Depth : 248.00 12/03/2024 ug/L					
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.45	J	**0.53**					
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethylene	0.5	U	0.5	U	0.3	J	0.37	J				
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U				
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U				
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroform	0.43	J	0.5		**1.5**		**1.6**					
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Cymene	0.5	U	0.5	U	0.5	U	0.5	U				
DBCP	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
EDB	0.5	U	0.5	U	0.5	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U				
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
m/p xylene	1	U	1	U	1	U	1	U				
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U				
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U				
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U	0.5	U				
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
Toluene	0.5	U	0.5	U	0.5	U	0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Trichloroethylene	0.5	U	0.5	U	**0.54**		**0.65**					
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U				
8260 TVOC	0.43		0.5		2.79		3.15					

Magothy
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

Analyte	000-102 Depth : 315.00 05/01/2024 ug/L		000-102 Depth : 315.00 12/30/2024 ug/L		000-105 Depth : 285.00 05/07/2024 ug/L		000-105 Depth : 285.00 11/22/2024 ug/L		000-130 Depth : 280.00 05/09/2024 ug/L		000-130 Depth : 280.00 12/04/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.21	J	0.5	U	0.36	J	**0.51**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.33	J	0.3	J
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0.21		0		0.69		0.81	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

Analyte	000-249 Depth : 264.00 04/18/2024 ug/L		000-249 Depth : 264.00 10/17/2024 ug/L		000-250 Depth : 298.00 10/17/2024 ug/L		000-343 Depth : 330.00 06/12/2024 ug/L		000-343 Depth : 330.00 12/18/2024 ug/L		000-425 Depth : 315.00 05/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	**0.62**	J	**0.7**	J	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	**2.05**		**2.45**		0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	J
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**4.3**		**0.84**		0.5	U	0.5	U	0.5	U	0.24	J
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1**		**0.65**		0.5	U	0.5	U	0.5	U	**0.63**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.37	J	0.41	J	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	0.5	U	0.5	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.41	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.4	J	**0.84**		0.5	U	0.5	U	0.5	U	**1.6**	
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.32	J	0.28	J	0.5	U	0.5	U	0.5	U	**0.65**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	3	U	3	U	1.5	U
8260 TVOC	6.43		2.61		0		3.04		3.56		3.32	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

Analyte	000-428 Depth : 293.00 05/21/2024 ug/L		000-428 Depth : 298.00 12/13/2024 ug/L		000-458 Depth : 301.00 05/08/2024 ug/L		000-458 Depth : 301.00 12/03/2024 ug/L		000-459 Depth : 304.00 05/08/2024 ug/L		000-459 Depth : 304.00 12/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0		0		0		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

Analyte	113-09 Depth : 222.00 05/02/2024 ug/L		113-09 Depth : 222.00 10/11/2024 ug/L		113-19 Depth : 230.00 02/20/2024 ug/L		113-19 Depth : 230.00 05/22/2024 ug/L		113-19 Depth : 230.00 08/26/2024 ug/L		113-19 Depth : 230.00 10/17/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**0.77**	J	**0.57**	J	**5.73**		**5.72**		**5.69**		**5.27**	
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	**1.03**		**1.08**		**1.12**		**1.05**	
1,1-Dichloroethylene	**0.82**	J	**0.69**	J	**3.23**		**3.53**		**3.64**		**2.91**	
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	**3.44**		**3.53**		**3.72**		**3.54**	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.4	J	0.37	J	**0.57**	J	**0.6**	J	**0.61**	J	**0.63**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.64	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	**46.4**		**37.5**		0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**2.94**		**2.66**		**4.11**		**4.1**		**3.6**		**3.28**	
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U			3	U	3	U	3	U
8260 TVOC	51.33		41.79		18.11		18.56		18.38		16.68	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

	113-22		113-22		122-05		122-05		122-20		130-04	
	Depth : 240.00		Depth : 240.00		Depth : 271.50		Depth : 271.50		Depth : 260.00		Depth : 287.50	
	05/21/2024		10/23/2024		05/23/2024		10/15/2024		10/17/2024		10/25/2024	
Analyte	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.36	J	0.5	U	0.38	J	0.5	J	**0.9**	J	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**8.33**		**6.04**		0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U
Chloroform	**0.89**	J	**0.63**	J	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	**6.81**		**3.31**		**0.66**	J	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	**2.36**		**1.98**		**1.4**		0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.41	J	0.5	U	**1.28**		**0.96**	J	**1.34**		0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	9.99		6.67		10.83		6.75		4.3		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

Analyte	800-101 Depth : 280.00 05/16/2024 ug/L		800-101 Depth : 280.00 12/12/2024 ug/L		800-102 Depth : 304.00 05/16/2024 ug/L		800-102 Depth : 304.00 12/12/2024 ug/L		800-105 Depth : 233.00 05/16/2024 ug/L		800-105 Depth : 233.00 12/12/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	**3.9**		**4.2**		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	**4.6**		**3.8**		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.28	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	**4.5**		**5.1**		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	**1.1**		**1.2**		0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	**3.4**		**2.9**		0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**9.5**		**14**		0.3	J	0.22	J	**2.2**		**2**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.19	J	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	**15**		**14**		0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	42		45.67		0.3		0.22		2.2		2	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (Magothy) Sampling Program

Analyte	800-90 Depth : 255.00 05/09/2024 ug/L		800-90 Depth : 255.00 12/03/2024 ug/L		800-99 Depth : 248.00 05/13/2024 ug/L		800-99 Depth : 248.00 12/03/2024 ug/L					
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.45	J	**0.53**					
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethylene	0.5	U	0.5	U	0.3	J	0.37	J				
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U				
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U				
Carbon tetrachloride	0.39	J	0.33	J	0.5	U	0.5	U				
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U				
Chloroform	**1.2**		**1.3**		**1.5**		**1.6**					
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Cymene	0.5	U	0.5	U	0.5	U	0.5	U				
DBCP	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U				
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
EDB	0.5	U	0.5	U	0.5	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U				
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
m/p xylene	1	U	1	U	1	U	1	U				
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U				
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U				
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U				
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U				
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U	0.5	U				
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U				
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U				
Toluene	0.5	U	0.5	U	0.5	U	0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U				
Trichloroethylene	**0.6**		**0.55**		**0.54**		**0.65**					
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U				
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U				
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U				
8260 TVOC	2.19		2.18		2.79		3.15					

William Floyd Wellfield Sentinel Monitoring
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	109-03 Depth : 130.00 03/25/2024 ug/L		109-03 Depth : 130.00 06/10/2024 ug/L		109-03 Depth : 130.00 09/17/2024 ug/L		109-03 Depth : 130.00 12/09/2024 ug/L		117-01 Depth : 80.00 03/25/2024 ug/L		117-01 Depth : 82.00 06/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.03**		**0.94**	J	**0.97**	J	**0.75**	J	**2.01**		**3.03**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	8.04	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	**0.54**	J	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.03		0.94		0.97		1.29		2.01		3.03	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	117-01 Depth : 80.00 09/17/2024 ug/L		117-01 Depth : 80.00 12/09/2024 ug/L		117-02 Depth : 79.00 03/25/2024 ug/L		117-02 Depth : 79.50 06/10/2024 ug/L		117-02 Depth : 79.00 09/17/2024 ug/L		117-02 Depth : 79.00 12/09/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**1.18**		**0.95**	J	0.45	J	0.4	J	0.42	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	8.48	U	0.5	U	0.5	U	0.5	U	7.87	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	1.18		0.95		0.45		0.4		0.42		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	117-04 Depth : 135.00 03/25/2024 ug/L		117-04 Depth : 135.00 06/10/2024 ug/L		117-04 Depth : 135.00 09/17/2024 ug/L		117-04 Depth : 135.00 12/09/2024 ug/L		117-05 Depth : 135.00 03/25/2024 ug/L		117-05 Depth : 135.00 06/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.83**	J	**0.81**	J	**0.83**	J	**0.56**	J	**0.57**	J	**0.61**	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	7.67	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0.83		0.81		0.83		0.56		0.57		0.61	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	117-05 Depth : 135.00 09/17/2024 ug/L		117-05 Depth : 135.00 12/09/2024 ug/L		117-06 Depth : 135.00 03/26/2024 ug/L		117-06 Depth : 135.00 06/10/2024 ug/L		117-06 Depth : 135.00 09/17/2024 ug/L		117-06 Depth : 135.00 12/09/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	0.056	J	0.138	J	0.2	U	0.2	U	0.0508	J	0.2	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	**0.76**	J	**0.53**	J	0.38	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	7.85	U	0.5	U	0.5	U	0.5	U	7.88	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	3	U	3	U	3	U
8260 TVOC	0		0		0.76		0.53		0.38		0	

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: William Floyd Wellfield Sentinel

	109-03 Depth : 130.00 12/09/2024 pCi/l				117-01 Depth : 80.00 12/09/2024 pCi/l				117-02 Depth : 79.00 12/09/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241 (isotope)	-0.538	U	21.2	13.8	-1.19	U	14.1	8.68	2.25	U	9.05	5.95
Beryllium-7	-2.61	U	17	10.1	-0.77	U	22.2	12.2	-9.49	U	21.4	12.7
Cesium-134	-0.108	U	1.92	1.07	0.0121	U	2.62	1.43	0.43	U	2.89	1.65
Cesium-137	0.333	U	1.84	1	0.633	U	2.59	1.34	1.42	U	2.84	1.57
Co-60	0.159	U	1.92	1.05	-1.98	U	2.3	1.83	1.06	U	3.53	1.79
Cobalt-57	-0.22	U	1.8	1.05	0.239	U	2.13	1.22	0.47	U	2.11	1.19
Europium-152	0.068	U	5.6	3.28	4.02	U	7.65	3.85	-0.431	U	6.95	3.82
Europium-154	-1.28	U	4.9	2.83	0.205	U	7.14	3.6	1.68	U	8.45	4.27
Europium-155	1.17	U	7.64	4.98	-2.5	U	9.06	5.41	2.85	U	8.08	4.44
Manganese-54	0.127	U	1.69	0.928	0.378	U	2.54	1.36	-0.441	U	2.43	1.33
Sodium-22	-0.4	U	1.74	1	0.022	U	2.49	1.26	0.592	U	2.98	1.5
Strontium-90	0.474	U	0.781	0.471	0.331	U	0.674	0.399	0.288	U	0.689	0.402
Tritium	-75.5	U	309	160	9.68	U	314	172	22.9	U	309	171
Zinc-65	0.726	U	3.79	2.05	-1.42	U	5.03	3.21	-0.418	U	5.53	3.43

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: William Floyd Wellfield Sentinel

	117-04 Depth : 135.00 12/09/2024 pCi/l				117-05 Depth : 135.00 12/09/2024 pCi/l				117-06 Depth : 135.00 12/09/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241 (isotope)	0.254	U	15.7	9.27	1.55	U	7.54	4.11	19.6	U	22.9	19.5
Beryllium-7	0.5	U	23.8	12.8	3.85	U	24.4	12.8	13.5	U	23.1	10.6
Cesium-134	0.0819	U	2.44	1.3	0.139	U	2.94	1.58	-0.184	U	2.28	1.22
Cesium-137	-1.19	U	2	1.24	-0.504	U	2.66	1.5	-0.0458	U	2.56	1.37
Co-60	0.528	U	2.69	1.27	0.193	U	2.85	1.41	0.485	U	2.93	1.37
Cobalt-57	0.127	U	2.19	1.24	-0.104	U	2.03	1.17	0.328	U	2.49	1.69
Europium-152	-2.91	U	6.54	4.4	-1.16	U	6.97	3.82	-0.27	U	7.55	4.02
Europium-154	-1.99	U	8.45	4.9	5.08	U	9.35	4.08	3.71	U	8.79	3.75
Europium-155	4.34	U	9.27	4.97	2.05	U	8.54	4.74	2.57	U	9.42	5.09
Manganese-54	-0.561	U	2.64	1.74	-1.1	U	2.56	1.55	0.894	U	2.84	1.42
Sodium-22	-0.677	U	3	1.73	1.68	U	3.24	1.42	1.34	U	3.12	1.33
Strontium-90	0.011	U	0.788	0.413	0.0954	U	0.753	0.406	0.644	U	0.748	0.467
Tritium	19.4	U	304	167	53.5	U	315	177	-61.2	U	312	164
Zinc-65	0.785	U	5.35	2.61	1.76	U	5.07	2.23	-1.05	U	5.12	2.72

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	109-03 Depth : 130.00 03/25/2024 ng/L		109-03 Depth : 130.00 06/10/2024 ng/L		109-03 Depth : 130.00 09/17/2024 ng/L		109-03 Depth : 130.00 12/09/2024 ng/L		117-01 Depth : 80.00 03/25/2024 ng/L		117-01 Depth : 82.00 06/10/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	14.5	U	6.71	U	15.2	U	7.48	U	14.7	U	6.81	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	14.7	U	6.81	U	15.4	U	7.6	U	15	U	6.92	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	76.7	U	35.5	U	80.2	U	39.6	U	77.9	U	36.1	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	76.7	U	35.5	U	80.2	U	39.6	U	77.9	U	36.1	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	15.3	U	7.1	U	16	U	7.91	U	15.6	U	7.21	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	14.5	U	6.71	U	15.2	U	7.48	U	14.7	U	6.81	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	14.3	U	6.64	U	15	U	7.4	U	14.6	U	6.74	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	14.4	U	6.65	U	15	U	7.42	U	14.6	U	6.76	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	14.6	U	6.74	U	15.2	U	7.52	U	14.8	U	6.85	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	15.3	U	7.1	U	16	U	7.91	U	15.6	U	7.21	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	38.4	U	17.7	U	40.1	U	19.8	U	39	U	18	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	38.4	U	17.7	U	40.1	U	19.8	U	39	U	18	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	7.67	U	3.55	U	8.02	U	3.96	U	7.79	U	3.61	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	6.83	U	3.16	U	7.14	U	3.52	U	6.94	U	3.21	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	7.67	U	3.55	U	8.02	U	3.96	U	7.79	U	3.61	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	7.67	U	3.55	U	8.02	U	3.96	U	7.79	U	3.61	U
Perfluorobutanesulfonate (PFBS)	3.4	U	1.57	U	3.56	U	1.75	U	**6.06**		**4.29**	
Perfluorobutyric acid (PFBA)	15.3	U	7.1	U	16	U	7.91	U	15.6	U	7.21	U
Perfluorodecanesulfonate (PFDS)	3.7	U	1.71	U	3.87	U	1.91	U	3.76	U	1.74	U
Perfluorodecanoic acid (PFDA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	3.58	U	1.72	U	3.89	U	1.92	U	3.62	U	1.75	U
Perfluorododecanoic acid (PFDoA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	3.65	U	1.69	U	3.82	U	1.89	U	3.71	U	1.72	U
Perfluoroheptanoic acid (PFHpA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorohexanesulfonate (PFHxS)	3.51	U	1.62	U	3.67	U	1.81	U	3.56	U	1.65	U
Perfluorohexanoic acid (PFHxA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorononanesulfonate (PFNS)	3.69	U	1.71	U	3.86	U	1.9	U	3.75	U	1.73	U
Perfluorononanoic acid (PFNA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorooctane sulfonamide (PFOSAm)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorooctanesulfonate (PFOS)	3.56	U	1.65	U	3.72	U	1.84	U	**14.6**		**5.88**	
Perfluorooctanoic acid (PFOA)	3.84	U	1.77	U	4.01	U	1.98	U	**7.19**		**3.64**	
Perfluoropentanesulfonate (PFPeS)	3.61	U	1.67	U	3.77	U	1.86	U	3.67	U	1.7	U
Perfluoropentanoic acid (PFPeA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorotetradecanoic acid (PFTeDA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
Perfluorotridecanoic acid (PFTrDA)	3.69	U	1.77	U	4.01	U	1.98	U	3.73	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	3.84	U	1.77	U	4.01	U	1.98	U	3.9	U	1.8	U
1633 TPFAS	0		0		0		0		**27.85**		**13.81**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	117-01 Depth : 80.00 09/17/2024 ng/L		117-01 Depth : 80.00 12/09/2024 ng/L		117-02 Depth : 79.00 03/25/2024 ng/L		117-02 Depth : 79.50 06/10/2024 ng/L		117-02 Depth : 79.00 09/17/2024 ng/L		117-02 Depth : 79.00 12/09/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	14	U	7.59	U	14.7	U	7.02	U	14.1	U	6.97	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	14.2	U	7.72	U	15	U	7.14	U	14.3	U	7.08	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	74	U	40.2	U	77.9	U	37.2	U	74.5	U	36.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	74	U	40.2	U	77.9	U	37.2	U	74.5	U	36.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	14.8	U	8.04	U	15.6	U	7.43	U	14.9	U	7.37	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	14	U	7.59	U	14.7	U	7.02	U	14.1	U	6.97	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	13.8	U	7.51	U	14.6	U	6.95	U	13.9	U	6.89	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	13.9	U	7.53	U	14.6	U	6.97	U	14	U	6.91	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	14.1	U	7.64	U	14.8	U	7.06	U	14.1	U	7	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	14.8	U	8.04	U	15.6	U	7.43	U	14.9	U	7.37	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	37	U	20.1	U	39	U	18.6	U	37.2	U	18.4	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	37	U	20.1	U	39	U	18.6	U	37.2	U	18.4	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	7.4	U	4.02	U	7.79	U	3.72	U	7.45	U	3.69	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	6.58	U	3.58	U	6.94	U	3.31	U	6.63	U	3.28	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	7.4	U	4.02	U	7.79	U	3.72	U	7.45	U	3.69	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	7.4	U	4.02	U	7.79	U	3.72	U	7.45	U	3.69	U
Perfluorobutanesulfonate (PFBS)	3.28	U	1.78	U	3.46	U	1.65	U	3.3	U	**1.66**	
Perfluorobutyric acid (PFBA)	14.8	U	8.04	U	15.6	U	7.43	U	14.9	U	7.37	U
Perfluorodecanesulfonate (PFDS)	3.57	U	1.94	U	3.76	U	1.79	U	3.59	U	1.78	U
Perfluorodecanoic acid (PFDA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorododecane sulfonic acid (PFDoS)	3.59	U	1.95	U	3.65	U	1.8	U	3.61	U	1.79	U
Perfluorododecanoic acid (PFDoA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluoroheptanesulfonate (PFHpS)	3.52	U	1.91	U	3.71	U	1.77	U	3.55	U	1.76	U
Perfluoroheptanoic acid (PFHpA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorohexanesulfonate (PFHxS)	3.38	U	1.84	U	3.56	U	1.7	U	3.4	U	1.68	U
Perfluorohexanoic acid (PFHxA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorononanesulfonate (PFNS)	3.56	U	1.93	U	3.75	U	1.79	U	3.58	U	1.77	U
Perfluorononanoic acid (PFNA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorooctane sulfonamide (PFOSAm)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorooctanesulfonate (PFOS)	**9.96**		**7**		3.62	U	**1.99**		**3.56**		**17.9**	
Perfluorooctanoic acid (PFOA)	**5.02**		**3.14**		3.9	U	1.86	U	3.72	U	**1.91**	
Perfluoropentanesulfonate (PFPeS)	3.48	U	1.89	U	3.67	U	1.75	U	3.5	U	1.73	U
Perfluoropentanoic acid (PFPeA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorotetradecanoic acid (PFTeDA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
Perfluorotridecanoic acid (PFTrDA)	3.7	U	2.01	U	3.76	U	1.86	U	3.72	U	1.84	U
Perfluoroundecanoic acid (PFUdA)	3.7	U	2.01	U	3.9	U	1.86	U	3.72	U	1.84	U
1633 TPFAS	**14.98**		**10.14**		0		**1.99**		**3.56**		**21.47**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	117-04 Depth : 135.00 03/25/2024 ng/L		117-04 Depth : 135.00 06/10/2024 ng/L		117-04 Depth : 135.00 09/17/2024 ng/L		117-04 Depth : 135.00 12/09/2024 ng/L		117-05 Depth : 135.00 03/25/2024 ng/L		117-05 Depth : 135.00 06/10/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	14.4	U	6.99	U	14.2	U	6.95	U	13.9	U	6.65	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	14.7	U	7.1	U	14.4	U	7.06	U	14.1	U	6.75	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	76.3	U	37	U	75	U	36.8	U	73.4	U	35.2	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	76.3	U	37	U	75	U	36.8	U	73.4	U	35.2	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	15.3	U	7.39	U	15	U	7.36	U	14.7	U	7.03	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	14.4	U	6.99	U	14.2	U	6.95	U	13.9	U	6.65	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	14.3	U	6.91	U	14	U	6.88	U	13.7	U	6.58	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	14.3	U	6.93	U	14.1	U	6.9	U	13.8	U	6.59	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	14.5	U	7.02	U	14.3	U	6.99	U	13.9	U	6.68	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	15.3	U	7.39	U	15	U	7.36	U	14.7	U	7.03	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	38.2	U	18.5	U	37.5	U	18.4	U	36.7	U	17.6	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	38.2	U	18.5	U	37.5	U	18.4	U	36.7	U	17.6	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	7.63	U	3.7	U	7.5	U	3.68	U	7.34	U	3.52	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	6.79	U	3.29	U	6.68	U	3.27	U	6.53	U	3.13	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	7.63	U	3.7	U	7.5	U	3.68	U	7.34	U	3.52	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	7.63	U	3.7	U	7.5	U	3.68	U	7.34	U	3.52	U
Perfluorobutanesulfonate (PFBS)	3.38	U	1.64	U	3.33	U	1.63	U	3.25	U	1.56	U
Perfluorobutyric acid (PFBA)	15.3	U	7.39	U	15	U	7.36	U	14.7	U	7.03	U
Perfluorodecanesulfonate (PFDS)	3.68	U	1.78	U	3.62	U	1.77	U	3.54	U	1.7	U
Perfluorodecanoic acid (PFDA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorododecane sulfonic acid (PFDoS)	3.87	U	1.79	U	3.64	U	1.78	U	3.55	U	1.71	U
Perfluorododecanoic acid (PFDoA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluoroheptanesulfonate (PFHpS)	3.64	U	1.76	U	3.57	U	1.75	U	3.5	U	1.68	U
Perfluoroheptanoic acid (PFHpA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorohexanesulfonate (PFHxS)	3.49	U	1.69	U	3.43	U	1.68	U	3.35	U	1.61	U
Perfluorohexanoic acid (PFHxA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorononanesulfonate (PFNS)	3.67	U	1.78	U	3.61	U	1.77	U	3.53	U	1.69	U
Perfluorononanoic acid (PFNA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorooctane sulfonamide (PFOSAm)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorooctanesulfonate (PFOS)	3.54	U	1.71	U	3.48	U	1.71	U	3.4	U	1.63	U
Perfluorooctanoic acid (PFOA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluoropentanesulfonate (PFPeS)	3.59	U	1.74	U	3.53	U	1.73	U	3.45	U	1.65	U
Perfluoropentanoic acid (PFPeA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorotetradecanoic acid (PFTeDA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
Perfluorotridecanoic acid (PFTrDA)	3.99	U	1.85	U	3.75	U	1.84	U	3.66	U	1.76	U
Perfluoroundecanoic acid (PFUdA)	3.82	U	1.85	U	3.75	U	1.84	U	3.67	U	1.76	U
1633 TPFAS	0		0		0		0		0		0	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: William Floyd Wellfield Sentinel

Analyte	117-05 Depth : 135.00 09/17/2024 ng/L		117-05 Depth : 135.00 12/09/2024 ng/L		117-06 Depth : 135.00 03/26/2024 ng/L		117-06 Depth : 135.00 06/10/2024 ng/L		117-06 Depth : 135.00 09/17/2024 ng/L		117-06 Depth : 135.00 12/09/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.56	U	7.54	U	14	U	6.74	U	7.74	U	7.22	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.68	U	7.66	U	14.3	U	6.84	U	7.86	U	7.33	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	40	U	39.9	U	74.3	U	35.6	U	40.9	U	38.2	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	40	U	39.9	U	74.3	U	35.6	U	40.9	U	38.2	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	8	U	7.98	U	14.9	U	7.13	U	8.19	U	7.64	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.56	U	7.54	U	14	U	6.74	U	7.74	U	7.22	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.48	U	7.46	U	13.9	U	6.67	U	7.65	U	7.14	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.5	U	7.48	U	13.9	U	6.68	U	7.67	U	7.16	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.6	U	7.58	U	14.1	U	6.77	U	7.78	U	7.25	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	8	U	7.98	U	14.9	U	7.13	U	8.19	U	7.64	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	20	U	19.9	U	37.1	U	17.8	U	20.5	U	19.1	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	20	U	19.9	U	37.1	U	17.8	U	20.5	U	19.1	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4	U	3.99	U	7.43	U	3.56	U	4.09	U	3.82	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.56	U	3.55	U	6.61	U	3.17	U	3.64	U	3.4	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	4	U	3.99	U	7.43	U	3.56	U	4.09	U	3.82	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	4	U	3.99	U	7.43	U	3.56	U	4.09	U	3.82	U
Perfluorobutanesulfonate (PFBS)	1.77	U	1.77	U	3.29	U	1.58	U	1.82	U	1.69	U
Perfluorobutyric acid (PFBA)	8	U	7.98	U	14.9	U	7.13	U	8.19	U	7.64	U
Perfluorodecanesulfonate (PFDS)	1.93	U	1.92	U	3.58	U	1.72	U	1.97	U	1.84	U
Perfluorodecanoic acid (PFDA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorododecane sulfonic acid (PFDoS)	1.94	U	1.93	U	3.69	U	1.73	U	1.99	U	1.85	U
Perfluorododecanoic acid (PFDoA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluoroheptanesulfonate (PFHpS)	1.91	U	1.9	U	3.54	U	1.7	U	1.95	U	1.82	U
Perfluoroheptanoic acid (PFHpA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorohexanesulfonate (PFHxS)	1.83	U	1.82	U	3.39	U	1.63	U	1.87	U	1.74	U
Perfluorohexanoic acid (PFHxA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorononanesulfonate (PFNS)	1.92	U	1.92	U	3.57	U	1.71	U	1.97	U	1.84	U
Perfluorononanoic acid (PFNA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorooctane sulfonamide (PFOSAm)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorooctanesulfonate (PFOS)	1.86	U	1.85	U	3.45	U	1.65	U	1.9	U	1.77	U
Perfluorooctanoic acid (PFOA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluoropentanesulfonate (PFPeS)	1.88	U	1.88	U	3.49	U	1.68	U	1.93	U	1.8	U
Perfluoropentanoic acid (PFPeA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorotetradecanoic acid (PFTeDA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
Perfluorotridecanoic acid (PFTrDA)	2	U	1.99	U	3.81	U	1.78	U	2.05	U	1.91	U
Perfluoroundecanoic acid (PFUdA)	2	U	1.99	U	3.71	U	1.78	U	2.05	U	1.91	U
1633 TPFAS	0		0		0		0		0		0	

OU III (BGRR/WCF Sr-90)
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-06 Depth : 60.00 12/02/2024 pCi/l				065-160 Depth : 40.00 06/27/2024 pCi/l				065-160 Depth : 42.00 11/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.451	U	0.659	0.398	**5.22**		0.707	0.883	**19.5**		0.446	0.753
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-162 Depth : 47.00 11/01/2024 pCi/l				065-163 Depth : 75.00 11/18/2024 pCi/l				065-164 Depth : 75.00 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.34	U	0.788	0.46	0.0658	UJ(-)B	0.377	0.218	0.833	UJ(+)-B	0.762	0.51
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-169 Depth : 85.00 06/12/2024 pCi/l				065-169 Depth : 85.00 11/26/2024 pCi/l				065-170 Depth : 85.00 12/27/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137	-1.15	U	6.71	3.87	1.17	U	6.7	3.4	0.462	U	5.62	3.2
Strontium-90	**11**		0.676	0.953	**43.8**		0.658	2.25	**104**		0.762	3.25
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-174 Depth : 44.00 11/18/2024 pCi/l				065-175 Depth : 40.00 06/18/2024 pCi/l				065-175 Depth : 43.00 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**5.48**		0.705	0.608	**38.2**		0.709	2.34	**79.4**		1.09	2.07
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-176 Depth : 42.00 11/01/2024 pCi/l				065-178 Depth : 80.00 11/18/2024 pCi/l				065-325 Depth : 73.50 06/14/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.563	U	0.767	0.479	-0.0849	UJ(-)B	0.796	0.459	**22.4**		0.802	1.62
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-325 Depth : 69.00 11/26/2024 pCi/l				065-360 Depth : 45.00 11/01/2024 pCi/l				065-361 Depth : 55.00 11/01/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**31.2**		0.614	1.93	0.319	U	0.791	0.458	0.0863	U	0.775	0.42
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-362 Depth : 45.00 11/01/2024 pCi/l				065-363 Depth : 60.00 11/15/2024 pCi/l				065-364 Depth : 70.00 11/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.381	U	0.731	0.436	0.295	UJ(-)B	0.634	0.373	1.33	UJ(+)-B	0.902	0.565
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-365 Depth : 80.00 11/15/2024 pCi/l				065-367 Depth : 95.00 11/26/2024 pCi/l				065-37 Depth : 74.00 06/27/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137									3.4	U	6.6	3.11
Strontium-90	0.0895	UJ(-)B	0.849	0.496	-0.0359	U	0.791	0.438	**7.51**		0.595	0.948
Tritium									131	U	468	267

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-37 Depth : 73.00 12/27/2024 pCi/l				065-38 Depth : 62.00 06/12/2024 pCi/l				065-38 Depth : 63.00 11/01/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137	1.82	U	5.68	2.78								
Strontium-90	**14.7**		0.789	1.35	0.721	U	0.774	0.498	-0.126	U	0.284	0.158
Tritium	-217	U	415	222								

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-39 Depth : 87.00 06/12/2024 pCi/l				065-39 Depth : 87.40 11/01/2024 pCi/l				065-401 Depth : 67.00 06/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**4.01**		0.782	0.703	**6.32**		0.638	0.816	-0.461	U	0.746	0.377
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-401 Depth : 75.00 12/23/2024 pCi/l				065-402 Depth : 47.00 06/27/2024 pCi/l				065-402 Depth : 47.00 11/06/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.105	U	0.74	0.404	0.123	U	0.766	0.418	0.185	U	0.667	0.393
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	065-404 Depth : 100.00 11/18/2024 pCi/l				065-405 Depth : 80.00 06/14/2024 pCi/l				065-405 Depth : 80.00 11/26/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**1.19**	UJ(+)-B	0.591	0.385	**1.44**		0.744	0.555	**1.95**		0.577	0.554
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-189 Depth : 69.50 10/31/2024 pCi/l				075-193 Depth : 85.00 11/07/2024 pCi/l				075-194 Depth : 145.00 11/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.758	N2	0.475	0.363	0.0331	U	0.294	0.17	0.423	U	0.481	0.291
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-201 Depth : 68.00 11/27/2024 pCi/l				075-210 Depth : 58.00 06/11/2024 pCi/l				075-210 Depth : 58.00 11/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.199	U	0.651	0.379	0.328	U	0.747	0.437	-0.306	U	0.67	0.375
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-39 Depth : 52.00 11/18/2024 pCi/l				075-40 Depth : 122.50 02/12/2024 pCi/l				075-40 Depth : 122.50 04/09/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.403	U	0.77	0.458								
Tritium					-26.913	U	410.756	286.575	-120.336	U	402.019	230.335

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-40 Depth : 122.50 07/09/2024 pCi/l				075-41 Depth : 195.50 10/30/2024 pCi/l				075-46 Depth : 38.00 11/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90					0.0279	U	0.768	0.411	-0.129	U	0.548	0.265
Tritium	69.76	U	461.799	270.276								

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-47 Depth : 36.30 06/11/2024 pCi/l				075-47 Depth : 36.30 11/06/2024 pCi/l				075-48 Depth : 68.50 06/11/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.384	U	0.776	0.46	0.252	U	0.284	0.174	0.463	U	0.495	0.328
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-48 Depth : 68.00 11/13/2024 pCi/l				075-664 Depth : 69.00 01/24/2024 pCi/l				075-664 Depth : 69.00 02/27/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.837	UJ(+)-B	0.711	0.49	0.521	N2	0.513	0.345	-0.222	U	0.771	0.38
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-664 Depth : 63.50 03/21/2024 pCi/l				075-664 Depth : 61.50 04/26/2024 pCi/l				075-664 Depth : 70.00 05/23/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	-0.0125	U	0.32	0.18	**0.844**		0.471	0.366	0.313	U	0.545	0.329
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-664 Depth : 70.00 06/27/2024 pCi/l				075-664 Depth : 67.00 07/31/2024 pCi/l				075-664 Depth : 70.00 08/30/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.351	U	0.782	0.46	0.739	U	0.758	0.508	0.574	U	0.791	0.481
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-664 Depth : 65.00 09/23/2024 pCi/l				075-664 Depth : 69.00 10/31/2024 pCi/l				075-664 Depth : 66.00 11/27/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.742	U	0.779	0.491	0.123	U	0.7	0.38	0.518	U	0.736	0.459
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-664 Depth : 66.00 12/27/2024 pCi/l				075-665 Depth : 82.00 11/20/2024 pCi/l				075-666 Depth : 51.00 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.347	U	0.401	0.245	0.139	U	0.766	0.422	**15.5**		0.903	0.978
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-669 Depth : 60.00 11/19/2024 pCi/l				075-670 Depth : 94.00 06/06/2024 pCi/l				075-670 Depth : 94.00 11/06/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**1.58**		0.786	0.57	0.301	U	0.32	0.196	-0.019	U	0.464	0.269
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-671 Depth : 109.00 06/06/2024 pCi/l				075-671 Depth : 109.00 11/06/2024 pCi/l				075-672 Depth : 112.00 11/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**1.4**		0.604	0.528	0.317	U	0.333	0.203	-0.0469	U	0.611	0.355
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-673 Depth : 41.00 11/18/2024 pCi/l				075-674 Depth : 75.00 11/07/2024 pCi/l				075-675 Depth : 95.00 11/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.817	N2	0.512	0.324	0.328	U	0.706	0.419	0.443	U	0.574	0.345
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-681 Depth : 59.00 11/15/2024 pCi/l				075-682 Depth : 81.00 06/11/2024 pCi/l				075-682 Depth : 81.00 10/31/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.129	U	0.74	0.433	0.665	U	0.709	0.452	-0.111	U	0.773	0.368
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-683 Depth : 81.00 11/15/2024 pCi/l				075-684 Depth : 79.50 06/11/2024 pCi/l				075-684 Depth : 79.00 11/13/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.879	N2	0.546	0.344	0.547	U	0.71	0.446	**1.73**	UJ(+)-B	0.497	0.34
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-699 Depth : 80.00 06/28/2024 pCi/l				075-699 Depth : 83.00 11/20/2024 pCi/l				075-700 Depth : 64.00 06/28/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.246	U	0.771	0.436	0.66	U	0.786	0.502	0.0943	U	0.764	0.42
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-700 Depth : 66.00 11/20/2024 pCi/l				075-701 Depth : 63.40 01/24/2024 pCi/l				075-701 Depth : 62.61 02/27/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.109	U	0.762	0.421	**2.37**		0.769	0.704	-0.328	U	0.654	0.257
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-701 Depth : 61.75 03/21/2024 pCi/l				075-701 Depth : 59.60 04/26/2024 pCi/l				075-701 Depth : 59.50 05/23/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**1.6**		0.686	0.567	**3.74**		0.517	0.63	**24.8**		0.702	1.8
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-701 Depth : 60.00 06/27/2024 pCi/l				075-701 Depth : 60.50 07/31/2024 pCi/l				075-701 Depth : 60.30 08/30/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**10.2**		0.747	1.26	**55.7**		0.741	2.16	**115**		0.79	3.02
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-701 Depth : 61.24 09/23/2024 pCi/l				075-701 Depth : 43.00 10/31/2024 pCi/l				075-701 Depth : 61.50 11/27/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**35.2**		0.695	2.2	**7.59**		0.79	0.72	**3.72**		0.765	0.823
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-701 Depth : 58.00 12/27/2024 pCi/l				075-705 Depth : 90.00 06/27/2024 pCi/l				075-705 Depth : 90.00 11/20/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**3.48**		0.774	0.691	1.04	N2	0.624	0.479	1.15	N2	0.758	0.549
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-706 Depth : 95.00 06/11/2024 pCi/l				075-706 Depth : 95.00 11/07/2024 pCi/l				075-707 Depth : 75.00 06/11/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.834	N2	0.555	0.411	0.295	U	0.587	0.349	**2.84**		0.627	0.627
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-707 Depth : 75.00 11/15/2024 pCi/l				075-85 Depth : 67.50 11/26/2024 pCi/l				075-86 Depth : 107.50 11/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	0.304	U	0.776	0.452	**26**		0.651	1.72	0.888	N2	0.556	0.42
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	075-87 Depth : 107.50 06/11/2024 pCi/l				075-87 Depth : 107.50 11/13/2024 pCi/l				085-398 Depth : 130.00 06/13/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	-0.259	U	0.729	0.35	-1.28	UJ(-)B	1.28	0.681	**1.41**		0.444	0.301
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	085-398 Depth : 130.00 12/10/2024 pCi/l				085-399 Depth : 65.00 06/11/2024 pCi/l				085-399 Depth : 65.00 11/06/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	-0.0444	U	0.724	0.415	0.185	U	0.792	0.442	0.301	U	0.438	0.262
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	085-402 Depth : 95.00 06/06/2024 pCi/l				085-402 Depth : 100.00 11/06/2024 pCi/l				085-403 Depth : 0.00 01/16/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**3.4**		0.466	0.596	**1.4**		0.572	0.457	0.694	U	0.767	0.474
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	085-403 Depth : 120.00 06/13/2024 pCi/l				085-403 Depth : 120.00 11/18/2024 pCi/l				085-415 Depth : 125.00 06/11/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**1.67**		0.463	0.336	0.584	N2	0.532	0.329	**3.24**		0.564	0.667
Tritium												

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (BGRR/WCF Sr-90)

	085-415 Depth : 125.00 11/06/2024 pCi/l				095-326 Depth : 120.00 06/13/2024 pCi/l				095-326 Depth : 120.00 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Cesium-137												
Strontium-90	**2.51**		0.557	0.572	0.237	U	0.398	0.238	0.0285	U	0.289	0.166
Tritium												

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU III (BGRR/WCF Sr-90)

Analyte	065-06 Depth : 60.00 12/02/2024 ug/L											
1,1,1,2-Tetrachloroethane	0.5	U										
1,1,1-Trichloroethane	**0.7**	J										
1,1,2,2-Tetrachloroethane	0.5	U										
1,1,2-Trichloroethane	0.5	U										
1,1-Dichloroethane	0.5	U										
1,1-Dichloroethylene	0.5	U										
1,1-Dichloropropene	0.5	U										
1,2,3-Trichlorobenzene	0.5	U										
1,2,3-Trichloropropane	0.5	U										
1,2,4-Trichlorobenzene	0.5	U										
1,2-Dichloroethane	0.5	U										
1,2-Dichloropropane	0.5	U										
1,3-Dichloropropane	0.5	U										
2,2-Dichloropropane	0.5	U										
Benzene	0.5	U										
Benzene, 1,2,4-trimethyl	0.5	U										
Benzene, 1,3,5-trimethyl-	0.5	U										
Benzene, 1-methylethyl-	0.5	U										
Bromobenzene	0.5	U										
Bromodichloromethane	0.5	U										
Bromoform	0.5	U										
Carbon tetrachloride	0.5	U										
Chlorobenzene	0.5	U										
Chlorobromomethane	0.5	U										
Chloroethane	0.5	U										
Chloroform	0.5	U										
cis-1,2-Dichloroethylene	0.5	U										
cis-1,3-Dichloropropene	0.5	U										
Cymene	0.5	U										
DBCP	0.5	U										
Dibromochloromethane	0.5	U										
Dibromomethane	0.5	U										
Dichlorodifluoromethane	0.5	U										
EDB	0.5	U										
Ethene, 1,2-dichloro-, (E)-	0.5	U										
Ethylbenzene	0.5	U										
Hexachlorobutadiene	0.5	U										
m-Dichlorobenzene	0.5	U										
m/p xylene	0.5	U										
Methyl bromide	0.5	U										
Methyl chloride	0.5	U										
Methyl tert-butyl ether	0.5	U										
Methylene chloride	0.5	U										
n-Butylbenzene	0.5	U										
n-Propylbenzene	0.5	U										
Naphthalene	0.5	U										
o-Chlorotoluene	0.5	U										
o-Dichlorobenzene	0.5	U										
o-Xylene	0.5	U										
p-Chlorotoluene	0.5	U										
p-Dichlorobenzene	0.5	U										
sec-Butylbenzene	0.5	U										
Styrene	0.5	U										
tert-Butylbenzene	0.5	U										
Tetrachloroethylene	0.5	U										
Toluene	0.5	U										
trans-1,3-Dichloropropene	0.5	U										
Trichloroethylene	0.5	U										
Trichlorofluoromethane	0.5	U										
Vinyl chloride	0.5	U										
Xylene (total)	3	U										
8260 TVOC	0.7											

Chemical/Animal Holes Sr-90
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	097-313 Depth : 36.00 03/08/2024 pCi/l				097-313 Depth : 34.83 09/30/2024 pCi/l				097-314 Depth : 36.00 03/08/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**3.31**		0.705	0.745	**4.12**		0.711	0.746	**13**		0.563	1.25

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	097-314 Depth : 34.75 09/30/2024 pCi/l				097-315 Depth : 35.00 03/12/2024 pCi/l				097-315 Depth : 34.40 09/30/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**44.9**		0.624	2.19	**5**		0.529	0.751	**4**		0.621	0.781

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	106-100 Depth : 29.40 09/13/2024 pCi/l				106-101 Depth : 32.18 09/16/2024 pCi/l				106-103 Depth : 28.77 09/12/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**2.75**		0.605	0.637	**1.84**		0.591	0.566	**7.21**		0.78	0.991

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	106-104 Depth : 28.86 09/12/2024 pCi/l				106-105 Depth : 28.98 09/12/2024 pCi/l				106-119 Depth : 29.78 09/16/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**1.91**		0.673	0.597	0.484	U	0.638	0.386	-0.267	U	0.416	0.221

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	106-125 Depth : 33.48 09/16/2024 pCi/l				106-136 Depth : 31.20 09/16/2024 pCi/l				106-16 Depth : 35.27 09/19/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**2.22**		0.786	0.701	**5.3**	JB	0.797	0.963	**20.9**		0.781	1.5

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	106-49 Depth : 32.11 09/19/2024 pCi/l				106-94 Depth : 35.47 09/19/2024 pCi/l				106-95 Depth : 35.19 09/19/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	0.286	U	0.794	0.459	**5.13**	JB	0.783	0.838	**6.33**	JB	0.786	0.919

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Chemical/Animal Holes Sr-90

	106-98 Depth : 30.13 09/12/2024 pCi/l				106-99 Depth : 30.64 09/13/2024 pCi/l							
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error				
Strontium-90	**1.76**		0.783	0.597	**14.8**		0.651	1.4				

OU III (AOC 29/HFBR Tritium)
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-11 Depth : 61.50 02/15/2024 pCi/l				075-11 Depth : 61.50 04/15/2024 pCi/l				075-11 Depth : 61.50 07/01/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	27	U	412.072	288.619	183.629	U	408.977	242.703	355.802	U	471.069	283.432

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-11 Depth : 55.83 09/30/2024 pCi/l				075-288 Depth : 54.00 02/16/2024 pCi/l				075-288 Depth : 54.00 04/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	214.315	U	492.101	292.033	-265.731	U	405.561	277.913	0	U	405.527	235.704

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-288 Depth : 54.00 07/01/2024 pCi/l				075-288 Depth : 54.00 10/01/2024 pCi/l				075-288 Depth : 122.50 10/01/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	141.42	U	468.09	275.898	0	U	478.793	279.193	210.884	U	484.225	287.358

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-40 Depth : 122.50 02/12/2024 pCi/l				075-40 Depth : 122.50 04/09/2024 pCi/l				075-40 Depth : 122.50 07/09/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-26.913	U	410.756	286.575	-120.336	U	402.019	230.335	69.76	U	461.799	270.276

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-802 Depth : 55.00 02/12/2024 pCi/l				075-802 Depth : 52.00 04/16/2024 pCi/l				075-802 Depth : 51.81 07/02/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	187.926	U	409.736	290.313	-60.784	U	406.133	234.38	164.771	U	467.466	276.173

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-802 Depth : 53.02 10/01/2024 pCi/l				075-803 Depth : 56.00 02/16/2024 pCi/l				075-803 Depth : 53.00 04/16/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	0	U	486.134	283.474	-186.878	U	407.449	280.904	-141.249	U	404.471	231.176

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-803 Depth : 52.87 07/02/2024 pCi/l				075-803 Depth : 54.06 10/01/2024 pCi/l				075-804 Depth : 56.42 02/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	46.9	U	465.703	271.914	0	U	482.516	281.364	**3695.668**		414.733	358.754

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-804 Depth : 54.00 04/09/2024 pCi/l				075-804 Depth : 52.00 07/03/2024 pCi/l				075-804 Depth : 54.00 09/30/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**2945.884**		404.449	305.481	**3121.248**		469.594	348.879	628.179	UJ(+)-B	480.801	295.001

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-805 Depth : 56.00 02/15/2024 pCi/l				075-805 Depth : 53.00 04/15/2024 pCi/l				075-805 Depth : 52.00 07/03/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**1602.814**		407.705	316.646	**881.59**		410.96	261.968	**3429.662**		472.996	357.553

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-805 Depth : 53.98 10/01/2024 pCi/l				075-806 Depth : 55.00 02/16/2024 pCi/l				075-806 Depth : 53.00 04/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**12639.16**		475.764	494.611	**1273.968**		405.071	308.57	161.738	U	405.249	239.945

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-806 Depth : 52.00 07/03/2024 pCi/l				075-806 Depth : 53.47 09/30/2024 pCi/l				075-807 Depth : 54.83 02/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**1838.81**		468.177	319.011	**839.481**	UJ(+)-B	481.896	300.404	**1102.707**		410.479	309.068

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-807 Depth : 52.00 04/15/2024 pCi/l				075-807 Depth : 52.00 07/03/2024 pCi/l				075-807 Depth : 52.60 09/30/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-182.898	U	407.348	231.683	71.293	U	471.944	276.213	635.132	UJ(+)-B	486.122	298.266

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-808 Depth : 53.40 02/16/2024 pCi/l				075-808 Depth : 50.00 04/15/2024 pCi/l				075-808 Depth : 52.00 07/03/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-80.793	U	411.022	285.634	0	U	396.858	230.666	93.238	U	462.913	271.569

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU III (AOC 29/HFBR Tritium)

	075-808 Depth : 52.00 09/30/2024 pCi/l											
Analyte	Result	Qual	MDA	Error								
Tritium	214.224	U	491.893	291.909								

OU IV (AOC 6
Sr-90)
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	066-189 Depth : 36.00 04/04/2024 pCi/l				076-04 Depth : 40.00 04/09/2024 pCi/l				076-06 Depth : 40.00 04/04/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	0.198	U	0.502	0.29	0.763	N2	0.451	0.334	**1.38**	UJ(+)-B	0.776	0.573

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-07 Depth : 60.00 04/04/2024 pCi/l				076-13 Depth : 41.00 04/02/2024 pCi/l				076-168 Depth : 46.00 04/02/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	0.172	U	0.787	0.436	**5.3**		0.719	0.958	**0.972**	UJ(+)-B	0.422	0.346

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-169 Depth : 46.00 04/02/2024 pCi/l				076-181 Depth : 65.00 04/05/2024 pCi/l				076-182 Depth : 85.00 04/05/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**1.31**	UJ(+)-B	0.514	0.456	0.249	U	0.771	0.446	0.165	U	0.45	0.256

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-184 Depth : 65.00 04/09/2024 pCi/l				076-20 Depth : 34.40 04/04/2024 pCi/l				076-22 Depth : 57.00 04/09/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**33.9**		0.67	1.96	0.522	U	0.773	0.471	**3.67**		0.579	0.723

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-24 Depth : 40.00 04/03/2024 pCi/l				076-25 Depth : 41.60 04/16/2024 pCi/l				076-262 Depth : 75.00 04/04/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**1.13**	UJ(+)-B	0.499	0.405	**4.19**		0.66	0.817	0.297	U	0.455	0.281

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-28 Depth : 45.00 04/04/2024 pCi/l				076-317 Depth : 41.00 04/02/2024 pCi/l				076-373 Depth : 44.00 04/04/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**3.99**		0.532	0.706	0.386	U	0.762	0.453	-0.377	U	0.788	0.411

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-415 Depth : 55.00 04/04/2024 pCi/l				076-416 Depth : 55.00 04/05/2024 pCi/l				076-418 Depth : 52.00 04/03/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	0.294	U	0.516	0.312	0.593	U	0.768	0.471	**5.3**		0.583	0.777

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

	076-419 Depth : 50.00 04/03/2024 pCi/l				076-420 Depth : 42.00 04/02/2024 pCi/l				076-421 Depth : 42.00 04/02/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	**4.8**		0.503	0.749	**1.11**		0.632	0.468	**1.83**		0.585	0.524

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU IV (AOC 6 Sr-90)

Analyte	076-25 Depth : 42.00 04/16/2024 ug/L		076-25 Depth : 42.00 10/03/2024 ug/L									
1,1,1,2-Tetrachloroethane	1	U	0.5	U								
1,1,1-Trichloroethane	1	U	0.5	U								
1,1,2,2-Tetrachloroethane	1	U	0.5	U								
1,1,2-Trichloroethane	1	U	0.5	U								
1,1-Dichloroethane	1	U	0.5	U								
1,1-Dichloroethylene	1	U	0.5	U								
1,1-Dichloropropene	1	U	0.5	U								
1,2,3-Trichlorobenzene	2	U	0.5	U								
1,2,3-Trichloropropane	2.5	U	0.5	U								
1,2,4-Trichlorobenzene	1	U	0.5	U								
1,2-Dichloroethane	1	U	0.5	U								
1,2-Dichloropropane	1	U	0.5	U								
1,3-Dichloropropane	1	U	0.5	U								
2,2-Dichloropropane	1	U	0.5	U								
Benzene	1	U	0.5	U								
Benzene, 1,2,4-trimethyl	1	U	0.5	U								
Benzene, 1,3,5-trimethyl-	1	U	0.5	U								
Benzene, 1-methylethyl-	1	U	0.5	U								
Bromobenzene	1	U	0.5	U								
Bromodichloromethane	1	U	0.5	U								
Bromoform	2	U	0.5	U								
Carbon tetrachloride	1	U	0.5	U								
Chlorobenzene	1	U	0.5	U								
Chlorobromomethane	1	U	0.5	U								
Chloroethane	4	U	0.5	U								
Chloroform	1	U	0.3	J								
cis-1,2-Dichloroethylene	1	U	0.5	U								
cis-1,3-Dichloropropene	2	U	0.5	U								
Cymene	1	U	0.5	U								
DBCP	5	U	0.5	U								
Dibromochloromethane	2	U	0.5	U								
Dibromomethane	1	U	0.5	U								
Dichlorodifluoromethane	3	U	0.5	U								
EDB	1	U	0.5	U								
Ethene, 1,2-dichloro-, (E)-	1	U	0.5	U								
Ethylbenzene	1	U	0.5	U								
Hexachlorobutadiene	2	U	0.5	U								
m-Dichlorobenzene	1	U	0.5	U								
m/p xylene	2	U	1	U								
Methyl bromide	5	U	0.5	U								
Methyl chloride	2	U	0.5	U								
Methyl tert-butyl ether	5	U	0.5	U								
Methylene chloride	2	U	0.5	U								
n-Butylbenzene	1	U	0.5	U								
n-Propylbenzene	1	U	0.5	U								
Naphthalene	2	U	0.5	U								
o-Chlorotoluene	1	U	0.5	U								
o-Dichlorobenzene	1	U	0.5	U								
o-Xylene	1	U	0.5	U								
p-Chlorotoluene	1	U	0.5	U								
p-Dichlorobenzene	1	U	0.5	U								
sec-Butylbenzene	1	U	0.5	U								
Styrene	1	U	0.5	U								
tert-Butylbenzene	1	U	0.5	U								
Tetrachloroethylene	**2.1**		**2**									
Toluene	1	U	0.5	U								
trans-1,3-Dichloropropene	2	U	0.5	U								
Trichloroethylene	1	U	0.5	U								
Trichlorofluoromethane	2	U	0.5	U								
Vinyl chloride	2	U	0.5	U								
Xylene (total)	1	U	1.5	U								
8260 TVOC	2.1		2.3									

OU VI (EDB)
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-173 Depth : 111.00 12/30/2024 ug/L		000-175 Depth : 105.00 12/30/2024 ug/L		000-178 Depth : 133.00 06/26/2024 ug/L		000-178 Depth : 133.00 12/27/2024 ug/L		000-209 Depth : 99.00 12/30/2024 ug/L		000-283 Depth : 107.00 06/25/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.02	U	0.02	U	0.011	U	0.02	U	0.02	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	0.01	J	0.012	J	**0.099**		**0.064**		0.02	U	**0.051**	
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-283 Depth : 107.00 12/27/2024 ug/L		000-284 Depth : 107.00 06/25/2024 ug/L		000-284 Depth : 107.00 12/27/2024 ug/L		000-498 Depth : 135.00 06/25/2024 ug/L		000-498 Depth : 135.00 12/20/2024 ug/L		000-499 Depth : 110.00 06/20/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.02	U	0.011	U	0.02	U	0.01	U	0.02	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.11**		0.011	U	0.02	U	0.01	U	0.02	U	0.01	U
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-499 Depth : 110.00 12/20/2024 ug/L		000-500 Depth : 135.00 03/11/2024 ug/L		000-500 Depth : 135.00 06/20/2024 ug/L		000-500 Depth : 135.00 08/21/2024 ug/L		000-500 Depth : 135.00 12/20/2024 ug/L		000-501 Depth : 125.00 06/17/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.02	U	0.01	U	0.01	U	0.01	U	0.02	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	0.02	U	**0.026**		**0.012**		**0.011**		0.02	U	0.01	U
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-501 Depth : 125.00 12/19/2024 ug/L		000-507 Depth : 125.00 06/25/2024 ug/L		000-507 Depth : 125.00 12/20/2024 ug/L		000-508 Depth : 120.00 03/11/2024 ug/L		000-508 Depth : 120.00 06/17/2024 ug/L		000-508 Depth : 120.00 07/31/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.02	U	0.01	U	0.02	U	0.01	U	0.011	U	0.011	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	0.02	U	0.01	U	0.02	U	0.01	U	0.011	U	0.011	U
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-508 Depth : 120.00 12/19/2024 ug/L		000-519 Depth : 130.00 03/11/2024 ug/L		000-519 Depth : 130.00 06/21/2024 ug/L		000-519 Depth : 130.00 07/30/2024 ug/L		000-519 Depth : 130.00 12/19/2024 ug/L		000-520 Depth : 140.00 06/17/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.02	U	0.01	U	0.01	U	0.011	U	0.02	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	0.02	U	0.01	U	0.01	U	0.011	U	0.02	U	**0.1**	
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-520 Depth : 140.00 12/19/2024 ug/L		000-524 Depth : 140.00 12/26/2024 ug/L		000-527 Depth : 145.00 03/13/2024 ug/L		000-527 Depth : 145.00 06/21/2024 ug/L		000-527 Depth : 145.00 07/30/2024 ug/L		000-527 Depth : 145.00 12/19/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.02	U	0.02	U	0.01	U	0.011	U	0.01	U	0.02	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.048**		0.02	U	0.01	U	0.011	U	0.01	U	0.02	U
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-549 Depth : 145.00 03/21/2024 ug/L		000-549 Depth : 145.00 06/26/2024 ug/L		000-549 Depth : 145.00 08/21/2024 ug/L		000-549 Depth : 145.00 12/26/2024 ug/L		000-550 Depth : 130.00 03/21/2024 ug/L		000-550 Depth : 130.00 06/26/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.01	U	0.01	U	0.01	U	0.02	U	0.01	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.29**		**0.29**		**0.28**		**0.23**		**0.28**		**0.34**	
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-550 Depth : 130.00 08/21/2024 ug/L		000-550 Depth : 130.00 12/26/2024 ug/L		000-567 Depth : 145.00 03/19/2024 ug/L		000-567 Depth : 145.00 06/20/2024 ug/L		000-567 Depth : 145.00 08/21/2024 ug/L		000-567 Depth : 145.00 12/19/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.01	U	0.02	U	0.011	U	0.01	U	0.01	U	0.02	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.3**		**0.31**		**0.057**		**0.055**		**0.046**		0.02	U
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-568 Depth : 160.00 03/19/2024 ug/L		000-568 Depth : 160.00 06/20/2024 ug/L		000-568 Depth : 160.00 08/21/2024 ug/L		000-568 Depth : 160.00 12/19/2024 ug/L		000-570 Depth : 160.00 03/11/2024 ug/L		000-570 Depth : 160.00 06/25/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.01	U	0.01	U	0.01	U	0.02	U	0.011	U	0.01	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.32**		**0.39**	D	**0.34**		0.02	U	**0.99**	D	**0.64**	D
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-570 Depth : 160.00 08/22/2024 ug/L		000-570 Depth : 160.00 12/26/2024 ug/L		000-571 Depth : 175.00 03/14/2024 ug/L		000-571 Depth : 175.00 06/24/2024 ug/L		000-571 Depth : 175.00 07/31/2024 ug/L		000-571 Depth : 175.00 12/20/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.011	U	0.02	U	0.01	U	0.011	U	0.01	U	0.02	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.78**	D	**0.51**		**0.52**	D	**0.27**		**0.23**		**0.072**	
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-572 Depth : 200.00 03/14/2024 ug/L		000-572 Depth : 200.00 06/24/2024 ug/L		000-572 Depth : 200.00 08/22/2024 ug/L		000-572 Depth : 200.00 12/19/2024 ug/L		000-578 Depth : 0.00 01/29/2024 ug/L		000-578 Depth : 0.00 01/31/2024 ug/L	
1,1,1,2-Tetrachloroethane									0.5	U	0.5	U
1,1,1-Trichloroethane									0.5	U	0.5	U
1,1,2,2-Tetrachloroethane									0.5	U	0.5	U
1,1,2-Trichloroethane									0.5	U	0.5	U
1,1-Dichloroethane									0.5	U	0.5	U
1,1-Dichloroethylene									0.5	U	0.5	U
1,1-Dichloropropene									0.5	U	0.5	U
1,2,3-Trichlorobenzene									0.5	U	0.5	U
1,2,3-Trichloropropane									0.5	U	0.5	U
1,2,4-Trichlorobenzene									0.5	U	0.5	U
1,2-Dichloroethane									0.5	U	0.5	U
1,2-Dichloropropane									0.5	U	0.5	U
1,3-Dichloropropane									0.5	U	0.5	U
1,4-Dioxane												
2,2-Dichloropropane									0.5	U	0.5	U
Benzene									0.5	U	0.5	U
Benzene, 1,2,4-trimethyl									0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-									0.5	U	0.5	U
Benzene, 1-methylethyl-									0.5	U	0.5	U
Bromobenzene									0.5	U	0.5	U
Bromodichloromethane									0.5	U	0.5	U
Bromoform									0.5	U	0.5	U
Carbon tetrachloride									0.5	U	0.5	U
Chlorobenzene									0.5	U	0.5	U
Chlorobromomethane									0.5	U	0.5	U
Chloroethane									0.5	U	0.5	U
Chloroform									**0.66**		**0.66**	
cis-1,2-Dichloroethylene									0.5	U	0.5	U
cis-1,3-Dichloropropene									0.5	U	0.5	U
Cymene									0.5	U	0.5	U
DBCP	0.01	U	0.01	U	0.01	U	0.02	U	0.011	U	0.011	U
Dibromochloromethane									0.5	U	0.5	U
Dibromomethane									0.5	U	0.5	U
Dichlorodifluoromethane									0.5	U	0.5	U
EDB	**0.2**		**0.12**		**0.018**		0.02	U	**0.15**		**0.18**	
Ethene, 1,2-dichloro-, (E)-									0.5	U	0.5	U
Ethylbenzene									0.5	U	0.5	U
Hexachlorobutadiene									0.5	U	0.5	U
m-Dichlorobenzene									0.5	U	0.5	U
m/p xylene									1	U	1	U
Methyl bromide									0.5	U	0.5	U
Methyl chloride									0.5	U	0.5	U
Methyl tert-butyl ether									0.5	U	0.5	U
Methylene chloride									0.5	U	0.5	U
n-Butylbenzene									0.5	U	0.5	U
n-Propylbenzene									0.5	U	0.5	U
Naphthalene									0.5	U	0.5	U
o-Chlorotoluene									0.5	U	0.5	U
o-Dichlorobenzene									0.5	U	0.5	U
o-Xylene									0.5	U	0.5	U
p-Chlorotoluene									0.5	U	0.5	U
p-Dichlorobenzene									0.5	U	0.5	U
sec-Butylbenzene									0.5	U	0.5	U
Styrene									0.5	U	0.5	U
tert-Butylbenzene									0.5	U	0.5	U
Tetrachloroethylene									0.5	U	0.5	U
Toluene									0.5	U	0.5	U
trans-1,3-Dichloropropene									0.5	U	0.5	U
Trichloroethylene									0.5	U	0.5	U
Trichlorofluoromethane									0.5	U	0.5	U
Vinyl chloride									0.5	U	0.5	U
Xylene (total)									1.5	U	1.5	U
8260 TVOC									0.66		0.66	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-578 Depth : 0.00 02/02/2024 ug/L		000-578 Depth : 0.00 02/05/2024 ug/L		000-578 Depth : 0.00 02/15/2024 ug/L		000-578 Depth : 0.00 02/23/2024 ug/L		000-578 Depth : 0.00 02/28/2024 ug/L		000-578 Depth : 0.00 03/06/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane			**0.36**									
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.61**		**0.54**		**0.53**		0.43	J	0.41	J	0.37	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.01	U	0.01	U	0.01	U	0.011	U	0.01	U	0.01	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	**0.19**		**0.16**		**0.16**		**0.17**		**0.15**		**0.12**	
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.61		0.54		0.53		0.43		0.41		0.37	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-578 Depth : 0.00 03/15/2024 ug/L		000-578 Depth : 0.00 03/22/2024 ug/L		000-578 Depth : 0.00 03/26/2024 ug/L		000-578 Depth : 0.00 04/08/2024 ug/L		000-578 Depth : 0.00 05/06/2024 ug/L		000-578 Depth : 0.00 06/06/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane												
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.4	J	0.38	J	0.4	J	0.48	J	0.42	J	0.49	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.011	U	0.011	U	0.01	U	0.01	U	0.01	U	0.011	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	**0.13**		**0.13**		**0.14**		**0.11**		**0.11**		**0.12**	
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.4		0.38		0.4		0.48		0.42		0.49	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-578 Depth : 0.00 07/11/2024 ug/L		000-578 Depth : 0.00 08/05/2024 ug/L		000-578 Depth : 0.00 09/09/2024 ug/L		000-578 Depth : 0.00 10/07/2024 ug/L		000-578 Depth : 0.00 11/07/2024 ug/L		000-578 Depth : 0.00 12/09/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane												
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.46	J	0.44	J	0.45	J	**0.53**		**0.61**		0.45	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.011	U	0.01	U	0.01	U	0.01	U	0.02	U	0.0185	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	**0.086**		**0.08**		**0.059**		**0.06**		**0.055**		0.0454	
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.92	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	3	U
8260 TVOC	0.46		0.44		0.45		0.53		0.61		0.45	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-579 Depth : 0.00 01/29/2024 ug/L		000-579 Depth : 0.00 01/31/2024 ug/L		000-579 Depth : 0.00 02/02/2024 ug/L		000-579 Depth : 0.00 02/05/2024 ug/L		000-579 Depth : 0.00 02/15/2024 ug/L		000-579 Depth : 0.00 02/23/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane							0.19	J				
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.23	J	0.3	J	0.31	J	0.35	J	0.42	J	0.38	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.01	U	0.053	U D	0.052	U D	0.01	U	0.01	U	0.01	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	**0.31**		**0.46**	D	**0.71**	D	**0.76**	D	**0.92**	D	**0.76**	D
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.59		0.72		0.92		1.09		0.97		0.98	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-579 Depth : 0.00 02/28/2024 ug/L		000-579 Depth : 0.00 03/06/2024 ug/L		000-579 Depth : 0.00 03/15/2024 ug/L		000-579 Depth : 0.00 03/22/2024 ug/L		000-579 Depth : 0.00 03/26/2024 ug/L		000-579 Depth : 0.00 04/08/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane												
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.3	J	0.39	J	0.44	J	0.42	J	0.43	J	0.45	J
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.01	U	0.011	U	0.011	U	0.01	U	0.011	U	0.01	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	**0.69**	D	**0.37**	D	**0.42**		**0.42**		**0.42**		**0.37**	
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.83		0.71		0.8		0.8		0.85		0.77	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-579 Depth : 0.00 05/06/2024 ug/L		000-579 Depth : 0.00 06/06/2024 ug/L		000-579 Depth : 0.00 07/11/2024 ug/L		000-579 Depth : 0.00 08/05/2024 ug/L		000-579 Depth : 0.00 09/09/2024 ug/L		000-579 Depth : 0.00 10/07/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane												
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	**0.51**		**0.65**		**0.56**		**0.53**		**0.54**		**0.65**	
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.052	U D	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	**0.35**	D	**0.29**		**0.22**	D	**0.18**		**0.15**		**0.14**	
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0.73		0.65		0.77		0.53		0.54		0.65	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-579 Depth : 0.00 11/07/2024 ug/L		000-579 Depth : 0.00 12/09/2024 ug/L		000-580 Depth : 185.00 03/22/2024 ug/L		000-580 Depth : 185.00 06/24/2024 ug/L		000-580 Depth : 185.00 07/31/2024 ug/L		000-580 Depth : 185.00 12/19/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U								
1,1,1-Trichloroethane	0.5	U	0.5	U								
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U								
1,1,2-Trichloroethane	0.5	U	0.5	U								
1,1-Dichloroethane	0.5	U	0.5	U								
1,1-Dichloroethylene	0.5	U	0.5	U								
1,1-Dichloropropene	0.5	U	0.5	U								
1,2,3-Trichlorobenzene	0.5	U	0.5	U								
1,2,3-Trichloropropane	0.5	U	0.5	U								
1,2,4-Trichlorobenzene	0.5	U	0.5	U								
1,2-Dichloroethane	0.5	U	0.5	U								
1,2-Dichloropropane	0.5	U	0.5	U								
1,3-Dichloropropane	0.5	U	0.5	U								
1,4-Dioxane												
2,2-Dichloropropane	0.5	U	0.5	U								
Benzene	0.5	U	0.5	U								
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U								
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U								
Benzene, 1-methylethyl-	0.5	U	0.5	U								
Bromobenzene	0.5	U	0.5	U								
Bromodichloromethane	0.5	U	0.5	U								
Bromoform	0.5	U	0.5	U								
Carbon tetrachloride	0.5	U	0.5	U								
Chlorobenzene	0.5	U	0.5	U								
Chlorobromomethane	0.5	U	0.5	U								
Chloroethane	0.5	U	0.5	U								
Chloroform	**0.66**		**0.57**	J								
cis-1,2-Dichloroethylene	0.5	U	0.5	U								
cis-1,3-Dichloropropene	0.5	U	0.5	U								
Cymene	0.5	U	0.5	U								
DBCP	0.02	U	0.0189	U	0.01	U	0.01	U	0.01	U	0.02	U
Dibromochloromethane	0.5	U	0.5	U								
Dibromomethane	0.5	U	0.5	U								
Dichlorodifluoromethane	0.5	U	0.5	U								
EDB	**0.11**		**0.107**		0.01	U	0.01	U	0.01	U	0.02	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U								
Ethylbenzene	0.5	U	0.5	U								
Hexachlorobutadiene	0.5	U	0.5	U								
m-Dichlorobenzene	0.5	U	0.5	U								
m/p xylene	1	U	0.5	U								
Methyl bromide	0.5	U	0.5	U								
Methyl chloride	0.5	U	0.5	U								
Methyl tert-butyl ether	0.5	U	0.5	U								
Methylene chloride	0.5	U	1.85	U								
n-Butylbenzene	0.5	U	0.5	U								
n-Propylbenzene	0.5	U	0.5	U								
Naphthalene	0.5	U	0.5	U								
o-Chlorotoluene	0.5	U	0.5	U								
o-Dichlorobenzene	0.5	U	0.5	U								
o-Xylene	0.5	U	0.5	U								
p-Chlorotoluene	0.5	U	0.5	U								
p-Dichlorobenzene	0.5	U	0.5	U								
sec-Butylbenzene	0.5	U	0.5	U								
Styrene	0.5	U	0.5	U								
tert-Butylbenzene	0.5	U	0.5	U								
Tetrachloroethylene	0.5	U	0.5	U								
Toluene	0.5	U	0.5	U								
trans-1,3-Dichloropropene	0.5	U	0.5	U								
Trichloroethylene	0.5	U	0.5	U								
Trichlorofluoromethane	0.5	U	0.5	U								
Vinyl chloride	0.5	U	0.5	U								
Xylene (total)	1.5	U	3	U								
8260 TVOC	0.66		0.57									

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: OU VI EDB

Analyte	000-581 Depth : 180.00 03/14/2024 ug/L		000-581 Depth : 180.00 06/21/2024 ug/L		000-581 Depth : 180.00 07/30/2024 ug/L		000-581 Depth : 180.00 12/19/2024 ug/L		000-582 Depth : 185.00 03/22/2024 ug/L		000-582 Depth : 185.00 06/24/2024 ug/L	
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.01	U	0.01	U	0.01	U	0.02	U	0.011	U	0.011	U
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.14**		**0.18**		**0.15**		0.02	U	0.011	U	**0.016**	
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: OU VI EDB

Analyte	000-582 Depth : 185.00 08/22/2024 ug/L		000-582 Depth : 180.00 12/19/2024 ug/L									
1,1,1,2-Tetrachloroethane												
1,1,1-Trichloroethane												
1,1,2,2-Tetrachloroethane												
1,1,2-Trichloroethane												
1,1-Dichloroethane												
1,1-Dichloroethylene												
1,1-Dichloropropene												
1,2,3-Trichlorobenzene												
1,2,3-Trichloropropane												
1,2,4-Trichlorobenzene												
1,2-Dichloroethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
1,4-Dioxane												
2,2-Dichloropropane												
Benzene												
Benzene, 1,2,4-trimethyl												
Benzene, 1,3,5-trimethyl-												
Benzene, 1-methylethyl-												
Bromobenzene												
Bromodichloromethane												
Bromoform												
Carbon tetrachloride												
Chlorobenzene												
Chlorobromomethane												
Chloroethane												
Chloroform												
cis-1,2-Dichloroethylene												
cis-1,3-Dichloropropene												
Cymene												
DBCP	0.01	U	0.02	U								
Dibromochloromethane												
Dibromomethane												
Dichlorodifluoromethane												
EDB	**0.068**		**0.24**									
Ethene, 1,2-dichloro-, (E)-												
Ethylbenzene												
Hexachlorobutadiene												
m-Dichlorobenzene												
m/p xylene												
Methyl bromide												
Methyl chloride												
Methyl tert-butyl ether												
Methylene chloride												
n-Butylbenzene												
n-Propylbenzene												
Naphthalene												
o-Chlorotoluene												
o-Dichlorobenzene												
o-Xylene												
p-Chlorotoluene												
p-Dichlorobenzene												
sec-Butylbenzene												
Styrene												
tert-Butylbenzene												
Tetrachloroethylene												
Toluene												
trans-1,3-Dichloropropene												
Trichloroethylene												
Trichlorofluoromethane												
Vinyl chloride												
Xylene (total)												
8260 TVOC												

Site Background
Analytical Result

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Site Background

Analyte	017-01 Depth : 20.00 09/10/2024 ug/L		017-03 Depth : 120.00 09/10/2024 ug/L		017-04 Depth : 164.50 09/10/2024 ug/L		018-01 Depth : 25.00 09/10/2024 ug/L		018-02 Depth : 75.00 09/10/2024 ug/L		018-04 Depth : 145.00 09/10/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.16	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	**0.76**		0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		0		0		0.76		0.16		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Site Background

Analyte	018-05 Depth : 275.00 09/10/2024 ug/L		034-02 Depth : 135.00 09/10/2024 ug/L		034-03 Depth : 175.00 09/10/2024 ug/L							
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U						
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U						
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U						
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U						
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U						
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U						
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U						
Benzene	0.5	U	0.5	U	0.5	U						
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U						
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U						
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U						
Bromobenzene	0.5	U	0.5	U	0.5	U						
Bromodichloromethane	0.5	U	0.5	U	0.5	U						
Bromoform	0.5	U	0.5	U	0.5	U						
Carbon tetrachloride	0.5	U	0.5	U	0.5	U						
Chlorobenzene	0.5	U	0.5	U	0.5	U						
Chlorobromomethane	0.5	U	0.5	U	0.5	U						
Chloroethane	0.5	U	0.5	U	0.5	U						
Chloroform	0.5	U	0.5	U	0.5	U						
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U						
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Cymene	0.5	U	0.5	U	0.5	U						
DBCP	0.5	U	0.5	U	0.5	U						
Dibromochloromethane	0.5	U	0.5	U	0.5	U						
Dibromomethane	0.5	U	0.5	U	0.5	U						
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U						
EDB	0.5	U	0.5	U	0.5	U						
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U						
Ethylbenzene	0.5	U	0.5	U	0.5	U						
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U						
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
m/p xylene	1	U	1	U	1	U						
Methyl bromide	0.5	U	0.5	U	0.5	U						
Methyl chloride	0.5	U	0.5	U	0.5	U						
Methyl tert-butyl ether	0.5	U	0.5	U	0.22	J						
Methylene chloride	0.5	U	0.5	U	0.5	U						
n-Butylbenzene	0.5	U	0.5	U	0.5	U						
n-Propylbenzene	0.5	U	0.5	U	0.5	U						
Naphthalene	0.5	U	0.5	U	0.5	U						
o-Chlorotoluene	0.5	U	0.5	U	0.5	U						
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
o-Xylene	0.5	U	0.5	U	0.5	U						
p-Chlorotoluene	0.5	U	0.5	U	0.5	U						
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U						
sec-Butylbenzene	0.5	U	0.5	U	0.5	U						
Styrene	0.5	U	0.5	U	0.5	U						
tert-Butylbenzene	0.5	U	0.5	U	0.5	U						
Tetrachloroethylene	0.5	U	0.5	U	0.5	U						
Toluene	0.5	U	0.5	U	0.5	U						
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U						
Trichloroethylene	0.5	U	0.5	U	0.5	U						
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U						
Vinyl chloride	0.5	U	0.5	U	0.5	U						
Xylene (total)	1.5	U	1.5	U	1.5	U						
8260 TVOC	0		0		0.22							

Current Landfill
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Current Landfill

Analyte	087-09 Depth : 29.00 05/28/2024 ug/L		087-09 Depth : 29.00 11/12/2024 ug/L		087-11 Depth : 14.29 05/30/2024 ug/L		087-11 Depth : 16.00 11/14/2024 ug/L		087-23 Depth : 32.50 05/30/2024 ug/L		087-23 Depth : 32.50 11/14/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane			0.2	U			**3**				**0.302**	
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	**1.9**		**0.92**	J	0.41	J	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	**0.88**		0.34	J	0.37	J	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	**1.5**		**0.73**	J	0.5	U	0.5	U
Chloroform	0.27	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	1.1	U	0.5	U	1.01	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.29	J	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.33	J	0.5	U	0.22	J	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.26	J	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	3	U	1.5	U	3	U	1.5	U	3	U
8260 TVOC	0.27		0		4.87		1.99		1.29		0	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: Current Landfill

Analyte	087-24 Depth : 75.00 11/14/2024 ug/L		087-26 Depth : 75.00 05/29/2024 ug/L		087-26 Depth : 75.00 11/13/2024 ug/L		087-27 Depth : 12.50 05/29/2024 ug/L		087-27 Depth : 15.50 11/13/2024 ug/L		088-109 Depth : 13.50 03/15/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.92**	
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	0.0488	J			0.088	J			**0.44**			
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	**0.61**	J	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.37	J	**2.5**	
Chloroform	0.5	J	**3.6**		**4.66**		**2.2**		0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	1	U	0.5	U	1	U	0.5	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	1.01	U	0.5	U	1.01	U	0.5	U	1.09	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	1.5	U	3	U	1.5	U	3	U	1.5	U
8260 TVOC	0.5		3.6		4.66		2.2		0.98		3.42	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Current Landfill

Analyte	088-109 Depth : 13.50 05/28/2024 ug/L		088-109 Depth : 13.50 09/06/2024 ug/L		088-109 Depth : 13.50 11/12/2024 ug/L		088-110 Depth : 17.50 05/29/2024 ug/L		088-110 Depth : 17.50 11/13/2024 ug/L		088-21 Depth : 7.88 05/30/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	**2.6**		**8.4**		**9.08**		0.41	J	0.35	J	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane					**0.602**				**0.628**			
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	**0.56**		0.5	U	**1.1**		**0.69**	J	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.28	J	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	**19**		**24**		**16**		**3.5**		**3.12**		0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	0.5	U	1	U	0.5	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	1.1	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.21	J	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	3	U	1.5	U	3	U	1.5	U
8260 TVOC	21.6		32.96		25.08		5.5		4.16		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Current Landfill

Analyte	088-21 Depth : 12.50 11/14/2024 ug/L		088-22 Depth : 75.00 11/14/2024 ug/L		088-23 Depth : 125.00 11/14/2024 ug/L		098-99 Depth : 44.50 03/12/2024 ug/L		098-99 Depth : 44.50 05/29/2024 ug/L		098-99 Depth : 44.50 09/06/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	**1.9**		**2.3**		**2.1**	
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dioxane	0.2	U	0.1	J	**2.47**							
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	**3.78**		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	0.5	U	0.5	U	0.5	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	**0.99**	U	**1.02**	U	**0.97**	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	3	U	3	U	3	U	1.5	U	1.5	U	1.5	U
8260 TVOC	0		3.78		0		1.9		2.3		2.1	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: Current Landfill

Analyte	098-99 Depth : 44.50 11/14/2024 ug/L											
1,1,1,2-Tetrachloroethane	0.5	U										
1,1,1-Trichloroethane	0.5	U										
1,1,2,2-Tetrachloroethane	0.5	U										
1,1,2-Trichloroethane	0.5	U										
1,1-Dichloroethane	**1.04**											
1,1-Dichloroethylene	0.5	U										
1,1-Dichloropropene	0.5	U										
1,2,3-Trichlorobenzene	0.5	U										
1,2,3-Trichloropropane	0.5	U										
1,2,4-Trichlorobenzene	0.5	U										
1,2-Dichloroethane	0.5	U										
1,2-Dichloropropane	0.5	U										
1,3-Dichloropropane	0.5	U										
1,4-Dioxane	**0.73**											
2,2-Dichloropropane	0.5	U										
Benzene	0.5	U										
Benzene, 1,2,4-trimethyl	0.5	U										
Benzene, 1,3,5-trimethyl-	0.5	U										
Benzene, 1-methylethyl-	0.5	U										
Bromobenzene	0.5	U										
Bromodichloromethane	0.5	U										
Bromoform	0.5	U										
Carbon tetrachloride	0.5	U										
Chlorobenzene	0.5	U										
Chlorobromomethane	0.5	U										
Chloroethane	0.5	U										
Chloroform	0.5	U										
cis-1,2-Dichloroethylene	0.5	U										
cis-1,3-Dichloropropene	0.5	U										
Cymene	0.5	U										
DBCP	0.5	U										
Dibromochloromethane	0.5	U										
Dibromomethane	0.5	U										
Dichlorodifluoromethane	0.5	U										
EDB	0.5	U										
Ethene, 1,2-dichloro-, (E)-	0.5	U										
Ethylbenzene	0.5	U										
Hexachlorobutadiene	0.5	U										
m-Dichlorobenzene	0.5	U										
m/p xylene	0.5	U										
Methyl bromide	0.5	U										
Methyl chloride	0.5	U										
Methyl tert-butyl ether	0.5	U										
Methylene chloride	**0.98**	U										
n-Butylbenzene	0.5	U										
n-Propylbenzene	0.5	U										
Naphthalene	0.5	U										
o-Chlorotoluene	0.5	U										
o-Dichlorobenzene	0.5	U										
o-Xylene	0.5	U										
p-Chlorotoluene	0.5	U										
p-Dichlorobenzene	0.5	U										
sec-Butylbenzene	0.5	U										
Styrene	0.5	U										
tert-Butylbenzene	0.5	U										
Tetrachloroethylene	0.5	U										
Toluene	0.5	U										
trans-1,3-Dichloropropene	0.5	U										
Trichloroethylene	0.5	U										
Trichlorofluoromethane	0.5	U										
Vinyl chloride	0.5	U										
Xylene (total)	3	U										
8260 TVOC	1.04											

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: Current Landfill

Analyte	087-09 Depth : 29.00 05/28/2024 ug/L		087-09 Depth : 29.00 11/12/2024 ug/L		087-11 Depth : 14.29 05/30/2024 ug/L		087-11 Depth : 16.00 11/14/2024 ug/L		087-23 Depth : 32.50 05/30/2024 ug/L		087-23 Depth : 32.50 11/14/2024 ug/L	
Aluminum	15	U	68	U	**100**		**248**		15		68	U
Antimony	2	U	3.5	U	0.8	B	**7.15**	B	2	U	**11.1**	B
Arsenic	2	U	2	B	**6.7**		**16.4**		**6.1**		**8.55**	
Barium	**31**		**39.2**	B	**24**		**24.3**	B	**23**		**24.3**	B
Beryllium	0.3	U	1	U	0.3	U	1	U	0.3	U	1	U
Cadmium	0.5	U	1	U	0.5	U	1	U	0.5	U	1	U
Calcium	**14000**		**25000**		**20000**		**18100**		**3900**		**3010**	B
Chromium	**15**		1	U	1.1	B	**1.4**	B	3	U	1	U
Cobalt	**1.1**		**4.83**	B	**1.7**		1	U	**9.5**		**8.61**	B
Copper	**2**		3	U	**3.7**		3	U	1	U	3	U
Iron	**210**	U	**42700**		**87000**		**83700**		**23000**		**25500**	
Lead	1	U	0.5	U	0.88	B	0.5	U	1	U	0.5	U
Magnesium	**3900**		**4620**	B	**3000**		**3230**	B	**1200**		**1230**	B
Manganese	**140**		**1150**		**1400**		**1650**		**2800**		**2690**	
Mercury	0.2	U	0.067	U	0.2	U	0.067	U	0.2	U	0.067	U
Nickel	**53**		1.5	U	2	U	1.5	U	**2.7**		1.5	U
Potassium	**1800**		**4850**	B	**2800**		**3600**	B	**960**		**842**	B
Selenium	5	U	1.5	U	5	U	1.5	U	5	U	1.5	U
Silver	1	U	**1.18**	B	1	U	1	U	1	U	1	U
Sodium	**29000**		**17200**		**15000**		**8040**		**5600**		**9150**	
Thallium	0.5	U	0.6	U	0.5	U	0.6	U	0.5	U	0.6	U
Vanadium	2	U	1	U	2	U	**2.43**	B	2	U	1	U
Zinc	5.6	B	3.3	U	2.6	B	**8.38**	B	4.4	B	**5.27**	B

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: Current Landfill

Analyte	087-24 Depth : 75.00 05/30/2024 ug/L		087-24 Depth : 75.00 11/14/2024 ug/L		087-26 Depth : 75.00 05/29/2024 ug/L		087-26 Depth : 75.00 11/13/2024 ug/L		087-27 Depth : 12.50 05/29/2024 ug/L		087-27 Depth : 15.50 11/13/2024 ug/L	
Aluminum	15	U	68	U	15	U	68	U	15	U	68	U
Antimony	2	U	**4.41**	B	2	U	**8.48**	B	2	U	**10.3**	B
Arsenic	2	U	2	U	2	U	2	U	0.66	B	**6.96**	
Barium	**15**		**9.09**	B	**31**		**31.4**	B	**8.7**		**31.6**	B
Beryllium	0.3	U	1	U	0.3	U	1	U	0.3	U	1	U
Cadmium	0.5	U	1	U	0.5	U	1	U	0.5	U	1	U
Calcium	**5500**		**3100**	B	**7900**		**8510**		**13000**		**17300**	
Chromium	3	U	1	U	3	U	1	U	3	U	**1.18**	B
Cobalt	1	U	1	U	1	U	1	U	**1.2**		**1.43**	B
Copper	1	U	3	U	**1.6**		3	U	1	U	3	U
Iron	13	B	30	U	31	B	**108**		**7600**		**63300**	
Lead	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Magnesium	**2900**		**1790**	B	**4200**		**4480**	B	**6000**		**3210**	B
Manganese	3	U	2	U	3	U	2	U	**240**		**1910**	
Mercury	0.2	U	0.067	U	0.2	U	0.067	U	0.2	U	0.067	U
Nickel	2	U	1.5	U	2	U	1.5	U	2	U	**2.24**	B
Potassium	**1300**		**995**	B	**1400**		**1550**	B	**1300**		**3470**	B
Selenium	5	U	1.5	U	5	U	1.5	U	5	U	1.5	U
Silver	1	U	1	U	1	U	1	U	1	U	1	U
Sodium	**51000**		**35300**		**30000**		**29300**		**12000**		**38400**	
Thallium	0.5	U	0.6	U	0.5	U	0.6	U	0.5	U	0.6	U
Vanadium	2	U	1	U	2	U	1	U	2	U	1	U
Zinc	10	U	**7.17**	B	10	U	3.3	U	10	U	3.3	U

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: Current Landfill

Analyte	088-109 Depth : 13.50 05/28/2024 ug/L		088-109 Depth : 13.50 11/12/2024 ug/L		088-110 Depth : 17.50 05/29/2024 ug/L		088-110 Depth : 17.50 11/13/2024 ug/L		088-21 Depth : 7.88 05/30/2024 ug/L		088-21 Depth : 12.50 11/14/2024 ug/L	
Aluminum	**65**		68	U	15	U	68	U	**34**		68	U
Antimony	2	U	3.5	U	2	U	**8.43**	B	2	U	**14.1**	U
Arsenic	**2.1**		**8.89**		**8.6**		**11.5**		2	U	2	U
Barium	**20**		**7.14**	B	**32**		**29.2**	B	**15**		**35.2**	B
Beryllium	0.3	U	1	U	0.3	U	1	U	0.3	U	1	U
Cadmium	0.5	U	1	U	0.5	U	1	U	0.5	U	1	U
Calcium	**10000**		50	U	**18000**		**19400**		**5200**		**4210**	B
Chromium	3	U	1	U	3	U	1	U	3	U	1	U
Cobalt	**1.8**		1	U	**6.1**		**3.35**	B	1	U	1	U
Copper	1	U	3	U	1	U	3	U	1	U	3	U
Iron	**13000**	U	30	U	**59000**		**55700**		85	B	30	U
Lead	0.32	B	0.5	U	1	U	0.5	U	1	U	0.5	U
Magnesium	**3900**		110	U	**4600**		**4770**	B	**2500**		**2580**	B
Manganese	**380**		2	U	**2500**		**2830**		**20**		**5.14**	B
Mercury	0.2	U	0.067	U	0.2	U	0.067	U	0.2	U	0.067	U
Nickel	2	U	1.5	U	2	U	1.5	U	2	U	1.5	U
Potassium	**1300**		50	U	**2500**		**3060**	B	**1100**		**1490**	B
Selenium	5	U	1.5	U	5	U	1.5	U	5	U	1.5	U
Silver	1	U	1	U	1	U	1	U	1	U	1	U
Sodium	**11000**		100	U	**24000**		**20600**		**49000**		**34800**	
Thallium	0.5	U	0.6	U	0.5	U	0.6	U	0.5	U	0.6	U
Vanadium	2	U	1	U	2	U	1	U	2	U	1	U
Zinc	10	U	3.3	U	10	U	**4.24**	B	10	U	3.3	U

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: Current Landfill

Analyte	088-22 Depth : 75.00 11/14/2024 ug/L		088-23 Depth : 125.00 11/14/2024 ug/L									
Aluminum	68	U	68	U								
Antimony	**7.21**	U	3.5	U								
Arsenic	2	U	2	U								
Barium	**34.5**	B	**3.18**	B								
Beryllium	1	U	1	U								
Cadmium	1	U	1	U								
Calcium	**6650**		**12300**									
Chromium	1	U	1	U								
Cobalt	1	U	1	U								
Copper	3	U	3	U								
Iron	30	B	**132**									
Lead	0.5	U	0.5	U								
Magnesium	**4390**	B	**3070**	B								
Manganese	**4.51**	B	**15.6**									
Mercury	0.067	U	0.067	U								
Nickel	1.5	U	1.5	U								
Potassium	**1780**	B	**563**	B								
Selenium	1.5	U	1.5	U								
Silver	1	U	1	U								
Sodium	**26900**		**12200**									
Thallium	0.6	U	0.6	U								
Vanadium	1	U	1	U								
Zinc	3.3	U	3.3	U								

2024 Groundwater Data : General Chemistry
Brookhaven National Laboratory
Project: Current Landfill

Analyte	087-09 Depth : 29.00 05/28/2024 ug/L		087-09 Depth : 29.00 11/12/2024 ug/L		087-11 Depth : 14.29 05/30/2024 ug/L		087-11 Depth : 16.00 11/14/2024 ug/L		087-23 Depth : 32.50 05/30/2024 ug/L		087-23 Depth : 32.50 11/14/2024 ug/L	
Alkalinity (as CaCO3)	**38**		**16**		**180**		**172**		**47**		**50.5**	
Ammonia (as N)	0.1	U	0.017	U	**2.3**		**1.75**		**0.26**		**0.06**	
BICARBONATE ION AS HCO3	**46**				**220**				**58**			
Chloride	**51**	J	**50.7**		**25**		**14.8**		**10**		**15.7**	
Cyanide	0.01	U	0.00167	U	0.01	U	0.00167	U	0.01	U	0.00167	U
Nitrate (as N)	**0.74**	J	**1.27**		0.5	U	**0.602**		0.2	B	**0.23**	JH
Nitrite (as N)	0.5	U	**0.382**	J	0.5	U	0.033	U	0.5	U	0.033	U
Nitrite + Nitrate-N	**0.79**	J	**1.77**		0.1	U	0.085	U	**0.19**		**0.136**	J
Nitrogen	**0.79**		**1.81**		**2.9**		**2.93**		**0.19**		**0.547**	
PHENOLPHTHALEIN ALKALINITY	10	U			10	U			10	U		
Sulfate	**14**	J	**7.79**		**2.7**		**0.582**		**4.4**		**4.88**	
TDS	**140**		**133**		**230**		**207**		**74**		**92**	
Total Kjeldahl Nitrogen	1	U	0.043	U	**2.9**		**2.93**		1	U	**0.411**	
TSS	1.2	B	0.648	U	**6.8**		**13.5**		3.6	B	**4.4**	J

2024 Groundwater Data : General Chemistry
Brookhaven National Laboratory
Project: Current Landfill

Analyte	087-24 Depth : 75.00 05/30/2024 ug/L		087-24 Depth : 75.00 11/14/2024 ug/L		087-26 Depth : 75.00 05/29/2024 ug/L		087-26 Depth : 75.00 11/13/2024 ug/L		087-27 Depth : 12.50 05/29/2024 ug/L		087-27 Depth : 15.50 11/13/2024 ug/L	
Alkalinity (as CaCO3)	**35**		**33.1**		**29**		**27.6**		**58**		**126**	
Ammonia (as N)	0.1	U	0.017	U	0.052	B	0.017	U	**0.27**		**0.808**	
BICARBONATE ION AS HCO3	**42**				**35**				**71**			
Chloride	**73**		**35**		**52**		**44.6**		**14**		**53.9**	
Cyanide	0.01	U	0.00167	U	0.01	U	0.00167	U	0.01	U	0.00167	U
Nitrate (as N)	0.23	B	**0.446**		0.36	B	**0.323**	H	0.17	B	**0.554**	JH
Nitrite (as N)	0.5	U	0.033	U	0.5	U	0.033	UH	0.5	U	0.033	UH
Nitrite + Nitrate-N	**0.22**		**0.525**		**0.4**		**0.357**		**0.13**		0.085	U
Nitrogen	**0.22**		**0.668**		**0.4**		**0.464**		**0.13**		**1.46**	
PHENOLPHTHALEIN ALKALINITY	10	U			10	U			10	U		
Sulfate	**11**		**5.91**		**12**		**9.06**		**9**		**10.4**	
TDS	**170**		**118**		**120**		**105**		**99**		**220**	
Total Kjeldahl Nitrogen	1	U	0.143	U	1	U	0.107	U	1	U	**1.46**	
TSS	4	U	0.62	U	1.6	B	0.74	U	**8.8**		**43.2**	

2024 Groundwater Data : General Chemistry
Brookhaven National Laboratory
Project: Current Landfill

Analyte	088-109 Depth : 13.50 05/28/2024 ug/L		088-109 Depth : 13.50 11/12/2024 ug/L		088-110 Depth : 17.50 05/29/2024 ug/L		088-110 Depth : 17.50 11/13/2024 ug/L		088-21 Depth : 7.88 05/30/2024 ug/L		088-21 Depth : 12.50 11/14/2024 ug/L	
Alkalinity (as CaCO3)	**31**		**151**		**81**		**138**		**35**		**14.6**	
Ammonia (as N)	**0.42**	J	**1.73**		**1.2**		**0.643**		0.1	U	0.017	U
BICARBONATE ION AS HCO3	**38**				**99**				**43**			
Chloride	**21**	J	**29.1**		**39**		**31.5**		**73**		**55.5**	
Cyanide	0.007	U	0.00167	U	0.01	U	0.00167	U	0.01	U	0.00167	U
Nitrate (as N)	0.5	U	**0.158**	J	0.5	U	0.132	U	0.18	B	**0.187**	
Nitrite (as N)	0.5	U	0.033	U	0.5	U	0.033	U	0.5	U	0.033	U
Nitrite + Nitrate-N	0.1	U	0.085	U	0.1	U	0.085	U	0.1	U	**0.157**	J
Nitrogen	0.1	U	**2.42**		**1.3**		**1.24**		0.1	U	**0.287**	
PHENOLPHTHALEIN ALKALINITY	10	U			10	U			10	U		
Sulfate	**13**	J	**6.19**		**13**		**12.8**		**3.8**		**4.54**	
TDS	**92**		**154**		**220**		**197**		**150**		**123**	
Total Kjeldahl Nitrogen	1	U	**2.42**		**1.3**		**1.2**		1	U	**0.13**	
TSS	**7.2**		**11**	J	**24**		**11.6**		4	U	0.6	U

2024 Groundwater Data : General Chemistry

Brookhaven National Laboratory

Project: Current Landfill

Analyte	088-22 Depth : 75.00 11/14/2024 ug/L		088-23 Depth : 125.00 11/14/2024 ug/L									
Alkalinity (as CaCO3)	**20.3**		**32.9**									
Ammonia (as N)	0.017	U	0.017	U								
BICARBONATE ION AS HCO3												
Chloride	**46**		**16**									
Cyanide	0.00167	U	0.00167	U								
Nitrate (as N)	**0.31**		**0.48**									
Nitrite (as N)	0.033	U	0.033	U								
Nitrite + Nitrate-N	**0.335**		**0.58**									
Nitrogen	**0.393**		**0.612**									
PHENOLPHTHALEIN ALKALINITY												
Sulfate	**10.1**		**12.9**									
TDS	**146**		**92.9**									
Total Kjeldahl Nitrogen	**0.058**	J	0.033	U								
TSS	0.594	U	0.613	U								

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Current Landfill

	087-23 Depth : 32.50 11/14/2024 pCi/l				087-27 Depth : 15.50 11/13/2024 pCi/l				088-109 Depth : 13.50 11/12/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241 (isotope)	1.42	U	15.3	9.01	1.58	U	17.5	9.35	-1.64	U	17.6	9.6
Beryllium-7	-26.3	U	30.8	21.4	-1.81	U	32.2	18	1.46	U	31.6	17.3
Cesium-134	-0.695	U	2.92	1.68	1.59	U	3.67	1.78	1.29	U	3.79	1.89
Cesium-137	-0.0603	U	3.06	2.11	0.714	U	3.36	1.82	0.295	U	3.29	1.82
Co-60	0.195	U	3.08	1.54	-0.66	U	3.46	2.16	-1.56	U	3.33	2.22
Cobalt-57	0.731	U	2.63	1.47	0.545	U	2.64	1.47	2.02	U	2.63	2.89
Europium-152	-0.944	U	8.26	4.5	2.48	U	9.7	5.15	-1.29	U	8.85	4.91
Europium-154	1.57	U	7.8	4.03	0.798	U	9.66	5.07	-0.549	U	8.68	4.89
Europium-155	-4.41	U	9.15	5.47	0.702	U	11	6.14	0.355	U	11.1	6.24
Manganese-54	-0.0181	U	2.87	1.58	1.84	U	3.38	1.61	0.316	U	3.21	1.67
Sodium-22	0.528	U	2.75	1.42	0.254	U	3.41	1.79	-0.195	U	3.08	1.73
Strontium-90	0.0214	U	0.788	0.417	0.117	U	0.782	0.437	0.262	U	0.436	0.261
Tritium	198	U	497	289	172	U	497	286	-25.8	U-DL	515	297
Zinc-65	-0.434	UJ(-)B	5.36	3.15	-2.02	UJ(-)B	6.8	3.93	5.53	UJ(-)B	6.42	4.91

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: Current Landfill

	088-21 Depth : 12.50 11/14/2024 pCi/l											
Analyte	Result	Qual	MDA	Error								
Americium-241 (isotope)	-3.14	U	12.9	7.33								
Beryllium-7	0.809	U	30.1	16.3								
Cesium-134	0.62	U	3.11	1.6								
Cesium-137	-0.976	U	2.54	1.51								
Co-60	0.546	U	3.64	1.81								
Cobalt-57	-0.503	U	2.06	1.21								
Europium-152	2.17	U	7.93	4.06								
Europium-154	-1.2	U	6.06	3.22								
Europium-155	-0.618	U	8.82	5.03								
Manganese-54	-0.607	U	2.75	1.61								
Sodium-22	-0.456	U	2.12	1.13								
Strontium-90	0.31	U	0.784	0.459								
Tritium	246	U	498	295								
Zinc-65	1.76	U	6.94	3.72								

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: Current Landfill

Analyte	087-09 Depth : 29.00 11/12/2024 ng/L		087-11 Depth : 16.00 11/14/2024 ng/L		087-23 Depth : 32.50 11/14/2024 ng/L		087-24 Depth : 75.00 11/14/2024 ng/L		087-26 Depth : 75.00 11/13/2024 ng/L		087-27 Depth : 15.50 11/13/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.75	U	9.45	U	9.45	U	6.78	U	6.62	U	12.6	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.86	U	9.6	U	9.6	U	6.89	U	6.72	U	12.8	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	35.7	U	50	U	50	U	35.9	U	35	U	66.7	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	35.7	U	50	U	50	U	35.9	U	35	U	66.7	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.14	U	10	U	10	U	7.17	U	7	U	13.3	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.75	U	9.45	U	9.45	U	6.78	U	6.62	U	12.6	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.68	U	9.35	U	9.35	U	6.71	U	6.55	U	12.5	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.69	U	9.38	U	9.38	U	6.72	U	6.56	U	12.5	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.78	U	9.5	U	9.5	U	6.81	U	6.65	U	12.7	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.14	U	10	U	10	U	7.17	U	7	U	13.3	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	17.9	U	25	U	25	U	17.9	U	17.5	U	33.3	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	17.9	U	25	U	25	U	17.9	U	17.5	U	33.3	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.57	U	5	U	5	U	3.59	U	3.5	U	6.67	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.18	U	4.45	U	4.45	U	3.19	U	3.12	U	5.93	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.57	U	5	U	5	U	3.59	U	3.5	U	6.67	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.57	U	5	U	5	U	3.59	U	3.5	U	6.67	U
Perfluorobutanesulfonate (PFBS)	1.58	U	2.22	U	2.22	U	1.59	U	1.55	U	2.96	U
Perfluorobutyric acid (PFBA)	7.14	U	**15.7**		**10.9**		7.17	U	7	U	13.3	U
Perfluorodecanesulfonate (PFDS)	1.72	U	2.41	U	2.41	U	1.73	U	1.69	U	3.22	U
Perfluorodecanoic acid (PFDA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
Perfluorododecane sulfonic acid (PFDoS)	1.73	U	2.43	U	2.43	U	1.74	U	1.7	U	3.23	U
Perfluorododecanoic acid (PFDoA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
Perfluoroheptanesulfonate (PFHpS)	1.7	U	2.38	U	2.38	U	1.71	U	1.67	U	3.18	U
Perfluoroheptanoic acid (PFHpA)	1.79	U	2.5	U	2.5	U	1.79	U	**1.76**		3.33	U
Perfluorohexanesulfonate (PFHxS)	1.63	U	**5.11**		2.29	U	**4.25**		**17.9**		3.05	U
Perfluorohexanoic acid (PFHxA)	1.79	U	**8.52**		2.5	U	1.79	U	**5.4**		**4.53**	
Perfluorononanesulfonate (PFNS)	1.72	U	2.41	U	2.41	U	1.72	U	1.68	U	3.21	U
Perfluorononanoic acid (PFNA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
Perfluorooctane sulfonamide (PFOSAm)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
Perfluorooctanesulfonate (PFOS)	1.66	U	**3.4**		2.32	U	**10.2**		**45.4**		3.09	U
Perfluorooctanoic acid (PFOA)	**2.01**		**17.9**		2.5	U	**3.22**		**2.33**		**5.43**	
Perfluoropentanesulfonate (PFPeS)	1.68	U	2.35	U	2.35	U	1.69	U	**2.39**		3.14	U
Perfluoropentanoic acid (PFPeA)	1.79	U	2.5	U	2.5	U	1.79	U	**2.05**		**3.4**	
Perfluorotetradecanoic acid (PFTeDA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
Perfluorotridecanoic acid (PFTrDA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
Perfluoroundecanoic acid (PFUdA)	1.79	U	2.5	U	2.5	U	1.79	U	1.75	U	3.33	U
1633 TPFAS	**2.01**		**50.63**		**10.9**		**17.67**		**77.23**		**13.36**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: Current Landfill

Analyte	088-109 Depth : 13.50 11/12/2024 ng/L		088-110 Depth : 17.50 11/13/2024 ng/L		088-21 Depth : 12.50 11/14/2024 ng/L		088-22 Depth : 75.00 11/14/2024 ng/L		088-23 Depth : 125.00 11/14/2024 ng/L		098-99 Depth : 44.50 11/14/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.96	U	6.69	U	6.8	U	6.63	U	7.66	U	7.61	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.07	U	6.8	U	6.91	U	6.73	U	7.78	U	7.73	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36.8	U	35.4	U	36	U	35.1	U	40.5	U	40.3	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36.8	U	35.4	U	36	U	35.1	U	40.5	U	40.3	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.37	U	7.08	U	7.2	U	7.01	U	8.1	U	8.06	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.96	U	6.69	U	6.8	U	6.63	U	7.66	U	7.61	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.89	U	6.62	U	6.73	U	6.56	U	7.58	U	7.53	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.91	U	6.64	U	6.75	U	6.58	U	7.6	U	7.55	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7	U	6.73	U	6.84	U	6.66	U	7.7	U	7.65	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.37	U	7.08	U	7.2	U	7.01	U	8.1	U	8.06	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.4	U	17.7	U	18	U	17.5	U	20.3	U	20.1	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.4	U	17.7	U	18	U	17.5	U	20.3	U	20.1	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.68	U	3.54	U	3.6	U	3.51	U	4.05	U	4.03	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.28	U	3.15	U	3.2	U	3.12	U	3.61	U	3.59	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.68	U	3.54	U	3.6	U	3.51	U	4.05	U	4.03	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.68	U	3.54	U	3.6	U	3.51	U	4.05	U	4.03	U
Perfluorobutanesulfonate (PFBS)	1.63	U	1.57	U	1.6	U	**2.55**		1.8	U	1.79	U
Perfluorobutyric acid (PFBA)	**8.38**		7.08	U	7.2	U	7.01	U	**32.2**		8.06	U
Perfluorodecanesulfonate (PFDS)	1.78	U	1.71	U	1.74	U	1.69	U	1.95	U	1.94	U
Perfluorodecanoic acid (PFDA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
Perfluorododecane sulfonic acid (PFDoS)	1.79	U	1.72	U	1.75	U	1.7	U	1.96	U	1.95	U
Perfluorododecanoic acid (PFDoA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
Perfluoroheptanesulfonate (PFHpS)	1.76	U	1.69	U	1.71	U	1.67	U	1.93	U	1.92	U
Perfluoroheptanoic acid (PFHpA)	1.84	U	1.77	U	1.8	U	**2.02**		2.03	U	2.01	U
Perfluorohexanesulfonate (PFHxS)	1.68	U	1.62	U	1.64	U	**23.2**		**5.14**		**6.07**	
Perfluorohexanoic acid (PFHxA)	1.84	U	**2.12**		1.8	U	**8.01**		2.03	U	2.01	U
Perfluorononanesulfonate (PFNS)	1.77	U	1.7	U	1.73	U	1.69	U	1.95	U	1.94	U
Perfluorononanoic acid (PFNA)	1.84	U	1.77	U	1.8	U	3.51	DU	2.03	U	2.01	U
Perfluorooctane sulfonamide (PFOSAm)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
Perfluorooctanesulfonate (PFOS)	**5.73**		1.64	U	**4.3**		**51.6**		1.88	U	**3.94**	
Perfluorooctanoic acid (PFOA)	**4.47**		**2.87**		1.8	U	**4.17**		**3.33**		2.01	U
Perfluoropentanesulfonate (PFPeS)	1.73	U	1.67	U	1.69	U	**3.62**		1.91	U	1.9	U
Perfluoropentanoic acid (PFPeA)	1.84	U	**1.95**		1.8	U	**3.33**		2.03	U	2.01	U
Perfluorotetradecanoic acid (PFTeDA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
Perfluorotridecanoic acid (PFTrDA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
Perfluoroundecanoic acid (PFUdA)	1.84	U	1.77	U	1.8	U	1.75	U	2.03	U	2.01	U
1633 TPFAS	**18.58**		**6.94**		**4.3**		**98.5**		**40.67**		**10.01**	

OU X (PFAS Source Areas and Groundwater Plumes)
Analytical Results

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	073-01 Depth : 42.00 01/23/2024 ng/L		073-01 Depth : 42.00 08/30/2024 ng/L		073-26 Depth : 45.50 01/04/2024 ng/L		073-26 Depth : 42.50 04/23/2024 ng/L		073-26 Depth : 45.50 08/20/2024 ng/L		073-26 Depth : 42.50 10/03/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.79	U	7.37	U	15.1	U	6.51	U	30.2	U	30.2	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.89	U	7.48	U	15.4	U	6.62	U	30.7	U	30.7	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	35.9	U	39	U	80	U	34.5	U	160	U	160	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	35.9	U	39	U	80	U	34.5	U	160	U	160	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.18	U	7.79	U	16	U	6.89	U	32	U	32	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.79	U	7.37	U	15.1	U	6.51	U	30.2	U	30.2	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.71	U	7.29	U	15	U	6.45	U	29.9	U	29.9	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.73	U	7.31	U	15	U	6.46	U	30	U	30	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.82	U	7.41	U	15.2	U	6.55	U	30.4	U	30.4	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.18	U	7.79	U	16	U	6.89	U	32	U	32	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18	U	19.5	U	40	U	17.2	U	80	U	80	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18	U	19.5	U	40	U	17.2	U	80	U	80	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.59	U	3.9	U	8	U	3.45	U	16	U	16	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.2	U	3.47	U	7.12	U	3.07	U	14.2	U	14.2	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.59	U	3.9	U	8	U	3.45	U	16	U	16	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.59	U	3.9	U	8	U	3.45	U	16	U	16	U
Perfluorobutanesulfonate (PFBS)	1.59	U	1.73	U	2.14	J	1.53	U	7.1	U	7.1	U
Perfluorobutyric acid (PFBA)	**15**		**13.9**		16	U	6.89	U	32	U	32	U
Perfluorodecanesulfonate (PFDS)	1.73	U	1.88	U	3.86	U	1.66	U	7.72	U	7.72	U
Perfluorodecanoic acid (PFDA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
Perfluorododecane sulfonic acid (PFDoS)	1.74	U	1.89	U	3.88	U	1.67	U	7.76	U	7.76	U
Perfluorododecanoic acid (PFDoA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
Perfluoroheptanesulfonate (PFHpS)	1.71	U	1.86	U	2.05	J	**5.51**		7.62	U	**30.1**	
Perfluoroheptanoic acid (PFHpA)	0.618	J	1.95	U	**5.08**		**3.93**		**8.37**		**11.6**	
Perfluorohexanesulfonate (PFHxS)	0.569	J	1.78	U	**54.8**		**76.3**		**229**		**237**	
Perfluorohexanoic acid (PFHxA)	1.02	J	1.95	U	**9.98**		**6.34**		**11**		**18.3**	
Perfluorononanesulfonate (PFNS)	1.73	U	1.87	U	3.85	U	1.66	U	7.7	U	7.7	U
Perfluorononanoic acid (PFNA)	1.8	U	1.95	U	2.42	J	**5.88**		8	U	**12.7**	
Perfluorooctane sulfonamide (PFOSAm)	1.8	U	1.95	U	1.48	J	1.72	U	8	U	8	U
Perfluorooctanesulfonate (PFOS)	**4.24**		**2.84**		**418**		**677**	D	**672**		**1610**	D
Perfluorooctanoic acid (PFOA)	0.743	J	1.95	U	**5.95**		**11.1**		**25.3**		**31.9**	
Perfluoropentanesulfonate (PFPeS)	1.69	U	1.83	U	**3.8**		**2.65**		7.53	U	**8.24**	
Perfluoropentanoic acid (PFPeA)	1.12	J	1.95	U	**7.35**		**3.16**		8	U	**10.5**	
Perfluorotetradecanoic acid (PFTeDA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
Perfluorotridecanoic acid (PFTrDA)	1.8	U	1.95	U	4	U	1.72	U	8	U	8	U
Perfluoroundecanoic acid (PFUdA)	1.8	U	1.95	U	**8.66**		**9.46**		8	U	**12**	
1633 TPFAS	**23.31**		**16.74**		**521.71**		**801.33**		**945.67**		**1982.34**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	073-27 Depth : 42.50 01/03/2024 ng/L		073-27 Depth : 42.50 04/19/2024 ng/L		073-27 Depth : 42.50 08/29/2024 ng/L		073-27 Depth : 42.50 10/04/2024 ng/L		073-28 Depth : 42.50 01/04/2024 ng/L		073-28 Depth : 42.50 04/16/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	15.1	U	6.98	U	7.1	U	7.23	U	7.06	U	151	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	15.4	U	7.09	U	7.21	U	7.34	U	7.17	U	154	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	80	U	36.9	U	37.6	U	38.3	U	37.3	U	800	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	80	U	36.9	U	37.6	U	38.3	U	37.3	U	800	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	16	U	7.39	U	7.51	U	7.65	U	7.47	U	160	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	15.1	U	6.98	U	7.1	U	7.23	U	7.06	U	151	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	15	U	6.91	U	7.02	U	7.15	U	6.98	U	150	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	15	U	6.93	U	7.04	U	7.17	U	7	U	150	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	15.2	U	7.02	U	7.14	U	7.27	U	7.09	U	152	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	16	U	7.39	U	7.51	U	7.65	U	7.47	U	160	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	40	U	18.5	U	18.8	U	19.1	U	18.7	U	400	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	40	U	18.5	U	18.8	U	19.1	U	18.7	U	400	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8	U	3.69	U	3.76	U	3.83	U	3.73	U	80	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	7.12	U	3.29	U	3.34	U	3.4	U	3.32	U	71.2	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	8	U	3.69	U	3.76	U	3.83	U	3.73	U	80	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	8	U	3.69	U	3.76	U	3.83	U	3.73	U	80	U
Perfluorobutanesulfonate (PFBS)	**20.2**		**6.78**		**11**		**10.4**		**1.93**		35.5	U
Perfluorobutyric acid (PFBA)	5.94	J	7.39	U	7.51	U	**8.06**		7.47	U	160	U
Perfluorodecanesulfonate (PFDS)	3.86	U	1.78	U	1.81	U	1.85	U	1.8	U	38.6	U
Perfluorodecanoic acid (PFDA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
Perfluorododecane sulfonic acid (PFDoS)	3.88	U	1.79	U	1.82	U	1.86	U	1.81	U	38.8	U
Perfluorododecanoic acid (PFDoA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
Perfluoroheptanesulfonate (PFHpS)	2.62	J	**6.93**		**8.12**		**10.8**		1.78	U	**342**	
Perfluoroheptanoic acid (PFHpA)	3.18	J	**4.08**		**4.21**		**5.08**		0.851	J	**60.5**	
Perfluorohexanesulfonate (PFHxS)	**40.3**		**78.5**		**55.9**		**39.2**		**6.61**		**3720**	
Perfluorohexanoic acid (PFHxA)	**15.7**		**12.1**		**15.1**		**13.5**		**3.78**		**71.4**	
Perfluorononanesulfonate (PFNS)	3.85	U	1.78	U	1.81	U	1.84	U	1.8	U	38.5	U
Perfluorononanoic acid (PFNA)	4	U	**2.63**		1.88	U	1.91	U	1.87	U	40	U
Perfluorooctane sulfonamide (PFOSAm)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
Perfluorooctanesulfonate (PFOS)	**415**		**436**	D	**297**	D	**262**		**57.1**		**9100**	D
Perfluorooctanoic acid (PFOA)	**7.29**		**13.6**		**11.6**		**10.6**		1.87	U	**295**	
Perfluoropentanesulfonate (PFPeS)	**8.46**		**4.81**		**6.88**		**5.53**		**2.51**		**150**	
Perfluoropentanoic acid (PFPeA)	**6.51**		**6.89**		**6.64**		**7.9**		**3.23**		40	U
Perfluorotetradecanoic acid (PFTeDA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
Perfluorotridecanoic acid (PFTrDA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
Perfluoroundecanoic acid (PFUdA)	4	U	1.85	U	1.88	U	1.91	U	1.87	U	40	U
1633 TPFAS	**525.2**		**572.32**		**416.45**		**373.07**		**76.011**		**13738.9**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	073-28 Depth : 42.50 08/29/2024 ng/L		073-28 Depth : 42.50 10/03/2024 ng/L		073-29 Depth : 42.50 01/04/2024 ng/L		073-29 Depth : 43.00 04/16/2024 ng/L		073-29 Depth : 42.50 08/29/2024 ng/L		073-29 Depth : 42.50 10/03/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	126	U	50.4	U	7.42	U	6.71	U	7.04	U	7.09	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	128	U	51.2	U	7.54	U	6.82	U	7.15	U	7.2	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	667	U	267	U	39.3	U	35.5	U	37.2	U	37.5	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	667	U	267	U	39.3	U	35.5	U	37.2	U	37.5	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	133	U	53.3	U	7.85	U	7.1	U	7.45	U	7.5	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	126	U	50.4	U	7.42	U	6.71	U	7.04	U	7.09	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	125	U	49.9	U	7.34	U	6.64	U	6.96	U	7.02	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	125	U	50	U	7.36	U	6.66	U	6.98	U	7.03	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	127	U	50.7	U	7.46	U	6.75	U	7.08	U	7.13	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	133	U	53.3	U	7.85	U	7.1	U	7.45	U	7.5	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	333	U	133	U	19.6	U	17.8	U	18.6	U	18.8	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	333	U	133	U	19.6	U	17.8	U	18.6	U	18.8	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	66.7	U	26.7	U	3.93	U	3.55	U	3.72	U	3.75	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	59.3	U	23.7	U	3.49	U	3.16	U	3.31	U	3.34	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	66.7	U	26.7	U	3.93	U	3.55	U	3.72	U	3.75	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	66.7	U	26.7	U	3.93	U	3.55	U	3.72	U	3.75	U
Perfluorobutanesulfonate (PFBS)	**75.7**		**48.8**		**3.71**		**61**		1.65	U	1.66	U
Perfluorobutyric acid (PFBA)	133	U	53.3	U	3.93	J	**42.2**		7.45	U	7.5	U
Perfluorodecanesulfonate (PFDS)	32.2	U	12.9	U	1.89	U	1.71	U	1.8	U	1.81	U
Perfluorodecanoic acid (PFDA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
Perfluorododecane sulfonic acid (PFDoS)	32.3	U	12.9	U	1.9	U	1.72	U	1.81	U	1.82	U
Perfluorododecanoic acid (PFDoA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
Perfluoroheptanesulfonate (PFHpS)	**82.6**		**39.8**		1.87	U	1.69	U	1.77	U	1.79	U
Perfluoroheptanoic acid (PFHpA)	**45.7**		13.3	U	1.96	U	**19.2**		1.86	U	1.88	U
Perfluorohexanesulfonate (PFHxS)	**1090**		**230**		**1.83**		**269**	D	**3.12**		**7.62**	
Perfluorohexanoic acid (PFHxA)	**90**		**38.6**		**2.95**		**107**		1.86	U	1.88	U
Perfluorononanesulfonate (PFNS)	32.1	U	12.8	U	1.89	U	1.71	U	1.79	U	1.8	U
Perfluorononanoic acid (PFNA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
Perfluorooctane sulfonamide (PFOSAm)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
Perfluorooctanesulfonate (PFOS)	**3770**	D	**1790**	D	0.766	J	**12.1**		**2.33**		**1.79**	
Perfluorooctanoic acid (PFOA)	**95.6**		**19.7**		1.96	U	**8.42**		1.86	U	1.88	U
Perfluoropentanesulfonate (PFPeS)	**221**		**97.1**		1.78	J	**78.8**	D	1.75	U	1.77	U
Perfluoropentanoic acid (PFPeA)	**45.7**		**29.7**		**5.31**		**95.2**		1.86	U	1.88	U
Perfluorotetradecanoic acid (PFTeDA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
Perfluorotridecanoic acid (PFTrDA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
Perfluoroundecanoic acid (PFUdA)	33.3	U	13.3	U	1.96	U	1.78	U	1.86	U	1.88	U
1633 TPFAS	**5516.3**		**2293.7**		**20.276**		**692.92**		**5.45**		**9.41**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	073-30 Depth : 46.00 01/04/2024 ng/L		073-30 Depth : 42.50 04/22/2024 ng/L		073-30 Depth : 46.00 08/20/2024 ng/L		073-30 Depth : 42.50 10/03/2024 ng/L		073-31 Depth : 42.50 01/04/2024 ng/L		073-31 Depth : 46.00 04/19/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.83	U	6.75	U	7.05	U	7.08	U	75.6	U	50.4	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.93	U	6.86	U	7.16	U	7.19	U	76.8	U	51.2	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36.1	U	35.7	U	37.3	U	37.4	U	400	U	267	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36.1	U	35.7	U	37.3	U	37.4	U	400	U	267	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.22	U	7.14	U	7.46	U	7.49	U	80	U	53.3	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.83	U	6.75	U	7.05	U	7.08	U	75.6	U	50.4	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.75	U	6.68	U	6.97	U	7	U	74.8	U	49.9	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.77	U	6.7	U	6.99	U	7.02	U	75	U	50	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.86	U	6.79	U	7.08	U	7.11	U	76	U	50.7	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.22	U	7.14	U	7.46	U	7.49	U	80	U	53.3	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.1	U	17.9	U	18.6	U	18.7	U	200	U	133	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.1	U	17.9	U	18.6	U	18.7	U	200	U	133	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.61	U	3.57	U	3.73	U	3.74	U	40	U	26.7	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.21	U	3.18	U	3.32	U	3.33	U	35.6	U	23.7	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.61	U	3.57	U	3.73	U	3.74	U	40	U	26.7	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.61	U	3.57	U	3.73	U	3.74	U	40	U	26.7	U
Perfluorobutanesulfonate (PFBS)	**1.61**		1.58	U	**2.76**		**3.57**		**20.2**		**48.7**	
Perfluorobutyric acid (PFBA)	7.22	U	7.14	U	7.46	U	7.49	U	80	U	53.3	U
Perfluorodecanesulfonate (PFDS)	1.74	U	1.72	U	1.8	U	1.81	U	19.3	U	12.9	U
Perfluorodecanoic acid (PFDA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
Perfluorododecane sulfonic acid (PFDoS)	1.75	U	1.73	U	1.81	U	1.82	U	19.4	U	12.9	U
Perfluorododecanoic acid (PFDoA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
Perfluoroheptanesulfonate (PFHpS)	1.72	U	**2.15**		1.78	U	1.78	U	19.1	U	**33.6**	
Perfluoroheptanoic acid (PFHpA)	0.639	J	**4.75**		1.86	U	**2.58**		8.59	J	**61**	
Perfluorohexanesulfonate (PFHxS)	**2.51**		**14.1**		**8.93**		**13.4**		**147**		**2530**	D
Perfluorohexanoic acid (PFHxA)	0.823	J	**13**		**4.47**		**5.14**		**20.4**		**174**	
Perfluorononanesulfonate (PFNS)	1.74	U	1.72	U	1.79	U	1.8	U	19.2	U	12.8	U
Perfluorononanoic acid (PFNA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
Perfluorooctane sulfonamide (PFOSAm)	1.81	U	1.79	U	1.86	U	1.87	U	9.26	J	13.3	U
Perfluorooctanesulfonate (PFOS)	**84.7**		**152**		**176**		**178**		**1280**		**1510**	D
Perfluorooctanoic acid (PFOA)	**3.02**		**9.25**		**7.01**		**6.68**		11.8	J	**240**	
Perfluoropentanesulfonate (PFPeS)	1.7	U	1.68	U	1.75	U	1.76	U	13.9	J	**269**	
Perfluoropentanoic acid (PFPeA)	0.646	J	**8.49**		**2.93**		**3.81**		13.4	J	**38**	
Perfluorotetradecanoic acid (PFTeDA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
Perfluorotridecanoic acid (PFTrDA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
Perfluoroundecanoic acid (PFUdA)	1.81	U	1.79	U	1.86	U	1.87	U	20	U	13.3	U
1633 TPFAS	**93.948**		**203.74**		**202.1**		**213.18**		**1524.55**		**4904.3**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	073-31 Depth : 42.50 08/29/2024 ng/L		073-31 Depth : 42.50 10/02/2024 ng/L		073-32 Depth : 60.00 01/04/2024 ng/L		073-32 Depth : 60.00 04/19/2024 ng/L		073-32 Depth : 60.00 08/29/2024 ng/L		073-32 Depth : 60.00 10/02/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	94.5	U	151	U	7.16	U	6.51	U	6.77	U	7.16	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	96	U	154	U	7.27	U	6.62	U	6.88	U	7.27	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	500	U	800	U	37.9	U	34.5	U	35.8	U	37.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	500	U	800	U	37.9	U	34.5	U	35.8	U	37.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	100	U	160	U	7.57	U	6.89	U	7.17	U	7.58	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	94.5	U	151	U	7.16	U	6.51	U	6.77	U	7.16	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	93.5	U	150	U	7.08	U	6.45	U	6.7	U	7.08	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	93.8	U	150	U	7.1	U	6.46	U	6.72	U	7.1	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	95	U	152	U	7.2	U	6.55	U	6.81	U	7.2	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	100	U	160	U	7.57	U	6.89	U	7.17	U	7.58	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	250	U	400	U	18.9	U	17.2	U	17.9	U	18.9	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	250	U	400	U	18.9	U	17.2	U	17.9	U	18.9	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	50	U	80	U	3.79	U	3.45	U	3.58	U	3.79	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	44.5	U	71.2	U	3.37	U	3.07	U	3.19	U	3.37	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	50	U	80	U	3.79	U	3.45	U	3.58	U	3.79	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	50	U	80	U	3.79	U	3.45	U	3.58	U	3.79	U
Perfluorobutanesulfonate (PFBS)	22.2	U	35.5	U	1.27	J	1.53	U	1.59	U	1.68	U
Perfluorobutyric acid (PFBA)	100	U	160	U	7.57	U	6.89	U	7.17	U	7.58	U
Perfluorodecanesulfonate (PFDS)	24.1	U	38.6	U	1.83	U	1.66	U	1.73	U	1.83	U
Perfluorodecanoic acid (PFDA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
Perfluorododecane sulfonic acid (PFDoS)	24.3	U	38.8	U	1.84	U	1.67	U	1.74	U	1.84	U
Perfluorododecanoic acid (PFDoA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
Perfluoroheptanesulfonate (PFHpS)	23.8	U	38.1	U	0.626	J	1.64	U	1.71	U	1.81	U
Perfluoroheptanoic acid (PFHpA)	25	U	40	U	0.904	J	1.72	U	1.79	U	1.89	U
Perfluorohexanesulfonate (PFHxS)	**84.5**		**241**		**18.3**		**5.91**		**15.1**		**6.59**	
Perfluorohexanoic acid (PFHxA)	25	U	40	U	**3.55**		1.72	U	**3.15**		1.89	U
Perfluorononanesulfonate (PFNS)	24.1	U	38.5	U	1.82	U	1.66	U	1.72	U	1.82	U
Perfluorononanoic acid (PFNA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
Perfluorooctane sulfonamide (PFOSAm)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
Perfluorooctanesulfonate (PFOS)	**2480**		**5990**	D	**51.4**		**13.1**		**37**		**11.9**	
Perfluorooctanoic acid (PFOA)	25	U	40	U	1.86	J	1.72	U	1.79	U	1.89	U
Perfluoropentanesulfonate (PFPeS)	23.5	U	37.6	U	1.47	J	1.62	U	1.69	U	1.78	U
Perfluoropentanoic acid (PFPeA)	25	U	40	U	1.82	J	1.72	U	1.79	U	1.89	U
Perfluorotetradecanoic acid (PFTeDA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
Perfluorotridecanoic acid (PFTrDA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
Perfluoroundecanoic acid (PFUdA)	25	U	40	U	1.89	U	1.72	U	1.79	U	1.89	U
1633 TPFAS	**2564.5**		**6231**		**81.2**		**19.01**		**55.25**		**18.49**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Current Firehouse MW

Analyte	073-33 Depth : 42.50 01/02/2024 ng/L		073-33 Depth : 46.00 04/19/2024 ng/L		073-33 Depth : 56.00 08/21/2024 ng/L		073-33 Depth : 42.50 10/03/2024 ng/L		074-135 Depth : 70.00 01/18/2024 ng/L		074-135 Depth : 60.00 04/16/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	37.8	U	6.85	U	50.4	U	50.4	U	7.09	U	7.56	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	38.4	U	6.95	U	51.2	U	51.2	U	7.2	U	7.68	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	200	U	36.2	U	267	U	267	U	37.5	U	40	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	200	U	36.2	U	267	U	267	U	37.5	U	40	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	40	U	7.24	U	53.3	U	53.3	U	7.5	U	8	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	37.8	U	6.85	U	50.4	U	50.4	U	7.09	U	7.56	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	37.4	U	6.77	U	49.9	U	49.9	U	7.01	U	7.48	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	37.5	U	6.79	U	50	U	50	U	7.03	U	7.5	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	38	U	6.88	U	50.7	U	50.7	U	7.13	U	7.6	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	40	U	7.24	U	53.3	U	53.3	U	7.5	U	8	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	100	U	18.1	U	133	U	133	U	18.8	U	20	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	100	U	18.1	U	133	U	133	U	18.8	U	20	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	20	U	3.62	U	26.7	U	26.7	U	3.75	U	4	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	17.8	U	3.22	U	23.7	U	23.7	U	3.34	U	3.56	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	20	U	3.62	U	26.7	U	26.7	U	3.75	U	4	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	20	U	3.62	U	26.7	U	26.7	U	3.75	U	4	U
Perfluorobutanesulfonate (PFBS)	**20.6**		**4.25**		**24**		**22.7**		0.871	J	**2.33**	
Perfluorobutyric acid (PFBA)	40	U	7.24	U	53.3	U	53.3	U	7.5	U	8	U
Perfluorodecanesulfonate (PFDS)	9.65	U	1.75	U	12.9	U	12.9	U	1.81	U	1.93	U
Perfluorodecanoic acid (PFDA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
Perfluorododecane sulfonic acid (PFDoS)	9.7	U	1.76	U	12.9	U	12.9	U	1.82	U	1.94	U
Perfluorododecanoic acid (PFDoA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
Perfluoroheptanesulfonate (PFHpS)	4.84	J	1.73	U	12.7	U	**12.9**		1.79	U	1.9	U
Perfluoroheptanoic acid (PFHpA)	6.75	J	1.81	U	13.3	U	**14.7**		0.904	J	2	U
Perfluorohexanesulfonate (PFHxS)	**144**		**14**		**176**		**529**		**3.44**		**11.7**	
Perfluorohexanoic acid (PFHxA)	**22.9**		1.81	U	**29.1**		**32.4**		**2.22**		**3.48**	
Perfluorononanesulfonate (PFNS)	9.62	U	1.74	U	12.8	U	12.8	U	1.8	U	1.92	U
Perfluorononanoic acid (PFNA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
Perfluorooctane sulfonamide (PFOSAm)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
Perfluorooctanesulfonate (PFOS)	**976**		**14.1**		**1610**	D	**1930**	D	**10.3**		**18.6**	
Perfluorooctanoic acid (PFOA)	6.29	J	1.81	U	13.3	U	**13.9**		1.75	J	**3.65**	
Perfluoropentanesulfonate (PFPeS)	**22.8**		**2.29**		**33.5**		**51**		1.76	U	1.88	U
Perfluoropentanoic acid (PFPeA)	**23.3**		1.81	U	**22**		**20.5**		**2.82**		**3.19**	
Perfluorotetradecanoic acid (PFTeDA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
Perfluorotridecanoic acid (PFTrDA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
Perfluoroundecanoic acid (PFUdA)	10	U	1.81	U	13.3	U	13.3	U	1.88	U	2	U
1633 TPFAS	**1227.48**		**34.64**		**1894.6**		**2627.1**		**22.305**		**42.95**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	074-135 Depth : 60.00 08/21/2024 ng/L		074-135 Depth : 60.00 10/04/2024 ng/L		083-01 Depth : 85.00 01/24/2024 ng/L		083-01 Depth : 85.00 08/22/2024 ng/L		083-02 Depth : 135.00 01/24/2024 ng/L		083-02 Depth : 135.00 08/30/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.04	U	7.02	U	15.1	U	7.41	U	7.19	U	7.48	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.16	U	7.13	U	15.4	U	7.53	U	7.3	U	7.6	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	37.3	U	37.2	U	80	U	39.2	U	38	U	39.6	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	37.3	U	37.2	U	80	U	39.2	U	38	U	39.6	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.45	U	7.43	U	16	U	7.84	U	7.61	U	7.91	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.04	U	7.02	U	15.1	U	7.41	U	7.19	U	7.48	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.97	U	6.95	U	15	U	7.33	U	7.11	U	7.4	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.99	U	6.97	U	15	U	7.35	U	7.13	U	7.42	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.08	U	7.06	U	15.2	U	7.45	U	7.23	U	7.52	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.45	U	7.43	U	16	U	7.84	U	7.61	U	7.91	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.6	U	18.6	U	40	U	19.6	U	19	U	19.8	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.6	U	18.6	U	40	U	19.6	U	19	U	19.8	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.73	U	3.72	U	8	U	3.92	U	3.8	U	3.96	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.32	U	3.31	U	7.12	U	3.49	U	3.39	U	3.52	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.73	U	3.72	U	8	U	3.92	U	3.8	U	3.96	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.73	U	3.72	U	8	U	3.92	U	3.8	U	3.96	U
Perfluorobutanesulfonate (PFBS)	**2.01**		1.65	U	3.55	U	1.74	U	1.69	U	1.75	U
Perfluorobutyric acid (PFBA)	7.45	U	7.43	U	16	U	7.84	U	7.61	U	7.91	U
Perfluorodecanesulfonate (PFDS)	1.8	U	1.79	U	3.86	U	1.89	U	1.84	U	1.91	U
Perfluorodecanoic acid (PFDA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluorododecane sulfonic acid (PFDoS)	1.81	U	1.8	U	3.88	U	1.9	U	1.85	U	1.92	U
Perfluorododecanoic acid (PFDoA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluoroheptanesulfonate (PFHpS)	1.78	U	1.77	U	3.81	U	1.87	U	1.81	U	1.89	U
Perfluoroheptanoic acid (PFHpA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluorohexanesulfonate (PFHxS)	**9.76**		**5.58**		3.66	U	1.79	U	0.995	J	1.81	U
Perfluorohexanoic acid (PFHxA)	**2.37**		**2.47**		4	U	1.96	U	0.687	J	1.98	U
Perfluorononanesulfonate (PFNS)	1.79	U	1.79	U	3.85	U	1.89	U	1.83	U	1.9	U
Perfluorononanoic acid (PFNA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluorooctane sulfonamide (PFOSAm)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluorooctanesulfonate (PFOS)	**17.9**		**14.6**		1.45	J	1.82	U	**4.23**		1.84	U
Perfluorooctanoic acid (PFOA)	**2.64**		**2.36**		4	U	1.96	U	0.961	J	1.98	U
Perfluoropentanesulfonate (PFPeS)	1.75	U	1.75	U	3.76	U	1.84	U	1.79	U	1.86	U
Perfluoropentanoic acid (PFPeA)	**2.35**		**1.88**		4	U	1.96	U	**2.08**		1.98	U
Perfluorotetradecanoic acid (PFTeDA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluorotridecanoic acid (PFTrDA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
Perfluoroundecanoic acid (PFUdA)	1.86	U	1.86	U	4	U	1.96	U	1.9	U	1.98	U
1633 TPFAS	**37.03**		**26.89**		**1.45**		0		**8.953**		0	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	083-05 Depth : 70.00 01/22/2024 ng/L		083-05 Depth : 70.00 08/30/2024 ng/L		083-33 Depth : 55.00 01/08/2024 ng/L		083-33 Depth : 55.00 08/19/2024 ng/L		083-34 Depth : 75.00 01/08/2024 ng/L		083-34 Depth : 75.00 08/19/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.41	U	6.83	U	7.12	U	7.41	U	7.03	U	7.54	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.53	U	6.94	U	7.24	U	7.53	U	7.15	U	7.66	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	39.2	U	36.1	U	37.7	U	39.2	U	37.2	U	39.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	39.2	U	36.1	U	37.7	U	39.2	U	37.2	U	39.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.85	U	7.23	U	7.54	U	7.84	U	7.44	U	7.98	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.41	U	6.83	U	7.12	U	7.41	U	7.03	U	7.54	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.34	U	6.76	U	7.05	U	7.33	U	6.96	U	7.46	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.36	U	6.78	U	7.07	U	7.35	U	6.98	U	7.48	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.45	U	6.87	U	7.16	U	7.45	U	7.07	U	7.58	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.85	U	7.23	U	7.54	U	7.84	U	7.44	U	7.98	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	19.6	U	18.1	U	18.8	U	19.6	U	18.6	U	19.9	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	19.6	U	18.1	U	18.8	U	19.6	U	18.6	U	19.9	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.92	U	3.61	U	3.77	U	3.92	U	3.72	U	3.99	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.49	U	3.22	U	3.35	U	3.49	U	3.31	U	3.55	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.92	U	3.61	U	3.77	U	3.92	U	3.72	U	3.99	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.92	U	3.61	U	3.77	U	3.92	U	3.72	U	3.99	U
Perfluorobutanesulfonate (PFBS)	1.74	U	1.6	U	0.957	J	1.74	U	0.635	J	1.77	U
Perfluorobutyric acid (PFBA)	**13.9**		7.23	U	7.54	U	7.84	U	7.44	U	7.98	U
Perfluorodecanesulfonate (PFDS)	1.89	U	1.74	U	1.82	U	1.89	U	1.8	U	1.92	U
Perfluorodecanoic acid (PFDA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluorododecane sulfonic acid (PFDoS)	1.9	U	1.75	U	1.83	U	1.9	U	1.81	U	1.93	U
Perfluorododecanoic acid (PFDoA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluoroheptanesulfonate (PFHpS)	1.87	U	1.72	U	1.8	U	1.87	U	1.77	U	1.9	U
Perfluoroheptanoic acid (PFHpA)	1.96	U	1.81	U	0.837	J	1.96	U	1.86	U	1.99	U
Perfluorohexanesulfonate (PFHxS)	0.675	J	1.65	U	0.786	J	1.79	U	**2.82**		1.82	U
Perfluorohexanoic acid (PFHxA)	1.36	J	1.81	U	1.01	J	1.96	U	0.935	J	**2.03**	
Perfluorononanesulfonate (PFNS)	1.89	U	1.74	U	1.81	U	1.89	U	1.79	U	1.92	U
Perfluorononanoic acid (PFNA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluorooctane sulfonamide (PFOSAm)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluorooctanesulfonate (PFOS)	**3.59**		**6.77**		**3.55**		**8.16**		**6.12**		**6.78**	
Perfluorooctanoic acid (PFOA)	1.1	J	1.81	U	**2.49**		**4.01**		1.3	J	1.99	U
Perfluoropentanesulfonate (PFPeS)	1.85	U	1.7	U	1.77	U	1.84	U	1.75	U	1.88	U
Perfluoropentanoic acid (PFPeA)	1.55	J	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluorotetradecanoic acid (PFTeDA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluorotridecanoic acid (PFTrDA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
Perfluoroundecanoic acid (PFUdA)	1.96	U	1.81	U	1.88	U	1.96	U	1.86	U	1.99	U
1633 TPFAS	**22.175**		**6.77**		**9.63**		**12.17**		**11.81**		**8.81**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	083-35 Depth : 55.00 01/16/2024 ng/L		083-35 Depth : 55.00 08/20/2024 ng/L		083-36 Depth : 75.00 01/16/2024 ng/L		083-36 Depth : 75.00 08/20/2024 ng/L		083-37 Depth : 55.00 01/16/2024 ng/L		083-37 Depth : 55.00 08/20/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.29	U	7.34	U	7.49	U	7.45	U	7.93	U	7.72	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.4	U	7.46	U	7.61	U	7.57	U	8.06	U	7.84	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	38.6	U	38.8	U	39.6	U	39.4	U	42	U	40.8	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	38.6	U	38.8	U	39.6	U	39.4	U	42	U	40.8	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.71	U	7.77	U	7.92	U	7.88	U	8.4	U	8.17	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.29	U	7.34	U	7.49	U	7.45	U	7.93	U	7.72	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.21	U	7.26	U	7.41	U	7.37	U	7.85	U	7.64	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	36.1	UD	7.28	U	7.43	U	7.39	U	7.87	U	7.66	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.32	U	7.38	U	7.53	U	7.49	U	7.98	U	7.76	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.71	U	7.77	U	7.92	U	7.88	U	8.4	U	8.17	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	19.3	U	19.4	U	19.8	U	19.7	U	21	U	20.4	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	19.3	U	19.4	U	19.8	U	19.7	U	21	U	20.4	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.86	U	3.88	U	3.96	U	3.94	U	4.2	U	4.08	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.43	U	3.46	U	3.53	U	3.51	U	3.74	U	3.63	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.86	U	3.88	U	3.96	U	3.94	U	4.2	U	4.08	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.86	U	3.88	U	3.96	U	3.94	U	4.2	U	4.08	U
Perfluorobutanesulfonate (PFBS)	1.21	J	**2.16**		1.76	U	1.75	U	1.6	J	1.81	U
Perfluorobutyric acid (PFBA)	5.34	J	7.77	U	7.92	U	7.88	U	8.4	U	8.17	U
Perfluorodecanesulfonate (PFDS)	1.86	U	1.87	U	1.91	U	1.9	U	2.03	U	1.97	U
Perfluorodecanoic acid (PFDA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
Perfluorododecane sulfonic acid (PFDoS)	1.87	U	1.88	U	1.92	U	1.91	U	2.04	U	1.98	U
Perfluorododecanoic acid (PFDoA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
Perfluoroheptanesulfonate (PFHpS)	1.84	U	1.85	U	1.89	U	1.88	U	2	U	1.95	U
Perfluoroheptanoic acid (PFHpA)	1.93	U	1.94	U	1.98	U	1.97	U	1.24	J	2.04	U
Perfluorohexanesulfonate (PFHxS)	0.881	J	**10.5**		0.611	J	**2.79**		**7.15**		**5.57**	
Perfluorohexanoic acid (PFHxA)	1.36	J	1.94	U	1.98	U	**3.92**		**3.44**		**3.6**	
Perfluorononanesulfonate (PFNS)	1.85	U	1.87	U	1.91	U	1.9	U	2.02	U	1.96	U
Perfluorononanoic acid (PFNA)	1.49	J	**2.92**		1.98	U	1.97	U	**10.2**		**9.6**	
Perfluorooctane sulfonamide (PFOSAm)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
Perfluorooctanesulfonate (PFOS)	**20.8**		**139**		**2.34**		**41.5**		**172**		**55.4**	
Perfluorooctanoic acid (PFOA)	**2.55**		**6.25**		1.98	U	**2.53**		1.87	J	2.04	U
Perfluoropentanesulfonate (PFPeS)	1.81	U	1.83	U	1.86	U	1.85	U	1.98	U	1.92	U
Perfluoropentanoic acid (PFPeA)	1.37	J	1.94	U	1.98	U	1.97	U	**2.42**		2.04	U
Perfluorotetradecanoic acid (PFTeDA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
Perfluorotridecanoic acid (PFTrDA)	1.93	U	1.94	U	1.98	U	1.97	U	2.1	U	2.04	U
Perfluoroundecanoic acid (PFUdA)	1.93	U	1.94	U	1.98	U	1.97	U	1.87	J	2.04	U
1633 TPFAS	**35.001**		**160.83**		**2.951**		**50.74**		**201.79**		**74.17**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	083-38 Depth : 75.00 01/04/2024 ng/L		083-38 Depth : 75.00 08/20/2024 ng/L		083-39 Depth : 65.00 01/18/2024 ng/L		083-39 Depth : 65.00 09/03/2024 ng/L		083-40 Depth : 105.00 01/18/2024 ng/L		083-40 Depth : 105.00 08/26/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	15.1	U	7.19	U	7.17	U	7.41	U	7.78	U	6.81	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	15.4	U	7.3	U	7.28	U	7.53	U	7.9	U	6.92	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	80	U	38	U	37.9	U	39.2	U	41.2	U	36	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	80	U	38	U	37.9	U	39.2	U	41.2	U	36	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	16	U	7.61	U	7.58	U	7.84	U	8.23	U	7.21	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	15.1	U	7.19	U	7.17	U	7.41	U	7.78	U	6.81	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	15	U	7.11	U	7.09	U	7.33	U	7.7	U	6.74	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	15	U	7.13	U	7.11	U	7.35	U	7.72	U	6.76	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	15.2	U	7.23	U	7.2	U	7.45	U	7.82	U	6.85	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	16	U	7.61	U	7.58	U	7.84	U	8.23	U	7.21	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	40	U	19	U	19	U	19.6	U	20.6	U	18	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	40	U	19	U	19	U	19.6	U	20.6	U	18	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8	U	3.8	U	3.79	U	3.92	U	4.12	U	3.6	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	7.12	U	3.38	U	3.37	U	3.49	U	3.66	U	3.21	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	8	U	3.8	U	3.79	U	3.92	U	4.12	U	3.6	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	8	U	3.8	U	3.79	U	3.92	U	4.12	U	3.6	U
Perfluorobutanesulfonate (PFBS)	3.55	U	1.69	U	1.15	J	1.74	U	0.842	J	1.6	U
Perfluorobutyric acid (PFBA)	16	U	7.61	U	7.58	U	7.84	U	8.23	U	7.21	U
Perfluorodecanesulfonate (PFDS)	3.86	U	1.83	U	1.83	U	1.89	U	1.99	U	1.74	U
Perfluorodecanoic acid (PFDA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	3.88	U	1.84	U	1.84	U	1.9	U	2	U	1.75	U
Perfluorododecanoic acid (PFDoA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	3.81	U	1.81	U	**1.82**		1.87	U	0.996	J	1.72	U
Perfluoroheptanoic acid (PFHpA)	4	U	1.9	U	1.47	J	1.96	U	1.3	J	1.8	U
Perfluorohexanesulfonate (PFHxS)	**8.07**		**15.1**		**34.4**		**21.2**		**21.9**		**16**	
Perfluorohexanoic acid (PFHxA)	1.61	J	1.9	U	**5.59**		1.96	U	**3.52**		**3.48**	
Perfluorononanesulfonate (PFNS)	3.85	U	1.83	U	1.82	U	1.89	U	1.98	U	1.73	U
Perfluorononanoic acid (PFNA)	3.85	J	**4.22**		**92.7**		**17.2**		**21.9**		**5.03**	
Perfluorooctane sulfonamide (PFOSAm)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
Perfluorooctanesulfonate (PFOS)	**61.9**		**99.1**		**274**	D	**89.2**		**157**		**76.8**	
Perfluorooctanoic acid (PFOA)	4	U	1.9	U	**4.11**		1.96	U	**2.48**		1.8	U
Perfluoropentanesulfonate (PFPeS)	3.76	U	1.79	U	**2.36**		**1.86**		1.49	J	1.7	U
Perfluoropentanoic acid (PFPeA)	4	U	1.9	U	**1.97**		1.96	U	1.52	J	1.8	U
Perfluorotetradecanoic acid (PFTeDA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
Perfluorotridecanoic acid (PFTrDA)	4	U	1.9	U	1.9	U	1.96	U	2.06	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	4	U	**2.49**		1.9	U	1.96	U	2.06	U	1.8	U
1633 TPFAS	**75.43**		**120.91**		**419.57**		**129.46**		**212.948**		**101.31**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	083-41 Depth : 125.00 01/19/2024 ng/L		083-41 Depth : 125.00 08/23/2024 ng/L		083-42 Depth : 95.00 01/19/2024 ng/L		083-42 Depth : 95.00 08/28/2024 ng/L		083-43 Depth : 125.00 01/19/2024 ng/L		083-43 Depth : 125.00 08/28/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	25.2	U	25.2	U	7.85	U	6.57	U	7.35	U	6.47	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	25.6	U	25.6	U	7.98	U	6.68	U	7.47	U	6.58	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	133	U	133	U	41.6	U	34.8	U	38.9	U	34.3	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	133	U	133	U	41.6	U	34.8	U	38.9	U	34.3	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	26.7	U	26.7	U	8.31	U	6.96	U	7.78	U	6.85	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	25.2	U	25.2	U	7.85	U	6.57	U	7.35	U	6.47	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	24.9	U	24.9	U	7.77	U	6.5	U	7.28	U	6.41	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	25	U	25	U	7.79	U	6.52	U	7.3	U	6.42	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	25.3	U	25.3	U	7.9	U	6.61	U	7.39	U	6.51	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	26.7	U	26.7	U	8.31	U	6.96	U	7.78	U	6.85	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	66.7	U	66.7	U	20.8	U	17.4	U	19.5	U	17.1	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	4	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	66.7	U	66.7	U	20.8	U	17.4	U	19.5	U	17.1	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	13.3	U	13.3	U	4.16	U	3.48	U	3.89	U	3.43	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	11.9	U	11.9	U	3.7	U	3.1	U	3.46	U	3.05	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	13.3	U	13.3	U	4.16	U	3.48	U	3.89	U	3.43	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	13.3	U	13.3	U	4.16	U	3.48	U	3.89	U	3.43	U
Perfluorobutanesulfonate (PFBS)	5.91	U	5.91	U	1.84	U	1.54	U	1.73	U	1.52	U
Perfluorobutyric acid (PFBA)	26.7	U	26.7	U	8.31	U	6.96	U	7.78	U	6.85	U
Perfluorodecanesulfonate (PFDS)	6.43	U	6.43	U	2.01	U	1.68	U	1.88	U	3.86	U
Perfluorodecanoic acid (PFDA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
Perfluorododecane sulfonic acid (PFDoS)	6.47	U	6.47	U	2.02	U	1.69	U	1.89	U	3.88	U
Perfluorododecanoic acid (PFDoA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
Perfluoroheptanesulfonate (PFHpS)	6.35	U	6.35	U	1.98	U	1.66	U	1.85	U	3.81	U
Perfluoroheptanoic acid (PFHpA)	6.67	U	6.67	U	0.802	J	1.74	U	1.95	U	1.71	U
Perfluorohexanesulfonate (PFHxS)	2.58	J	6.09	U	1	J	1.59	U	**3.75**		**2.29**	
Perfluorohexanoic acid (PFHxA)	6.67	U	6.67	U	**3.16**		1.74	U	0.928	J	1.71	U
Perfluorononanesulfonate (PFNS)	6.41	U	6.41	U	2	U	1.67	U	1.87	U	3.85	U
Perfluorononanoic acid (PFNA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
Perfluorooctane sulfonamide (PFOSAm)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	4	U
Perfluorooctanesulfonate (PFOS)	**6.9**		**7.7**		1.87	J	1.61	U	**35.8**		**15.4**	
Perfluorooctanoic acid (PFOA)	6.67	U	6.67	U	**2.52**		1.74	U	0.707	J	1.71	U
Perfluoropentanesulfonate (PFPeS)	6.27	U	6.27	U	1.96	U	1.64	U	1.83	U	1.61	U
Perfluoropentanoic acid (PFPeA)	6.67	U	6.67	U	**2.54**		1.74	U	1.23	J	1.71	U
Perfluorotetradecanoic acid (PFTeDA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
Perfluorotridecanoic acid (PFTrDA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
Perfluoroundecanoic acid (PFUdA)	6.67	U	6.67	U	2.08	U	1.74	U	1.95	U	1.71	U
1633 TPFAS	**9.48**		**7.7**		**11.892**		0		**42.415**		**17.69**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	083-44 Depth : 75.00 01/04/2024 ng/L		083-44 Depth : 75.00 08/23/2024 ng/L		083-47 Depth : 60.00 01/04/2024 ng/L		083-47 Depth : 60.00 08/02/2024 ng/L		084-03 Depth : 105.00 01/23/2024 ng/L		084-03 Depth : 105.00 09/03/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.77	U	6.89	U	7.16	U	7.2	U	7.62	U	6.59	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.88	U	7	U	7.27	U	7.31	U	7.74	U	6.69	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	35.8	U	36.5	U	37.9	U	38.1	U	40.3	U	34.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	35.8	U	36.5	U	37.9	U	38.1	U	40.3	U	34.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.17	U	7.29	U	7.57	U	7.62	U	8.06	U	6.97	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.77	U	6.89	U	7.16	U	7.2	U	7.62	U	6.59	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.7	U	6.82	U	7.08	U	7.12	U	7.54	U	6.52	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.72	U	6.84	U	7.1	U	7.14	U	7.56	U	6.53	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.81	U	6.93	U	7.19	U	7.23	U	7.66	U	6.62	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.17	U	7.29	U	7.57	U	7.62	U	8.06	U	6.97	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	17.9	U	18.2	U	18.9	U	19	U	20.2	U	17.4	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	17.9	U	18.2	U	18.9	U	19	U	20.2	U	17.4	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.58	U	3.65	U	3.79	U	3.81	U	4.03	U	3.49	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.19	U	3.25	U	3.37	U	3.39	U	3.59	U	3.1	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.58	U	3.65	U	3.79	U	3.81	U	4.03	U	3.49	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.58	U	3.65	U	3.79	U	3.81	U	4.03	U	3.49	U
Perfluorobutanesulfonate (PFBS)	1.59	U	1.62	U	1.68	U	1.69	U	1.06	J	1.55	U
Perfluorobutyric acid (PFBA)	7.17	U	7.29	U	7.57	U	7.62	U	8.06	U	6.97	U
Perfluorodecanesulfonate (PFDS)	1.73	U	1.76	U	1.83	U	1.84	U	1.94	U	1.68	U
Perfluorodecanoic acid (PFDA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
Perfluorododecane sulfonic acid (PFDoS)	1.74	U	1.77	U	1.84	U	1.85	U	1.96	U	1.69	U
Perfluorododecanoic acid (PFDoA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
Perfluoroheptanesulfonate (PFHpS)	1.71	U	1.74	U	1.8	U	1.81	U	1.92	U	1.66	U
Perfluoroheptanoic acid (PFHpA)	1.79	U	1.82	U	1.89	U	1.9	U	0.852	J	1.74	U
Perfluorohexanesulfonate (PFHxS)	1.64	U	1.67	U	0.709	J	**20.5**		**11.2**		**3.56**	
Perfluorohexanoic acid (PFHxA)	1.79	U	1.82	U	1.89	U	1.9	U	**4.27**		**4.27**	
Perfluorononanesulfonate (PFNS)	1.72	U	1.75	U	1.82	U	1.83	U	1.94	U	1.68	U
Perfluorononanoic acid (PFNA)	1.79	U	1.82	U	1.89	U	1.9	U	1.35	J	1.74	U
Perfluorooctane sulfonamide (PFOSAm)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
Perfluorooctanesulfonate (PFOS)	1	J	1.69	U	0.836	J	**212**		**40.4**		**17.9**	
Perfluorooctanoic acid (PFOA)	0.916	J	1.82	U	1.89	U	1.9	U	1.87	J	**1.95**	
Perfluoropentanesulfonate (PFPeS)	1.69	U	1.72	U	1.78	U	1.79	U	1.29	J	1.64	U
Perfluoropentanoic acid (PFPeA)	1.79	U	1.82	U	1.89	U	1.9	U	1.81	J	1.74	U
Perfluorotetradecanoic acid (PFTeDA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
Perfluorotridecanoic acid (PFTrDA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
Perfluoroundecanoic acid (PFUdA)	1.79	U	1.82	U	1.89	U	1.9	U	2.02	U	1.74	U
1633 TPFAS	**1.916**		0		**1.545**		**232.5**		**64.102**		**27.68**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Current Firehouse MW

Analyte	084-04 Depth : 150.00 01/23/2024 ng/L		084-04 Depth : 150.00 09/03/2024 ng/L		084-28 Depth : 66.50 01/24/2024 ng/L		084-28 Depth : 58.00 09/11/2024 ng/L		084-86 Depth : 125.00 01/16/2024 ng/L		084-86 Depth : 125.00 08/26/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.9	U	7.67	U	7.72	U	7.45	U	7.65	U	7.16	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	8.02	U	7.79	U	7.84	U	7.57	U	7.77	U	76.8	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	41.8	U	40.6	U	40.9	U	39.4	U	40.5	U	37.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	41.8	U	40.6	U	40.9	U	39.4	U	40.5	U	37.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	8.36	U	8.12	U	8.17	U	7.88	U	8.1	U	7.58	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.9	U	7.67	U	7.72	U	7.45	U	7.65	U	7.16	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.82	U	7.59	U	7.64	U	7.37	U	7.57	U	7.09	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.84	U	7.61	U	7.66	U	7.39	U	7.59	U	75	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.94	U	7.71	U	7.76	U	7.49	U	7.69	U	76	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	8.36	U	8.12	U	8.17	U	7.88	U	8.1	U	7.58	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	20.9	U	20.3	U	20.4	U	19.7	U	20.2	U	19	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	20.9	U	20.3	U	20.4	U	19.7	U	20.2	U	19	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.18	U	4.06	U	4.09	U	3.94	U	4.05	U	3.79	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.72	U	3.61	U	3.64	U	3.51	U	3.6	U	3.37	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.18	U	4.06	U	4.09	U	3.94	U	4.05	U	3.79	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.18	U	4.06	U	4.09	U	3.94	U	4.05	U	3.79	U
Perfluorobutanesulfonate (PFBS)	1.85	U	1.8	U	**9.64**		**11.5**		0.709	J	17.7	U
Perfluorobutyric acid (PFBA)	8.36	U	8.12	U	**8.22**		7.88	U	8.1	U	7.58	U
Perfluorodecanesulfonate (PFDS)	2.02	U	1.96	U	1.97	U	1.9	U	1.95	U	1.83	U
Perfluorodecanoic acid (PFDA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
Perfluorododecane sulfonic acid (PFDoS)	2.03	U	1.97	U	1.98	U	1.91	U	1.96	U	1.84	U
Perfluorododecanoic acid (PFDoA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
Perfluoroheptanesulfonate (PFHpS)	1.99	U	1.93	U	1.95	U	1.88	U	1.93	U	1.81	U
Perfluoroheptanoic acid (PFHpA)	2.09	U	2.03	U	**5.36**		**2.54**		1.08	J	1.9	U
Perfluorohexanesulfonate (PFHxS)	**4.21**		**2.77**		**3.93**		**3.75**		**7.78**		18.3	U
Perfluorohexanoic acid (PFHxA)	2.09	U	2.03	U	**9.68**		**5.74**		**6.85**		**5.86**	
Perfluorononanesulfonate (PFNS)	2.01	U	1.95	U	1.96	U	1.9	U	1.95	U	1.82	U
Perfluorononanoic acid (PFNA)	2.09	U	2.03	U	1.59	J	1.97	U	1.22	J	1.9	U
Perfluorooctane sulfonamide (PFOSAm)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
Perfluorooctanesulfonate (PFOS)	**4.99**		**3.99**		**16.5**		**15.5**		**33.2**		18.6	U
Perfluorooctanoic acid (PFOA)	0.775	J	2.03	U	**8.65**		**9.09**		**2.49**		1.9	U
Perfluoropentanesulfonate (PFPeS)	0.798	J	1.91	U	0.706	J	1.85	U	0.876	J	18.8	U
Perfluoropentanoic acid (PFPeA)	2.09	U	2.03	U	**7.17**		**3.77**		1.98	J	1.9	U
Perfluorotetradecanoic acid (PFTeDA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	20	U
Perfluorotridecanoic acid (PFTrDA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	20	U
Perfluoroundecanoic acid (PFUdA)	2.09	U	2.03	U	2.04	U	1.97	U	2.02	U	1.9	U
1633 TPFAS	**10.773**		**6.76**		**71.446**		**51.89**		**56.185**		**5.86**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	084-87 Depth : 65.00 01/16/2024 ng/L		084-87 Depth : 65.00 08/26/2024 ng/L		084-88 Depth : 95.00 01/16/2024 ng/L		084-88 Depth : 95.00 08/20/2024 ng/L		084-89 Depth : 125.00 01/16/2024 ng/L		084-89 Depth : 125.00 08/20/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	75.6	U	6.85	U	7.45	U	37.8	U	7.85	U	7.36	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.8	U	6.96	U	7.57	U	38.4	U	7.98	U	7.47	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	400	U	36.2	U	39.4	U	200	U	41.6	U	38.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	400	U	36.2	U	39.4	U	200	U	41.6	U	38.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	80	U	7.25	U	7.88	U	40	U	8.31	U	7.79	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	75.6	U	6.85	U	7.45	U	37.8	U	7.85	U	7.36	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	74.8	U	6.78	U	7.37	U	37.4	U	7.77	U	7.28	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	75	U	6.79	U	7.39	U	37.5	U	7.79	U	7.3	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	76	U	6.88	U	7.49	U	38	U	7.9	U	7.4	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	80	U	7.25	U	7.88	U	40	U	8.31	U	7.79	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	200	U	18.1	U	19.7	U	100	U	20.8	U	19.5	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	200	U	18.1	U	19.7	U	100	U	20.8	U	19.5	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40	U	3.62	U	3.94	U	20	U	4.16	U	3.89	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	35.6	U	3.22	U	3.51	U	17.8	U	3.7	U	3.46	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	40	U	3.62	U	3.94	U	20	U	4.16	U	3.89	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	40	U	3.62	U	3.94	U	20	U	4.16	U	3.89	U
Perfluorobutanesulfonate (PFBS)	17.7	U	**9.82**		0.644	J	**14.2**		1.34	J	1.73	U
Perfluorobutyric acid (PFBA)	80	U	7.25	U	7.88	U	40	U	8.31	U	7.79	U
Perfluorodecanesulfonate (PFDS)	19.3	U	1.75	U	1.9	U	9.65	U	2.01	U	1.88	U
Perfluorodecanoic acid (PFDA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
Perfluorododecane sulfonic acid (PFDoS)	19.4	U	1.76	U	1.91	U	9.7	U	2.02	U	1.89	U
Perfluorododecanoic acid (PFDoA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
Perfluoroheptanesulfonate (PFHpS)	19.1	U	**13.6**		1.88	U	9.53	U	0.972	J	1.85	U
Perfluoroheptanoic acid (PFHpA)	20	U	**5.93**		1.19	J	**15.6**		1.08	J	1.95	U
Perfluorohexanesulfonate (PFHxS)	**134**		**232**	D	**7.5**		**251**		**20.1**		**11.1**	
Perfluorohexanoic acid (PFHxA)	17.8	J	**43.4**		**5.44**		**61.9**		**4.25**		**2.6**	
Perfluorononanesulfonate (PFNS)	19.2	U	1.74	U	1.9	U	9.62	U	2	U	1.87	U
Perfluorononanoic acid (PFNA)	20	U	1.81	U	0.771	J	10	U	2.08	U	1.95	U
Perfluorooctane sulfonamide (PFOSAm)	20	U	**8.31**		0.801	J	10	U	2.08	U	1.95	U
Perfluorooctanesulfonate (PFOS)	**611**		**1380**	D	**22.8**		**1090**	D	**106**		**54.5**	
Perfluorooctanoic acid (PFOA)	**21.8**		**39.7**		**2.81**		**30.1**		2.02	J	1.95	U
Perfluoropentanesulfonate (PFPeS)	8.65	J	**17.1**		1.85	U	**25.5**		**2.04**		1.83	U
Perfluoropentanoic acid (PFPeA)	7.44	J	**11.5**		**2.22**		**24.9**		**3.04**		1.95	U
Perfluorotetradecanoic acid (PFTeDA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
Perfluorotridecanoic acid (PFTrDA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
Perfluoroundecanoic acid (PFUdA)	20	U	1.81	U	1.97	U	10	U	2.08	U	1.95	U
1633 TPFAS	**800.69**		**1761.36**		**44.176**		**1513.2**		**140.842**		**68.2**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	084-90 Depth : 95.00 01/22/2024 ng/L		084-90 Depth : 95.00 08/21/2024 ng/L		084-91 Depth : 125.00 01/22/2024 ng/L		084-91 Depth : 125.00 08/22/2024 ng/L		084-92 Depth : 145.00 01/22/2024 ng/L		084-92 Depth : 145.00 08/21/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.24	U	15.1	U	7.36	U	7.34	U	37.8	U	7.3	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.36	U	15.4	U	7.47	U	7.45	U	38.4	U	7.42	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	38.3	U	80	U	38.9	U	38.8	U	200	U	38.6	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	38.3	U	80	U	38.9	U	38.8	U	200	U	38.6	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.67	U	16	U	7.78	U	7.76	U	40	U	7.73	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.24	U	15.1	U	7.36	U	7.34	U	37.8	U	7.3	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.17	U	15	U	7.28	U	7.26	U	37.4	U	7.23	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.19	U	15	U	7.3	U	7.28	U	37.5	U	7.25	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.28	U	15.2	U	7.4	U	7.38	U	38	U	7.34	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.67	U	16	U	7.78	U	7.76	U	40	U	7.73	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	19.2	U	40	U	19.5	U	19.4	U	100	U	19.3	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	19.2	U	40	U	19.5	U	19.4	U	100	U	19.3	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.83	U	8	U	3.89	U	3.88	U	20	U	3.86	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.41	U	7.12	U	3.46	U	3.46	U	17.8	U	3.44	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.83	U	8	U	3.89	U	3.88	U	20	U	3.86	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.83	U	8	U	3.89	U	3.88	U	20	U	3.86	U
Perfluorobutanesulfonate (PFBS)	1.7	U	3.55	U	0.729	J	1.72	U	**16.8**		**7.92**	
Perfluorobutyric acid (PFBA)	7.67	U	16	U	7.78	U	7.76	U	40	U	7.73	U
Perfluorodecanesulfonate (PFDS)	1.85	U	3.86	U	1.88	U	1.87	U	9.65	U	1.86	U
Perfluorodecanoic acid (PFDA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
Perfluorododecane sulfonic acid (PFDoS)	1.86	U	3.88	U	1.89	U	1.88	U	9.7	U	1.87	U
Perfluorododecanoic acid (PFDoA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
Perfluoroheptanesulfonate (PFHpS)	1.83	U	3.81	U	1.85	U	1.85	U	**10.1**		**5.69**	
Perfluoroheptanoic acid (PFHpA)	1.92	U	4	U	1.95	U	1.94	U	**11.3**		**5.54**	
Perfluorohexanesulfonate (PFHxS)	**2.56**		**47.4**		**5.95**		**9.73**		**298**		**140**	
Perfluorohexanoic acid (PFHxA)	1.24	J	**9.62**		**2.89**		**2.84**		**54.8**		**28.4**	
Perfluorononanesulfonate (PFNS)	1.84	U	3.85	U	1.87	U	1.87	U	9.62	U	1.86	U
Perfluorononanoic acid (PFNA)	**3.83**		**66.1**		1.95	U	1.94	U	10	U	1.93	U
Perfluorooctane sulfonamide (PFOSAm)	0.752	J	4	U	1.95	U	1.94	U	10	U	1.93	U
Perfluorooctanesulfonate (PFOS)	**8.89**		**402**		**17.5**		**22.5**		**665**		**319**	D
Perfluorooctanoic acid (PFOA)	0.648	J	**5.76**		1.36	J	1.94	U	**51.4**		**27.5**	
Perfluoropentanesulfonate (PFPeS)	1.8	U	3.76	U	0.853	J	1.83	U	**30**		**16.4**	
Perfluoropentanoic acid (PFPeA)	1.92	U	4	U	1.53	J	1.94	U	**23**		**11.3**	
Perfluorotetradecanoic acid (PFTeDA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
Perfluorotridecanoic acid (PFTrDA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
Perfluoroundecanoic acid (PFUdA)	1.92	U	4	U	1.95	U	1.94	U	10	U	1.93	U
1633 TPFAS	**17.92**		**530.88**		**30.812**		**35.07**		**1160.4**		**561.75**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	084-93 Depth : 95.00 01/10/2024 ng/L		084-93 Depth : 95.00 09/03/2024 ng/L		084-94 Depth : 125.00 01/12/2024 ng/L		084-94 Depth : 125.00 07/25/2024 ng/L		084-95 Depth : 145.00 01/12/2024 ng/L		084-95 Depth : 145.00 08/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.8	U	6.77	U	7.08	U	7.05	U	15.1	U	7.06	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.91	U	6.88	U	7.2	U	7.16	U	15.4	U	7.18	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	35.8	U	37.5	U	37.3	U	80	U	37.4	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	35.8	U	37.5	U	37.3	U	80	U	37.4	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.19	U	7.16	U	7.5	U	7.46	U	16	U	7.48	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.8	U	6.77	U	7.08	U	7.05	U	15.1	U	7.06	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.73	U	6.7	U	7.01	U	6.97	U	15	U	6.99	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.74	U	6.72	U	7.03	U	6.99	U	15	U	7.01	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.83	U	6.81	U	7.12	U	7.08	U	15.2	U	7.1	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.19	U	7.16	U	7.5	U	7.46	U	16	U	7.48	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18	U	17.9	U	18.7	U	18.6	U	40	U	18.7	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18	U	17.9	U	18.7	U	18.6	U	40	U	18.7	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.6	U	3.58	U	3.75	U	3.73	U	8	U	3.74	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.2	U	3.19	U	3.34	U	3.32	U	7.12	U	3.33	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.6	U	3.58	U	3.75	U	3.73	U	8	U	3.74	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.6	U	3.58	U	3.75	U	3.73	U	8	U	3.74	U
Perfluorobutanesulfonate (PFBS)	0.766	J	**1.99**		**4.37**		**4.37**		1.45	J	**1.85**	
Perfluorobutyric acid (PFBA)	7.19	U	7.16	U	3.23	J	7.46	U	16	U	7.48	U
Perfluorodecanesulfonate (PFDS)	1.74	U	1.73	U	1.81	U	1.8	U	3.86	U	1.8	U
Perfluorodecanoic acid (PFDA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
Perfluorododecane sulfonic acid (PFDoS)	1.74	U	1.74	U	1.82	U	1.81	U	3.88	U	1.81	U
Perfluorododecanoic acid (PFDoA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
Perfluoroheptanesulfonate (PFHpS)	1.02	J	**7.56**		1.38	J	1.78	U	3.81	U	1.78	U
Perfluoroheptanoic acid (PFHpA)	0.678	J	**2.34**		**3.18**		**3.33**		4	U	1.87	U
Perfluorohexanesulfonate (PFHxS)	**20.7**		**97.5**		**56.7**		**54.3**		**6.96**		**17.8**	
Perfluorohexanoic acid (PFHxA)	**2.26**		**9.47**		**11.8**		**13.2**		2.72	J	**4.55**	
Perfluorononanesulfonate (PFNS)	1.73	U	1.72	U	1.8	U	1.79	U	3.85	U	1.8	U
Perfluorononanoic acid (PFNA)	**26.8**		**24.9**		0.911	J	1.86	U	4	U	1.87	U
Perfluorooctane sulfonamide (PFOSAm)	1.8	U	1.79	U	0.836	J	1.86	U	4	U	1.87	U
Perfluorooctanesulfonate (PFOS)	**75.8**		**604**	D	**67.6**		**67.1**		3.71	U	**15.9**	
Perfluorooctanoic acid (PFOA)	**2.24**		**8.62**		**6.89**		**5.16**		4	U	1.87	U
Perfluoropentanesulfonate (PFPeS)	1.67	J	**4.15**		**8.87**		**7.3**		1.38	J	**2.96**	
Perfluoropentanoic acid (PFPeA)	0.905	J	**2.89**		**6.76**		**5.74**		4	U	1.87	U
Perfluorotetradecanoic acid (PFTeDA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
Perfluorotridecanoic acid (PFTrDA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
Perfluoroundecanoic acid (PFUdA)	1.8	U	1.79	U	1.87	U	1.86	U	4	U	1.87	U
1633 TPFAS	**132.839**		**763.42**		**172.527**		**160.5**		**12.51**		**43.06**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	084-96 Depth : 95.00 01/08/2024 ng/L		084-96 Depth : 95.00 07/25/2024 ng/L		084-97 Depth : 125.00 01/10/2024 ng/L		084-97 Depth : 125.00 07/25/2024 ng/L		084-98 Depth : 145.00 01/10/2024 ng/L		084-98 Depth : 145.00 07/25/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	189	U	6.73	U	75.6	U	6.45	U	6.88	U	6.67	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	192	U	6.83	U	76.8	U	6.55	U	6.99	U	6.78	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	1000	U	35.6	U	400	U	34.1	U	36.4	U	35.3	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	1000	U	35.6	U	400	U	34.1	U	36.4	U	35.3	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	200	U	7.12	U	80	U	6.83	U	7.28	U	7.06	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	189	U	6.73	U	75.6	U	6.45	U	6.88	U	6.67	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	187	U	6.66	U	74.8	U	6.38	U	6.8	U	6.6	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	188	U	6.67	U	75	U	6.4	U	6.82	U	6.62	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	190	U	6.76	U	76	U	6.49	U	6.91	U	6.71	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	200	U	7.12	U	80	U	6.83	U	7.28	U	7.06	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	50	U	8.9	DU	20	U	1.71	U	1.82	U	1.76	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	500	U	89	DU	200	U	17.1	U	18.2	U	17.6	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	500	U	89	DU	200	U	17.1	U	18.2	U	17.6	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	100	U	3.56	U	40	U	3.41	U	3.64	U	3.53	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	89	U	3.17	U	35.6	U	3.04	U	3.24	U	3.14	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	100	U	3.56	U	40	U	3.41	U	3.64	U	3.53	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	100	U	3.56	U	40	U	3.41	U	3.64	U	3.53	U
Perfluorobutanesulfonate (PFBS)	37.3	J	**26.3**		11.4	J	**12.7**		**1.93**		**1.95**	
Perfluorobutyric acid (PFBA)	200	U	**17.8**		80	U	6.83	U	7.28	U	7.06	U
Perfluorodecanesulfonate (PFDS)	48.3	U	1.72	U	19.3	U	1.65	U	1.76	U	1.7	U
Perfluorodecanoic acid (PFDA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
Perfluorododecane sulfonic acid (PFDoS)	48.5	U	1.73	U	19.4	U	1.66	U	1.76	U	1.71	U
Perfluorododecanoic acid (PFDoA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
Perfluoroheptanesulfonate (PFHpS)	**52.1**		**70.9**		11.4	J	**24.4**		1.73	U	1.68	U
Perfluoroheptanoic acid (PFHpA)	34	J	**29.9**		8.8	J	**8.36**		1.82	U	1.76	U
Perfluorohexanesulfonate (PFHxS)	**1330**		**695**	D	**233**		**371**	D	**5.73**		**9.18**	
Perfluorohexanoic acid (PFHxA)	**156**		**112**		**37.1**		**33.9**		1.82	U	1.76	U
Perfluorononanesulfonate (PFNS)	48.1	U	1.71	U	19.2	U	1.64	U	1.75	U	1.7	U
Perfluorononanoic acid (PFNA)	50	U	**4.99**		20	U	**1.82**		1.82	U	1.76	U
Perfluorooctane sulfonamide (PFOSAm)	50	U	8.9	DU	20	U	1.71	U	1.82	U	1.76	U
Perfluorooctanesulfonate (PFOS)	**2240**		**4000**	D	**1070**		**1190**	D	1.69	U	1.64	U
Perfluorooctanoic acid (PFOA)	**332**		**69.2**		**22.6**		**26.3**		1.82	U	1.76	U
Perfluoropentanesulfonate (PFPeS)	**70.6**		**68**		18	J	**28.2**		**2.02**		**2.65**	
Perfluoropentanoic acid (PFPeA)	**70.3**		**62.3**		19.9	J	**19.2**		1.82	U	1.76	U
Perfluorotetradecanoic acid (PFTeDA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
Perfluorotridecanoic acid (PFTrDA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
Perfluoroundecanoic acid (PFUdA)	50	U	1.78	U	20	U	1.71	U	1.82	U	1.76	U
1633 TPFAS	**4322.3**		**5156.39**		**1432.2**		**1715.88**		**9.68**		**13.78**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	093-04 Depth : 49.50 01/05/2024 ng/L		093-04 Depth : 49.00 04/19/2024 ng/L		093-04 Depth : 49.00 08/05/2024 ng/L		093-04 Depth : 49.00 10/02/2024 ng/L		093-88 Depth : 125.00 01/08/2024 ng/L		093-88 Depth : 125.00 08/05/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	378	U	75.6	U	6.87	U	75.6	U	7.16	U	7.33	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	384	U	76.8	U	6.98	U	76.8	U	7.27	U	7.44	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	2000	U	400	U	36.3	U	400	U	37.9	U	38.8	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	2000	U	400	U	36.3	U	400	U	37.9	U	38.8	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	400	U	80	U	7.27	U	80	U	7.58	U	7.75	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	378	U	75.6	U	6.87	U	75.6	U	7.16	U	7.33	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	374	U	74.8	U	6.8	U	74.8	U	7.08	U	7.25	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	375	U	75	U	6.81	U	75	U	7.1	U	7.27	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	380	U	76	U	6.9	U	76	U	7.2	U	7.36	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	400	U	80	U	7.27	U	80	U	7.58	U	7.75	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	1000	U	200	U	18.2	U	200	U	18.9	U	19.4	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	1000	U	200	U	18.2	U	200	U	18.9	U	19.4	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	200	U	40	U	3.63	U	40	U	3.79	U	3.88	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	178	U	35.6	U	3.23	U	35.6	U	3.37	U	3.45	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	200	U	40	U	3.63	U	40	U	3.79	U	3.88	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	200	U	40	U	3.63	U	40	U	3.79	U	3.88	U
Perfluorobutanesulfonate (PFBS)	35.8	J	**37**		**14.5**		**28.5**		1.68	U	1.72	U
Perfluorobutyric acid (PFBA)	400	U	80	U	**7.72**		80	U	7.58	U	7.75	U
Perfluorodecanesulfonate (PFDS)	96.5	U	19.3	U	1.75	U	19.3	U	1.83	U	1.87	U
Perfluorodecanoic acid (PFDA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
Perfluorododecane sulfonic acid (PFDoS)	97	U	19.4	U	1.76	U	19.4	U	1.84	U	1.88	U
Perfluorododecanoic acid (PFDoA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
Perfluoroheptanesulfonate (PFHpS)	95.3	U	**53.7**		**27.4**		**24.6**		1.81	U	1.85	U
Perfluoroheptanoic acid (PFHpA)	40.6	J	**28.4**		**13.3**		**23.6**		1.89	U	1.94	U
Perfluorohexanesulfonate (PFHxS)	**873**		**744**		**359**	D	**572**		1.73	U	1.77	U
Perfluorohexanoic acid (PFHxA)	**110**		**98.2**		**51.4**		**95.4**		1.89	U	1.94	U
Perfluorononanesulfonate (PFNS)	96.2	U	19.2	U	1.75	U	19.2	U	1.82	U	1.86	U
Perfluorononanoic acid (PFNA)	100	U	20	U	**4.05**		20	U	1.89	U	1.94	U
Perfluorooctane sulfonamide (PFOSAm)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
Perfluorooctanesulfonate (PFOS)	**2560**		**5050**	D	**2980**	D	**3010**	D	0.692	J	1.8	U
Perfluorooctanoic acid (PFOA)	63.7	J	**65.3**		**22**		**34.7**		1.89	U	1.94	U
Perfluoropentanesulfonate (PFPeS)	65.3	J	**66.6**		**27.6**		**53.6**		1.78	U	1.82	U
Perfluoropentanoic acid (PFPeA)	50.7	J	**37.6**		**18.8**		**37.6**		1.89	U	1.94	U
Perfluorotetradecanoic acid (PFTeDA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
Perfluorotridecanoic acid (PFTrDA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
Perfluoroundecanoic acid (PFUdA)	100	U	20	U	1.82	U	20	U	1.89	U	1.94	U
1633 TPFAS	**3799.1**		**6180.8**		**3525.77**		**3880**		**0.692**		0	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	093-89 Depth : 75.00 01/09/2024 ng/L		093-89 Depth : 75.00 07/26/2024 ng/L		093-90 Depth : 105.00 01/12/2024 ng/L		093-90 Depth : 105.00 07/26/2024 ng/L		093-91 Depth : 85.00 01/09/2024 ng/L		093-91 Depth : 85.00 07/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.42	U	6.82	U	7.37	U	7.07	U	7.13	U	6.8	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.54	U	6.93	U	7.49	U	7.18	U	7.24	U	6.91	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	39.3	U	36.1	U	39	U	37.4	U	37.7	U	36	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	39.3	U	36.1	U	39	U	37.4	U	37.7	U	36	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.85	U	7.22	U	7.8	U	7.48	U	7.54	U	7.19	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.42	U	6.82	U	7.37	U	7.07	U	7.13	U	6.8	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.34	U	6.75	U	7.29	U	6.99	U	7.05	U	6.73	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.36	U	6.77	U	7.31	U	7.01	U	7.07	U	6.74	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.46	U	6.86	U	7.41	U	7.11	U	7.17	U	6.83	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.85	U	7.22	U	7.8	U	7.48	U	7.54	U	7.19	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	19.6	U	18.1	U	19.5	U	18.7	U	18.9	U	18	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	19.6	U	18.1	U	19.5	U	18.7	U	18.9	U	18	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.93	U	3.61	U	3.9	U	3.74	U	3.77	U	3.6	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.49	U	3.21	U	3.47	U	3.33	U	3.36	U	3.2	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.93	U	3.61	U	3.9	U	3.74	U	3.77	U	3.6	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.93	U	3.61	U	3.9	U	3.74	U	3.77	U	3.6	U
Perfluorobutanesulfonate (PFBS)	1.74	U	1.6	U	1.73	U	1.66	U	1.67	U	1.6	U
Perfluorobutyric acid (PFBA)	7.85	U	7.22	U	7.8	U	7.48	U	7.54	U	7.19	U
Perfluorodecanesulfonate (PFDS)	1.89	U	1.74	U	1.88	U	1.8	U	1.82	U	1.74	U
Perfluorodecanoic acid (PFDA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	1.9	U	1.75	U	1.89	U	1.81	U	1.83	U	1.74	U
Perfluorododecanoic acid (PFDoA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	1.87	U	1.72	U	1.86	U	1.78	U	1.8	U	1.71	U
Perfluoroheptanoic acid (PFHpA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluorohexanesulfonate (PFHxS)	1.79	U	1.65	U	0.657	J	1.71	U	**1.78**		**1.7**	
Perfluorohexanoic acid (PFHxA)	1.96	U	1.81	U	1.95	U	1.87	U	0.863	J	**1.83**	
Perfluorononanesulfonate (PFNS)	1.89	U	1.74	U	1.88	U	1.8	U	1.81	U	1.73	U
Perfluorononanoic acid (PFNA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluorooctane sulfonamide (PFOSAm)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluorooctanesulfonate (PFOS)	**2.6**		**2.29**		1.81	U	1.74	U	**7.03**		**5.45**	
Perfluorooctanoic acid (PFOA)	0.66	J	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluoropentanesulfonate (PFPeS)	1.85	U	1.7	U	1.84	U	1.76	U	1.77	U	1.69	U
Perfluoropentanoic acid (PFPeA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluorotetradecanoic acid (PFTeDA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluorotridecanoic acid (PFTrDA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	1.96	U	1.81	U	1.95	U	1.87	U	1.89	U	1.8	U
1633 TPFAS	**3.26**		**2.29**		**0.657**		0		**9.673**		**8.98**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	093-92 Depth : 105.00 01/23/2024 ng/L		093-92 Depth : 105.00 07/26/2024 ng/L		093-93 Depth : 60.00 01/05/2024 ng/L		093-93 Depth : 60.00 04/19/2024 ng/L		093-93 Depth : 60.00 08/02/2024 ng/L		093-93 Depth : 60.00 10/02/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.29	U	7.16	U	7.07	U	7.07	U	7.09	U	7.56	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.41	U	7.27	U	7.18	U	7.18	U	7.2	U	7.68	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	38.6	U	37.9	U	37.4	U	37.4	U	37.5	U	40	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	38.6	U	37.9	U	37.4	U	37.4	U	37.5	U	40	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.72	U	7.57	U	7.48	U	7.48	U	7.5	U	8	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.29	U	7.16	U	7.07	U	7.07	U	7.09	U	7.56	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.22	U	7.08	U	6.99	U	6.99	U	7.01	U	7.48	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.24	U	7.1	U	7.01	U	7.01	U	7.03	U	7.5	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.33	U	7.19	U	7.1	U	7.11	U	7.12	U	7.6	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.72	U	7.57	U	7.48	U	7.48	U	7.5	U	8	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	19.3	U	18.9	U	18.7	U	18.7	U	18.7	U	20	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	19.3	U	18.9	U	18.7	U	18.7	U	18.7	U	20	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.86	U	3.79	U	3.74	U	3.74	U	3.75	U	4	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.43	U	3.37	U	3.33	U	3.33	U	3.34	U	3.56	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.86	U	3.79	U	3.74	U	3.74	U	3.75	U	4	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.86	U	3.79	U	3.74	U	3.74	U	3.75	U	4	U
Perfluorobutanesulfonate (PFBS)	0.875	J	1.68	U	1.66	U	1.66	U	1.66	U	1.77	U
Perfluorobutyric acid (PFBA)	7.72	U	7.57	U	7.48	U	7.48	U	7.5	U	8	U
Perfluorodecanesulfonate (PFDS)	1.86	U	1.83	U	1.8	U	1.8	U	1.81	U	1.93	U
Perfluorodecanoic acid (PFDA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorododecane sulfonic acid (PFDoS)	1.87	U	1.84	U	1.81	U	1.81	U	1.82	U	1.94	U
Perfluorododecanoic acid (PFDoA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluoroheptanesulfonate (PFHpS)	1.84	U	1.8	U	1.78	U	1.78	U	1.79	U	1.91	U
Perfluoroheptanoic acid (PFHpA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorohexanesulfonate (PFHxS)	**6.38**		**2.62**		0.608	J	1.71	U	1.71	U	1.83	U
Perfluorohexanoic acid (PFHxA)	1.66	J	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorononanesulfonate (PFNS)	1.86	U	1.82	U	1.8	U	1.8	U	1.8	U	1.92	U
Perfluorononanoic acid (PFNA)	1.15	J	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorooctane sulfonamide (PFOSAm)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorooctanesulfonate (PFOS)	**38.8**		**13.4**		**5.02**		**1.8**		**8.29**		**7.52**	
Perfluorooctanoic acid (PFOA)	1.58	J	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluoropentanesulfonate (PFPeS)	1.82	U	1.78	U	1.76	U	1.76	U	1.76	U	1.88	U
Perfluoropentanoic acid (PFPeA)	0.997	J	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorotetradecanoic acid (PFTeDA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluorotridecanoic acid (PFTrDA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
Perfluoroundecanoic acid (PFUdA)	1.93	U	1.89	U	1.87	U	1.87	U	1.87	U	2	U
1633 TPFAS	**51.442**		**16.02**		**5.628**		**1.8**		**8.29**		**7.52**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	093-94 Depth : 50.00 01/05/2024 ng/L		093-94 Depth : 50.00 04/22/2024 ng/L		093-94 Depth : 50.00 08/05/2024 ng/L		093-94 Depth : 53.50 10/02/2024 ng/L		093-95 Depth : 100.00 01/05/2024 ng/L		093-95 Depth : 65.00 04/22/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	75.6	U	6.73	U	7.45	U	30.2	U	37.8	U	18.9	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.8	U	6.84	U	7.57	U	30.7	U	38.4	U	19.2	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	400	U	35.6	U	39.4	U	160	U	200	U	100	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	400	U	35.6	U	39.4	U	160	U	200	U	100	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	80	U	7.12	U	7.89	U	32	U	40	U	20	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	75.6	U	6.73	U	7.45	U	30.2	U	37.8	U	18.9	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	74.8	U	6.66	U	7.37	U	29.9	U	37.4	U	18.7	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	75	U	6.68	U	7.39	U	30	U	37.5	U	18.8	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	76	U	6.77	U	7.49	U	30.4	U	38	U	19	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	80	U	7.12	U	7.89	U	32	U	40	U	20	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	200	U	17.8	U	19.7	U	80	U	100	U	50	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	200	U	17.8	U	19.7	U	80	U	100	U	50	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40	U	3.56	U	3.94	U	16	U	20	U	10	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	35.6	U	3.17	U	3.51	U	14.2	U	17.8	U	8.9	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	40	U	3.56	U	3.94	U	16	U	20	U	10	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	40	U	3.56	U	3.94	U	16	U	20	U	10	U
Perfluorobutanesulfonate (PFBS)	17.7	U	1.58	U	**49.7**		**33.9**		**10.2**		**10.2**	
Perfluorobutyric acid (PFBA)	80	U	7.12	U	**10.9**		32	U	40	U	20	U
Perfluorodecanesulfonate (PFDS)	19.3	U	1.72	U	1.9	U	7.72	U	9.65	U	4.83	U
Perfluorodecanoic acid (PFDA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
Perfluorododecane sulfonic acid (PFDoS)	19.4	U	1.73	U	1.91	U	7.76	U	9.7	U	4.85	U
Perfluorododecanoic acid (PFDoA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
Perfluoroheptanesulfonate (PFHpS)	14.4	J	1.7	U	**28.1**		**46.2**		7.8	J	**13.7**	
Perfluoroheptanoic acid (PFHpA)	20	U	1.78	U	**6.51**		8	U	**12.7**		**18.9**	
Perfluorohexanesulfonate (PFHxS)	**63.3**		**5.1**		**687**	D	**469**		**241**		**275**	
Perfluorohexanoic acid (PFHxA)	10.2	J	**2.37**		**86.7**		**46.9**		**33.8**		**41.4**	
Perfluorononanesulfonate (PFNS)	19.2	U	1.71	U	1.9	U	7.7	U	9.62	U	4.81	U
Perfluorononanoic acid (PFNA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
Perfluorooctane sulfonamide (PFOSAm)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
Perfluorooctanesulfonate (PFOS)	**1120**		**191**		**525**	D	**1010**	D	**821**		**1290**	D
Perfluorooctanoic acid (PFOA)	20	U	**2.92**		**46.6**		**27.4**		**13.3**		**19.6**	
Perfluoropentanesulfonate (PFPeS)	6.36	J	1.68	U	**143**		**77.6**		**24.7**		**25.1**	
Perfluoropentanoic acid (PFPeA)	20	U	1.78	U	**24**		**14**		**19**		**27.2**	
Perfluorotetradecanoic acid (PFTeDA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
Perfluorotridecanoic acid (PFTrDA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
Perfluoroundecanoic acid (PFUdA)	20	U	1.78	U	1.97	U	8	U	10	U	5	U
1633 TPFAS	**1214.26**		**201.39**		**1607.51**		**1725**		**1183.5**		**1721.1**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	093-95 Depth : 65.00 08/05/2024 ng/L		093-95 Depth : 65.00 10/02/2024 ng/L		093-96 Depth : 60.00 01/09/2024 ng/L		093-96 Depth : 60.00 08/22/2024 ng/L		093-97 Depth : 63.00 01/24/2024 ng/L		093-97 Depth : 63.00 09/06/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.05	U	7.13	U	7.08	U	7.1	U	7.38	U	7.27	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.16	U	7.24	U	7.19	U	7.22	U	7.5	U	7.39	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	37.3	U	37.7	U	37.5	U	37.6	U	39	U	38.5	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	37.3	U	37.7	U	1.8	J	37.6	U	39	U	38.5	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.46	U	7.55	U	7.49	U	7.52	U	7.81	U	7.7	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.05	U	7.13	U	7.08	U	7.1	U	7.38	U	7.27	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.98	U	7.06	U	7	U	7.03	U	7.3	U	7.2	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7	U	7.07	U	7.02	U	7.05	U	7.32	U	7.22	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.09	U	7.17	U	7.12	U	7.14	U	7.42	U	7.31	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.46	U	7.55	U	7.49	U	7.52	U	7.81	U	7.7	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.7	U	18.9	U	18.7	U	18.8	U	19.5	U	19.2	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.7	U	18.9	U	18.7	U	18.8	U	19.5	U	19.2	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.73	U	3.77	U	3.75	U	3.76	U	3.9	U	3.85	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.32	U	3.36	U	3.33	U	3.34	U	3.47	U	3.42	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.73	U	3.77	U	3.75	U	3.76	U	3.9	U	3.85	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.73	U	3.77	U	3.75	U	3.76	U	3.9	U	3.85	U
Perfluorobutanesulfonate (PFBS)	1.66	U	**4.49**		**11.9**		**50.7**	D	0.624	J	1.71	U
Perfluorobutyric acid (PFBA)	7.46	U	7.55	U	7.49	U	7.52	U	7.81	U	7.7	U
Perfluorodecanesulfonate (PFDS)	1.8	U	1.82	U	1.81	U	1.81	U	1.88	U	1.86	U
Perfluorodecanoic acid (PFDA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
Perfluorododecane sulfonic acid (PFDoS)	1.81	U	1.83	U	1.82	U	1.82	U	1.89	U	1.87	U
Perfluorododecanoic acid (PFDoA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
Perfluoroheptanesulfonate (PFHpS)	1.78	U	**2.57**		1.07	J	1.79	U	0.77	J	1.83	U
Perfluoroheptanoic acid (PFHpA)	**2.76**		**4.89**		0.825	J	1.88	U	1.95	U	1.92	U
Perfluorohexanesulfonate (PFHxS)	**39**		**134**		**103**		**283**	D	**21.6**		**21.2**	
Perfluorohexanoic acid (PFHxA)	**6.74**		**12.5**		**8.97**		**17.6**		1.27	J	1.92	U
Perfluorononanesulfonate (PFNS)	1.79	U	1.81	U	1.8	U	1.81	U	1.88	U	1.85	U
Perfluorononanoic acid (PFNA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
Perfluorooctane sulfonamide (PFOSAm)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
Perfluorooctanesulfonate (PFOS)	**96.7**		**154**		**9.05**		**5.43**		**20.3**		**14.7**	
Perfluorooctanoic acid (PFOA)	**2.6**		**5.79**		**8.44**		**17.4**		1.64	J	1.92	U
Perfluoropentanesulfonate (PFPeS)	**3.2**		**12**		**15.7**		**65.7**		1.39	J	1.81	
Perfluoropentanoic acid (PFPeA)	**4.36**		**8.19**		**2.2**		**3.55**		1.95	U	1.92	U
Perfluorotetradecanoic acid (PFTeDA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
Perfluorotridecanoic acid (PFTrDA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
Perfluoroundecanoic acid (PFUdA)	1.87	U	1.89	U	1.87	U	1.88	U	1.95	U	1.92	U
1633 TPFAS	**155.36**		**338.43**		**162.955**		**443.38**		**47.594**		**37.71**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	093-98 Depth : 65.00 01/24/2024 ng/L		093-98 Depth : 65.00 09/06/2024 ng/L		094-275 Depth : 85.00 01/09/2024 ng/L		094-275 Depth : 85.00 08/02/2024 ng/L		094-276 Depth : 105.00 01/10/2024 ng/L		094-276 Depth : 105.00 08/02/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.9	U	6.88	U	7.16	U	6.82	U	15.1	U	6.82	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	8.02	U	6.99	U	7.27	U	6.92	U	15.4	U	6.92	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	41.8	U	36.4	U	37.9	U	36.1	U	80	U	36.1	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	41.8	U	36.4	U	37.9	U	36.1	U	80	U	36.1	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	8.36	U	7.28	U	7.57	U	7.21	U	16	U	7.21	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.9	U	6.88	U	7.16	U	6.82	U	15.1	U	6.82	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.81	U	6.8	U	7.08	U	6.74	U	15	U	6.74	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.83	U	6.82	U	7.1	U	6.76	U	15	U	6.76	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.94	U	6.91	U	7.2	U	6.85	U	15.2	U	6.85	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	8.36	U	7.28	U	7.57	U	7.21	U	16	U	7.21	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	20.9	U	18.2	U	18.9	U	18	U	40	U	18	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	20.9	U	18.2	U	18.9	U	18	U	40	U	18	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.18	U	3.64	U	3.79	U	3.61	U	8	U	3.61	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.72	U	3.24	U	3.37	U	3.21	U	7.12	U	3.21	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.18	U	3.64	U	3.79	U	3.61	U	8	U	3.61	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.18	U	3.64	U	3.79	U	3.61	U	8	U	3.61	U
Perfluorobutanesulfonate (PFBS)	**4.44**		**8.17**		0.811	J	1.6	U	1.58	J	1.6	U
Perfluorobutyric acid (PFBA)	8.36	U	7.28	U	7.57	U	7.21	U	16	U	7.21	U
Perfluorodecanesulfonate (PFDS)	2.02	U	1.76	U	1.83	U	1.74	U	3.86	U	1.74	U
Perfluorodecanoic acid (PFDA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	2.03	U	1.76	U	1.84	U	1.75	U	3.88	U	1.75	U
Perfluorododecanoic acid (PFDoA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	**2.04**		**1.91**		1.8	U	1.72	U	1.78	J	1.72	U
Perfluoroheptanoic acid (PFHpA)	0.849	J	1.82	U	1.89	U	1.8	U	4	U	1.8	U
Perfluorohexanesulfonate (PFHxS)	**55.6**		**73**		**11.1**		**2.06**		**50.5**		**32**	
Perfluorohexanoic acid (PFHxA)	**2.58**		**4.6**		**2.18**		1.8	U	**6.94**		**8.16**	
Perfluorononanesulfonate (PFNS)	2.01	U	1.75	U	1.82	U	1.73	U	3.85	U	1.73	U
Perfluorononanoic acid (PFNA)	2.09	U	1.82	U	1.16	J	1.8	U	**4.31**		**3.82**	
Perfluorooctane sulfonamide (PFOSAm)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
Perfluorooctanesulfonate (PFOS)	**39.1**		**81.7**		**33.1**		**12.3**		**201**		**173**	
Perfluorooctanoic acid (PFOA)	**2.43**		**4.56**		1.3	J	1.8	U	2.83	J	**2.44**	
Perfluoropentanesulfonate (PFPeS)	**6.56**		**11**		1.78	U	1.7	U	**4**		**1.78**	
Perfluoropentanoic acid (PFPeA)	1.01	J	1.82	U	1.13	J	1.8	U	2.61	J	**2.1**	
Perfluorotetradecanoic acid (PFTeDA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
Perfluorotridecanoic acid (PFTrDA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	2.09	U	1.82	U	1.89	U	1.8	U	4	U	1.8	U
1633 TPFAS	**114.609**		**184.94**		**50.781**		**14.36**		**275.55**		**223.3**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	094-277 Depth : 75.00 01/12/2024 ng/L		094-277 Depth : 75.00 08/02/2024 ng/L		094-278 Depth : 105.00 01/12/2024 ng/L		094-278 Depth : 105.00 08/06/2024 ng/L		102-12 Depth : 58.00 01/24/2024 ng/L		102-12 Depth : 58.00 08/30/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.98	U	6.93	U	7.66	U	7	U	15.1	U	6.49	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.09	U	7.04	U	7.78	U	7.12	U	15.4	U	6.59	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36.9	U	36.7	U	40.5	U	37.1	U	80	U	34.3	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36.9	U	36.7	U	40.5	U	37.1	U	80	U	34.3	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.39	U	7.33	U	8.1	U	7.41	U	16	U	6.87	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.98	U	6.93	U	7.66	U	7	U	15.1	U	6.49	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.91	U	6.86	U	7.58	U	6.93	U	15	U	6.42	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.93	U	6.88	U	7.6	U	6.95	U	15	U	6.44	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.02	U	6.97	U	7.7	U	7.04	U	15.2	U	6.52	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.39	U	7.33	U	8.1	U	7.41	U	16	U	6.87	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.5	U	18.3	U	20.3	U	18.5	U	40	U	17.2	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.5	U	18.3	U	20.3	U	18.5	U	40	U	17.2	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.69	U	3.67	U	4.05	U	3.71	U	8	U	3.43	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.29	U	3.26	U	3.61	U	3.3	U	7.12	U	3.06	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.69	U	3.67	U	4.05	U	3.71	U	8	U	3.43	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.69	U	3.67	U	4.05	U	3.71	U	8	U	3.43	U
Perfluorobutanesulfonate (PFBS)	1.1	J	1.63	U	1.38	J	**3.38**		1.67	J	7.61	DU
Perfluorobutyric acid (PFBA)	2.53	J	7.33	U	8.1	U	7.41	U	16	U	6.87	U
Perfluorodecanesulfonate (PFDS)	1.78	U	1.77	U	1.96	U	1.79	U	3.86	U	1.66	U
Perfluorodecanoic acid (PFDA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
Perfluorododecane sulfonic acid (PFDoS)	1.79	U	1.78	U	1.97	U	1.8	U	3.88	U	1.67	U
Perfluorododecanoic acid (PFDoA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
Perfluoroheptanesulfonate (PFHpS)	1.76	U	1.75	U	1.93	U	1.77	U	3.81	U	1.64	U
Perfluoroheptanoic acid (PFHpA)	1.13	J	1.83	U	1.38	J	1.85	U	4	U	1.72	U
Perfluorohexanesulfonate (PFHxS)	**8.49**		**10.7**		**14.7**		**22.6**		1.37	J	**1.98**	
Perfluorohexanoic acid (PFHxA)	**1.92**		**2.69**		**3.91**		**5.16**		2.38	J	**12**	
Perfluorononanesulfonate (PFNS)	1.78	U	1.76	U	1.95	U	1.78	U	3.85	U	1.65	U
Perfluorononanoic acid (PFNA)	**9.41**		**19.9**		**23.3**		**12.9**		4	U	1.72	U
Perfluorooctane sulfonamide (PFOSAm)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
Perfluorooctanesulfonate (PFOS)	**24.9**		**29.8**		**41.5**		**47**		3.43	J	**2.14**	
Perfluorooctanoic acid (PFOA)	**2.67**		**3.89**		**2.59**		**2.92**		4	U	1.72	U
Perfluoropentanesulfonate (PFPeS)	0.976	J	1.73	U	1.86	J	**3.48**		3.76	U	1.62	U
Perfluoropentanoic acid (PFPeA)	1.2	J	**2.21**		**2.71**		**2.06**		3.34	J	**21.6**	
Perfluorotetradecanoic acid (PFTeDA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
Perfluorotridecanoic acid (PFTrDA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
Perfluoroundecanoic acid (PFUdA)	1.85	U	1.83	U	2.03	U	1.85	U	4	U	1.72	U
1633 TPFAS	**54.326**		**69.19**		**93.33**		**99.5**		**12.19**		**37.72**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Current Firehouse MW

Analyte	102-26 Depth : 95.00 01/11/2024 ng/L		102-26 Depth : 95.00 08/27/2024 ng/L		102-27 Depth : 115.00 01/11/2024 ng/L		102-27 Depth : 115.00 08/26/2024 ng/L		102-28 Depth : 145.00 01/11/2024 ng/L		102-28 Depth : 145.00 08/26/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.53	U	6.73	U	7.48	U	7.56	U	18.9	U	25.2	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.63	U	6.84	U	7.6	U	7.68	U	19.2	U	25.6	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	34.5	U	35.6	U	39.6	U	40	U	100	U	133	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	34.5	U	35.6	U	39.6	U	40	U	100	U	133	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	6.91	U	7.13	U	7.92	U	8	U	20	U	26.7	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.53	U	6.73	U	7.48	U	7.56	U	18.9	U	25.2	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.46	U	6.66	U	7.41	U	7.48	U	18.7	U	24.9	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	32.4	DU	6.68	U	7.43	U	7.5	U	18.8	U	25	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.56	U	6.77	U	7.52	U	7.6	U	19	U	25.3	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	6.91	U	7.13	U	7.92	U	8	U	20	U	26.7	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	17.3	U	17.8	U	19.8	U	20	U	50	U	66.7	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	17.3	U	17.8	U	19.8	U	20	U	50	U	66.7	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.45	U	3.56	U	3.96	U	4	U	10	U	13.3	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.07	U	3.17	U	3.52	U	3.56	U	8.9	U	11.9	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.45	U	3.56	U	3.96	U	4	U	10	U	13.3	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.45	U	3.56	U	3.96	U	4	U	10	U	13.3	U
Perfluorobutanesulfonate (PFBS)	1.53	U	1.58	U	1.76	U	1.77	U	4.44	U	5.91	U
Perfluorobutyric acid (PFBA)	6.91	U	7.13	U	7.92	U	8	U	20	U	26.7	U
Perfluorodecanesulfonate (PFDS)	1.67	U	1.72	U	1.91	U	19.3	U	4.83	U	6.43	U
Perfluorodecanoic acid (PFDA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
Perfluorododecane sulfonic acid (PFDoS)	1.68	U	1.73	U	1.92	U	19.4	U	4.85	U	6.47	U
Perfluorododecanoic acid (PFDoA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
Perfluoroheptanesulfonate (PFHpS)	1.65	U	1.7	U	1.89	U	19.1	U	4.77	U	6.35	U
Perfluoroheptanoic acid (PFHpA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
Perfluorohexanesulfonate (PFHxS)	1.58	U	1.63	U	0.731	J	1.83	U	3.06	J	6.09	U
Perfluorohexanoic acid (PFHxA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
Perfluorononanesulfonate (PFNS)	1.66	U	1.71	U	1.9	U	19.2	U	4.81	U	6.41	U
Perfluorononanoic acid (PFNA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
Perfluorooctane sulfonamide (PFOSAm)	1.73	U	1.78	U	1.98	U	20	U	5	U	6.67	U
Perfluorooctanesulfonate (PFOS)	1.08	J	1.65	U	**2.37**		**18.8**		3.16	J	6.19	U
Perfluorooctanoic acid (PFOA)	1.73	U	1.78	U	0.764	J	2	U	5	U	6.67	U
Perfluoropentanesulfonate (PFPeS)	1.63	U	1.68	U	1.86	U	1.88	U	4.71	U	6.27	U
Perfluoropentanoic acid (PFPeA)	1.73	U	1.78	U	**2.04**		2	U	5	U	6.67	U
Perfluorotetradecanoic acid (PFTeDA)	1.73	U	1.78	U	1.98	U	20	U	5	U	6.67	U
Perfluorotridecanoic acid (PFTrDA)	1.73	U	1.78	U	1.98	U	20	U	5	U	6.67	U
Perfluoroundecanoic acid (PFUdA)	1.73	U	1.78	U	1.98	U	2	U	5	U	6.67	U
1633 TPFAS	**1.08**		0		**5.905**		**18.8**		**6.22**		0	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	102-29 Depth : 95.00 01/11/2024 ng/L		102-29 Depth : 95.00 07/25/2024 ng/L		102-30 Depth : 115.00 01/11/2024 ng/L		102-30 Depth : 115.00 07/24/2024 ng/L		102-31 Depth : 135.00 01/11/2024 ng/L		102-31 Depth : 135.00 07/24/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.86	U	6.95	U	7.31	U	6.76	U	6.84	U	6.64	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.97	U	7.06	U	7.42	U	6.86	U	6.94	U	6.75	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36.3	U	36.8	U	38.7	U	35.7	U	36.2	U	35.2	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36.3	U	36.8	U	38.7	U	35.7	U	36.2	U	35.2	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.26	U	7.35	U	7.73	U	7.15	U	7.23	U	7.03	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.86	U	6.95	U	7.31	U	6.76	U	6.84	U	6.64	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.79	U	6.87	U	7.23	U	6.68	U	6.76	U	6.57	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.81	U	6.89	U	7.25	U	6.7	U	6.78	U	6.59	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.9	U	6.98	U	7.34	U	6.79	U	6.87	U	6.68	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.26	U	7.35	U	7.73	U	7.15	U	7.23	U	7.03	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.2	U	18.4	U	19.3	U	17.9	U	18.1	U	17.6	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.2	U	18.4	U	19.3	U	17.9	U	18.1	U	17.6	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.63	U	3.68	U	3.87	U	3.57	U	3.62	U	3.52	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.23	U	3.27	U	3.44	U	3.18	U	3.22	U	3.13	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.63	U	3.68	U	3.87	U	3.57	U	3.62	U	3.52	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.63	U	3.68	U	3.87	U	3.57	U	3.62	U	3.52	U
Perfluorobutanesulfonate (PFBS)	1.61	U	1.63	U	1.71	U	**1.94**		**4.03**		**5.07**	
Perfluorobutyric acid (PFBA)	7.26	U	7.35	U	7.73	U	7.15	U	7.23	U	7.03	U
Perfluorodecanesulfonate (PFDS)	1.75	U	1.77	U	1.87	U	1.72	U	1.74	U	1.7	U
Perfluorodecanoic acid (PFDA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
Perfluorododecane sulfonic acid (PFDoS)	1.76	U	1.78	U	1.87	U	1.73	U	1.75	U	1.7	U
Perfluorododecanoic acid (PFDoA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
Perfluoroheptanesulfonate (PFHpS)	1.73	U	1.75	U	1.84	U	1.7	U	**1.86**		1.68	U
Perfluoroheptanoic acid (PFHpA)	1.82	U	1.84	U	1.93	U	1.79	U	0.697	J	**2**	
Perfluorohexanesulfonate (PFHxS)	**2.72**		**2.97**		**2.16**		**3.81**		**50.8**		**58.3**	
Perfluorohexanoic acid (PFHxA)	1.82	U	**2.01**		**2.01**		**3.22**		**4.14**		**8.37**	
Perfluorononanesulfonate (PFNS)	1.75	U	1.77	U	1.86	U	1.72	U	1.74	U	1.69	U
Perfluorononanoic acid (PFNA)	1.42	J	1.84	U	1.93	U	1.79	U	**2.37**		**5.49**	
Perfluorooctane sulfonamide (PFOSAm)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
Perfluorooctanesulfonate (PFOS)	**7.68**		**8.49**		**10.5**		**13.8**		**128**		**143**	
Perfluorooctanoic acid (PFOA)	1.56	J	**1.89**		1.36	J	**1.8**		**3.05**		**4.77**	
Perfluoropentanesulfonate (PFPeS)	1.71	U	1.73	U	1.82	U	1.68	U	**6.35**		**8.05**	
Perfluoropentanoic acid (PFPeA)	0.814	J	1.84	U	1.29	J	1.79	U	**2.49**		**2.66**	
Perfluorotetradecanoic acid (PFTeDA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
Perfluorotridecanoic acid (PFTrDA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
Perfluoroundecanoic acid (PFUdA)	1.82	U	1.84	U	1.93	U	1.79	U	1.81	U	1.76	U
1633 TPFAS	**14.194**		**15.36**		**17.32**		**24.57**		**203.787**		**237.71**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	102-36 Depth : 75.00 01/22/2024 ng/L		102-36 Depth : 75.00 08/27/2024 ng/L		102-37 Depth : 70.00 01/22/2024 ng/L		102-37 Depth : 70.00 08/27/2024 ng/L		102-38 Depth : 75.00 01/22/2024 ng/L		102-38 Depth : 75.00 08/30/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	8.12	U	6.62	U	7.45	U	7.06	U	7.37	U	6.93	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	8.25	U	6.73	U	7.57	U	7.17	U	7.48	U	7.04	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	42.9	U	35	U	39.4	U	37.4	U	39	U	36.7	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	42.9	U	35	U	39.4	U	37.4	U	39	U	36.7	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	8.59	U	7.01	U	7.88	U	7.47	U	7.8	U	7.33	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	8.12	U	6.62	U	7.45	U	7.06	U	7.37	U	6.93	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	8.03	U	6.55	U	7.37	U	6.99	U	7.29	U	6.86	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	8.05	U	6.57	U	7.39	U	7	U	7.31	U	6.88	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	8.16	U	6.66	U	7.49	U	7.1	U	7.41	U	6.97	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	8.59	U	7.01	U	7.88	U	7.47	U	7.8	U	7.33	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	21.5	U	17.5	U	19.7	U	18.7	U	19.5	U	18.3	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	21.5	U	17.5	U	19.7	U	18.7	U	19.5	U	18.3	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.29	U	3.5	U	3.94	U	3.74	U	3.9	U	3.67	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.82	U	3.12	U	3.51	U	3.32	U	3.47	U	3.26	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.29	U	3.5	U	3.94	U	3.74	U	3.9	U	3.67	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.29	U	3.5	U	3.94	U	3.74	U	3.9	U	3.67	U
Perfluorobutanesulfonate (PFBS)	1.9	U	1.55	U	1.75	U	1.66	U	0.603	J	1.63	U
Perfluorobutyric acid (PFBA)	8.59	U	7.01	U	7.88	U	7.47	U	7.8	U	7.33	U
Perfluorodecanesulfonate (PFDS)	2.07	U	1.69	U	1.9	U	1.8	U	1.88	U	1.77	U
Perfluorodecanoic acid (PFDA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluorododecane sulfonic acid (PFDoS)	2.08	U	1.7	U	1.91	U	1.81	U	1.89	U	1.78	U
Perfluorododecanoic acid (PFDoA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluoroheptanesulfonate (PFHpS)	2.05	U	1.67	U	1.88	U	1.78	U	1.86	U	1.75	U
Perfluoroheptanoic acid (PFHpA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluorohexanesulfonate (PFHxS)	1.96	U	1.6	U	**3.17**		**7.89**		**12.9**		**4.39**	
Perfluorohexanoic acid (PFHxA)	2.15	U	1.75	U	1.02	J	1.87	U	1.95	U	1.83	U
Perfluorononanesulfonate (PFNS)	2.07	U	1.69	U	1.9	U	1.8	U	1.88	U	1.76	U
Perfluorononanoic acid (PFNA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluorooctane sulfonamide (PFOSAm)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluorooctanesulfonate (PFOS)	1.22	J	**2.78**		**10.7**		**18.7**		**10.9**		**6.64**	
Perfluorooctanoic acid (PFOA)	1.24	J	1.75	U	1.74	J	1.87	U	0.968	J	1.83	U
Perfluoropentanesulfonate (PFPeS)	2.02	U	1.65	U	1.85	U	1.76	U	0.923	J	1.73	U
Perfluoropentanoic acid (PFPeA)	2.15	U	1.75	U	1.97	U	1.87	U	0.699	J	1.83	U
Perfluorotetradecanoic acid (PFTeDA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluorotridecanoic acid (PFTrDA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
Perfluoroundecanoic acid (PFUdA)	2.15	U	1.75	U	1.97	U	1.87	U	1.95	U	1.83	U
1633 TPFAS	**2.46**		**2.78**		**16.63**		**26.59**		**26.993**		**11.03**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	102-39 Depth : 75.00 01/22/2024 ng/L		102-39 Depth : 75.00 08/30/2024 ng/L		102-40 Depth : 150.00 01/11/2024 ng/L		102-40 Depth : 150.00 07/24/2024 ng/L		103-10 Depth : 64.00 01/23/2024 ng/L		103-10 Depth : 62.00 08/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.84	U	7.44	U	37.8	U	7.76	U	7.33	U	6.83	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.96	U	7.56	U	38.4	U	7.88	U	7.45	U	6.94	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	41.5	U	39.4	U	200	U	41	U	38.8	U	36.1	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	41.5	U	39.4	U	200	U	41	U	38.8	U	36.1	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	8.29	U	7.88	U	40	U	8.21	U	7.76	U	7.22	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.84	U	7.44	U	37.8	U	7.76	U	7.33	U	6.83	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.75	U	7.36	U	37.4	U	7.68	U	7.26	U	6.75	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.77	U	7.38	U	37.5	U	7.7	U	7.28	U	6.77	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.88	U	7.48	U	38	U	7.8	U	7.37	U	6.86	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	8.29	U	7.88	U	40	U	8.21	U	7.76	U	7.22	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	20.7	U	19.7	U	100	U	20.5	U	19.4	U	18.1	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	20.7	U	19.7	U	100	U	20.5	U	19.4	U	18.1	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.15	U	3.94	U	20	U	4.1	U	3.88	U	3.61	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.69	U	3.51	U	17.8	U	3.65	U	3.45	U	3.21	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.15	U	3.94	U	20	U	4.1	U	3.88	U	3.61	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.15	U	3.94	U	20	U	4.1	U	3.88	U	3.61	U
Perfluorobutanesulfonate (PFBS)	1.84	U	1.75	U	8.43	J	**10.3**		1.72	U	1.6	U
Perfluorobutyric acid (PFBA)	8.29	U	7.88	U	40	U	8.21	U	7.76	U	7.22	U
Perfluorodecanesulfonate (PFDS)	2	U	1.9	U	9.65	U	1.98	U	1.87	U	1.74	U
Perfluorodecanoic acid (PFDA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
Perfluorododecane sulfonic acid (PFDoS)	2.01	U	1.91	U	9.7	U	1.99	U	1.88	U	1.75	U
Perfluorododecanoic acid (PFDoA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
Perfluoroheptanesulfonate (PFHpS)	1.98	U	1.88	U	4.65	J	**4.79**		1.85	U	1.72	U
Perfluoroheptanoic acid (PFHpA)	2.07	U	1.97	U	10	U	10.3	DU	1.94	U	1.81	U
Perfluorohexanesulfonate (PFHxS)	**1.97**		1.8	U	**101**		**108**		1.77	U	1.65	U
Perfluorohexanoic acid (PFHxA)	1.02	J	1.97	U	**11.6**		**20**		1.94	U	1.81	U
Perfluorononanesulfonate (PFNS)	1.99	U	1.89	U	9.62	U	1.97	U	1.87	U	1.74	U
Perfluorononanoic acid (PFNA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
Perfluorooctane sulfonamide (PFOSAm)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
Perfluorooctanesulfonate (PFOS)	**4.83**		**3.33**		**256**		**233**	D	1.8	U	1.68	U
Perfluorooctanoic acid (PFOA)	0.857	J	1.97	U	9.89	J	**8.14**		1.94	U	1.81	U
Perfluoropentanesulfonate (PFPeS)	1.95	U	1.85	U	**13.9**		**10.7**		1.83	U	1.7	U
Perfluoropentanoic acid (PFPeA)	2.07	U	1.97	U	3.55	J	**3.59**		1.94	U	1.81	U
Perfluorotetradecanoic acid (PFTeDA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
Perfluorotridecanoic acid (PFTrDA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
Perfluoroundecanoic acid (PFUdA)	2.07	U	1.97	U	10	U	2.05	U	1.94	U	1.81	U
1633 TPFAS	**8.677**		**3.33**		**409.02**		**398.52**		0		0	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	103-30 Depth : 95.00 01/11/2024 ng/L		103-30 Depth : 95.00 08/05/2024 ng/L		103-31 Depth : 115.00 01/11/2024 ng/L		103-31 Depth : 115.00 08/06/2024 ng/L		103-32 Depth : 135.00 01/11/2024 ng/L		103-32 Depth : 135.00 08/06/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.81	U	7.34	U	6.91	U	7.08	U	6.89	U	6.68	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.92	U	7.46	U	7.02	U	7.19	U	7	U	6.78	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	38.8	U	36.6	U	37.5	U	36.5	U	35.3	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	38.8	U	36.6	U	37.5	U	36.5	U	35.3	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.21	U	7.77	U	7.31	U	7.49	U	7.3	U	7.07	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.81	U	7.34	U	6.91	U	7.08	U	6.89	U	6.68	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.74	U	7.26	U	6.83	U	7.01	U	6.82	U	6.61	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.76	U	7.28	U	6.85	U	7.02	U	6.84	U	6.62	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.85	U	7.38	U	6.94	U	7.12	U	6.93	U	6.71	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.21	U	7.77	U	7.31	U	7.49	U	7.3	U	7.07	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18	U	19.4	U	18.3	U	18.7	U	18.2	U	17.7	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18	U	19.4	U	18.3	U	18.7	U	18.2	U	17.7	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.6	U	3.88	U	3.66	U	3.75	U	3.65	U	3.53	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.21	U	3.46	U	3.25	U	3.33	U	3.25	U	3.14	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.6	U	3.88	U	3.66	U	3.75	U	3.65	U	3.53	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.6	U	3.88	U	3.66	U	3.75	U	3.65	U	3.53	U
Perfluorobutanesulfonate (PFBS)	1.45	J	**2.13**		**9.42**		**8.84**		**8.89**		**13**	
Perfluorobutyric acid (PFBA)	7.21	U	7.77	U	4.94	J	7.49	U	5.7	J	7.07	U
Perfluorodecanesulfonate (PFDS)	1.74	U	1.87	U	1.76	U	1.81	U	1.76	U	1.7	U
Perfluorodecanoic acid (PFDA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
Perfluorododecane sulfonic acid (PFDoS)	1.75	U	1.88	U	1.77	U	1.82	U	1.77	U	1.71	U
Perfluorododecanoic acid (PFDoA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
Perfluoroheptanesulfonate (PFHpS)	0.574	J	1.85	U	**5.09**		**3.55**		**4.44**		**7.32**	
Perfluoroheptanoic acid (PFHpA)	0.728	J	1.94	U	**5.08**		**3.83**		**4.49**		**5.9**	
Perfluorohexanesulfonate (PFHxS)	**14.2**		**18.1**		**133**		**105**		**121**		**186**	
Perfluorohexanoic acid (PFHxA)	**2.48**		**4.52**		**29.5**		**24.5**		**26.5**		**36.1**	
Perfluorononanesulfonate (PFNS)	1.73	U	1.87	U	1.76	U	1.8	U	1.75	U	1.7	U
Perfluorononanoic acid (PFNA)	**15.3**		**5.53**		**7.97**		**2.45**		1.15	J	**2.11**	
Perfluorooctane sulfonamide (PFOSAm)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
Perfluorooctanesulfonate (PFOS)	**40.2**		**51.1**		**315**	D	**188**		**329**	D	**299**	D
Perfluorooctanoic acid (PFOA)	**1.89**		**2.07**		**13**		**8.88**		**14.1**		**17.5**	
Perfluoropentanesulfonate (PFPeS)	**1.94**		1.83	U	**19**		**12.9**		**12.9**		**21.7**	
Perfluoropentanoic acid (PFPeA)	1.37	J	**2.11**		**15.7**		**9.61**		**14.1**		**10.6**	
Perfluorotetradecanoic acid (PFTeDA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
Perfluorotridecanoic acid (PFTrDA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
Perfluoroundecanoic acid (PFUdA)	1.8	U	1.94	U	1.83	U	1.87	U	1.82	U	1.77	U
1633 TPFAS	**80.132**		**85.56**		**557.7**		**367.56**		**542.27**		**599.23**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	103-33 Depth : 95.00 01/11/2024 ng/L		103-33 Depth : 94.00 08/27/2024 ng/L		103-34 Depth : 125.00 01/11/2024 ng/L		103-34 Depth : 125.00 08/27/2024 ng/L		111-20 Depth : 170.00 11/05/2024 ng/L		118-07 Depth : 105.00 11/06/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.59	U	6.78	U	7.09	U	6.69	U	37.8	U	7	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.71	U	6.89	U	7.2	U	6.8	U	38.4	U	7.11	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	40.2	U	35.9	U	37.5	U	35.4	U	200	U	37	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	40.2	U	35.9	U	37.5	U	35.4	U	200	U	37	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	8.03	U	7.17	U	7.5	U	7.08	U	40	U	7.41	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	7.59	U	6.78	U	7.09	U	6.69	U	37.8	U	7	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	7.51	U	6.71	U	7.02	U	6.62	U	37.4	U	6.93	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	7.53	U	6.73	U	7.04	U	6.64	U	37.5	U	6.94	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.63	U	6.82	U	7.13	U	6.73	U	38	U	7.04	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	8.03	U	7.17	U	7.5	U	7.08	U	40	U	7.41	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	20.1	U	17.9	U	18.8	U	17.7	U	100	U	18.5	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	20.1	U	17.9	U	18.8	U	17.7	U	100	U	18.5	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.02	U	3.59	U	3.75	U	3.54	U	20	U	3.7	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.57	U	3.19	U	3.34	U	3.15	U	17.8	U	3.3	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.02	U	3.59	U	3.75	U	3.54	U	20	U	3.7	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.02	U	3.59	U	3.75	U	3.54	U	20	U	3.7	U
Perfluorobutanesulfonate (PFBS)	**10.4**		**6.44**		**5.7**		**3.56**		**24.6**		**20.3**	
Perfluorobutyric acid (PFBA)	5.85	J	7.17	U	3.39	J	7.08	U	40	U	7.41	U
Perfluorodecanesulfonate (PFDS)	1.94	U	1.73	U	1.81	U	1.71	U	9.65	U	1.79	U
Perfluorodecanoic acid (PFDA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
Perfluorododecane sulfonic acid (PFDoS)	1.95	U	1.74	U	1.82	U	1.72	U	9.7	U	1.8	U
Perfluorododecanoic acid (PFDoA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
Perfluoroheptanesulfonate (PFHpS)	**3.24**		**2.13**		1.23	J	1.69	U	9.53	U	**4.49**	
Perfluoroheptanoic acid (PFHpA)	**4.91**		**4.31**		**2.06**		1.77	U	10	U	**2.95**	
Perfluorohexanesulfonate (PFHxS)	**106**		**76.7**		**42.1**		**28.5**		**80.6**		**105**	
Perfluorohexanoic acid (PFHxA)	**17.8**		**18.1**		**6.57**		**4.87**		**19.3**		**18.8**	
Perfluorononanesulfonate (PFNS)	1.93	U	1.73	U	1.8	U	1.7	U	9.62	U	1.78	U
Perfluorononanoic acid (PFNA)	1.57	J	1.79	U	1.38	J	1.77	U	10	U	1.85	U
Perfluorooctane sulfonamide (PFOSAm)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
Perfluorooctanesulfonate (PFOS)	**177**		**137**		**47.6**		**36.5**		**74.3**		**139**	
Perfluorooctanoic acid (PFOA)	**9.16**		**6.03**		**5.21**		**2.42**		10	U	**10.9**	
Perfluoropentanesulfonate (PFPeS)	**18.3**		**11**		**7.36**		**4.69**		**20.3**		**17.6**	
Perfluoropentanoic acid (PFPeA)	**17.7**		**10.3**		**2.94**		1.77	U	10	U	**5.56**	
Perfluorotetradecanoic acid (PFTeDA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
Perfluorotridecanoic acid (PFTrDA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
Perfluoroundecanoic acid (PFUdA)	2.01	U	1.79	U	1.88	U	1.77	U	10	U	1.85	U
1633 TPFAS	**371.93**		**272.01**		**125.54**		**80.54**		**219.1**		**324.6**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Current Firehouse MW

Analyte	125-04 Depth : 110.00 11/05/2024 ng/L		125-05 Depth : 170.00 11/05/2024 ng/L									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	21.6	U	30.2	U								
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	21.9	U	30.7	U								
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	114	U	160	U								
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	114	U	160	U								
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	22.9	U	32	U								
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	21.6	U	30.2	U								
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	21.4	U	29.9	U								
Fluorotelomer sulfonate 4:2 (4:2 FTS)	21.4	U	30	U								
Fluorotelomer sulfonate 6:2 (6:2 FTS)	21.7	U	30.4	U								
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	22.9	U	32	U								
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	5.71	U	8	U								
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.71	U	8	U								
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	57.1	U	80	U								
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	5.71	U	8	U								
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.71	U	8	U								
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	57.1	U	80	U								
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	11.4	U	16	U								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	10.2	U	14.2	U								
Perfluoro-3-methoxypropanoic acid (PFMPA)	11.4	U	16	U								
Perfluoro-4-methoxybutanoic acid (PFMBA)	11.4	U	16	U								
Perfluorobutanesulfonate (PFBS)	**32.1**		**10.8**									
Perfluorobutyric acid (PFBA)	22.9	U	32	U								
Perfluorodecanesulfonate (PFDS)	5.51	U	7.72	U								
Perfluorodecanoic acid (PFDA)	5.71	U	8	U								
Perfluorododecane sulfonic acid (PFDoS)	5.54	U	7.76	U								
Perfluorododecanoic acid (PFDoA)	5.71	U	8	U								
Perfluoroheptanesulfonate (PFHpS)	**7.35**		7.62	U								
Perfluoroheptanoic acid (PFHpA)	5.71	U	8	U								
Perfluorohexanesulfonate (PFHxS)	**240**		**43.6**									
Perfluorohexanoic acid (PFHxA)	**40.5**		8	U								
Perfluorononanesulfonate (PFNS)	5.5	U	7.7	U								
Perfluorononanoic acid (PFNA)	5.71	U	8	U								
Perfluorooctane sulfonamide (PFOSAm)	5.71	U	8	U								
Perfluorooctanesulfonate (PFOS)	**169**		**28.4**									
Perfluorooctanoic acid (PFOA)	**28.4**		8	U								
Perfluoropentanesulfonate (PFPeS)	**35.4**		**10.8**									
Perfluoropentanoic acid (PFPeA)	**9.56**		8	U								
Perfluorotetradecanoic acid (PFTeDA)	5.71	U	8	U								
Perfluorotridecanoic acid (PFTrDA)	5.71	U	8	U								
Perfluoroundecanoic acid (PFUdA)	5.71	U	8	U								
1633 TPFAS	**562.31**		**93.6**									

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	075-809 Depth : 37.50 02/01/2024 ng/L		075-809 Depth : 32.30 06/04/2024 ng/L		075-809 Depth : 32.52 07/01/2024 ng/L		075-809 Depth : 37.50 08/06/2024 ng/L		075-809 Depth : 35.50 10/11/2024 ng/L		075-810 Depth : 37.50 02/01/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.5	U	580	U	210	U	280	U	151	U	63	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.5	U	580	U	420	U	560	U	154	U	63	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	34	U	3600	U	1000	U	1400	U	800	U	390	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	34	U	3600	U	1000	U	1400	U	800	U	390	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	6.8	U	730	U	420	U	560	U	160	U	79	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.5	U	580	U	210	U	280	U	151	U	63	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.5	U	580	U	210	U	280	U	150	U	63	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.5	U	580	U	420	U	560	U	150	U	63	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.5	U	580	U	420	U	560	U	152	U	63	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.5	U	580	U	160	U	210	U	160	U	63	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	150	U	210	U	280	U	40	U	16	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	150	U	210	U	280	U	40	U	16	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	1500	U	1000	U	1400	U	400	U	160	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	150	U	210	U	280	U	40	U	16	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	150	U	210	U	280	U	40	U	16	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	1500	U	1000	U	1400	U	400	U	160	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.7	U	290	U	210	U	280	U	80	U	31	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.7	U	290	U	210	U	280	U	71.2	U	31	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.7	U	290	U	210	U	280	U	80	U	31	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.7	U	290	U	210	U	280	U	80	U	31	U
Perfluorobutanesulfonate (PFBS)	**4**		150	U	210	U	280	U	35.5	U	**17**	
Perfluorobutyric acid (PFBA)	**13**		580	U	30	J	560	U	160	U	24	J
Perfluorodecanesulfonate (PFDS)	1.4	U	150	U	210	U	280	U	38.6	U	16	U
Perfluorodecanoic acid (PFDA)	1.4	U	150	U	210	U	280	U	40	U	16	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	150	U	210	U	280	U	38.8	U	16	U
Perfluorododecanoic acid (PFDoA)	1.4	U	150	U	210	U	280	U	40	U	16	U
Perfluoroheptanesulfonate (PFHpS)	**19**		**620**		**770**		**670**		**216**		**29**	
Perfluoroheptanoic acid (PFHpA)	**3.2**		77	J	97	J	280	U	40	U	12	J
Perfluorohexanesulfonate (PFHxS)	**90**		**7200**		**7700**		**1600**		**1610**		**1100**	
Perfluorohexanoic acid (PFHxA)	**19**		**170**		**220**		86	J	**84.6**		**110**	
Perfluorononanesulfonate (PFNS)	1.4	U	150	U	210	U	280	U	38.5	U	16	U
Perfluorononanoic acid (PFNA)	1.3	J	150	U	210	U	280	U	40	U	16	
Perfluorooctane sulfonamide (PFOSAm)	**2.3**		150	U	210	U	280	U	40	U	3.2	J
Perfluorooctanesulfonate (PFOS)	**460**	D	**17000**		**24000**		**11000**		**8960**	D	**1200**	
Perfluorooctanoic acid (PFOA)	**23**		**940**		**1600**		**430**		**395**		**140**	
Perfluoropentanesulfonate (PFPeS)	**4.5**		66	J	74	J	280	U	37.6	U	**20**	
Perfluoropentanoic acid (PFPeA)	**9.4**		290	U	210	U	280	U	40	U	29	J
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	150	U	210	U	280	U	40	U	16	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	150	U	210	U	280	U	40	U	16	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	150	U	210	U	280	U	40	U	16	U
1633 TPFAS	**648.7**		**26073**		**34491**		**13786**		**11265.6**		**2700.2**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	075-810 Depth : 32.38 06/04/2024 ng/L		075-810 Depth : 32.53 07/02/2024 ng/L		075-810 Depth : 37.50 10/10/2024 ng/L		075-811 Depth : 37.50 02/01/2024 ng/L		075-811 Depth : 33.14 06/04/2024 ng/L		075-811 Depth : 33.33 07/01/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	63	U	25	U	37.8	U	63	U	580	U	210	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	63	U	51	U	38.4	U	63	U	580	U	420	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	400	U	130	U	200	U	390	U	3600	U	1000	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	400	U	130	U	200	U	390	U	3600	U	1000	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	79	U	51	U	40	U	79	U	730	U	420	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	63	U	25	U	37.8	U	63	U	580	U	210	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	63	U	25	U	37.4	U	63	U	580	U	210	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	63	U	51	U	37.5	U	63	U	580	U	420	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	63	U	51	U	38	U	63	U	580	U	420	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	63	U	19	U	40	U	63	U	580	U	160	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	16	U	25	U	10	U	16	U	150	U	210	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	16	U	25	U	10	U	16	U	150	U	210	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	160	U	130	U	100	U	160	U	1500	U	1000	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	16	U	25	U	10	U	16	U	150	U	210	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	16	U	25	U	10	U	16	U	150	U	210	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	160	U	130	U	100	U	160	U	1500	U	1000	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	32	U	25	U	20	U	32	U	290	U	210	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	32	U	25	U	17.8	U	32	U	290	U	210	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	32	U	25	U	20	U	32	U	290	U	210	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	32	U	25	U	20	U	32	U	290	U	210	U
Perfluorobutanesulfonate (PFBS)	**34**		**27**		**17.1**		**26**		110	J	110	J
Perfluorobutyric acid (PFBA)	26	J	22	J	40	U	31	J	70	J	79	J
Perfluorodecanesulfonate (PFDS)	16	U	25	U	9.65	U	16	U	150	U	210	U
Perfluorodecanoic acid (PFDA)	16	U	25	U	10	U	16	U	150	U	210	U
Perfluorododecane sulfonic acid (PFDoS)	16	U	25	U	9.7	U	16	U	150	U	210	U
Perfluorododecanoic acid (PFDoA)	16	U	25	U	10	U	16	U	150	U	210	U
Perfluoroheptanesulfonate (PFHpS)	**160**		**120**		**76.3**		**33**		110	J	210	U
Perfluoroheptanoic acid (PFHpA)	**22**		**26**		**16.8**		**64**		140	J	86	J
Perfluorohexanesulfonate (PFHxS)	**1600**		**1800**		**1060**	D	**1700**		**15000**		**7500**	
Perfluorohexanoic acid (PFHxA)	**160**		**160**		**120**		**530**		**2300**		**1700**	
Perfluorononanesulfonate (PFNS)	16	U	25	U	9.62	U	16	U	150	U	210	U
Perfluorononanoic acid (PFNA)	8.4	J	8.1	J	10	U	11	J	150	U	210	U
Perfluorooctane sulfonamide (PFOSAm)	4.1	J	25	U	10	U	**770**		**1600**		**1400**	
Perfluorooctanesulfonate (PFOS)	**4800**		**4800**		**3510**	D	**1400**		**2200**		**1600**	
Perfluorooctanoic acid (PFOA)	**230**		**270**		**451**		**360**		**1600**		**1200**	
Perfluoropentanesulfonate (PFPeS)	**45**		**40**		**34.4**		**33**		76	J	69	J
Perfluoropentanoic acid (PFPeA)	**38**		**32**		**17.7**		**76**		240	J	190	J
Perfluorotetradecanoic acid (PFTeDA)	16	U	25	U	10	U	16	U	150	U	210	U
Perfluorotridecanoic acid (PFTrDA)	16	U	25	U	10	U	16	U	150	U	210	U
Perfluoroundecanoic acid (PFUdA)	16	U	25	U	10	U	16	U	150	U	210	U
1633 TPFAS	**7127.5**		**7305.1**		**5303.3**		**5034**		**23446**		**13934**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	075-811 Depth : 37.50 10/10/2024 ng/L		075-87 Depth : 107.50 02/05/2024 ng/L		075-87 Depth : 107.50 07/10/2024 ng/L		085-350 Depth : 34.50 02/05/2024 ng/L		085-350 Depth : 34.50 07/24/2024 ng/L		085-384 Depth : 37.50 02/07/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	75.6	U	5.6	U	1.9	U	5.8	U	1.6	U	6.9	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.8	U	5.6	U	3.8	U	5.8	U	3.1	U	6.9	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	400	U	35	U	9.5	U	36	U	7.8	U	43	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	400	U	35	U	9.5	U	36	U	7.8	U	43	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	80	U	7	U	3.8	U	7.2	U	3.1	U	8.6	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	75.6	U	5.6	U	1.9	U	5.8	U	1.6	U	6.9	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	74.8	U	5.6	U	1.9	U	5.8	U	1.6	U	6.9	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	75	U	5.6	U	3.8	U	5.8	U	3.1	U	6.9	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	76	U	5.6	U	3.8	U	5.8	U	3.1	U	6.9	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	80	U	5.6	U	1.4	U	5.8	U	1.2	U	6.9	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	200	U	14	U	9.5	U	14	U	7.8	U	17	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	200	U	14	U	9.5	U	14	U	7.8	U	17	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40	U	2.8	U	1.9	U	2.9	U	1.6	U	3.4	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	35.6	U	2.8	U	1.9	U	2.9	U	1.6	U	3.4	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	40	U	2.8	U	1.9	U	2.9	U	1.6	U	3.4	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	40	U	2.8	U	1.9	U	2.9	U	1.6	U	3.4	U
Perfluorobutanesulfonate (PFBS)	**33.4**		1.3	J	1.9	U	1.3	J	1.6		**8.8**	
Perfluorobutyric acid (PFBA)	80	U	2.8	J	**3.9**		4.7	J	**3.8**		5.6	J
Perfluorodecanesulfonate (PFDS)	19.3	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
Perfluorodecanoic acid (PFDA)	20	U	0.29	J	1.9	U	1.4	U	1.6	U	0.6	J
Perfluorododecane sulfonic acid (PFDoS)	19.4	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
Perfluorododecanoic acid (PFDoA)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
Perfluoroheptanesulfonate (PFHpS)	**36.3**		1.4	U	1.9	U	1.4	U	1.6	U	**2.5**	
Perfluoroheptanoic acid (PFHpA)	**71.1**		1.2	J	1.9		0.65	J	**1.9**		**3.4**	
Perfluorohexanesulfonate (PFHxS)	**4280**	D	**6.2**		**3.8**		0.96	J	**3.6**		**19**	
Perfluorohexanoic acid (PFHxA)	**752**		**2.8**		**4.2**		1	J	**1.8**		**6.2**	
Perfluorononanesulfonate (PFNS)	19.2	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
Perfluorononanoic acid (PFNA)	20	U	1	J	1.7	J	1.4	U	1.6	U	**2.7**	
Perfluorooctane sulfonamide (PFOSAm)	**288**		1.4	U	1.9	U	1.4	U	1.6	U	0.93	J
Perfluorooctanesulfonate (PFOS)	**1290**		**7.5**		**7.6**		**3.1**		**33**		**110**	
Perfluorooctanoic acid (PFOA)	**608**		**7.6**		**7.4**		**1.9**		**8.1**		**14**	
Perfluoropentanesulfonate (PFPeS)	**42.7**		0.87	J	1.9	U	1.4	U	1.6	U	1.2	J
Perfluoropentanoic acid (PFPeA)	**61.9**		2.1	J	**2.4**		0.82	J	1.6	U	**4.6**	
Perfluorotetradecanoic acid (PFTeDA)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
Perfluorotridecanoic acid (PFTrDA)	20	U	1.4	U	1.9	U	1.4	U	1.6	U	1.7	U
Perfluoroundecanoic acid (PFUdA)	20	U	1.2	J	1.9	U	1.4	U	1.6	U	0.74	J
1633 TPFAS	**7463.4**		**34.86**		**32.9**		**14.43**		**53.8**		**180.27**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	085-384 Depth : 27.50 07/10/2024 ng/L		085-404 Depth : 37.50 01/29/2024 ng/L		085-404 Depth : 37.50 06/04/2024 ng/L		085-404 Depth : 40.00 07/09/2024 ng/L		085-404 Depth : 37.50 10/10/2024 ng/L		085-405 Depth : 55.00 01/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	1.9	U	5.8	U	6.1	U	1.8	U	7.02	U	6.4	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	3.7	U	5.8	U	6.1	U	3.6	U	7.13	U	6.4	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	9.4	U	36	U	38	U	9	U	37.1	U	40	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	9.4	U	36	U	38	U	9	U	37.1	U	40	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	3.7	U	7.3	U	7.6	U	3.6	U	7.43	U	8	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	1.9	U	5.8	U	6.1	U	1.8	U	7.02	U	6.4	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	1.9	U	5.8	U	6.1	U	1.8	U	6.95	U	6.4	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	3.7	U	5.8	U	6.1	U	3.6	U	6.97	U	6.4	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	3.7	U	5.8	U	6.1	U	3.6	U	7.06	U	6.4	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	1.4	U	5.8	U	6.1	U	1.4	U	7.43	U	6.4	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	9.4	U	15	U	15	U	9	U	18.6	U	16	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	9.4	U	15	U	15	U	9	U	18.6	U	16	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.9	U	2.9	U	3	U	1.8	U	3.71	U	3.2	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.9	U	2.9	U	3	U	1.8	U	3.31	U	3.2	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.9	U	2.9	U	3	U	1.8	U	3.71	U	3.2	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.9	U	2.9	U	3	U	1.8	U	3.71	U	3.2	U
Perfluorobutanesulfonate (PFBS)	**5.9**		**2.3**		**1.9**		**2.6**		**2.36**		**3.2**	
Perfluorobutyric acid (PFBA)	**6.3**		**7.7**		**11**		**9.2**		7.43	U	**25**	
Perfluorodecanesulfonate (PFDS)	1.9	U	1.5	U	1.5	U	1.8	U	1.79	U	1.6	U
Perfluorodecanoic acid (PFDA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
Perfluorododecane sulfonic acid (PFDoS)	1.9	U	1.5	U	1.5	U	1.8	U	1.8	U	1.6	U
Perfluorododecanoic acid (PFDoA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
Perfluoroheptanesulfonate (PFHpS)	1.9	U	1.2	J	1.5	U	1.8	U	1.77	U	1.6	U
Perfluoroheptanoic acid (PFHpA)	**3.7**		**4.7**		**3.8**		**4**		**2.7**		**5**	
Perfluorohexanesulfonate (PFHxS)	**13**		**21**		**22**		**23**		**15.7**		**11**	
Perfluorohexanoic acid (PFHxA)	**3.6**		**7.2**		**7.4**		**7**		**8.01**		**7.1**	
Perfluorononanesulfonate (PFNS)	1.9	U	1.5	U	1.5	U	1.8	U	1.79	U	1.6	U
Perfluorononanoic acid (PFNA)	**6.3**		**2**		1.2	J	**1.9**		1.86	U	**19**	
Perfluorooctane sulfonamide (PFOSAm)	0.62	J	1.5	U	0.15	J	**2**		1.86	U	1.6	U
Perfluorooctanesulfonate (PFOS)	**110**		**16**		**12**		**13**		**14.4**		**17**	
Perfluorooctanoic acid (PFOA)	**22**		**14**		**11**		**16**		**11.8**		**13**	
Perfluoropentanesulfonate (PFPeS)	1.9	U	0.45	J	0.49	J	1.8	U	1.75	U	0.54	J
Perfluoropentanoic acid (PFPeA)	**3.6**		**6.5**		**4.1**		**4.4**		**2.29**		**8.2**	
Perfluorotetradecanoic acid (PFTeDA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
Perfluorotridecanoic acid (PFTrDA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
Perfluoroundecanoic acid (PFUdA)	1.9	U	1.5	U	1.5	U	1.8	U	1.86	U	1.6	U
1633 TPFAS	**175.02**		**83.05**		**75.04**		**83.1**		**57.26**		**109.04**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	085-405 Depth : 55.00 06/04/2024 ng/L		085-405 Depth : 55.00 07/09/2024 ng/L		085-405 Depth : 55.00 10/09/2024 ng/L		085-406 Depth : 37.50 01/29/2024 ng/L		085-406 Depth : 35.00 06/05/2024 ng/L		085-406 Depth : 37.50 07/02/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.7	U	1.8	U	6.58	U	5.5	U	5.8	U	2	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.7	U	3.7	U	6.68	U	5.5	U	5.8	U	4	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	9.2	U	34.8	U	35	U	36	U	9.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	9.2	U	34.8	U	35	U	36	U	9.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.2	U	3.7	U	6.96	U	6.9	U	7.2	U	4	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.7	U	1.8	U	6.58	U	5.5	U	5.8	U	2	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.7	U	1.8	U	6.51	U	5.5	U	5.8	U	2	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.7	U	3.7	U	6.52	U	5.5	U	5.8	U	4	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.7	U	3.7	U	6.61	U	5.5	U	5.8	U	4	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.7	U	1.4	U	6.96	U	5.5	U	5.8	U	1.5	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	9.2	U	17.4	U	14	U	14	U	9.9	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	9.2	U	17.4	U	14	U	14	U	9.9	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.9	U	1.8	U	3.48	U	2.8	U	2.9	U	2	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.9	U	1.8	U	3.1	U	2.8	U	2.9	U	2	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.9	U	1.8	U	3.48	U	2.8	U	2.9	U	2	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.9	U	1.8	U	3.48	U	2.8	U	2.9	U	2	U
Perfluorobutanesulfonate (PFBS)	**1.8**		**2**		1.54	U	**3.9**		**2.1**		**2.2**	
Perfluorobutyric acid (PFBA)	**21**		**21**		**15.9**		**8.7**		**9.9**		**10**	
Perfluorodecanesulfonate (PFDS)	1.4	U	1.8	U	1.68	U	1.4	U	1.4	U	2	U
Perfluorodecanoic acid (PFDA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	1.8	U	1.69	U	1.4	U	1.4	U	2	U
Perfluorododecanoic acid (PFDoA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
Perfluoroheptanesulfonate (PFHpS)	1.4	U	1.8	U	1.66	U	**7.9**		**2.5**		**2.7**	
Perfluoroheptanoic acid (PFHpA)	**5.1**		**4.2**		**1.75**		**4.7**		1.4		1.8	J
Perfluorohexanesulfonate (PFHxS)	**20**		**18**		**5.05**		**200**		**20**		**33**	
Perfluorohexanoic acid (PFHxA)	**6.5**		**7.6**		**5.79**		**31**		**3.5**		**6.3**	
Perfluorononanesulfonate (PFNS)	1.4	U	1.8	U	1.67	U	1.4	U	1.4	U	2	U
Perfluorononanoic acid (PFNA)	1.3	J	1.6	J	1.74	U	1.3	J	0.52	J	2	U
Perfluorooctane sulfonamide (PFOSAm)	0.14	J	1.8	U	1.74	U	**3.2**		0.8	J	2	U
Perfluorooctanesulfonate (PFOS)	**7.7**		**9.3**		**4.65**		**290**		**62**		**92**	
Perfluorooctanoic acid (PFOA)	**11**		**10**		**5.04**		**30**		**11**		**15**	
Perfluoropentanesulfonate (PFPeS)	0.49	J	1.8	U	1.64	U	**3.3**		0.59	J	0.69	J
Perfluoropentanoic acid (PFPeA)	**3.9**		**4.4**		**2.51**		**7**		1.2	J	1.8	J
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	1.8	U	1.74	U	1.4	U	1.4	U	2	U
1633 TPFAS	**78.93**		**78.1**		**40.69**		**591**		**115.51**		**165.49**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	085-406 Depth : 37.50 10/10/2024 ng/L		085-407 Depth : 55.00 01/29/2024 ng/L		085-407 Depth : 55.00 06/05/2024 ng/L		085-407 Depth : 55.00 07/02/2024 ng/L		085-407 Depth : 55.00 10/09/2024 ng/L		085-408 Depth : 65.00 01/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.67	U	6.7	U	5.8	U	2	U	7.53	U	5.8	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.78	U	6.7	U	5.8	U	3.9	U	7.65	U	5.8	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	35.3	U	42	U	36	U	9.8	U	39.9	U	36	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	35.3	U	42	U	36	U	9.8	U	39.9	U	36	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.06	U	8.3	U	7.2	U	3.9	U	7.97	U	7.2	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.67	U	6.7	U	5.8	U	2	U	7.53	U	5.8	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.6	U	6.7	U	5.8	U	2	U	7.45	U	5.8	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.62	U	6.7	U	5.8	U	3.9	U	7.47	U	5.8	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.71	U	6.7	U	5.8	U	3.9	U	7.57	U	5.8	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.06	U	6.7	U	5.8	U	1.5	U	7.97	U	5.8	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	17.7	U	17	U	14	U	9.8	U	19.9	U	14	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	17.7	U	17	U	14	U	9.8	U	19.9	U	14	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.53	U	3.3	U	2.9	U	2	U	3.99	U	2.9	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.14	U	3.3	U	2.9	U	2	U	3.55	U	2.9	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.53	U	3.3	U	2.9	U	2	U	3.99	U	2.9	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.53	U	3.3	U	2.9	U	2	U	3.99	U	2.9	U
Perfluorobutanesulfonate (PFBS)	**2.32**		0.82	J	1.3	J	1.7	J	1.77	U	0.99	J
Perfluorobutyric acid (PFBA)	**7.23**		3.6	J	4.5	J	**5**		7.97	U	4.1	J
Perfluorodecanesulfonate (PFDS)	1.7	U	1.7	U	1.4	U	2	U	1.92	U	1.4	U
Perfluorodecanoic acid (PFDA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
Perfluorododecane sulfonic acid (PFDoS)	1.71	U	1.7	U	1.4	U	2	U	1.93	U	1.4	U
Perfluorododecanoic acid (PFDoA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
Perfluoroheptanesulfonate (PFHpS)	**2.58**		1.7	U	0.55	J	2	U	1.9	U	1.4	U
Perfluoroheptanoic acid (PFHpA)	**2.09**		1.5	J	**1.9**		1.9	J	1.99	U	**1.7**	
Perfluorohexanesulfonate (PFHxS)	**21.6**		**14**		**16**		**17**		**6.04**		**9.3**	
Perfluorohexanoic acid (PFHxA)	**8.92**		**6.3**		**6.3**		**8.3**		**3.17**		**5.4**	
Perfluorononanesulfonate (PFNS)	1.7	U	1.7	U	1.4	U	2	U	1.92	U	1.4	U
Perfluorononanoic acid (PFNA)	1.77	U	0.77	J	0.76	J	0.88	J	1.99	U	0.67	J
Perfluorooctane sulfonamide (PFOSAm)	1.77	U	**36**		**27**		**24**		**14**		**6.4**	
Perfluorooctanesulfonate (PFOS)	**87.6**		**15**		**19**		**38**		**17.2**		**9.3**	
Perfluorooctanoic acid (PFOA)	**10.5**		**6.5**		**6.2**		**8.9**		**3.04**		**4.8**	
Perfluoropentanesulfonate (PFPeS)	1.66	U	0.42	J	0.64	J	0.74	J	1.87	U	0.34	J
Perfluoropentanoic acid (PFPeA)	**1.94**		1.8	J	2.2	J	**2.7**		1.99	U	1.9	J
Perfluorotetradecanoic acid (PFTeDA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
Perfluorotridecanoic acid (PFTrDA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
Perfluoroundecanoic acid (PFUdA)	1.77	U	1.7	U	1.4	U	2	U	1.99	U	1.4	U
1633 TPFAS	**144.78**		**86.71**		**86.35**		**109.12**		**43.45**		**44.9**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	085-408 Depth : 65.00 06/05/2024 ng/L		085-408 Depth : 65.00 07/02/2024 ng/L		085-408 Depth : 65.00 10/09/2024 ng/L		085-409 Depth : 37.50 01/29/2024 ng/L		085-409 Depth : 37.50 06/04/2024 ng/L		085-409 Depth : 40.00 07/09/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.8	U	2	U	6.55	U	5.9	U	6	U	1.8	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.8	U	3.9	U	6.65	U	5.9	U	6	U	3.7	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	9.8	U	34.6	U	37	U	37	U	9.2	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	9.8	U	34.6	U	37	U	37	U	9.2	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.2	U	3.9	U	6.93	U	7.3	U	7.5	U	3.7	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.8	U	2	U	6.55	U	5.9	U	6	U	1.8	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.8	U	2	U	6.48	U	5.9	U	6	U	1.8	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.8	U	3.9	U	6.5	U	5.9	U	6	U	3.7	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.8	U	3.9	U	6.58	U	5.9	U	6	U	3.7	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.8	U	1.5	U	6.93	U	5.9	U	6	U	1.4	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	9.8	U	17.3	U	15	U	15	U	9.2	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	9.8	U	17.3	U	15	U	15	U	9.2	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.9	U	2	U	3.46	U	2.9	U	3	U	1.8	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.9	U	2	U	3.08	U	2.9	U	3	U	1.8	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.9	U	2	U	3.46	U	2.9	U	3	U	1.8	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.9	U	2	U	3.46	U	2.9	U	3	U	1.8	U
Perfluorobutanesulfonate (PFBS)	0.91	J	1.1	J	1.54	U	**5.4**		**5.1**		**2.6**	
Perfluorobutyric acid (PFBA)	4.3	J	**5.1**		6.93	U	**6.4**		**6.1**		**6.3**	
Perfluorodecanesulfonate (PFDS)	1.4	U	2	U	1.67	U	1.5	U	1.5	U	1.8	U
Perfluorodecanoic acid (PFDA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	2	U	1.68	U	1.5	U	1.5	U	1.8	U
Perfluorododecanoic acid (PFDoA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	1.4	U	0.82	J	1.65	U	1.5	U	1.5	U	1.8	U
Perfluoroheptanoic acid (PFHpA)	1	J	1.7	J	1.73	U	**1.9**		**1.6**		**3.6**	
Perfluorohexanesulfonate (PFHxS)	**6.1**		**27**		**12**		**5.3**		**5.3**		**4.2**	
Perfluorohexanoic acid (PFHxA)	**3**		**6.3**		**3.84**		**2.1**		**2.2**		**3.5**	
Perfluorononanesulfonate (PFNS)	1.4	U	2	U	1.67	U	1.5	U	1.5	U	1.8	U
Perfluorononanoic acid (PFNA)	0.67	J	1.1	J	1.73	U	0.4	J	0.4	J	1.8	U
Perfluorooctane sulfonamide (PFOSAm)	**5.8**		**4.7**		**2.41**		1.5	U	1.5	U	1.8	U
Perfluorooctanesulfonate (PFOS)	**12**		**37**		**18.2**		**6.6**		**6.6**		**6.9**	
Perfluorooctanoic acid (PFOA)	**3.6**		**9.9**		**5.88**		**4.6**		**5.1**		**12**	
Perfluoropentanesulfonate (PFPeS)	0.4	J	0.75	J	1.63	U	0.29	J	0.27	J	1.8	U
Perfluoropentanoic acid (PFPeA)	1.8	J	**2.4**		1.73	U	0.87	J	1.5	J	**3.3**	
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	2	U	1.73	U	1.5	U	1.5	U	1.8	U
1633 TPFAS	**39.58**		**97.87**		**42.33**		**33.86**		**34.17**		**42.4**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	085-409 Depth : 37.50 10/10/2024 ng/L		085-410 Depth : 55.00 06/04/2024 ng/L		085-410 Depth : 55.00 07/09/2024 ng/L		085-410 Depth : 55.00 10/10/2024 ng/L		085-411 Depth : 55.00 02/01/2024 ng/L		085-411 Depth : 55.00 07/26/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.97	U	5.6	U	1.9	U	6.98	U	63	U	1.9	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.08	U	5.6	U	3.7	U	7.09	U	63	U	3.7	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36.9	U	35	U	9.3	U	36.9	U	390	U	9.3	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36.9	U	35	U	9.3	U	36.9	U	390	U	9.3	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.38	U	7	U	3.7	U	7.39	U	79	U	3.7	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.97	U	5.6	U	1.9	U	6.98	U	63	U	1.9	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.9	U	5.6	U	1.9	U	6.91	U	63	U	1.9	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.92	U	5.6	U	3.7	U	6.93	U	63	U	3.7	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	7.01	U	5.6	U	3.7	U	7.02	U	63	U	3.7	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	7.38	U	5.6	U	1.4	U	7.39	U	63	U	1.4	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	18.4	U	14	U	9.3	U	18.5	U	160	U	9.3	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	18.4	U	14	U	9.3	U	18.5	U	160	U	9.3	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.69	U	2.8	U	1.9	U	3.69	U	31	U	1.9	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.28	U	2.8	U	1.9	U	3.29	U	31	U	1.9	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.69	U	2.8	U	1.9	U	3.69	U	31	U	1.9	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.69	U	2.8	U	1.9	U	3.69	U	31	U	1.9	U
Perfluorobutanesulfonate (PFBS)	1.64	U	**2.4**		**2.6**		**1.97**		9	J	**7.4**	
Perfluorobutyric acid (PFBA)	7.38	U	**7.7**		**7.7**		7.39	U	12	J	**13**	
Perfluorodecanesulfonate (PFDS)	1.78	U	1.4	U	1.9	U	1.78	U	16	U	1.9	U
Perfluorodecanoic acid (PFDA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
Perfluorododecane sulfonic acid (PFDoS)	1.79	U	1.4	U	1.9	U	1.79	U	16	U	1.9	U
Perfluorododecanoic acid (PFDoA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
Perfluoroheptanesulfonate (PFHpS)	1.76	U	**5.1**		**3.3**		**4.7**		14	J	**15**	
Perfluoroheptanoic acid (PFHpA)	**2.27**		**1.7**		**2**		**1.88**		**28**		**18**	
Perfluorohexanesulfonate (PFHxS)	**5.03**		**57**		**56**		**52.1**		**990**		**660**	
Perfluorohexanoic acid (PFHxA)	**2.38**		**9.9**		**9.4**		**10.6**		**170**		**120**	
Perfluorononanesulfonate (PFNS)	1.77	U	1.4	U	1.9	U	1.78	U	16	U	1.9	U
Perfluorononanoic acid (PFNA)	1.84	U	0.5	J	1.9	U	1.85	U	3.1	J	**3.5**	
Perfluorooctane sulfonamide (PFOSAm)	1.84	U	**2.2**		**2.6**		1.85	U	**68**		1.9	U
Perfluorooctanesulfonate (PFOS)	**4.99**		**120**		**110**		**120**		**510**		**450**	
Perfluorooctanoic acid (PFOA)	**12**		**8.4**		**14**		**9.77**		**430**		**350**	
Perfluoropentanesulfonate (PFPeS)	1.74	U	**2.7**		**2.1**		**3.13**		14	J	**7.9**	
Perfluoropentanoic acid (PFPeA)	1.84	U	2.8		**2.7**		**2.41**		23	J	**19**	
Perfluorotetradecanoic acid (PFTeDA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
Perfluorotridecanoic acid (PFTrDA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
Perfluoroundecanoic acid (PFUdA)	1.84	U	1.4	U	1.9	U	1.85	U	16	U	1.9	U
1633 TPFAS	**26.67**		**220.4**		**212.4**		**206.56**		**2271.1**		**1663.8**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	085-412 Depth : 95.00 02/01/2024 ng/L		085-412 Depth : 95.00 07/26/2024 ng/L		085-43 Depth : 26.00 01/31/2024 ng/L		085-43 Depth : 26.00 07/19/2024 ng/L		086-123 Depth : 34.50 02/05/2024 ng/L		086-123 Depth : 34.50 07/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.1	U	1.6	U	6.1	U	1.4	U	5.8	U	1.5	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.1	U	3.2	U	6.1	U	2.8	U	5.8	U	3	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	38	U	7.9	U	38	U	6.9	U	36	U	7.6	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	38	U	7.9	U	38	U	6.9	U	36	U	7.6	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.6	U	3.2	U	7.6	U	2.8	U	7.2	U	3	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.1	U	1.6	U	6.1	U	1.4	U	5.8	U	1.5	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.1	U	1.6	U	6.1	U	1.4	U	5.8	U	1.5	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.1	U	3.2	U	6.1	U	2.8	U	5.8	U	3	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.1	U	3.2	U	6.1	U	2.8	U	5.8	U	3	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	6.1	U	1.2	U	6.1	U	1	U	5.8	U	1.1	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	15	U	7.9	U	15	U	6.9	U	14	U	7.6	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	15	U	7.9	U	15	U	6.9	U	14	U	7.6	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.1	U	1.6	U	3	U	1.4	U	2.9	U	1.5	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.1	U	1.6	U	3	U	1.4	U	2.9	U	1.5	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.1	U	1.6	U	3	U	1.4	U	2.9	U	1.5	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.1	U	1.6	U	3	U	1.4	U	2.9	U	1.5	U
Perfluorobutanesulfonate (PFBS)	**1.9**		1.4	J	**2.7**		1.4	U	0.98	J	1.3	J
Perfluorobutyric acid (PFBA)	5.1	J	**4.5**		**11**		**6.1**		4.2	J	**7.7**	
Perfluorodecanesulfonate (PFDS)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluorodecanoic acid (PFDA)	0.11	J	1.6	U	0.25	J	1.4	U	1.4	U	1.5	U
Perfluorododecane sulfonic acid (PFDoS)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluorododecanoic acid (PFDoA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluoroheptanesulfonate (PFHpS)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluoroheptanoic acid (PFHpA)	**1.6**		1.3	J	**3.6**		**3**		0.86	J	**3.9**	
Perfluorohexanesulfonate (PFHxS)	**22**		**9.3**		**4.4**		**2.8**		1.1	J	**5.9**	
Perfluorohexanoic acid (PFHxA)	**4.9**		**2.8**		**6.9**		**4.1**		1.2	J	**2.8**	
Perfluorononanesulfonate (PFNS)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluorononanoic acid (PFNA)	0.65	J	1.6	U	1.2	J	**2**		0.19	J	1.5	U
Perfluorooctane sulfonamide (PFOSAm)	1.5	U	1.6	U	1.5	U	0.32	J	1.4	U	**1.8**	
Perfluorooctanesulfonate (PFOS)	**7.8**		**5.4**		**16**		**47**		0.7	J	0.79	J
Perfluorooctanoic acid (PFOA)	**8.5**		**8.1**		**34**		**130**		**2.4**		**7.9**	
Perfluoropentanesulfonate (PFPeS)	0.71	J	0.53	J	0.23	J	1.4	U	1.4	U	0.47	J
Perfluoropentanoic acid (PFPeA)	2.2	J	1.6		**5.3**		**4.1**		0.84	J	**2.6**	
Perfluorotetradecanoic acid (PFTeDA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluorotridecanoic acid (PFTrDA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
Perfluoroundecanoic acid (PFUdA)	1.5	U	1.6	U	1.5	U	1.4	U	1.4	U	1.5	U
1633 TPFAS	**55.47**		**34.93**		**85.58**		**199.42**		**12.47**		**35.16**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	095-170 Depth : 50.00 02/05/2024 ng/L		095-170 Depth : 50.00 07/19/2024 ng/L		095-171 Depth : 50.00 01/31/2024 ng/L		095-171 Depth : 50.00 07/29/2024 ng/L		096-115 Depth : 90.00 02/06/2024 ng/L		096-115 Depth : 90.00 07/25/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.7	U	1.4	U	5.9	U	1.6	U	5.9	U	1.8	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.7	U	2.9	U	5.9	U	3.2	U	5.9	U	3.5	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	7.1	U	37	U	7.9	U	37	U	8.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	7.1	U	37	U	7.9	U	37	U	8.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.2	U	2.9	U	7.4	U	3.2	U	7.4	U	3.5	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.7	U	1.4	U	5.9	U	1.6	U	5.9	U	1.8	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.7	U	1.4	U	5.9	U	1.6	U	5.9	U	1.8	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.7	U	2.9	U	5.9	U	3.2	U	5.9	U	3.5	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.7	U	2.9	U	5.9	U	3.2	U	5.9	U	3.5	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.7	U	1.1	U	5.9	U	1.2	U	5.9	U	1.3	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	7.1	U	15	U	7.9	U	15	U	8.9	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	7.1	U	15	U	7.9	U	15	U	8.9	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.9	U	1.4	U	3	U	1.6	U	3	U	1.8	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.9	U	1.4	U	3	U	1.6	U	3	U	1.8	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.9	U	1.4	U	3	U	1.6	U	3	U	1.8	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.9	U	1.4	U	3	U	1.6	U	3	U	1.8	U
Perfluorobutanesulfonate (PFBS)	0.65	J	1.4	U	0.67	J	0.83	J	**2.4**		**2.1**	
Perfluorobutyric acid (PFBA)	**16**		**20**		**10**		**16**		**10**		**7.1**	
Perfluorodecanesulfonate (PFDS)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluorodecanoic acid (PFDA)	0.18	J	1.4	U	0.45	J	1.6	U	0.42	J	1.8	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluorododecanoic acid (PFDoA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluoroheptanesulfonate (PFHpS)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluoroheptanoic acid (PFHpA)	0.93	J	1.1	J	1.3	J	1.3	J	**4.3**		**3.6**	
Perfluorohexanesulfonate (PFHxS)	0.89	J	1.4	U	**1.7**		**2.5**		**10**		**4.1**	
Perfluorohexanoic acid (PFHxA)	**2.4**		**2.9**		**3.1**		**2.5**		**15**		**9.9**	
Perfluorononanesulfonate (PFNS)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluorononanoic acid (PFNA)	0.43	J	1.4	U	0.74	J	1.6	U	**1.6**		1.8	U
Perfluorooctane sulfonamide (PFOSAm)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluorooctanesulfonate (PFOS)	**2.9**		1.4	U	**5.8**		**5.7**		**9.4**		**11**	
Perfluorooctanoic acid (PFOA)	1.3	J	**2.9**		**3.6**		**3**		**5.1**		**5.6**	
Perfluoropentanesulfonate (PFPeS)	1.4	U	1.4	U	1.5	U	1.6	U	0.72	J	1.8	U
Perfluoropentanoic acid (PFPeA)	2.4	J	**2.8**		2.4	J	**2.5**		**13**		**6.9**	
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	1.4	U	1.5	U	1.6	U	1.5	U	1.8	U
1633 TPFAS	**28.08**		**29.7**		**29.76**		**34.33**		**71.94**		**50.3**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	096-117 Depth : 90.00 02/06/2024 ng/L		096-117 Depth : 90.00 07/25/2024 ng/L		096-118 Depth : 89.00 01/31/2024 ng/L		096-118 Depth : 89.00 07/25/2024 ng/L		096-122 Depth : 65.00 02/06/2024 ng/L		096-122 Depth : 65.00 07/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6.1	U	1.7	U	5.7	U	1.8	U	5.9	U	1.4	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6.1	U	3.5	U	5.7	U	3.5	U	5.9	U	2.8	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	38	U	8.7	U	36	U	8.8	U	37	U	6.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	38	U	8.7	U	36	U	8.8	U	37	U	6.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.6	U	3.5	U	7.1	U	3.5	U	7.4	U	2.8	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.1	U	1.7	U	5.7	U	1.8	U	5.9	U	1.4	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6.1	U	1.7	U	5.7	U	1.8	U	5.9	U	1.4	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6.1	U	3.5	U	5.7	U	3.5	U	5.9	U	2.8	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6.1	U	3.5	U	5.7	U	3.5	U	5.9	U	2.8	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	6.1	U	1.3	U	5.7	U	1.3	U	5.9	U	1	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	15	U	8.7	U	14	U	8.8	U	15	U	6.9	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	15	U	8.7	U	14	U	8.8	U	15	U	6.9	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.1	U	1.7	U	2.8	U	1.8	U	3	U	1.4	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.1	U	1.7	U	2.8	U	1.8	U	3	U	1.4	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.1	U	1.7	U	2.8	U	1.8	U	3	U	1.4	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.1	U	1.7	U	2.8	U	1.8	U	3	U	1.4	U
Perfluorobutanesulfonate (PFBS)	**1.7**		**2.2**		**3.3**		**3.8**		**4**		**5.2**	
Perfluorobutyric acid (PFBA)	5.8	J	**7.5**		**5.9**		**5.9**		**6.8**		**7.6**	
Perfluorodecanesulfonate (PFDS)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
Perfluorodecanoic acid (PFDA)	0.53	J	1.7	U	0.28	J	1.8	U	1.5	U	1.4	U
Perfluorododecane sulfonic acid (PFDoS)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
Perfluorododecanoic acid (PFDoA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
Perfluoroheptanesulfonate (PFHpS)	1.5	U	1.7	U	**2.8**		1.8	U	**3.6**		**7.5**	
Perfluoroheptanoic acid (PFHpA)	**1.7**		1.7		**6.6**		**2.5**		**8**		**16**	
Perfluorohexanesulfonate (PFHxS)	**13**		**11**		**170**		**49**		**260**		**440**	
Perfluorohexanoic acid (PFHxA)	**3.3**		1.7	U	**42**		**9.3**		**49**		**85**	
Perfluorononanesulfonate (PFNS)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
Perfluorononanoic acid (PFNA)	**6.2**		**6**		**1.6**		**2.5**		1.2	J	**2.1**	
Perfluorooctane sulfonamide (PFOSAm)	0.27	J	1.7	U	**5.7**		**2.8**		**11**		**3.6**	
Perfluorooctanesulfonate (PFOS)	**18**		**19**		**110**		**91**		**130**		**220**	
Perfluorooctanoic acid (PFOA)	**5.6**		**9.1**		**62**		**15**		**93**		**230**	
Perfluoropentanesulfonate (PFPeS)	1.1	J	1.7	U	**3.4**		**2.9**		**4.9**		**9.7**	
Perfluoropentanoic acid (PFPeA)	2.6	J	**4.4**		**8.3**		**4.6**		**8.1**		**12**	
Perfluorotetradecanoic acid (PFTeDA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
Perfluorotridecanoic acid (PFTrDA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
Perfluoroundecanoic acid (PFUdA)	1.5	U	1.7	U	1.4	U	1.8	U	1.5	U	1.4	U
1633 TPFAS	**59.8**		**60.9**		**421.88**		**189.3**		**579.6**		**1038.7**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	096-123 Depth : 125.00 01/29/2024 ng/L		096-123 Depth : 125.00 07/12/2024 ng/L		096-124 Depth : 75.00 01/30/2024 ng/L		096-124 Depth : 75.00 07/19/2024 ng/L		096-125 Depth : 125.00 01/30/2024 ng/L		096-125 Depth : 135.00 07/19/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6	U	1.6	U	6.2	U	1.5	U	6.1	U	1.6	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6	U	3.3	U	6.2	U	3.1	U	6.1	U	3.1	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	37	U	8.2	U	39	U	7.6	U	38	U	7.8	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	37	U	8.2	U	39	U	7.6	U	38	U	7.8	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.5	U	3.3	U	7.7	U	3.1	U	7.6	U	3.1	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6	U	1.6	U	6.2	U	1.5	U	6.1	U	1.6	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6	U	1.6	U	6.2	U	1.5	U	6.1	U	1.6	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6	U	3.3	U	6.2	U	3.1	U	6.1	U	3.1	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6	U	3.3	U	6.2	U	3.1	U	6.1	U	3.1	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	6	U	1.2	U	6.2	U	1.1	U	6.1	U	1.2	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	15	U	8.2	U	15	U	7.6	U	15	U	7.8	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	15	U	8.2	U	15	U	7.6	U	15	U	7.8	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3	U	1.6	U	3.1	U	1.5	U	3	U	1.6	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3	U	1.6	U	3.1	U	1.5	U	3	U	1.6	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3	U	1.6	U	3.1	U	1.5	U	3	U	1.6	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3	U	1.6	U	3.1	U	1.5	U	3	U	1.6	U
Perfluorobutanesulfonate (PFBS)	**2.8**		**3.2**		0.96	J	**1.6**		1.4	J	1.6	U
Perfluorobutyric acid (PFBA)	5.5	J	**4.9**		3.8	J	**5.5**		4.8	J	**5.5**	
Perfluorodecanesulfonate (PFDS)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluorodecanoic acid (PFDA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluorododecane sulfonic acid (PFDoS)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluorododecanoic acid (PFDoA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluoroheptanesulfonate (PFHpS)	**1.9**		1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluoroheptanoic acid (PFHpA)	**1.8**		1.6		1.1	J	**2.2**		1.2	J	1.5	J
Perfluorohexanesulfonate (PFHxS)	**27**		**32**		**2.2**		**3.3**		**3.8**		**3.7**	
Perfluorohexanoic acid (PFHxA)	**5.5**		**4.4**		1.1	J	**3.5**		**2.1**		1.6	U
Perfluorononanesulfonate (PFNS)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluorononanoic acid (PFNA)	0.71	J	1.6	U	**60**		**100**		0.89	J	**11**	
Perfluorooctane sulfonamide (PFOSAm)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluorooctanesulfonate (PFOS)	**78**		**64**		**4**		**5.7**		**5.9**		**5.6**	
Perfluorooctanoic acid (PFOA)	**7.9**		**8.7**		**4.3**		**7.5**		**4.7**		**7.7**	
Perfluoropentanesulfonate (PFPeS)	**1.7**		**1.9**		1.5	U	1.5	U	0.37	J	1.6	U
Perfluoropentanoic acid (PFPeA)	2.3	J	**2**		1.4	J	**3.5**		2	J	**2.5**	
Perfluorotetradecanoic acid (PFTeDA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluorotridecanoic acid (PFTrDA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
Perfluoroundecanoic acid (PFUdA)	1.5	U	1.6	U	1.5	U	1.5	U	1.5	U	1.6	U
1633 TPFAS	**135.11**		**122.7**		**78.86**		**132.8**		**27.16**		**37.5**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	096-126 Depth : 60.00 02/06/2024 ng/L		096-126 Depth : 60.00 07/19/2024 ng/L		096-127 Depth : 115.00 02/06/2024 ng/L		096-127 Depth : 115.00 07/29/2024 ng/L		096-128 Depth : 60.00 02/06/2024 ng/L		096-128 Depth : 60.00 07/19/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	63	U	1.5	U	6.1	U	1.4	U	6.1	U	1.4	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	63	U	3	U	6.1	U	2.8	U	6.1	U	2.8	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	400	U	7.5	U	38	U	7	U	38	U	7.1	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	400	U	7.5	U	38	U	7	U	38	U	7.1	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	79	U	3	U	7.6	U	2.8	U	7.7	U	2.8	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	63	U	1.5	U	6.1	U	1.4	U	6.1	U	1.4	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	63	U	1.5	U	6.1	U	1.4	U	6.1	U	1.4	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	63	U	3	U	6.1	U	2.8	U	6.1	U	2.8	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	63	U	3	U	6.1	U	2.8	U	6.1	U	2.8	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	63	U	1.1	U	6.1	U	1.1	U	6.1	U	1.1	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	160	U	7.5	U	15	U	7	U	15	U	7.1	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	160	U	7.5	U	15	U	7	U	15	U	7.1	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	32	U	1.5	U	3	U	1.4	U	3.1	U	1.4	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	32	U	1.5	U	3	U	1.4	U	3.1	U	1.4	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	32	U	1.5	U	3	U	1.4	U	3.1	U	1.4	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	32	U	1.5	U	3	U	1.4	U	3.1	U	1.4	U
Perfluorobutanesulfonate (PFBS)	3.5	J	**3.8**		**2.9**		**4.8**		**2.2**		**4.4**	
Perfluorobutyric acid (PFBA)	6.3	J	**6.1**		5.9	J	**7.6**		5.5	J	**8.1**	
Perfluorodecanesulfonate (PFDS)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluorodecanoic acid (PFDA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluorododecane sulfonic acid (PFDoS)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluorododecanoic acid (PFDoA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluoroheptanesulfonate (PFHpS)	16	U	1.5	U	**4.6**		**6.1**		0.69	J	1.4	U
Perfluoroheptanoic acid (PFHpA)	16	U	**1.8**		**3.3**		**3.8**		**2.1**		**3.4**	
Perfluorohexanesulfonate (PFHxS)	**21**		**18**		**87**		**100**		**21**		**26**	
Perfluorohexanoic acid (PFHxA)	16	U	**3.6**		**13**		**15**		**3.7**		**9.9**	
Perfluorononanesulfonate (PFNS)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluorononanoic acid (PFNA)	3.5	J	**3.1**		1	J	**1.5**		**2**		1.4	U
Perfluorooctane sulfonamide (PFOSAm)	16	U	**1.7**		1.1	J	0.82	J	**2.9**		**2.3**	
Perfluorooctanesulfonate (PFOS)	**17**		**18**		**84**		**120**		**18**		**21**	
Perfluorooctanoic acid (PFOA)	16	U	**8.8**		**19**		**24**		**5.2**		**12**	
Perfluoropentanesulfonate (PFPeS)	16	U	1.5		**3.5**		**5.4**		1.4	J	1.4	U
Perfluoropentanoic acid (PFPeA)	32	U	**2.4**		**5.5**		**7.2**		1.7	J	**4.8**	
Perfluorotetradecanoic acid (PFTeDA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluorotridecanoic acid (PFTrDA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
Perfluoroundecanoic acid (PFUdA)	16	U	1.5	U	1.5	U	1.4	U	1.5	U	1.4	U
1633 TPFAS	**51.3**		**68.8**		**230.8**		**296.22**		**66.39**		**91.9**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	096-129 Depth : 115.00 02/06/2024 ng/L		096-129 Depth : 115.00 07/26/2024 ng/L		096-130 Depth : 60.00 01/31/2024 ng/L		096-130 Depth : 60.00 07/16/2024 ng/L		096-131 Depth : 115.00 01/31/2024 ng/L		096-131 Depth : 115.00 07/16/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.8	U	1.5	U	5.6	U	1.7	U	5.9	U	1.6	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.8	U	3.1	U	5.6	U	3.3	U	5.9	U	3.2	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	7.7	U	35	U	8.3	U	37	U	8	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	7.7	U	35	U	8.3	U	37	U	8	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.2	U	3.1	U	7	U	3.3	U	7.3	U	3.2	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.8	U	1.5	U	5.6	U	1.7	U	5.9	U	1.6	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.8	U	1.5	U	5.6	U	1.7	U	5.9	U	1.6	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.8	U	3.1	U	5.6	U	3.3	U	5.9	U	3.2	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.8	U	3.1	U	5.6	U	3.3	U	5.9	U	3.2	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.8	U	1.2	U	5.6	U	1.2	U	5.9	U	1.2	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	7.7	U	14	U	8.3	U	15	U	8	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	7.7	U	14	U	8.3	U	15	U	8	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.9	U	1.5	U	2.8	U	1.7	U	2.9	U	1.6	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.9	U	1.5	U	2.8	U	1.7	U	2.9	U	1.6	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.9	U	1.5	U	2.8	U	1.7	U	2.9	U	1.6	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.9	U	1.5	U	2.8	U	1.7	U	2.9	U	1.6	U
Perfluorobutanesulfonate (PFBS)	**3.5**		0.97	J	0.84	J	1.7	U	0.77	J	1.6	U
Perfluorobutyric acid (PFBA)	4.3	J	2.4	J	4.5	J	**3.7**		3.5	J	**3.9**	
Perfluorodecanesulfonate (PFDS)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluorodecanoic acid (PFDA)	1.4	U	1.5	U	0.49	J	1.7	U	1.5	U	1.6	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluorododecanoic acid (PFDoA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluoroheptanesulfonate (PFHpS)	**2.9**		**3.1**		1.4	U	1.7	U	1.5	U	1.6	U
Perfluoroheptanoic acid (PFHpA)	**1.7**		1.1	J	**2**		1.3	J	1.4	J	0.69	J
Perfluorohexanesulfonate (PFHxS)	**51**		**56**		**9**		**10**		**2.2**		**3.1**	
Perfluorohexanoic acid (PFHxA)	**4.4**		**4.4**		**2.4**		**2**		**1.6**		1.4	J
Perfluorononanesulfonate (PFNS)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluorononanoic acid (PFNA)	0.8	J	0.74	J	**8.2**		**59**		**66**		**46**	
Perfluorooctane sulfonamide (PFOSAm)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluorooctanesulfonate (PFOS)	**54**		**26**		**4.2**		**9.6**		**2.3**		**3.8**	
Perfluorooctanoic acid (PFOA)	**9**		**11**		**5.2**		**6.3**		**4.3**		**4.1**	
Perfluoropentanesulfonate (PFPeS)	**2.4**		**2.7**		0.44	J	1.7	U	1.5	U	1.6	U
Perfluoropentanoic acid (PFPeA)	1.7	J	1.2	J	1.8	J	1.7		0.99	J	1	J
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	1.5	U	1.4	U	1.7	U	1.5	U	1.6	U
1633 TPFAS	**135.7**		**109.61**		**39.07**		**93.6**		**83.06**		**63.99**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	096-84 Depth : 133.50 02/02/2024 ng/L		096-84 Depth : 133.50 07/17/2024 ng/L		105-43 Depth : 147.50 01/26/2024 ng/L		105-43 Depth : 147.50 07/26/2024 ng/L		105-44 Depth : 152.50 01/24/2024 ng/L		105-44 Depth : 152.50 07/17/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	6	U	1.6	U	6.1	U	1.6	U	6	U	1.5	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	6	U	3.2	U	6.1	U	3.2	U	6	U	3.1	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	37	U	8	U	38	U	8	U	37	U	7.6	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	37	U	8	U	38	U	8	U	37	U	7.6	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.5	U	3.2	U	7.6	U	3.2	U	7.5	U	3.1	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6	U	1.6	U	6.1	U	1.6	U	6	U	1.5	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	6	U	1.6	U	6.1	U	1.6	U	6	U	1.5	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	6	U	3.2	U	6.1	U	3.2	U	6	U	3.1	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6	U	3.2	U	6.1	U	3.2	U	6	U	3.1	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	6	U	1.2	U	6.1	U	1.2	U	6	U	1.1	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	15	U	8	U	15	U	8	U	15	U	7.6	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	15	U	8	U	15	U	8	U	15	U	7.6	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3	U	1.6	U	3	U	1.6	U	3	U	1.5	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3	U	1.6	U	3	U	1.6	U	3	U	1.5	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	3	U	1.6	U	3	U	1.6	U	3	U	1.5	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	3	U	1.6	U	3	U	1.6	U	3	U	1.5	U
Perfluorobutanesulfonate (PFBS)	**1.7**		**2.1**		**1.6**		**1.7**		1.1	J	1.5	U
Perfluorobutyric acid (PFBA)	**9.3**		**11**		6	J	**5.8**		**9.4**		**11**	
Perfluorodecanesulfonate (PFDS)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluorodecanoic acid (PFDA)	0.4	J	1.6	U	0.46	J	0.44	J	1.5	U	1.5	U
Perfluorododecane sulfonic acid (PFDoS)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluorododecanoic acid (PFDoA)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluoroheptanesulfonate (PFHpS)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluoroheptanoic acid (PFHpA)	**6.3**		**6.7**		**2.1**		**5.9**		1.5		**1.7**	
Perfluorohexanesulfonate (PFHxS)	**5.9**		**7.1**		**17**		**15**		**8.5**		**9.7**	
Perfluorohexanoic acid (PFHxA)	**12**		**15**		**3.7**		**3.5**		**2.7**		1.5	U
Perfluorononanesulfonate (PFNS)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluorononanoic acid (PFNA)	**1.6**		1.5	J	**6.8**		**8.2**		0.82	J	1.5	U
Perfluorooctane sulfonamide (PFOSAm)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluorooctanesulfonate (PFOS)	**8**		**7.9**		**7.1**		**7.3**		**6.3**		**8.4**	
Perfluorooctanoic acid (PFOA)	**9.2**		**13**		**6.4**		**8.3**		**4.8**		**5.2**	
Perfluoropentanesulfonate (PFPeS)	0.61	J	1.6	U	0.93	J	1.2	J	0.66	J	1.5	U
Perfluoropentanoic acid (PFPeA)	**9.4**		**11**		2.8	J	**4.6**		**6.5**		**8.6**	
Perfluorotetradecanoic acid (PFTeDA)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluorotridecanoic acid (PFTrDA)	1.5	U	1.6	U	1.5	U	1.6	U	1.5	U	1.5	U
Perfluoroundecanoic acid (PFUdA)	1.5	U	1.6	U	0.41	J	0.5	J	1.5	U	1.5	U
1633 TPFAS	**64.41**		**75.3**		**55.3**		**62.44**		**42.28**		**44.6**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	105-72 Depth : 105.00 01/26/2024 ng/L		105-72 Depth : 105.00 07/16/2024 ng/L		105-73 Depth : 125.00 01/26/2024 ng/L		105-73 Depth : 125.00 07/16/2024 ng/L		105-74 Depth : 95.00 01/30/2024 ng/L		105-74 Depth : 95.00 07/29/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.7	U	1.6	U	6	U	1.6	U	5.7	U	1.5	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.7	U	3.3	U	6	U	3.3	U	5.7	U	3	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	8.2	U	38	U	8.2	U	35	U	7.5	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	8.2	U	38	U	8.2	U	35	U	7.5	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.1	U	3.3	U	7.5	U	3.3	U	7.1	U	3	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.7	U	1.6	U	6	U	1.6	U	5.7	U	1.5	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.7	U	1.6	U	6	U	1.6	U	5.7	U	1.5	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.7	U	3.3	U	6	U	3.3	U	5.7	U	3	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.7	U	3.3	U	6	U	3.3	U	5.7	U	3	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.7	U	1.2	U	6	U	1.2	U	5.7	U	1.1	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	8.2	U	15	U	8.2	U	14	U	7.5	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	8.2	U	15	U	8.2	U	14	U	7.5	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.8	U	1.6	U	3	U	1.6	U	2.8	U	1.5	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.8	U	1.6	U	3	U	1.6	U	2.8	U	1.5	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.8	U	1.6	U	3	U	1.6	U	2.8	U	1.5	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.8	U	1.6	U	3	U	1.6	U	2.8	U	1.5	U
Perfluorobutanesulfonate (PFBS)	**1.5**		**2.2**		**1.6**		**2**		**3.4**		**4.4**	
Perfluorobutyric acid (PFBA)	5.7		**7.6**		5.3	J	**7.2**		**6.1**		**7.4**	
Perfluorodecanesulfonate (PFDS)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluorodecanoic acid (PFDA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluorododecanoic acid (PFDoA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluoroheptanesulfonate (PFHpS)	1.4	U	1.6	U	1.5	U	1.6	U	**9.1**		**11**	
Perfluoroheptanoic acid (PFHpA)	**1.8**		**3.1**		**1.9**		**2.2**		**3.2**		**5.1**	
Perfluorohexanesulfonate (PFHxS)	**12**		**16**		**23**		**20**		**110**		**170**	
Perfluorohexanoic acid (PFHxA)	**3.1**		**6.2**		**3.8**		1.6	U	**14**		**26**	
Perfluorononanesulfonate (PFNS)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluorononanoic acid (PFNA)	**2.1**		**4.2**		**2.2**		**3.6**		1.3	J	1.5	
Perfluorooctane sulfonamide (PFOSAm)	1.4	U	1.6	U	1.2	J	1.6	U	**2.9**		**4.4**	
Perfluorooctanesulfonate (PFOS)	**6.2**		**13**		**16**		**15**		1.4	U	**200**	
Perfluorooctanoic acid (PFOA)	**5.3**		**9.2**		**8.4**		**8.9**		**19**		**36**	
Perfluoropentanesulfonate (PFPeS)	0.74	J	1.6	U	0.97	J	1.6	U	**4.5**		**5.3**	
Perfluoropentanoic acid (PFPeA)	2.5	J	**5.4**		1.9	J	**4.1**		**5.1**		**9.4**	
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	1.6	U	1.5	U	1.6	U	1.4	U	1.5	U
1633 TPFAS	**40.94**		**66.9**		**66.27**		**63**		**178.6**		**480.5**	

2024 Groundwater Data : PFAS
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

Analyte	105-75 Depth : 115.00 01/30/2024 ng/L		105-75 Depth : 115.00 07/12/2024 ng/L		105-76 Depth : 135.00 01/30/2024 ng/L		105-76 Depth : 135.00 07/12/2024 ng/L		105-77 Depth : 105.00 02/07/2024 ng/L		105-77 Depth : 105.00 07/17/2024 ng/L	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.8	U	1.6	U	6.3	U	1.7	U	5.9	U	1.6	U
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.8	U	3.2	U	6.3	U	3.3	U	5.9	U	3.2	U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	36	U	8	U	39	U	8.4	U	37	U	7.9	U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	36	U	8	U	39	U	8.4	U	37	U	7.9	U
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7.2	U	3.2	U	7.8	U	3.3	U	7.4	U	3.2	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.8	U	1.6	U	6.3	U	1.7	U	5.9	U	1.6	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.8	U	1.6	U	6.3	U	1.7	U	5.9	U	1.6	U
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.8	U	3.2	U	6.3	U	3.3	U	5.9	U	3.2	U
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.8	U	3.2	U	6.3	U	3.3	U	5.9	U	3.2	U
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.8	U	1.2	U	6.3	U	1.3	U	5.9	U	1.2	U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	8	U	16	U	8.4	U	15	U	7.9	U
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	8	U	16	U	8.4	U	15	U	7.9	U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.9	U	1.6	U	3.1	U	1.7	U	3	U	1.6	U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.9	U	1.6	U	3.1	U	1.7	U	3	U	1.6	U
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.9	U	1.6	U	3.1	U	1.7	U	3	U	1.6	U
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.9	U	1.6	U	3.1	U	1.7	U	3	U	1.6	U
Perfluorobutanesulfonate (PFBS)	**3.2**		**4.5**		1.5	J	**2.5**		**2.9**		**1.9**	
Perfluorobutyric acid (PFBA)	**6.1**		**7.8**		3.9	J	**4.6**		5.7	J	**6.5**	
Perfluorodecanesulfonate (PFDS)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluorodecanoic acid (PFDA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluorododecanoic acid (PFDoA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluoroheptanesulfonate (PFHpS)	**7**		**10**		**3.8**		1.7	U	**8.1**		1.6	U
Perfluoroheptanoic acid (PFHpA)	**3.8**		**3.7**		**2.3**		**3.2**		**4.4**		**3.8**	
Perfluorohexanesulfonate (PFHxS)	**140**		**130**		**82**		**93**		**200**		**66**	
Perfluorohexanoic acid (PFHxA)	**21**		**17**		**7.6**		**10**		**27**		**13**	
Perfluorononanesulfonate (PFNS)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluorononanoic acid (PFNA)	**1.5**		**1.7**		**2.4**		**3.6**		1.3	J	1.6	U
Perfluorooctane sulfonamide (PFOSAm)	0.95	J	1.6	U	1.6	U	1.7	U	**6.9**		1.6	U
Perfluorooctanesulfonate (PFOS)	**100**		**140**		**39**		**40**		**140**		**59**	
Perfluorooctanoic acid (PFOA)	**30**		**30**		**15**		**22**		**40**		**21**	
Perfluoropentanesulfonate (PFPeS)	**3.2**		**4.4**		**2.8**		**2.6**		**4**		**1.8**	
Perfluoropentanoic acid (PFPeA)	**8.7**		**8.7**		1.8	J	**2.5**		**5.7**		**4.9**	
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluorotridecanoic acid (PFTrDA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
Perfluoroundecanoic acid (PFUdA)	1.4	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U
1633 TPFAS	**325.45**		**357.8**		**162.1**		**184**		**446**		**177.9**	

2024 Groundwater Data : PFAS

Brookhaven National Laboratory

Project: OU X Fomer Firehouse MW

Analyte	105-78 Depth : 125.00 02/07/2024 ng/L		105-78 Depth : 125.00 07/17/2024 ng/L									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.6	U	1.4	U								
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	5.6	U	2.8	U								
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	35	U	7.1	U								
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	35	U	7.1	U								
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	7	U	2.8	U								
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.6	U	1.4	U								
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.6	U	1.4	U								
Fluorotelomer sulfonate 4:2 (4:2 FTS)	5.6	U	2.8	U								
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5.6	U	2.8	U								
Hexafluoropropyleneoxide dimer acid (HFPO-DA)(Gen-X)	5.6	U	1.1	U								
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.4	U	1.4	U								
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.4	U	1.4	U								
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	14	U	7.1	U								
N-Methylperfluorooctane sulfonamide (NMeFOSAA)	1.4	U	1.4	U								
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.4	U	1.4	U								
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	14	U	7.1	U								
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.8	U	1.4	U								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.8	U	1.4	U								
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.8	U	1.4	U								
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.8	U	1.4	U								
Perfluorobutanesulfonate (PFBS)	**3.1**		**5.3**									
Perfluorobutyric acid (PFBA)	5.2	J	**8.5**									
Perfluorodecanesulfonate (PFDS)	1.4	U	1.4	U								
Perfluorodecanoic acid (PFDA)	1.4	U	1.4	U								
Perfluorododecane sulfonic acid (PFDoS)	1.4	U	1.4	U								
Perfluorododecanoic acid (PFDoA)	1.4	U	1.4	U								
Perfluoroheptanesulfonate (PFHpS)	**1.8**		**12**									
Perfluoroheptanoic acid (PFHpA)	**3.3**		**8.2**									
Perfluorohexanesulfonate (PFHxS)	**56**		**320**									
Perfluorohexanoic acid (PFHxA)	**9**		**59**									
Perfluorononanesulfonate (PFNS)	1.4	U	1.4	U								
Perfluorononanoic acid (PFNA)	0.8	J	**2.3**									
Perfluorooctane sulfonamide (PFOSAm)	1.3	J	**5.2**									
Perfluorooctanesulfonate (PFOS)	**32**		**210**									
Perfluorooctanoic acid (PFOA)	**13**		**90**									
Perfluoropentanesulfonate (PFPeS)	**4.5**		**6.3**									
Perfluoropentanoic acid (PFPeA)	**3.4**		**13**									
Perfluorotetradecanoic acid (PFTeDA)	1.4	U	1.4	U								
Perfluorotridecanoic acid (PFTrDA)	1.4	U	1.4	U								
Perfluoroundecanoic acid (PFUdA)	1.4	U	1.4	U								
1633 TPFAS	**133.4**		**739.8**									

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: OU X Fomer Firehouse MW

	075-809 Depth : 32.52 07/01/2024 pCi/l				075-810 Depth : 32.53 07/02/2024 pCi/l				075-811 Depth : 33.33 07/01/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Strontium-90	-0.283	U	0.781	0.377	-0.129	U	0.78	0.419	0.248	U	0.796	0.452
Tritium												

g-2 Tritium Source Area
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	054-07 Depth : 35.00 04/29/2024 pCi/l				054-07 Depth : 35.00 10/16/2024 pCi/l				054-124 Depth : 32.50 04/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**1440**		316	332	**12400**		338	1350	-50	U	428	218

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	054-124 Depth : 32.50 10/16/2024 pCi/l				054-125 Depth : 32.50 11/13/2024 pCi/l				054-126 Depth : 35.00 04/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	528	N2	352	254	-7.21	U	357	186	-63.1	U	305	158

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	054-126 Depth : 35.00 10/28/2024 pCi/l				054-184 Depth : 32.50 04/29/2024 pCi/l				054-184 Depth : 32.50 10/16/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	58.6	U	352	193	**7100**		452	1030	141	U	377	218

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	054-185 Depth : 32.50 04/29/2024 pCi/l				054-185 Depth : 32.50 10/16/2024 pCi/l				054-65 Depth : 25.20 04/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**7780**		321	924	141	U	359	210	-0.45	U	306	167

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	054-65 Depth : 25.20 10/16/2024 pCi/l				054-66 Depth : 25.50 11/13/2024 pCi/l				054-67 Depth : 25.10 11/13/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	204	U	373	225	64	U	360	199	231	U	350	221

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	054-68 Depth : 24.80 11/14/2024 pCi/l				064-95 Depth : 43.00 05/22/2024 pCi/l				064-95 Depth : 32.50 10/16/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	209	U	369	226	77.9	U	322	182	**663**		367	276

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	065-121 Depth : 26.50 10/29/2024 pCi/l				065-122 Depth : 28.80 10/29/2024 pCi/l				065-123 Depth : 25.70 10/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	168	U	345	208	136	U	342	201	**1750**		346	414

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	065-124 Depth : 25.80 10/30/2024 pCi/l				065-193 Depth : 55.00 10/29/2024 pCi/l				065-194 Depth : 50.00 10/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	174	U	343	208	96.4	U	345	196	145	U	345	204

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	065-321 Depth : 32.00 10/28/2024 pCi/l				065-322 Depth : 32.00 10/28/2024 pCi/l				065-323 Depth : 30.00 10/28/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	5.41	U	333	175	73	U	337	189	298	U	339	226

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: g-2

	065-324 Depth : 28.00 10/29/2024 pCi/l											
Analyte	Result	Qual	MDA	Error								
Tritium	184	U	343	210								

BLIP Facility
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: BLIP Facility (BLIP)

	064-46 Depth : 54.50 10/08/2024 pCi/l				064-47 Depth : 55.50 04/17/2024 pCi/l				064-47 Depth : 55.50 10/02/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	100	U	353	203	-11.3	U	309	167	100	U	347	200

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: BLIP Facility (BLIP)

	064-48 Depth : 55.50 04/17/2024 pCi/l				064-48 Depth : 55.50 10/02/2024 pCi/l				064-67 Depth : 58.50 04/17/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**711**		314	254	361	N2	346	232	**770**		318	263

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: BLIP Facility (BLIP)

	064-67 Depth : 58.50 10/02/2024 pCi/l											
Analyte	Result	Qual	MDA	Error								
Tritium	402	N2	346	237								

APPENDIX D

2024 FACILITY MONITORING

GROUNDWATER RESULTS

AGS Research Areas
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-07 Depth : 35.00 04/29/2024 pCi/l				054-08 Depth : 47.50 11/19/2024 pCi/l				054-124 Depth : 32.50 04/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**1440**		316	332	9.46	U	355	194	-50	U	428	218

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-125 Depth : 32.50 11/13/2024 pCi/l				054-126 Depth : 35.00 04/29/2024 pCi/l				054-126 Depth : 35.00 10/28/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-7.21	U	357	186	-63.1	U	305	158	58.6	U	352	193

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-127 Depth : 29.50 11/13/2024 pCi/l				054-128 Depth : 29.50 11/13/2024 pCi/l				054-129 Depth : 28.50 11/13/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-105	U	357	167	110	U	375	213	139	U	381	220

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-130 Depth : 29.50 11/13/2024 pCi/l				054-168 Depth : 25.00 11/13/2024 pCi/l				054-169 Depth : 25.00 11/13/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	161	U	347	209	19.4	U	356	190	195	U	357	219

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-184 Depth : 32.50 04/29/2024 pCi/l				054-185 Depth : 32.50 04/29/2024 pCi/l				054-191 Depth : 28.00 11/19/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**7100**		452	1030	**7780**		321	924	29.7	U	363	200

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-62 Depth : 25.70 11/19/2024 pCi/l				054-63 Depth : 49.80 11/18/2024 pCi/l				054-64 Depth : 49.50 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-21.2	U	354	189	-29.3	U	367	193	0.45	U	354	192

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-65 Depth : 25.20 04/29/2024 pCi/l				054-66 Depth : 25.50 11/13/2024 pCi/l				054-67 Depth : 25.10 11/13/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-0.45	U	306	167	64	U	360	199	231	U	350	221

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	054-68 Depth : 24.80 11/14/2024 pCi/l				054-69 Depth : 24.80 11/14/2024 pCi/l				055-14 Depth : 24.70 11/14/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	209	U	369	226	107	U	359	206	174	U	379	224

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	055-15 Depth : 25.50 11/18/2024 pCi/l				055-16 Depth : 25.20 11/18/2024 pCi/l				055-29 Depth : 52.00 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	145	U	346	208	-35.6	U	368	192	47.7	U	352	197

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	055-30 Depth : 27.50 11/18/2024 pCi/l				055-32 Depth : 47.50 11/18/2024 pCi/l				064-03 Depth : 48.00 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	118	U	360	210	95.5	U	352	204	34.2	U	353	196

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	064-51 Depth : 46.00 11/19/2024 pCi/l				064-53 Depth : 39.80 11/18/2024 pCi/l				064-54 Depth : 40.50 11/18/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-62.2	U	348	181	6.76	U	347	190	-14.9	U	347	187

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	064-56 Depth : 29.50 11/14/2024 pCi/l				064-80 Depth : 29.50 11/14/2024 pCi/l				064-95 Depth : 43.00 05/22/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	173	U	356	215	15.3	U	359	190	77.9	U	322	182

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	065-120 Depth : 29.90 11/19/2024 pCi/l				065-121 Depth : 26.50 10/29/2024 pCi/l				065-122 Depth : 28.80 10/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-58.1	U	354	184	168	U	345	208	136	U	342	201

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	065-123 Depth : 25.70 10/29/2024 pCi/l				065-124 Depth : 25.80 10/30/2024 pCi/l				065-125 Depth : 26.50 10/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	**1750**		346	414	174	U	343	208	109	U	343	198

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	065-126 Depth : 26.00 10/29/2024 pCi/l				065-192 Depth : 52.50 11/19/2024 pCi/l				065-193 Depth : 55.00 10/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	42.3	U	345	187	114	U	380	218	96.4	U	345	196

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	065-194 Depth : 50.00 10/29/2024 pCi/l				065-195 Depth : 50.00 10/29/2024 pCi/l				065-321 Depth : 32.00 10/28/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	145	U	345	204	-53.2	U	348	170	5.41	U	333	175

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: AGS Research Areas (AGS)

	065-322 Depth : 32.00 10/28/2024 pCi/l				065-323 Depth : 30.00 10/28/2024 pCi/l				065-324 Depth : 28.00 10/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	73	U	337	189	298	U	339	226	184	U	343	210

RHIC Facility
Analytical Results

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	025-03 Depth : 45.70 02/29/2024 pCi/l				025-03 Depth : 45.70 08/28/2024 pCi/l				025-04 Depth : 45.80 02/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	19.7	U	365	199	4.5	U	359	188	274	U	365	225

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	025-04 Depth : 45.80 08/28/2024 pCi/l				025-05 Depth : 11.80 02/28/2024 pCi/l				025-05 Depth : 11.80 08/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	24.8	U	350	188	72.3	U	365	205	17.1	U	362	192

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	025-06 Depth : 12.40 02/28/2024 pCi/l				025-06 Depth : 12.40 08/29/2024 pCi/l				025-07 Depth : 13.30 02/28/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-34.4	U	365	193	109	U	364	208	193	U	365	217

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	025-07 Depth : 13.30 08/29/2024 pCi/l				025-08 Depth : 12.30 02/28/2024 pCi/l				025-08 Depth : 12.30 08/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	11.3	U	367	193	-20	U	365	195	-82.9	U	367	176

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	034-05 Depth : 42.50 02/29/2024 pCi/l				034-05 Depth : 42.50 08/28/2024 pCi/l				034-06 Depth : 41.80 02/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	56	U	366	204	74.8	U	364	202	236	U	365	222

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	034-06 Depth : 41.80 08/28/2024 pCi/l				043-01 Depth : 41.30 02/28/2024 pCi/l				043-01 Depth : 41.30 08/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	189	U	354	216	43.2	U	365	202	189	U	417	242

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	043-02 Depth : 63.80 02/28/2024 pCi/l				043-02 Depth : 83.80 08/28/2024 pCi/l				044-13 Depth : 38.30 02/28/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-93.6	U	365	186	91.9	U	364	205	129	U	365	211

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	044-13 Depth : 38.30 08/29/2024 pCi/l				044-14 Depth : 59.00 02/28/2024 pCi/l				044-14 Depth : 59.00 08/29/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	77.9	U	362	202	48.8	U	365	202	42.8	U	364	197

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: RHIC Facility (RHIC)

	044-29 Depth : 35.00 02/29/2024 pCi/l				044-29 Depth : 35.00 08/29/2024 pCi/l							
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error				
Tritium	-1.87	U	365	197	59.9	U	359	198				

Sewage Treatment Plant and Peconic River
Analytical Results

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: STP and Peconic River (STP)

Analyte	039-115 Depth : 17.50 11/07/2024 ug/L		039-87 Depth : 17.50 11/07/2024 ug/L		039-88 Depth : 24.50 11/07/2024 ug/L		039-89 Depth : 22.50 11/07/2024 ug/L		048-08 Depth : 17.50 11/05/2024 ug/L		048-09 Depth : 17.50 11/07/2024 ug/L	
Aluminum	68	U	**796**		68	U	68	U	**83.9**	B	**108**	B
Antimony	3.5	U	**3.75**	B	3.5	U	**4.16**	B	3.5	U	3.5	U
Arsenic	2	U	2	U	2	U	2	U	2	U	2	U
Barium	**21.1**	B	**8.85**	B	**32.7**	B	**65**	B	**10.2**	B	**88.7**	B
Beryllium	1	U	1	U	1	U	1	U	1	U	1	U
Cadmium	1	U	1	U	1	U	1	U	1	U	1	U
Calcium	**31400**		**5390**		**22100**		**20300**		**6220**		**6500**	
Chromium	1	U	1	U	1	U	1	U	1	U	1	U
Cobalt	**1.23**	B	1	U	**1.08**	B	**1.07**	B	1	U	**1.51**	B
Copper	**3.89**	B	3	U	3	U	3	U	3	U	3	U
Iron	30	U	**185**		30	U	30	U	**106**		30	U
Lead	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Magnesium	**9560**		**860**	B	**6100**		**6700**		**2220**	B	**3650**	B
Manganese	**2.61**	B	**11.1**	B	2	U	2	U	**52.2**		**13.2**	B
Mercury	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U
Nickel	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	**5450**		**408**	B	**3870**	B	**3600**	B	**361**	B	**1520**	B
Selenium	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Silver	1	U	1	U	1	U	1	U	1	U	1	U
Sodium	**87300**		**2210**	B	**66900**		**71300**		**21700**		**53900**	
Thallium	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Vanadium	**4.22**	B	1	U	1	U	1	U	1	U	1	U
Zinc	3.3	U	**4.54**	B	3.3	U	3.3	U	**3.76**	B	3.3	U

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: STP and Peconic River (STP)

Analyte	048-10 Depth : 17.50 11/07/2024 ug/L											
Aluminum	**240**											
Antimony	**3.57**	B										
Arsenic	2	U										
Barium	**43.7**	B										
Beryllium	1	U										
Cadmium	1	U										
Calcium	**14300**											
Chromium	1	U										
Cobalt	**1.01**	B										
Copper	3	U										
Iron	**513**											
Lead	0.5	U										
Magnesium	**5830**											
Manganese	**15.8**											
Mercury	0.067	U										
Nickel	1.5	U										
Potassium	**3900**	B										
Selenium	1.5	U										
Silver	1	U										
Sodium	**47300**											
Thallium	0.6	U										
Vanadium	1	U										
Zinc	3.3	U										

Motor Pool Area
Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Motor Pool Area (MTP)

Analyte	102-05 Depth : 56.74 10/30/2024 ug/L		102-06 Depth : 56.20 10/30/2024 ug/L									
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U								
1,1,1-Trichloroethane	0.5	U	0.5	U								
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U								
1,1,2-Trichloroethane	0.5	U	0.5	U								
1,1-Dichloroethane	0.5	U	0.5	U								
1,1-Dichloroethylene	0.5	U	0.5	U								
1,1-Dichloropropene	0.5	U	0.5	U								
1,2,3-Trichlorobenzene	0.5	U	0.5	U								
1,2,3-Trichloropropane	0.5	U	0.5	U								
1,2,4-Trichlorobenzene	0.5	U	0.5	U								
1,2-Dichloroethane	0.5	U	0.5	U								
1,2-Dichloropropane	0.5	U	0.5	U								
1,3-Dichloropropane	0.5	U	0.5	U								
2,2-Dichloropropane	0.5	U	0.5	U								
Benzene	0.5	U	0.5	U								
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U								
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U								
Benzene, 1-methylethyl-	0.5	U	0.5	U								
Bromobenzene	0.5	U	0.5	U								
Bromodichloromethane	0.5	U	0.5	U								
Bromoform	0.35	J	0.5	U								
Carbon tetrachloride	0.5	U	0.5	U								
Chlorobenzene	0.5	U	0.5	U								
Chlorobromomethane	0.5	U	0.5	U								
Chloroethane	0.5	U	0.5	U								
Chloroform	0.22	J	0.28	J								
cis-1,2-Dichloroethylene	0.5	U	0.5	U								
cis-1,3-Dichloropropene	0.5	U	0.5	U								
Cymene	0.5	U	0.5	U								
DBCP	0.5	U	0.5	U								
Dibromochloromethane	0.5	U	0.5	U								
Dibromomethane	0.5	U	0.5	U								
Dichlorodifluoromethane	0.5	U	0.5	U								
EDB	0.5	U	0.5	U								
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U								
Ethylbenzene	0.5	U	0.5	U								
Hexachlorobutadiene	0.5	U	0.5	U								
m-Dichlorobenzene	0.5	U	0.5	U								
m/p xylene	1	U	1	U								
Methyl bromide	0.5	U	0.5	U								
Methyl chloride	0.5	U	0.5	U								
Methyl tert-butyl ether	0.5	U	0.5	U								
Methylene chloride	0.5	U	0.5	U								
n-Butylbenzene	0.5	U	0.5	U								
n-Propylbenzene	0.5	U	0.5	U								
Naphthalene	0.5	U	0.5	U								
o-Chlorotoluene	0.5	U	0.5	U								
o-Dichlorobenzene	0.5	U	0.5	U								
o-Xylene	0.5	U	0.5	U								
p-Chlorotoluene	0.5	U	0.5	U								
p-Dichlorobenzene	0.5	U	0.5	U								
sec-Butylbenzene	0.5	U	0.5	U								
Styrene	0.5	U	0.5	U								
tert-Butylbenzene	0.5	U	0.5	U								
Tetrachloroethylene	0.5	U	0.5	U								
Toluene	0.5	U	0.5	U								
trans-1,3-Dichloropropene	0.5	U	0.5	U								
Trichloroethylene	0.5	U	0.5	U								
Trichlorofluoromethane	0.5	U	0.5	U								
Vinyl chloride	0.5	U	0.5	U								
Xylene (total)	1.5	U	1.5	U								
8260 TVOC	0.57		0.28									

Major Petroleum Facility

Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility (MPF)

	076-16		076-16		076-17		076-17		076-18		076-18	
	Depth : 35.00		Depth : 35.00		Depth : 35.00		Depth : 35.00		Depth : 30.00		Depth : 30.00	
	04/16/2024		10/03/2024		04/16/2024		10/03/2024		04/17/2024		10/03/2024	
Analyte	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
1,1,1,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1,1-Trichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1,2,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1,2-Trichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1-Dichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1-Dichloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1-Dichloropropene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,2,3-Trichlorobenzene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
1,2,3-Trichloropropane	2.5	U	0.5	U	2.5	U	0.5	U	2.5	U	0.5	U
1,2,4-Trichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,2-Dichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,3-Dichloropropane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
2,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene, 1,2,4-trimethyl	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene, 1,3,5-trimethyl-	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene, 1-methylethyl-	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Bromobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Bromodichloromethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Bromoform	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Carbon tetrachloride	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Chlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Chlorobromomethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Chloroethane	4	U	0.5	U	4	U	0.5	U	4	U	0.5	U
Chloroform	1	U	0.5	U	1	U	0.5	U	1	U	0.46	J
cis-1,2-Dichloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
cis-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Cymene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
DBCP	5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Dibromochloromethane	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Dibromomethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Dichlorodifluoromethane	3	U	0.5	U	3	U	0.5	U	3	U	0.5	U
EDB	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Ethylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Hexachlorobutadiene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
m-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
m/p xylene	2	U	1	U	2	U	1	U	2	U	1	U
Methyl bromide	5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Methyl chloride	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Methyl tert-butyl ether	5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Methylene chloride	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
n-Butylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
n-Propylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Naphthalene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
o-Chlorotoluene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
o-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
o-Xylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
p-Chlorotoluene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
p-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
sec-Butylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Styrene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
tert-Butylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Tetrachloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Toluene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
trans-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Trichloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Trichlorofluoromethane	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Vinyl chloride	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Xylene (total)	1	U	1.5	U	1	U	1.5	U	1	U	1.5	U
8260 TVOC	0		0		0		0		0		0.46	

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: Major Petroleum Facility (MPF)

Analyte	076-19 Depth : 30.00 04/16/2024 ug/L		076-19 Depth : 30.00 10/04/2024 ug/L		076-25 Depth : 42.00 04/16/2024 ug/L		076-25 Depth : 42.00 10/03/2024 ug/L		076-378 Depth : 34.50 04/16/2024 ug/L		076-378 Depth : 34.50 10/03/2024 ug/L	
1,1,1,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1,1-Trichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1,2,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1,2-Trichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1-Dichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1-Dichloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,1-Dichloropropene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,2,3-Trichlorobenzene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
1,2,3-Trichloropropane	2.5	U	0.5	U	2.5	U	0.5	U	2.5	U	0.5	U
1,2,4-Trichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,2-Dichloroethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
1,3-Dichloropropane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
2,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene, 1,2,4-trimethyl	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene, 1,3,5-trimethyl-	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Benzene, 1-methylethyl-	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Bromobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Bromodichloromethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Bromoform	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Carbon tetrachloride	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Chlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Chlorobromomethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Chloroethane	4	U	0.5	U	4	U	0.5	U	4	U	0.5	U
Chloroform	1	U	0.5	U	1	U	0.3	J	1	U	0.5	U
cis-1,2-Dichloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
cis-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Cymene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
DBCP	5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Dibromochloromethane	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Dibromomethane	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Dichlorodifluoromethane	3	U	0.5	U	3	U	0.5	U	3	U	0.5	U
EDB	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Ethylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Hexachlorobutadiene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
m-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
m/p xylene	2	U	1	U	2	U	1	U	2	U	1	U
Methyl bromide	5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Methyl chloride	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Methyl tert-butyl ether	5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Methylene chloride	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
n-Butylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
n-Propylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Naphthalene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
o-Chlorotoluene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
o-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
o-Xylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
p-Chlorotoluene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
p-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
sec-Butylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Styrene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
tert-Butylbenzene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Tetrachloroethylene	1	U	0.5	U	**2.1**		**2**		1	U	0.5	U
Toluene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
trans-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Trichloroethylene	1	U	0.5	U	1	U	0.5	U	1	U	0.5	U
Trichlorofluoromethane	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Vinyl chloride	2	U	0.5	U	2	U	0.5	U	2	U	0.5	U
Xylene (total)	1	U	1.5	U	1	U	1.5	U	1	U	1.5	U
8260 TVOC	0		0		2.1		2.3		0		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: Major Petroleum Facility (MPF)

Analyte	076-379 Depth : 35.50 04/16/2024 ug/L		076-379 Depth : 35.50 10/04/2024 ug/L		076-380 Depth : 34.50 04/17/2024 ug/L		076-380 Depth : 34.50 10/03/2024 ug/L					
1,1,1,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U				
1,1,1-Trichloroethane	1	U	0.5	U	1	U	0.5	U				
1,1,2,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U				
1,1,2-Trichloroethane	1	U	0.5	U	1	U	0.5	U				
1,1-Dichloroethane	1	U	0.5	U	1	U	0.5	U				
1,1-Dichloroethylene	1	U	0.5	U	1	U	0.5	U				
1,1-Dichloropropene	1	U	0.5	U	1	U	0.5	U				
1,2,3-Trichlorobenzene	2	U	0.5	U	2	U	0.5	U				
1,2,3-Trichloropropane	2.5	U	0.5	U	2.5	U	0.5	U				
1,2,4-Trichlorobenzene	1	U	0.5	U	1	U	0.5	U				
1,2-Dichloroethane	1	U	0.5	U	1	U	0.5	U				
1,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U				
1,3-Dichloropropane	1	U	0.5	U	1	U	0.5	U				
2,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U				
Benzene	1	U	0.5	U	1	U	0.5	U				
Benzene, 1,2,4-trimethyl	1	U	0.5	U	1	U	0.5	U				
Benzene, 1,3,5-trimethyl-	1	U	0.5	U	1	U	0.5	U				
Benzene, 1-methylethyl-	1	U	0.5	U	1	U	0.5	U				
Bromobenzene	1	U	0.5	U	1	U	0.5	U				
Bromodichloromethane	1	U	0.5	U	1	U	0.5	U				
Bromoform	2	U	0.5	U	2	U	0.5	U				
Carbon tetrachloride	1	U	0.5	U	1	U	0.5	U				
Chlorobenzene	1	U	0.5	U	1	U	0.5	U				
Chlorobromomethane	1	U	0.5	U	1	U	0.5	U				
Chloroethane	4	U	0.5	U	4	U	0.5	U				
Chloroform	1	U	0.5	U	1	U	0.5	U				
cis-1,2-Dichloroethylene	1	U	0.5	U	1	U	0.5	U				
cis-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U				
Cymene	1	U	0.5	U	1	U	0.5	U				
DBCP	5	U	0.5	U	5	U	0.5	U				
Dibromochloromethane	2	U	0.5	U	2	U	0.5	U				
Dibromomethane	1	U	0.5	U	1	U	0.5	U				
Dichlorodifluoromethane	3	U	0.5	U	3	U	0.5	U				
EDB	1	U	0.5	U	1	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	1	U	0.5	U	1	U	0.5	U				
Ethylbenzene	1	U	0.5	U	1	U	0.5	U				
Hexachlorobutadiene	2	U	0.5	U	2	U	0.5	U				
m-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U				
m/p xylene	2	U	1	U	2	U	1	U				
Methyl bromide	5	U	0.5	U	5	U	0.5	U				
Methyl chloride	2	U	0.5	U	2	U	0.5	U				
Methyl tert-butyl ether	5	U	0.5	U	5	U	0.5	U				
Methylene chloride	2	U	0.5	U	2	U	0.5	U				
n-Butylbenzene	1	U	0.5	U	1	U	0.5	U				
n-Propylbenzene	1	U	0.5	U	1	U	0.5	U				
Naphthalene	2	U	0.5	U	2	U	0.5	U				
o-Chlorotoluene	1	U	0.5	U	1	U	0.5	U				
o-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U				
o-Xylene	1	U	0.5	U	1	U	0.5	U				
p-Chlorotoluene	1	U	0.5	U	1	U	0.5	U				
p-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U				
sec-Butylbenzene	1	U	0.5	U	1	U	0.5	U				
Styrene	1	U	0.5	U	1	U	0.5	U				
tert-Butylbenzene	1	U	0.5	U	1	U	0.5	U				
Tetrachloroethylene	1	U	0.25	J	1	U	**6.9**					
Toluene	1	U	0.5	U	1	U	0.5	U				
trans-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U				
Trichloroethylene	1	U	0.5	U	1	U	0.5	U				
Trichlorofluoromethane	2	U	0.5	U	2	U	0.5	U				
Vinyl chloride	2	U	0.5	U	2	U	0.5	U				
Xylene (total)	1	U	1.5	U	1	U	1.5	U				
8260 TVOC	0		0.25		0		6.9					

Waste Management Facility

Analytical Results

2024 Groundwater Data : Volatile Organic Compounds
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

Analyte	055-03 Depth : 50.00 02/07/2024 ug/L		055-03 Depth : 50.00 08/14/2024 ug/L		055-10 Depth : 94.00 02/07/2024 ug/L		055-10 Depth : 94.00 08/14/2024 ug/L		056-21 Depth : 51.00 02/07/2024 ug/L		056-21 Depth : 51.00 08/14/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	**0.57**		0.31	J	0.29	J	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
524.2 TVOC	0		0		0.57		0.31		0.29		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: New Waste Mgt Facility (WMF)

Analyte	056-22 Depth : 51.00 02/09/2024 ug/L		056-22 Depth : 51.00 08/15/2024 ug/L		056-23 Depth : 51.00 02/08/2024 ug/L		066-220 Depth : 46.00 02/07/2024 ug/L		066-220 Depth : 46.00 08/14/2024 ug/L		066-221 Depth : 47.00 02/08/2024 ug/L	
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m/p xylene	1	U	1	U	1	U	1	U	1	U	1	U
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
524.2 TVOC	0		0		0		0		0		0	

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: New Waste Mgt Facility (WMF)

	066-221		066-222		066-222		066-223		066-223			
	Depth : 47.00		Depth : 48.00		Depth : 48.00		Depth : 48.00		Depth : 48.00			
	08/15/2024		02/08/2024		08/15/2024		02/08/2024		08/15/2024			
Analyte	ug/L		ug/L		ug/L		ug/L		ug/L			
1,1,1,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,1-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,1-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,2,3-Trichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
1,3-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
2,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Benzene, 1,2,4-trimethyl	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Benzene, 1,3,5-trimethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Benzene, 1-methylethyl-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Bromobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Chlorobromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Chloroform	0.5	U	**1.3**		**0.59**		**1.3**		**0.69**			
cis-1,2-Dichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Cymene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
DBCP	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Dibromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
EDB	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Ethene, 1,2-dichloro-, (E)-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Hexachlorobutadiene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
m-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
m/p xylene	1	U	1	U	1	U	1	U	1	U		
Methyl bromide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Methyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Methyl tert-butyl ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Methylene chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
n-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
n-Propylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Naphthalene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
o-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
o-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
p-Chlorotoluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
p-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
sec-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
tert-Butylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Tetrachloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Trichloroethylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Xylene (total)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U		
524.2 TVOC	0		1.3		0.59		1.3		0.69			

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

Analyte	055-03 Depth : 50.00 08/14/2024 ug/L		055-10 Depth : 94.00 08/14/2024 ug/L		056-21 Depth : 51.00 08/14/2024 ug/L		056-22 Depth : 51.00 08/15/2024 ug/L		066-220 Depth : 46.00 08/14/2024 ug/L		066-221 Depth : 47.00 08/15/2024 ug/L	
Aluminum	15	U	15	U	15	U	**27**		11	B	15	U
Antimony	2	U	2	U	2	U	2	U	2	U	2	U
Arsenic	2	U	2	U	2	U	2	U	2	U	2	U
Barium	**20**		**140**		**15**		**32**		**14**		**27**	
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Cadmium	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Calcium	**6100**		**35000**		**9200**		**10000**		**5300**		**15000**	
Chromium	3	U	3	U	3	U	3	U	3	U	3	U
Cobalt	1	U	1	U	1	U	1	U	1	U	1	U
Copper	1	U	1	U	1	U	1	U	1	U	1	U
Iron	22	B	52	B	200	U	40	B	11	B	200	U
Lead	1	U	1	U	1	U	1	U	1	U	1	U
Magnesium	**1300**		**12000**		**1400**		**3100**		**1200**		**1800**	
Manganese	0.54	B	3	U	3	U	**4.1**		1.3	B	1.5	B
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	2	U	2	U	2	U	2	U	2	U	**6.8**	
Potassium	**550**		**3800**		**1100**		**1000**		**750**		**1100**	
Selenium	5	U	5	U	5	U	5	U	5	U	5	U
Silver	1	U	1	U	1	U	1	U	1	U	1	U
Sodium	**88000**		**110000**		**9400**		**32000**		**10000**		**40000**	
Thallium	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium	2	U	2	U	2	U	2	U	2	U	2	U
Zinc	2.1	B	10	U	10	U	6.7	B	10	U	4.9	B

2024 Groundwater Data : Metals
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

Analyte	066-222 Depth : 48.00 08/15/2024 ug/L		066-223 Depth : 48.00 08/15/2024 ug/L									
Aluminum	15	U	**69**									
Antimony	2	U	2	U								
Arsenic	2	U	2	U								
Barium	**16**		**14**									
Beryllium	0.3	U	0.3	U								
Cadmium	0.5	U	0.5	U								
Calcium	**9100**		**11000**									
Chromium	3	U	3	U								
Cobalt	1	U	1	U								
Copper	1	U	1	U								
Iron	200	U	47	B								
Lead	1	U	1	U								
Magnesium	**1400**		**1500**									
Manganese	3	U	1.4	B								
Mercury	0.2	U	0.2	U								
Nickel	2	U	2	U								
Potassium	**1100**		**780**									
Selenium	5	U	5	U								
Silver	1	U	1	U								
Sodium	**9500**		**7300**									
Thallium	0.5	U	0.5	U								
Vanadium	2	U	2	U								
Zinc	10	U	8	B								

2024 Groundwater Data : General Chemistry

Brookhaven National Laboratory

Project: New Waste Mgt Facility (WMF)

Analyte	055-03 Depth : 50.00 08/14/2024 ug/L		055-10 Depth : 94.00 08/14/2024 ug/L		056-21 Depth : 51.00 08/14/2024 ug/L		056-22 Depth : 51.00 08/15/2024 ug/L		066-220 Depth : 46.00 08/14/2024 ug/L		066-221 Depth : 47.00 08/15/2024 ug/L	
Chloride	**130**		**270**		**60**		**57**		**13**		**62**	
Nitrite + Nitrate-N	**0.44**		**1.2**		**0.73**		**2.2**		**1.8**		**3.4**	
Sulfate	**6.7**		**12**		**11**		**24**		**10**		**24**	

2024 Groundwater Data : General Chemistry

Brookhaven National Laboratory

Project: New Waste Mgt Facility (WMF)

Analyte	066-222 Depth : 48.00 08/15/2024 ug/L		066-223 Depth : 48.00 08/15/2024 ug/L									
Chloride	**18**		**16**									
Nitrite + Nitrate-N	**0.66**		**0.92**									
Sulfate	**13**		**13**									

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	055-03 Depth : 50.00 02/07/2024 pCi/l				055-03 Depth : 50.00 02/29/2024 pCi/l				055-03 Depth : 50.00 08/14/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241					0.305	U	19.6	13.6	0.673	U	21.3	14.7
Beryllium-7					-26	U DL	92.6	72.3	-49.6	U DL	126	98
Cesium-134					5.94	U DL	16.6	12.4	2.6	U DL	19.8	3.39
Cesium-137					-1.76	U DL	12	9.29	2.49	U	11.7	9
Co-60					2.95	U	11.1	8.72	5.2	U	11	9.5
Cobalt-57					1.26	U DL	7.71	4.55	2.5	U DL	8.08	5.77
Europium-152					-64.2	U DL	191	114	21.3	U DL	153	24.6
Europium-154					5.89	U DL	112	19.4	-32.6	U DL	126	103
Europium-155					1.62	U	31.2	5.78	2.67	U	37.1	11.1
Gross Alpha	0.673	U DL	2.2	1.26					0.107	U DL	2.96	1.58
Gross Beta	1.41	U	1.71	1.11					0.0389	U	1.53	0.864
Manganese-54					2.72	U DL	13.8	8.02	3.53	U DL	12.2	7.08
Sodium-22					2.56	U DL	17.8	10.1	4.82	U DL	10.2	6.29
Strontium-90												
Tritium	5.41	U	427	230					-211	U	446	227
Zinc-65					-15.8	U DL	45.6	27.2	4.78	U DL	44.4	25.2

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	055-10 Depth : 94.00 02/07/2024 pCi/l				055-10 Depth : 94.00 08/14/2024 pCi/l				056-21 Depth : 51.00 02/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-0.471	U	14.9	10.3	4.44	U	20.6	14.3	-6.03	U	25	15
Beryllium-7	-14.9	U DL	64.3	51.3	13.9	U DL	60.9	48.2	58.5	U	58.8	50.2
Cesium-134	-0.855	U DL	14	2.11	3	U DL	12.7	9.22	8.36	U DL	12.4	10.1
Cesium-137	-1.7	U	7.7	6.28	0.361	U	9.44	7.65	1.22	U	9.86	8.05
Co-60	0.129	U	10.4	9.12	0.244	U	9.34	7.8	7.35	N2	4.97	4.49
Cobalt-57	-0.506	U DL	7.01	2.62	-0.601	U DL	7.79	1.65	0.604	U DL	6.41	3.77
Europium-152	11.6	U DL	93	28.8	22.1	U	62.7	37.1	33.4	U DL	89.8	53.6
Europium-154	-5.21	U DL	93.7	11.4	8.39	U DL	63.8	10.4	24	U DL	78.8	66.4
Europium-155	-4.77	U	28.6	17	0.543	U	30.2	17.8	-9.97	U	34.7	20.8
Gross Alpha	0.535	U	1.55	0.907	1.96	U DL	4.01	2.44	0.725	U	1.65	0.984
Gross Beta	**2.27**		0.666	0.568	**4.65**		1.76	1.46	1.31	N2	0.888	0.638
Manganese-54	1.37	U DL	8.83	5.08	-1.8	U DL	11.5	8.23	3.52	U DL	9.81	5.85
Sodium-22	0.842	U DL	8.74	4.77	2.9	U DL	7.09	4.24	2.45	U DL	10.4	5.96
Strontium-90									-0.0191	U	0.334	0.184
Tritium	1.8	U	426	229	-211	U	438	224	-135	U	417	206
Zinc-65	-5.06	U DL	21.9	12.8	5.99	U DL	18.9	11.1	4.96	U DL	22.9	13.3

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	056-21 Depth : 51.00 08/14/2024 pCi/l				056-22 Depth : 51.00 02/09/2024 pCi/l				056-22 Depth : 51.00 08/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	6.79	U DL	27.1	16.3	0.916	U	20.2	14.1	-7.03	U DL	29.1	17.5
Beryllium-7	-8.05	U DL	78	61.5	0.432	U DL	89	66	-14.1	U DL	73	57.8
Cesium-134	8.92	U DL	16.4	17.3	7.62	U DL	16.6	14.2	2.33	U DL	19.7	4.69
Cesium-137	2.78	U	9.11	7.47	-4.84	U DL	14.2	11.3	-0.428	U	9.11	7.26
Co-60	11.3	N2	6.97	7.47	-11.8	U	19.9	13.8	-5.22	U	13.9	13
Cobalt-57	-0.0148	U DL	7.42	0.0899	0.471	U DL	7.62	4.46	0	U DL	7.94	3.24
Europium-152	-43.8	U DL	133	79.5	16.4	U DL	130	16.3	-39.2	U DL	141	83.3
Europium-154	33.4	U	56.7	39.5	36.9	U DL	89.8	62.1	11.1	U DL	87.8	19.6
Europium-155	6.92	U	36.3	21.8	1.67	U	34.8	20.4	7.47	U	35.9	15.9
Gross Alpha	0.392	U	1.53	0.863	0.923	U	1.95	1.18	-0.0398	U DL	2.14	1.11
Gross Beta	1.22	N2	0.792	0.58	**1.99**		0.846	0.693	0.68	U	0.863	0.551
Manganese-54	0.775	U DL	11.6	6.57	-7.61	U DL	21.4	9.14	-2.18	U DL	11.8	6.83
Sodium-22	3.88	U DL	10.3	6.14	-4.17	U DL	15.8	13.5	4.52	U DL	8.69	5.38
Strontium-90	0.237	U	0.312	0.198	0.095	U	0.428	0.247	0.128	U	0.319	0.19
Tritium	-226	U	444	225	-67.6	U	426	219	-226	U	446	225
Zinc-65	-6.09	U DL	32.7	19	0	U DL	33.2	5.59	-4.66	U DL	35.2	20.4

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	056-23 Depth : 51.00 02/08/2024 pCi/l				056-23 Depth : 51.00 02/20/2024 pCi/l				066-220 Depth : 46.00 02/07/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-0.707	U	15.5	10.8					0	U	15.4	6.29
Beryllium-7	-31.2	U DL	73.6	59.9					14.9	U	58	46.1
Cesium-134	-2.03	U DL	17.7	4.79					1.5	U DL	16.4	5.03
Cesium-137	-3.57	U	9.27	7.77					-0.511	U	8.12	6.55
Co-60	-5.43	U	11.3	10.4					0.518	U	6.96	5.83
Cobalt-57	0.328	U DL	6.35	3.46					-1.91	U DL	6.7	4.01
Europium-152	11.4	U DL	116	18.8					-38.7	U DL	138	81.8
Europium-154	6.63	U DL	84.6	13.3					21.4	U DL	61.9	21.2
Europium-155	3.1	U	26.5	15.7					-0.67	U	27	15.8
Gross Alpha	0.79	U	1.22	0.786					0.321	U	1.06	0.6
Gross Beta	**1.56**		0.844	0.646					1.08	N2	1.02	0.675
Manganese-54	-1.92	U DL	11.6	6.74					3.04	U DL	6.51	5.59
Sodium-22	-1.68	U DL	11	6.19					3.79	U DL	8.74	5.28
Strontium-90	-0.0469	U	0.319	0.17					0.425	N2	0.33	0.227
Tritium					-132	U	405	204	23.4	U	433	235
Zinc-65	0	U DL	27.4	7.64					-5.07	U DL	28.2	16.5

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	066-220 Depth : 46.00 08/14/2024 pCi/l				066-221 Depth : 47.00 02/08/2024 pCi/l				066-221 Depth : 47.00 02/16/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-1.75	U	16.5	11.5	-6.54	U DL	28	16.8				
Beryllium-7	-3.58	U DL	69.5	54.5	3.65	U DL	70.9	55.7				
Cesium-134	5.12	U DL	14.3	4.32	6.87	U DL	16.9	11.1				
Cesium-137	-1.87	U	9.8	8.05	2.26	U	7.48	6.1				
Co-60	1.57	U	9.05	2.87	0.228	U	10.5	2.89				
Cobalt-57	1.55	U DL	6.2	3.69	0	U DL	7.19	1.57				
Europium-152	-35.2	U DL	119	70.5	4.82	U DL	149	7.1				
Europium-154	16.9	U DL	61.1	30.4	-7.23	U DL	113	13.3				
Europium-155	-4.66	U	31.8	18.9	-9.89	U	34.8	20.9				
Gross Alpha	0.173	U	1.43	0.781	5.18	U DL	14.1	8.26				
Gross Beta	1.3	N2	0.844	0.611	5.31	U DL	8.34	5.26				
Manganese-54	0.861	U DL	7.33	6.05	-0.285	U DL	9.97	5.61				
Sodium-22	0.408	U DL	8.47	4.54	0.489	U DL	10.4	5.62				
Strontium-90	0.234	U	0.257	0.168	0.0436	U	0.329	0.188				
Tritium	-191	U	452	232					-203	U	398	193
Zinc-65	-9.19	U DL	29.5	17.5	0	U DL	31.9	2.76				

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	066-221 Depth : 47.00 08/15/2024 pCi/l				066-222 Depth : 48.00 02/08/2024 pCi/l				066-222 Depth : 48.00 08/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241	-6.23	U DL	30.1	18.1	-5.92	U	19	13.5	2.69	U	21.6	15.1
Beryllium-7	4.02	U DL	75.6	59.2	23.1	U	55.7	44.9	-28.3	U DL	98	74.5
Cesium-134	0.492	U DL	15.9	0.927	4.06	U DL	24.5	7.24	-0.808	U DL	26.9	1.55
Cesium-137	-1.71	U	10.7	8.76	1.53	U	8.12	6.63	-6.47	U DL	16	12.9
Co-60	1.85	U	9.29	8.2	0.557	U	10.4	0.975	-5.97	U	19.7	17.7
Cobalt-57	-1.16	U DL	8.88	5.27	-0.226	U DL	8.09	0.64	0	U DL	7.82	1.31
Europium-152	39.2	U DL	108	64.2	19.2	U DL	156	20.8	36.9	U DL	120	65
Europium-154	1.72	U DL	82.6	4.8	21.5	U	54.6	39.3	24.3	U DL	86.8	36.3
Europium-155	-11.9	U	37.1	21.2	7.18	U	30.8	18.4	-7.45	U	35.8	21.2
Gross Alpha	0.77	U DL	2.09	1.24	1.22	U	1.6	1.05	1.7	N2	1.1	0.883
Gross Beta	1.91	N2	1.41	0.944	1.08	N2	0.969	0.66	1.53	N2	0.93	0.692
Manganese-54	0.111	U DL	15	8.55	3.84	U DL	10.3	6.15	3.67	U DL	14.3	8.32
Sodium-22	3.88	U DL	10.3	6.14	-1.26	U DL	11	6.13	0.78	U DL	10.2	5.17
Strontium-90	0.0511	U	0.293	0.168	0.12	U	0.398	0.234	-0.0917	U	0.282	0.145
Tritium	-271	U	454	222	-87.4	U	424	216	-232	U	450	226
Zinc-65	10.6	U DL	32.5	19.3	0	U DL	37.4	4.96	10.8	U DL	37.5	21.9

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: New Waste Mgt Facility (WMF)

	066-223 Depth : 48.00 02/08/2024 pCi/l				066-223 Depth : 48.00 02/16/2024 pCi/l				066-223 Depth : 48.00 08/15/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Americium-241					5.5	U	9.26	6.49	1.93	U	22.4	15.5
Beryllium-7					16.6	U DL	64.3	51.4	-13.9	U DL	73.5	58.7
Cesium-134					3.54	U DL	14.1	6.62	1.75	U DL	15.1	2.84
Cesium-137					-4.26	U	9.27	7.82	2.98	U	7.16	5.92
Co-60					0.583	U	10.4	2.92	-8.12	U	13.2	8.15
Cobalt-57					1.54	U DL	5.47	3.27	1.61	U DL	7.1	3.88
Europium-152					9.36	U DL	124	9.26	18.4	U	83.9	21.3
Europium-154					3.51	U DL	89.2	11.9	8.8	U DL	72.7	14.2
Europium-155					1.83	U	25.5	15	-11.2	U	37.1	20.2
Gross Alpha					0.767	U	1.4	0.864	0.74	U	1.66	0.997
Gross Beta					**2.08**		0.863	0.706	0.756	U	0.957	0.621
Manganese-54					0	U DL	9.15	1.03	-4.42	U DL	10.3	9.62
Sodium-22					6.74	N2	5.53	4.37	2.77	U DL	8.89	5.19
Strontium-90	0.151	U	0.36	0.215	0.0678	U	0.283	0.163	-0.00179	U	0.308	0.171
Tritium									-109	U	444	240
Zinc-65					-3.93	U DL	26.9	15.6	4.5	U DL	25.6	14.8

NSLS II

Analytical Results

2024 Groundwater Data : Volatile Organic Compounds

Brookhaven National Laboratory

Project: NSLS II (NSLS)

Analyte	076-18 Depth : 30.00 04/17/2024 ug/L		076-18 Depth : 30.00 10/03/2024 ug/L		076-19 Depth : 30.00 04/16/2024 ug/L		076-19 Depth : 30.00 10/04/2024 ug/L					
1,1,1,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U				
1,1,1-Trichloroethane	1	U	0.5	U	1	U	0.5	U				
1,1,2,2-Tetrachloroethane	1	U	0.5	U	1	U	0.5	U				
1,1,2-Trichloroethane	1	U	0.5	U	1	U	0.5	U				
1,1-Dichloroethane	1	U	0.5	U	1	U	0.5	U				
1,1-Dichloroethylene	1	U	0.5	U	1	U	0.5	U				
1,1-Dichloropropene	1	U	0.5	U	1	U	0.5	U				
1,2,3-Trichlorobenzene	2	U	0.5	U	2	U	0.5	U				
1,2,3-Trichloropropane	2.5	U	0.5	U	2.5	U	0.5	U				
1,2,4-Trichlorobenzene	1	U	0.5	U	1	U	0.5	U				
1,2-Dichloroethane	1	U	0.5	U	1	U	0.5	U				
1,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U				
1,3-Dichloropropane	1	U	0.5	U	1	U	0.5	U				
2,2-Dichloropropane	1	U	0.5	U	1	U	0.5	U				
Benzene	1	U	0.5	U	1	U	0.5	U				
Benzene, 1,2,4-trimethyl	1	U	0.5	U	1	U	0.5	U				
Benzene, 1,3,5-trimethyl-	1	U	0.5	U	1	U	0.5	U				
Benzene, 1-methylethyl-	1	U	0.5	U	1	U	0.5	U				
Bromobenzene	1	U	0.5	U	1	U	0.5	U				
Bromodichloromethane	1	U	0.5	U	1	U	0.5	U				
Bromoform	2	U	0.5	U	2	U	0.5	U				
Carbon tetrachloride	1	U	0.5	U	1	U	0.5	U				
Chlorobenzene	1	U	0.5	U	1	U	0.5	U				
Chlorobromomethane	1	U	0.5	U	1	U	0.5	U				
Chloroethane	4	U	0.5	U	4	U	0.5	U				
Chloroform	1	U	0.46	J	1	U	0.5	U				
cis-1,2-Dichloroethylene	1	U	0.5	U	1	U	0.5	U				
cis-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U				
Cymene	1	U	0.5	U	1	U	0.5	U				
DBCP	5	U	0.5	U	5	U	0.5	U				
Dibromochloromethane	2	U	0.5	U	2	U	0.5	U				
Dibromomethane	1	U	0.5	U	1	U	0.5	U				
Dichlorodifluoromethane	3	U	0.5	U	3	U	0.5	U				
EDB	1	U	0.5	U	1	U	0.5	U				
Ethene, 1,2-dichloro-, (E)-	1	U	0.5	U	1	U	0.5	U				
Ethylbenzene	1	U	0.5	U	1	U	0.5	U				
Hexachlorobutadiene	2	U	0.5	U	2	U	0.5	U				
m-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U				
m/p xylene	2	U	1	U	2	U	1	U				
Methyl bromide	5	U	0.5	U	5	U	0.5	U				
Methyl chloride	2	U	0.5	U	2	U	0.5	U				
Methyl tert-butyl ether	5	U	0.5	U	5	U	0.5	U				
Methylene chloride	2	U	0.5	U	2	U	0.5	U				
n-Butylbenzene	1	U	0.5	U	1	U	0.5	U				
n-Propylbenzene	1	U	0.5	U	1	U	0.5	U				
Naphthalene	2	U	0.5	U	2	U	0.5	U				
o-Chlorotoluene	1	U	0.5	U	1	U	0.5	U				
o-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U				
o-Xylene	1	U	0.5	U	1	U	0.5	U				
p-Chlorotoluene	1	U	0.5	U	1	U	0.5	U				
p-Dichlorobenzene	1	U	0.5	U	1	U	0.5	U				
sec-Butylbenzene	1	U	0.5	U	1	U	0.5	U				
Styrene	1	U	0.5	U	1	U	0.5	U				
tert-Butylbenzene	1	U	0.5	U	1	U	0.5	U				
Tetrachloroethylene	1	U	0.5	U	1	U	0.5	U				
Toluene	1	U	0.5	U	1	U	0.5	U				
trans-1,3-Dichloropropene	2	U	0.5	U	2	U	0.5	U				
Trichloroethylene	1	U	0.5	U	1	U	0.5	U				
Trichlorofluoromethane	2	U	0.5	U	2	U	0.5	U				
Vinyl chloride	2	U	0.5	U	2	U	0.5	U				
Xylene (total)	1	U	1.5	U	1	U	1.5	U				
8260 TVOC	0		0.46		0		0					

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: NSLS II (NSLS)

	086-123 Depth : 34.50 12/10/2024 pCi/l				086-124 Depth : 47.00 12/10/2024 pCi/l				086-125 Depth : 37.00 12/10/2024 pCi/l			
Analyte	Result	Qual	MDA	Error	Result	Qual	MDA	Error	Result	Qual	MDA	Error
Tritium	-167	U	432	235	-273	U	426	225	-131	U	427	234

2024 Groundwater Data : Radionuclides
Brookhaven National Laboratory
Project: NSLS II (NSLS)

	086-126 Depth : 36.50 12/10/2024 pCi/l											
Analyte	Result	Qual	MDA	Error								
Tritium	-231	U	434	232								

Qualifier definitions

A - Indicates that a TIC is a suspected aldol-condensation product.

B - Used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for TICs as well as for positively identified target compounds.

C - Applies to pesticide results where the identification has been confirmed by gas chromatography/mass spectrometry (GC/MS). If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a aboratory-defined flag is used instead.

D - Identifies all compounds identified in an analysis at a secondary dilution factor. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

DL - Detection limit requirements not met. Data quality objectives may not be met.

E - Identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

J - The associated numerical value is an estimated quantity.

JN - Presumptive evidence of the presence of the material at an estimated quantity.

N - Indicates presumptive evidence of a compound. This flag is used only for TICs, where the identification is based on a mass spectral library search.

N2 - The reported activity value is less than or equal to the sum of the MDA and the uncertainty. Possible false positive.

P - Used for pesticide/Aroclor target analytes when there is greater than 25% difference for detected concentrations between the two gas chromatograph (GC) columns.

R - The data are unusable (radionuclide may or may not be present).

U - Indicates that the compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution. For a soil/sediment sample, the value must also be corrected for percent moisture.

UI - (Uncertain identification for gamma spectroscopy) - Radionuclide peaks that are detected but fail to meet the positive identification criteria.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description must be attached to the Sample Data Summary Package and the sample delivery group (SDG) narrative.

APPENDIX E

SAMPLE COLLECTION, TRACKING, AND QA/QC RESULTS

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1.0 Introduction

This document describes the tracking system, quality assurance, and quality control (QA/QC) for samples collected for the CERCLA and Facility Monitoring (FM) Groundwater Monitoring Programs, and contains the procedures used to collect groundwater samples from monitoring wells. Quality Assurance/Quality Control (QA/QC) issues and the procedures for collecting groundwater samples were formalized into BNL Standard Operating Procedures (SOPs) in 1999. The SOPs are thoroughly reviewed on a 5-year schedule, and revisions are made as necessary. These SOPs will be discussed in the appropriate sections below.

2.0 Sample Collection

Groundwater samples were collected during calendar year (CY) 2024 by the BNL Field Sampling Team for the FM program and treatment system sampling program, and by J.R. Holzmacher P.E., LLC; Dvirka and Bartilucci Consulting Engineers; GEI Consultants and the BNL Field Sampling Team for the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) program.

Groundwater samples were collected using dedicated bladder pumps installed in all routinely monitored wells. To collect the samples, BNL used a low flow purge technique that is defined in BNL EM-SOP-302, "*Low Flow Purging and Sampling Using Dedicated Bladder Pumps"*. A minimum of two times the volume of the sample pump and tubing are purged from the wells, and samples are collected once water quality parameters (pH, specific conductance, and dissolved oxygen) stabilize or when 25 percent of the well casing volume has been purged. Depending on the parameter, purge flow rates were adjusted to approximately 100 milliliters per minute for sample collection. Groundwater samples were collected from the pump's discharge tubing into laboratory-supplied bottles and preserved according to analysis requirements. A typical low flow sampling event produces 1.5 to 5 gallons of purge water waste per well.

The collection of groundwater samples from temporary wells was dependent on the drilling method used to install the well. When using an auger rig, hollow stem augers are advanced to the deepest sampling interval. A stainless-steel well screen is connected to two-inch diameter steel well pipe and lowered through the center of the augers to the required sampling depth. The augers are then withdrawn above the well screen. A submersible pump is lowered to the well screen and three well volumes of groundwater are purged prior to sampling. Groundwater samples were collected from the operating pump discharge tubing into laboratory-supplied bottles and preserved according to analysis requirements. This procedure is repeated at each depth interval required by the work plan.

When collecting groundwater samples via a Geoprobe, a screen was placed inside a sampler sheath and an expendable drive point is attached to the bottom of the sheath and then threaded onto a steel rod. The probe is advanced to the deepest sample collection level and the screen is released using a trip rod. A length of low-density polyethylene tubing (or high-density polyethylene tubing required for PFAS sampling) sized to fit inside the probe rods is attached to a check valve. The check valve and tubing are sent down the probe rod until they reach the bottom of the screen, and then withdrawn 12 inches. An inertial pump (e.g., Waterra) is used to purge the Geoprobe well. Three well casing volumes of groundwater were typically removed prior to sampling. Samples are collected with the inertial pump running continuously.

Purge water from groundwater samples is disposed of by one of three methods as described in BNL EM-SOP-802, "*Well Development, Purge and Decontamination Water Handling Procedures"*. If the groundwater does not contain any contaminants above action levels, NYSDEC and Federal drinking water standards and DOE groundwater screening levels, the purge water is discharged to the ground surface approximately 20 feet downgradient from the wellhead. If the groundwater

contains chemical contaminants above action levels, the purge water is run through granular activated carbon (GAC). If this takes place in the field using a portable GAC filter, the treated water is discharged at least 20 feet downgradient of the wellhead. Purge water which contains radiological contaminants above action levels is containerized and normally processed by an on-site treatment system.

2.1 Decontamination

All groundwater sampling equipment is dedicated to each well and was decontaminated by the manufacturer. No additional decontamination is required.

3.0 Sample Tracking System

Samples are tracked using the Environmental Information Management System (EIMS) as outlined in BNL EI-SOP-002 "Analytical Data Ingest". Tracking starts when a sample is recorded on a chain-of-custody (COC) form. Sampling personnel submit these forms to the sampling coordinator, and the information is entered into the EIMS.

3.1 Sample Identification

Samples are identified using a code consisting of the COC number and the unique ID (UID) number. This ID is written on the sampling logs along with the BNL well ID. BNL well IDs are placed on the COC forms in the Site ID column. QA/QC samples are identified in the same manner as environmental samples. The blind duplicate samples are recorded as BD in the sample ID column of the COC. The location ID of the BD sample is documented on an internal copy of the COC form and subsequently entered into EIMS. BNL EM-SOP-109 details *BNL's Chain of Custody, "Storage, Packaging, and Shipment of Samples"*. COC records are maintained by BNL and are available for review.

3.2 Sample Tracking

The COC forms are provided to the BNL Field Sampling Team supervisor and EIMS personnel for entry into EIMS. The status of each sample is updated when:

1. The sample is assigned to a Sample Delivery Group (SDG) and the analytical laboratory communicates this information to the Sampling Coordinator;
2. The Project Manager receives the electronic PDF version of the analytical report;
3. The Electronic Data Deliverable (EDD) analytical results are received and entered into the EIMS;
4. The Project Manager receives an electronic copy of the data validation package (when applicable); and
5. The results of the EDD data-validation results are received and entered (when applicable) into the EIMS.

3.3 Sample Packaging and Shipping

Samples are placed inside a plastic bag, sealed inside a cooler, then shipped to external contractor analytical laboratories. The bottles with VOC samples are placed in protective foam inserts. Glass

bottles are wrapped with protective packaging to protect against breakage during shipment. Plastic bags are filled with ice (no blue-ice) and sealed, then placed inside each cooler with the samples to ensure that they arrive at the analytical laboratory at four degrees Celsius (plus or minus two degrees). A BNL COC form completed by the sampling team accompanies the samples to the laboratory. The form is placed in a plastic bag, sealed, and put inside the cooler with the samples. The samples are shipped to the analytical laboratory via an overnight mail carrier.

3.4 Sample Documentation

The sample teams maintain electronic tablets and field notebooks (bound weatherproof logbooks) that are filled out at the location where the sample is collected. They contain the sample's designation, collection time, description, collection method, and the weather conditions, field measurements, and other site-specific observations.

The sample teams also complete Groundwater Sample Logs for every sample that is collected. The completed Groundwater Sample Logs are submitted to the BNL Field Sampling Team supervisor weekly.

4.0 Analytical Methods

The following sections describe the analytical methods used for the BNL Groundwater Monitoring Program.

4.1 Chemical Analytical Methods

The CERCLA and FM samples collected during CY 2024 were analyzed for organic, inorganic, and various wet-chemistry analytes. FM and CERCLA chemical analyses were performed by GEL Laboratories, Eurofins-Test America-Denver and Eurofins-Test America-Sacramento. Tables 1-5 (A to U) summarizes the analytes and/or methods used for specific CERCLA monitoring programs and samples as well as the date of sampling. Table 1-6 summarizes this information for the FM program.

4.2 Radiological Analytical Methods

Unlike organic and inorganic chemical analytical methods, few standard methods are available for the radiological analysis of environmental samples. There are no standard established QA/QC requirements and acceptance criteria for environmental radiological methods; therefore, the USEPA, U.S. Department of Energy (DOE), and commercial laboratories may have different methods of preparing samples and analytical techniques for specific radiological analytes. Hence, laboratory-reported detection limits may vary. Nonetheless, multi-laboratory validation studies and inter-laboratory comparisons have demonstrated that accurate, comparable, radiological data are obtainable even when different procedures are used. Radiological analyses were performed by GEL Laboratories, Eberline Analytical, and Eurofins-Test America-St. Louis.

Tables 1-5 (A to U) and Table 1-6 provide the analytical parameters and/or methods used for specific monitoring programs and samples. Radiological analyses were undertaken for onsite and offsite locations. The radiological analyses enable BNL to monitor radiological water-quality status throughout the site.

5.0 Quality Assurance and Quality Control

This section describes the QA/QC requirements for field work conducted under the CERCLA and FM Groundwater Monitoring Programs. In general, the quality of the analytical results from groundwater samples collected during CY 2024 met data quality objectives.

5.1 Calibration and Preventive Maintenance of Field Instruments

Sampling team personnel are responsible for assuring that the Daily Water Quality and the Monthly Calibration Logs are maintained for each water quality meter (i.e., pH, conductivity, turbidity meters, etc.).

5.2 QA/QC Sample Collection

Guidance on collecting the QA/QC samples is given in *BNL EM-SOP-200 "Collection and Frequency of Field Quality Control Samples."* Sample-specific requirements are listed separately, below.

The collection of QA/QC samples is dependent on the data quality objectives of each project. The following is a general breakdown of the QA/QC samples collected by project type:

CERCLA Groundwater Monitoring: trip blanks, field blanks, equipment blanks, matrix spike/matrix spike duplicates (MS/MSDs), and blind field duplicates.

Remediation Treatment System Sampling: trip blanks.

FM Groundwater Monitoring: trip blanks, field blanks, equipment blanks, and blind field duplicates.

5.2.1 Equipment Blanks

Equipment blanks are collected to evaluate any potential cross-contamination of samples due to the reuse of sampling equipment. They are collected by pouring laboratory grade water over the sampling equipment which comes in contact to the groundwater sample. Equipment blanks are typically not collected during routine monitoring efforts when dedicated sampling equipment is used. Equipment blanks are collected when non-dedicated sampling equipment is used (e.g., sampling of temporary Geoprobe wells) or at the request of the project manager. The frequency of collecting equipment blanks is one for every 20 groundwater samples collected.

5.2.2 Field Blanks

Field blanks are obtained by pouring laboratory grade water into clean sample bottles. The field blanks are collected in the field at the sampling location. They are analyzed for the same parameters that the groundwater is being analyzed for on that day, at that location. The frequency of collecting field blanks is one for every 20 groundwater samples collected. Field blank results are summarized on Table E-1. The major constituent found in field blanks collected for VOCs in 2024 was methylene chloride (detected in 8 of 58 samples) detected in 8 of 58 samples at the highest concentration of 1.52 µg/L.

5.2.3 Trip Blanks

A trip blank is an aliquot of deionized water that is sealed in a sample bottle (glass vials (40 ml) with Teflon septa). It is used to determine if there is any cross-contamination between aqueous samples during shipment. Trip blanks are analyzed for aqueous VOCs only. In 2024, trip blanks were provided by the contract analytical laboratory suppling the VOA vials. Upon arrival at BNL, the sealed trip blank bottles are placed in a cooler and brought to the field by the sampling team. The frequency of trip blanks collected is one of every 20 VOC samples collected. If several coolers are required, each cooler must contain an individual trip blank. Trip blank detections are summarized on Table E-2. The total number of trip blanks collected in 2024 was 84. The constituents detected most frequently in the trip blanks was methylene chloride and styrene which were each detected 8 times. These detections are most likely due to trace laboratory contamination. The highest concentration of any organic compounds in the Trip blanks was Methylene chloride and Styrene detected at 2.14 µg/L and 0.3 ug/L, respectively.

5.2.4 Duplicate Samples

Field duplicate samples are analyzed to check the reproducibility of the laboratory's analytical results. Duplicates are either blind (the laboratory doesn't know the identity of the sample location) or field (the laboratory is told the identity of the sampling location). The specific type of duplicate used on a project is dependent on the project data quality objectives. The frequency of collecting duplicate samples is one for every 20 groundwater samples collected to evaluate the precision of the methods. USEPA Region II USEPA Region II data validation criteria were used for field duplicate interpretation. For detections above 5 times the contract required detection limit (CRDL), a relative percent difference (RPD) was calculated. An acceptable RPD was 50% or below. For detections below 5 times the CRDL, the QC requirement is that the difference between the duplicate results must be less than or equal to the CRDL. A total of 167 duplicate samples were collected for non-radiological analyses and 101 duplicates were collected for radiologic analyses in 2024. Not all parameters were analyzed in every duplicate. The parameters in each duplicate were consistent with those required for the specific program the duplicate was monitoring. Of the 7,981 non-radiologic parameters analyzed; 279 parameters (less than four percent) did not meet QA criteria. For the radiologic parameters 19 of the 272 parameters (93%) meet QA criteria. The results are indicative of consistency with the laboratory and sampling team that is resulting in valid, reproducible data.

5.2.5 Requirements for Matrix Spike/Matrix Spike Duplicate Volumes

Matrix Spike/Matrix Spike Duplicates (MS/MSDs) for organic analysis are performed at a frequency of one MS/MSD for every 20 groundwater samples in an SDG.

Matrix spikes (MS) are actual field samples to which known spiked concentrations of target analytes have been added prior to sample preparation and analytical testing. The MS is analyzed as a method performance assessment by measuring the effects of interferences caused by the specific sample matrix. Poor spike recoveries for MS samples could mean your sample matrix is causing matrix interference issues.

A matrix spike duplicate (MSD) is an additional replicate of the matrix spike sample following the same sample preparation and analytical testing as the original sample. MSDs are used to document the precision and bias of a method for a specific sample matrix. Following MS and MSD recovery results, the Relative Percent Difference (RPD) is reported for each analyte as a means of measuring reproducibility. To ensure that the laboratory has sufficient volume for MS/MSD analysis, triple the sample volume must be collected. For 2024, A total of 268 MS/MSD samples were collected for non-radiological analyses and 213 MS/MSD samples were collected for radiological analyses. Not all parameters were analyzed for every MS/MSD pair. Of the 15,447 non-radiological parameters analyzed, 925 parameters (5%) were outside of the QA criteria. For the radiological parameters, 373 of the 503 parameters (74%) meet QA criteria. These overall non-radiological results are indicative of consistent measuring reproducibility with the laboratories and field sampling teams. Radiological results indicate some matrix interference and require more attention to the reported sample results.

5.3 Data Verification

Data verification is the process by which contract laboratory results are checked to ensure that the proper quality control steps were performed. These steps checked in data verification include, but are not limited to, data package deliverable completeness, review of the chain-of-custody, review of analytical holding times, blank contaminants, duplicate results, and matrix spike results. All groundwater data collected at BNL undergoes data verification. The procedures for data verification are given in BNL EM-SOP-203, "*Chemical Data Verification"* and BNL EM-SOP-204, "*Radiochemical Data Verification"*. This is BNL's internal process to verify the accuracy and/or completeness of analytical data. For the 2024 CY, 1,156 data verifications were completed.

5.4 Data Usability

Data usability is the process by which data that does not meet the expected results, but which has been deemed acceptable by data validation or verification, is reviewed.

To determining the usability of chemical data, the data is assessed according to BNL EM-SOP-211, "*Chemical Data Usability*". Laboratory analytical data are validated or verified, and validation qualifiers are assigned. Table E-3 defines the qualifiers placed on the data by the analytical laboratory, and Table E-4 defines the data validation, verification, and usability qualifiers.

The usability of radiological data for in CY 2024 was determined through a two-step process. First, the project manager reviewed all groundwater monitoring data to identify results significantly different than expected for a particular result based on historical trends, and were qualified as usable during the validation and/or verification procedures. Results for a particular well that were not expected based on historical trends were referred to the EPD chemist. The data then were assessed according to BNL EM-SOP-210, "*Radiochemical Data Usability*". The data subsequently were assigned (if applicable) a revised qualifier and a data-usability code. A usability code of "N2" was assigned if the data were not usable because the results and the propagated error are indistinguishable from background (i.e., the result minus the 2 sigma error is less than the detection limit). A usability code of "N3" would be assigned if the data were not usable based on the lack of expected daughter products. Data identified as being "not usable" were not considered in characterizing the presence or extent of contamination. There were 297 instances of data qualified "N2" in 2024. Data validation, verification, and usability report summaries are included as Appendix G of the 2024 Site Environmental Report Volume II, Groundwater Status Report.

5.5 Data Qualification

During the data validation, verification and/or usability processes, the data may be qualified to alert the user to limitations in the use of the data based on QA/QC violations. Table E-3 defines the qualifiers placed on the data by the analytical laboratory and Table E-4 defines the data validation, verification, and usability qualifiers placed on the data by BNL. For organic and inorganic analytes, three primary qualifiers were applied to laboratory data: "U," "J," and "R." For radiological data, in addition to the "U," "J," and "R" qualifiers, qualifiers "DL" and "N2" were also applied to the results.

A "U" qualifier, which is a laboratory qualifier, indicates that the analyte was a target of the method but was not detected above the minimum detection level (MDL). The "U" qualifier also may be used in conjunction with the "J" qualifier, which indicates that the reported concentration is an estimated value because the reported value is lower than the required reporting limit, or because one or more analytical deficiencies were noted during the data validation review. Thus, the designation "UJ" indicates that the analyte was not detected above the MDL, and the reported quantitation or detection limit is an estimate due to QA/QC deficiencies. The "R" qualifier indicates that the datum is rejected. An "R" qualifier can be reported for analytes that either were, or were not, detected. In other words, an "R" qualifier may be assessed upon a reported concentration, or a result reported with a "U" qualifier.

Data reported as either unqualified, or with "U" or "J" qualifiers are typically usable, in assessments of the extent of contamination or effectiveness of remedial actions. Data qualified by "R" are considered unusable.

APPENDIX F

REMEDIATION SYSTEM DATA TABLES

Table F-1
Extraction Wells Radiological and VOC Data
OU I South Boundary System

2024 BNL Groundwater Status Report

The extraction wells did not operate in 2024.

Table F-2
Air Stripper Influent Radiological and VOC Data
OU I South Boundary System

2024 BNL Groundwater Status Report

OU I South Boundary Treatment System was in standby mode during 2024.

Table F-3
Air Stripper Effluent Radiological and VOC Data
OU I South Boundary System

2024 BNL Groundwater Status Report

OU I South Boundary Treatment System was in standby mode during 2024.

Table F-4
Cumulative Mass Removal
OU I South Boundary System

2024 BNL Groundwater Status Report

Date Sampled		Cumulative VOC's (lbs)
6/3/2013	Final mass removal	368.97

Table F-5
Influent VOC Data
OU III Building 96 System

2024 BNL Groundwater Status Report

Site ID : 095-151 (RTW-1 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	02/05/24	27.7	0	NG/L	0	
8260 TVOC	02/05/24	3.5	0	UG/L	0	
Chloroform	02/05/24	0.6	0.5	UG/L	0	
Perfluorobutanesulfonate (PFBS)	02/05/24	1	1.6	NG/L	0	J
Perfluorobutyric acid (PFBA)	02/05/24	8.3	6.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	02/05/24	1	1.6	NG/L	0	J
Perfluorohexanesulfonate	02/05/24	2.2	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/05/24	2.4	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	02/05/24	0.6	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/05/24	7.2	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/05/24	3.2	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	02/05/24	1.8	3.3	NG/L	0	J
Tetrachloroethylene	02/05/24	2.9	0.5	UG/L	0	
1633 TPFAS	04/10/24	33.53	0	NG/L	0	
8260 TVOC	04/10/24	4.61	0	UG/L	0	
Chloroform	04/10/24	0.61	0.5	UG/L	0	
N-Ethylperfluorooctane	04/10/24	3.1	1.5	NG/L	0	
N-Methylperfluorooctane	04/10/24	1.4	1.5	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	04/10/24	1.1	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	04/10/24	8.8	5.9	NG/L	0	
Perfluorodecanoic acid (PFDA)	04/10/24	0.19	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	04/10/24	0.91	1.5	NG/L	0	J
Perfluorohexanesulfonate	04/10/24	2.6	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/10/24	2	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	04/10/24	0.51	1.5	NG/L	0	J
Perfluorooctane sulfonamide	04/10/24	0.52	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/10/24	6.8	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/10/24	3.5	1.5	NG/L	0	
Perfluoropentanesulfonate	04/10/24	0.3	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	04/10/24	1.8	3	NG/L	0	J
Tetrachloroethylene	04/10/24	4	0.5	UG/L	0	
8260 TVOC	06/05/24	3.62	0	UG/L	0	
Chloroform	06/05/24	0.62	0.5	UG/L	0	
Tetrachloroethylene	06/05/24	3	0.5	UG/L	0	
1633 TPFAS	09/09/24	37.18	0	NG/L	0	
8260 TVOC	09/09/24	2.35	0	UG/L	0	
Chloroform	09/09/24	0.45	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	09/09/24	0.88	1.6	NG/L	0	J
Perfluorobutyric acid (PFBA)	09/09/24	9.8	3.2	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	09/09/24	1.4	1.6	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	09/09/24	1.7	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	09/09/24	1.1	1.6	NG/L	0	J B
Perfluorooctanesulfonate (PFOS)	09/09/24	16	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/09/24	4.8	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	09/09/24	1.5	1.6	NG/L	0	J
Tetrachloroethylene	09/09/24	1.9	0.5	UG/L	0	
1633 TPFAS	12/16/24	34.29	0	NG/L	0	
8260 TVOC	12/16/24	2.84	0	UG/L	0	
Chloroform	12/16/24	0.74	0.5	UG/L	0	
Perfluorobutanesulfonate (PFBS)	12/16/24	0.91	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	12/16/24	12	3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/16/24	1	1.5	NG/L	0	J
Perfluorohexanesulfonate	12/16/24	1.5	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/16/24	2.4	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	12/16/24	0.78	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	12/16/24	10	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/24	3.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/24	1.9	1.5	NG/L	0	
Tetrachloroethylene	12/16/24	2.1	0.5	UG/L	0	

Table F-5
Influent VOC Data
OU III Building 96 System

2024 BNL Groundwater Status Report

Site ID : 095-153 (RTW-2 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/09/24	0	0	UG/L	0	
8260 TVOC	04/09/24	8	0	UG/L	0	
Tetrachloroethylene	04/09/24	8	0.5	UG/L	0	
8260 TVOC	07/08/24	4.8	0	UG/L	0	
Tetrachloroethylene	07/08/24	4.8	0.5	UG/L	0	

Site ID : 095-155 (RTW-3 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/09/24	0.54	0	UG/L	0	
Chloroform	01/09/24	0.54	0.5	UG/L	0	
8260 TVOC	04/09/24	0.36	0	UG/L	0	
Chloroform	04/09/24	0.36	0.5	UG/L	0	J
8260 TVOC	07/08/24	0.28	0	UG/L	0	
Tetrachloroethylene	07/08/24	0.28	0.5	UG/L	0	J
8260 TVOC	11/06/24	0.75	0	UG/L	0	
Chloroform	11/06/24	0.42	0.5	UG/L	0	J
Tetrachloroethylene	11/06/24	0.33	0.5	UG/L	0	J

Site ID : 095-157 (RTW-4 Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/09/24	0.47	0	UG/L	0	
Chloroform	01/09/24	0.47	0.5	UG/L	0	J
8260 TVOC	04/09/24	0.79	0	UG/L	0	
Chloroform	04/09/24	0.58	0.5	UG/L	0	
Tetrachloroethylene	04/09/24	0.21	0.5	UG/L	0	J
8260 TVOC	07/08/24	4.7	0	UG/L	0	
Tetrachloroethylene	07/08/24	4.7	0.5	UG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.

Table F-6
System Effluent VOC Data
OU III Building 96 System

2024 BNL Groundwater Status Report

Site ID: 095-152 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	2/5/2024	27.68	0	NG/L	0	
8260 TVOC	2/5/2024	0	0	UG/L	0	
Perfluorobutanesulfonate (PFBS)	2/5/2024	1	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	2/5/2024	8.5	5.9	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	2/5/2024	0.97	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	2/5/2024	2.3	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	2/5/2024	2	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	2/5/2024	0.61	1.5	NG/L	0	J
Perfluorooctane sulfonamide	2/5/2024	0.2	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	2/5/2024	7.4	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	2/5/2024	2.9	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	2/5/2024	1.8	2.9	NG/L	0	J
1633 TPFAS	4/10/2024	33.72	0	NG/L	0	
8260 TVOC	4/10/2024	0	0	UG/L	0	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4/10/2024	1.4	1.4	NG/L	0	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4/10/2024	0.78	1.4	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	4/10/2024	1.2	1.4	NG/L	0	J
Perfluorobutyric acid (PFBA)	4/10/2024	8.8	5.8	NG/L	0	
Perfluorodecanoic acid (PFDA)	4/10/2024	0.2	1.4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	4/10/2024	1.1	1.4	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	4/10/2024	2.5	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	4/10/2024	1.9	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	4/10/2024	0.62	1.4	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	4/10/2024	0.55	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	4/10/2024	9.4	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	4/10/2024	3.1	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	4/10/2024	0.27	1.4	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	4/10/2024	1.9	2.9	NG/L	0	J
1,2,3-Trichlorobenzene	4/25/2024	0.23	0.5	UG/L	0	J
8260 TVOC	4/25/2024	0.66	0	UG/L	0	
Iron	4/25/2024	11	200	UG/L	0	B
Iron	4/25/2024	22	200	UG/L	0	B
Manganese	4/25/2024	1.1	3	UG/L	0	B
Manganese	4/25/2024	2.7	3	UG/L	0	B
Naphthalene	4/25/2024	0.43	0.5	UG/L	0	J
TOC	4/25/2024	0.87	1	MG/L	0	B
Alkalinity (as CaCO3)	4/26/2024	50	10	MG/L	0	
Bicarbonate alkalinity	4/26/2024	61	10	MG/L	0	
Bicarbonate alkalinity	4/26/2024	50	10	MG/L	0	
Chloride	4/26/2024	110	10	MG/L	0	
Nitrate (as N)	4/26/2024	0.87	0.5	MG/L	0	
Sulfate	4/26/2024	12	5	MG/L	0	
Barium	6/5/2024	33	0.8	UG/L	0	
Calcium	6/5/2024	15000	32	UG/L	0	
Chromium	6/5/2024	0.87	3	UG/L	0	B *
Iron	6/5/2024	16	200	UG/L	0	B

Table F-6
System Effluent VOC Data
OU III Building 96 System

2024 BNL Groundwater Status Report

Site ID: 095-152 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Magnesium	6/5/2024	3600	25	UG/L	0	
Manganese	6/5/2024	0.92	3	UG/L	0	B
Potassium	6/5/2024	1800	52	UG/L	0	
Sodium	6/5/2024	57000	73	UG/L	0	
8260 TVOC	6/5/2024	0	0	UG/L	0	
1633 TPFAS	9/9/2024	36.3	0	NG/L	0	
8260 TVOC	9/9/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	9/9/2024	9.1	3.2	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	9/9/2024	1.3	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	9/9/2024	1.6	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	9/9/2024	18	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	9/9/2024	4.9	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	9/9/2024	1.4	1.6	NG/L	0	J
1633 TPFAS	12/16/2024	33.08	0	NG/L	0	
8260 TVOC	12/16/2024	0	0	UG/L	0	
Perfluorobutanesulfonate (PFBS)	12/16/2024	0.74	1.8	NG/L	0	J
Perfluorobutyric acid (PFBA)	12/16/2024	11	3.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/16/2024	1.1	1.8	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/16/2024	1.7	1.8	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	12/16/2024	2.1	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	12/16/2024	0.74	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	12/16/2024	10	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/2024	3.8	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/2024	1.9	1.8	NG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L

B = Compound was found in both the sample and associated laboratory blank.

Table F-7
Pumpage and Mass Removal
OU III Building 96 System

2024 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped***	**Mass Recovered**	**Total Pumped***	**Mass Recovered**	**Total Pumped***	**Mass Recovered**	**Total Pumped***	**Mass Recovered**
	(Gallons)	*(lbs)*	*(Gallons)*	*(lbs)*	*(Gallons)*	*(lbs)*	*(Gallons)*	*(lbs)*
01/18/01	0	0.00	0	0.00	0	0.00	1,320	0.00
02/06/01	39,960	0.05	22,680	0.00	25,920	0.21	25,080	0.00
02/07/01	91,020	0.09	50,400	0.00	59,040	0.29	54,120	0.00
02/08/01	142,080	0.26	80,640	0.00	92,160	0.22	85,800	0.01
02/09/01	199,800	0.34	113,400	0.00	129,600	0.26	120,120	0.01
02/10/01	304,140	0.66	172,620	0.01	197,280	0.37	180,840	0.02
02/12/01	357,420	0.32	176,400	0.00	231,840	0.18	213,840	0.01
03/09/01	768,120	2.65	322,560	0.01	498,240	1.33	458,040	0.10
03/28/01	1,582,860	5.20	728,280	0.03	1,026,720	2.71	941,160	0.07
04/04/01	1,762,680	0.61	830,340	0.08	1,143,360	0.20	1,048,080	0.09
05/07/01	1,973,580	0.68	956,340	0.08	1,280,160	0.21	1,176,120	0.08
06/12/01	3,053,580	1.86	1,676,340	0.26	2,000,160	1.07	1,896,120	0.54
07/16/01	3,698,700	0.91	2,482,740	0.39	2,806,560	0.79	2,702,520	1.18
08/13/01	4,343,820	0.98	3,208,500	0.53	3,612,960	0.57	3,468,600	0.88
09/05/01	4,873,740	0.52	3,804,660	0.45	4,275,360	0.50	4,097,880	0.62
10/02/01	5,397,345	0.67	4,405,393	0.51	4,945,772	0.36	4,749,934	0.38
11/01/01	6,033,079	1.05	5,133,686	0.68	5,759,659	0.40	5,547,867	0.24
12/07/01	6,281,676	0.39	5,605,726	0.37	6,283,103	0.20	6,067,911	0.09
01/02/02	6,953,724	1.00	6,337,777	0.23	7,088,353	0.14	6,873,161	0.04
02/01/02	8,138,324	1.36	7,097,468	0.17	7,852,723	0.00	7,630,802	0.03
03/01/02	9,438,485	1.07	7,933,881	0.18	8,682,452	0.08	8,464,356	0.04
04/01/02	10,738,646	0.96	8,770,294	0.08	9,512,181	0.06	9,297,910	0.03
05/01/02	11,994,906	0.70	9,590,008	0.07	10,321,344	0.06	10,114,663	0.02
06/03/02	13,418,012	0.85	10,544,112	0.07	11,253,969	0.06	11,081,608	0.03
07/01/02	14,637,525	0.53	11,361,779	0.05	12,049,136	0.05	11,908,916	0.03
08/01/02	15,838,038	0.58	12,145,419	0.04	12,835,173	0.05	12,713,560	0.03
09/03/02	17,244,306	0.67	13,101,051	0.04	13,752,178	0.06	13,664,127	0.03
10/01/02	18,421,996	0.43	13,907,894	0.03	14,519,888	0.03	14,430,693	0.02
11/01/02	19,824,678	0.54	14,802,436	0.03	15,437,805	0.03	15,287,459	0.03
12/02/02	21,150,755	0.45	15,685,023	0.02	16,209,167	0.02	16,137,219	0.02
01/03/03	22,296,027	0.41	16,448,088	0.02	16,964,154	0.04	16,880,317	0.01
02/04/03	23,723,049	0.52	17,399,860	0.03	17,920,702	0.07	17,825,363	0.01
03/03/03	24,881,283	0.51	18,171,948	0.02	18,696,672	0.06	18,588,383	0.02
04/01/03	25,982,363	0.37	18,895,607	0.01	19,427,732	0.03	19,278,997	0.02
05/01/03	27,252,775	0.53	19,719,678	0.06	20,264,804	0.03	20,056,403	0.02
05/18/03	27,905,079	NA	20,135,774	NA	20,681,555	NA	20,446,633	NA
07/01/03	27,905,079	0.31	20,135,774	0.00	20,681,555	0.002	20,446,633	0.01
07/15/03	28,284,425	NA	20,534,396	NA	21,080,269	NA	20,762,535	NA
09/15/03	28,284,425	2.15	20,534,396	0.01	21,080,269	0.02	20,762,535	0.005
10/01/03	28,853,917	1.60	20,890,592	0.01	21,498,423	0.02	21,091,161	0.004
11/03/03	30,118,477	0.68	21,733,662	0.02	22,425,833	0.03	21,805,409	0.005
12/01/03	31,256,257	1.57	21,949,542	0.00	23,260,139	0.02	22,430,473	0.004
01/06/04	32,446,597	1.53	21,949,542	0.00	24,132,989	0.03	23,086,025	0.003

Table F-7
Pumpage and Mass Removal
OU III Building 96 System

2024 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
02/02/04	33,267,247	1.01	21,949,542	0.00	24,734,997	0.06	23,220,645	0.000
03/01/04	34,384,807	1.30	21,949,542	0.00	25,553,353	0.09	23,220,645	0.000
04/02/04	35,460,667	0.85	21,949,542	0.00	26,342,251	0.36	23,220,645	0.000
05/04/04	36,837,217	0.91	22,161,956	0.02	27,351,809	0.36	23,436,889	0.007
06/02/04	38,082,937	0.72	23,056,442	0.08	28,265,337	0.27	24,348,877	0.024
07/01/04	39,276,293	0.80	23,953,258	0.12	29,088,351	0.15	25,261,235	0.016
7/13/04*	39,740,085	NA	24,151,174	NA	29,419,431	NA	25,625,291	NA
08/03/04	40,583,081	0.83	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
09/01/04	41,748,693	0.70	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
10/04/04	43,144,141	0.70	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
11/03/04	44,528,109	0.60	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
12/02/04	45,556,469	0.52	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
01/04/05	47,065,453	0.91	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
02/02/05	48,275,053	0.55	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
03/04/05	49,614,253	0.37	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
04/21/05	51,687,853	0.48	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
05/19/05	52,897,853	0.24	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
06/01/05	53,373,053	0.13	24,151,174	0.00	29,419,431	0.00	25,625,291	0.000
07/01/05	53,373,053	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
08/30/05	53,373,053	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
09/30/05	53,373,053	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
10/31/05	53,621,149	0.11	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
11/30/05	54,435,113	0.16	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
12/30/05	55,249,077	0.03	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
01/31/06	55,766,745	0.15	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
02/28/06	55,766,745	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
03/31/06	55,947,421	0.05	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
04/30/06	55,956,057	0.23	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
05/31/06	58,190,277	0.20	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
06/30/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
07/31/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
08/31/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
09/30/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
10/31/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
11/30/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
12/31/06	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
01/31/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
02/28/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
03/31/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
04/30/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
05/31/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
06/30/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
07/31/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00

Table F-7
Pumpage and Mass Removal
OU III Building 96 System

2024 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
08/31/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
09/30/07	58,190,277	0.00	24,151,174	0.00	29,419,431	0.00	25,625,291	0.00
10/31/07	58,190,277	0.00	24,419,826	0.01	29,419,431	0.00	25,625,291	0.00
11/30/07	58,190,277	0.00	25,888,822	0.06	29,419,431	0.00	25,625,291	0.00
12/31/07	58,190,277	0.00	26,967,734	0.07	29,419,431	0.00	25,625,291	0.00
01/31/08	58,190,277	0.00	27,948,548	0.03	29,419,431	0.00	25,625,291	0.00
02/28/08	58,190,277	0.00	28,572,246	0.02	29,419,431	0.00	25,642,079	0.00
03/31/08	58,190,277	0.00	29,682,602	0.04	30,480,807	0.22	26,742,201	1.11
04/30/08	58,190,277	0.00	30,187,210	0.01	31,062,687	0.35	27,095,357	0.05
05/31/08	59,195,217	1.42	31,279,392	0.05	32,315,577	0.58	27,771,579	0.14
06/30/08	60,003,465	0.74	31,863,560	0.04	32,989,197	0.61	28,131,035	0.05
07/31/08	61,598,386	1.29	32,013,086	0.00	34,462,977	0.73	28,761,501	0.11
08/31/08	62,356,297	0.52	32,846,646	0.04	35,424,747	0.61	28,761,501	0.00
09/30/08	62,994,481	0.47	33,771,648	0.06	36,492,117	0.70	28,761,501	0.00
10/31/08	64,281,093	0.90	34,865,260	0.03	37,750,335	0.45	29,216,663	0.00
11/30/08	65,599,609	0.66	35,486,892	0.01	38,953,743	0.23	30,204,617	0.00
12/31/08	66,795,541	0.62	36,353,662	0.02	40,058,415	0.18	31,110,945	0.00
01/31/09	67,805,949	0.66	37,113,184	0.01	41,068,903	0.19	32,029,877	0.03
02/28/09	68,903,125	0.68	38,016,552	0.02	42,072,383	0.11	32,946,601	0.01
03/31/09	70,176,037	0.66	39,066,128	0.02	43,233,715	0.08	34,026,172	0.03
04/30/09	71,058,925	0.42	39,914,876	0.01	44,173,991	0.04	34,884,771	0.00
05/31/09	72,379,037	0.70	41,022,336	0.01	45,415,887	0.03	35,939,465	0.00
06/30/09	73,380,029	0.53	41,859,828	0.01	46,408,673	0.02	36,753,597	0.00
07/31/09	74,696,413	0.78	43,011,636	0.01	47,363,555	0.03	37,901,937	0.01
08/31/09	76,098,205	0.82	44,238,176	0.01	48,545,471	0.03	39,128,397	0.00
09/30/09	77,253,341	0.73	45,248,920	0.00	49,590,855	0.01	40,136,693	0.00
10/31/09	78,357,981	0.66	46,297,236	0.01	50,658,495	0.02	41,118,557	0.03
11/30/09	79,590,733	0.78	47,500,172	0.00	51,861,291	0.01	42,306,641	0.00
12/31/09	80,512,829	0.61	48,305,216	0.00	52,666,347	0.01	43,111,557	0.00
01/31/10	81,417,989	0.74	49,047,020	0.00	53,363,759	0.01	43,808,529	0.00
02/28/10	82,405,421	0.59	49,911,184	0.01	53,506,123	0.00	44,549,253	0.00
03/31/10	83,045,517	0.56	50,233,268	0.00	53,589,955	0.00	45,058,681	0.00
04/30/10	83,269,101	0.12	50,233,268	0.00	53,740,191	0.00	46,653,141	0.00
05/31/10	84,914,765	0.62	50,234,192	0.00	54,072,647	0.01	47,316,405	0.00
06/30/10	85,987,149	0.57	51,299,164	0.02	54,229,587	0.01	48,077,501	0.00
07/31/10	87,269,625	1.10	51,299,164	0.00	54,229,587	0.00	48,838,597	0.00
08/31/10	87,269,625	0.00	51,299,164	0.00	54,229,587	0.00	48,838,597	0.00
09/30/10	87,269,625	0.00	51,299,164	0.00	54,398,735	0.00	48,838,597	0.00
10/31/10	87,638,109	0.09	51,646,060	0.01	55,537,327	0.02	48,975,037	0.00
11/30/10	89,074,525	1.27	52,985,744	0.01	56,565,347	0.01	49,978,593	0.01
12/31/10	90,249,629	0.83	54,060,748	0.01	57,149,287	0.02	51,006,753	0.00
01/31/11	90,917,021	0.46	54,602,976	0.01	58,152,191	0.02	51,590,665	0.00
02/28/11	92,063,129	0.80	55,610,572	0.01	59,388,979	0.02	52,593,513	0.01

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	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
03/31/11	93,476,701	0.73	56,853,412	0.01	60,338,347	0.01	53,826,065	0.01
04/30/11	94,561,725	0.56	57,806,852	0.01	61,303,423	0.01	54,779,401	0.00
05/31/11	95,664,701	0.60	58,778,244	0.01	62,168,651	0.01	55,665,453	0.00
06/30/11	96,614,429	0.56	59,643,639	0.01	63,289,153	0.01	56,394,713	0.00
07/31/11	97,048,997	0.23	60,769,676	0.01	64,182,579	0.02	57,328,665	0.00
08/31/11	98,084,613	0.67	61,676,660	0.01	64,974,447	0.03	58,011,349	0.00
09/30/11	99,163,061	0.82	62,468,808	0.02	66,234,337	0.03	58,609,481	0.00
10/31/11	100,647,805	1.20	63,728,448	0.04	67,330,395	0.02	59,528,921	0.00
11/30/11	101,898,173	0.96	64,778,552	0.01	68,516,783	0.03	60,016,017	0.00
12/30/11	102,962,109	0.34	65,520,040	0.01	69,543,007	0.02	61,371,953	0.00
01/31/12	103,570,227	0.21	66,295,796	0.02	70,507,639	0.03	62,316,145	0.00
02/28/12	104,901,373	0.51	67,244,756	0.03	71,575,283	0.03	63,645,481	0.00
03/31/12	106,004,285	0.51	68,210,312	0.03	72,888,403	0.00	64,739,109	0.00
04/30/12	107,306,941	0.59	69,342,556	0.03	73,748,275	0.02	65,951,313	0.00
05/31/12	108,180,093	0.49	70,031,860	0.00	74,946,995	0.02	66,748,825	0.00
06/30/12	108,528,605	0.27	71,178,836	0.02	75,961,715	0.02	67,802,341	0.00
07/31/12	109,543,325	1.08	72,192,436	0.01	77,038,803	0.02	68,690,221	0.00
08/31/12	110,620,381	1.41	73,269,492	0.01	78,008,467	0.01	69,632,589	0.00
09/30/12	111,590,077	0.95	74,233,300	0.02	78,731,827	0.02	70,478,833	0.00
10/31/12	112,405,597	0.65	74,742,292	0.01	79,738,323	0.02	70,478,889	0.00
11/30/12	113,411,773	0.85	75,446,644	0.02	81,060,307	0.02	70,479,029	0.00
12/31/12	114,313,405	1.35	76,810,292	0.08	82,399,955	0.02	70,479,113	0.00
01/31/13	114,794,781	0.18	77,501,492	0.00	83,117,463	0.02	70,479,113	0.00
02/28/13	114,882,205	0.08	77,718,676	0.00	84,489,875	0.02	70,479,113	0.00
03/31/13	115,973,437	0.24	78,834,836	0.17	85,808,883	0.03	70,479,113	0.00
04/30/13	117,052,821	0.44	79,748,404	0.08	87,230,003	0.05	70,479,113	0.00
05/31/13	118,223,661	0.33	80,341,972	0.04	88,631,347	0.10	70,479,113	0.00
06/30/13	119,657,389	1.12	81,603,860	0.04	89,971,763	0.32	70,479,113	0.00
07/31/13	120,997,773	1.25	82,944,276	0.07	91,406,291	0.26	70,479,113	0.00
08/31/13	122,440,557	1.22	84,499,476	0.07	92,704,147	0.17	70,479,113	0.00
09/30/13	123,595,981	0.95	85,857,332	0.07	94,126,131	0.19	70,479,113	0.00
10/31/13	125,017,965	0.85	87,219,316	0.07	95,609,779	0.21	70,479,113	0.00
11/30/13	126,330,797	0.75	88,661,876	0.05	96,795,539	0.18	70,479,113	0.00
12/31/13	127,090,829	0.27	89,342,420	0.02	96,895,539	0.10	70,479,113	0.00
01/31/14	127,870,797	0.50	89,342,612	0.00	98,184,723	0.08	70,725,709	0.00
02/28/14	128,415,533	0.39	90,303,356	0.01	99,380,723	0.06	70,725,793	0.00
03/31/14	129,580,653	0.49	91,362,500	0.00	100,792,819	0.07	70,725,793	0.00
04/30/14	130,475,725	0.32	92,376,780	0.00	102,131,827	0.08	70,726,521	0.00
05/31/14	130,932,941	0.36	93,395,924	0.00	103,504,019	0.05	70,726,717	0.00
06/30/14	131,913,357	0.91	94,503,428	0.00	104,980,627	0.04	70,727,053	0.00
07/31/14	133,025,325	0.65	95,450,404	0.00	106,243,187	0.02	70,727,053	0.00
08/31/14	134,083,213	0.62	96,563,876	0.00	107,751,603	0.02	70,727,249	0.00
09/30/14	135,308,589	0.70	97,590,212	0.00	109,095,955	0.02	70,727,445	0.00

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Pumpage and Mass Removal
OU III Building 96 System

2024 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
10/31/14	136,232,237	0.53	98,625,844	0.00	110,476,659	0.01	70,727,725	0.00
11/30/14	137,631,117	0.41	99,735,076	0.00	111,955,507	0.01	70,727,809	0.00
12/31/14	138,436,557	0.23	100,762,732	0.00	113,325,683	0.00	70,728,005	0.00
01/31/15	139,342,221	0.22	101,656,324	0.00	114,517,139	0.00	70,728,201	0.00
02/28/15	140,318,565	0.31	102,554,508	0.00	115,632,371	0.01	70,728,313	0.00
03/31/15	140,574,253	0.08	103,374,428	0.00	116,725,587	0.00	70,728,705	0.00
04/30/15	140,689,069	0.09	104,167,500	0.00	117,782,803	0.01	70,728,817	0.00
05/31/15	141,216,365	0.32	105,028,804	0.00	118,524,467	0.01	70,728,873	0.00
06/30/15	142,150,925	0.67	105,849,612	0.00	119,718,259	0.02	70,728,985	0.00
07/31/15	142,694,861	0.78	106,670,954	0.00	121,036,531	0.01	70,729,377	0.00
08/31/15	143,608,397	0.88	107,595,484	0.00	122,556,083	0.02	70,729,573	0.00
09/30/15	144,518,029	0.19	108,287,572	0.00	123,670,867	0.01	70,729,825	0.00
10/31/15	145,671,885	0.24	109,216,044	0.00	124,977,715	0.01	70,730,133	0.00
11/30/15	146,367,629	0.33	109,870,612	0.00	126,132,659	0.01	70,730,189	0.00
12/31/15	146,958,797	0.27	110,419,852	0.00	127,512,819	0.01	70,730,357	0.00
01/31/16	148,087,757	0.29	110,419,852	0.00	127,512,819	0.00	70,730,357	0.00
02/29/16	149,153,261	0.26	110,419,852	0.00	127,512,851	0.00	70,730,357	0.00
03/31/16	150,581,901	0.28	110,419,852	0.00	127,513,011	0.00	70,730,357	0.00
04/30/16	151,831,501	0.26	110,419,852	0.00	127,513,043	0.00	70,730,357	0.00
05/31/16	153,388,461	0.34	110,419,852	0.00	127,513,331	0.00	70,730,357	0.00
06/30/16	154,686,381	0.27	110,419,852	0.00	127,513,491	0.00	70,730,357	0.00
07/31/16	156,121,421	0.04	110,419,852	0.00	127,513,523	0.00	70,730,357	0.00
08/31/16	157,087,277	0.06	110,419,852	0.00	127,513,587	0.00	70,730,357	0.00
09/30/16	158,151,421	0.06	110,419,852	0.00	127,513,651	0.00	70,730,357	0.00
10/31/16	158,615,677	0.02	110,419,852	0.00	127,513,683	0.00	70,730,357	0.00
11/30/16	158,615,677	0.00	110,419,852	0.00	127,513,683	0.00	70,730,357	0.00
12/31/16	159,731,677	0.17	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
01/31/17	160,613,405	0.23	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
02/28/17	161,391,005	0.04	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
03/31/17	161,784,541	0.01	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
04/30/17	163,203,037	0.06	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
05/31/17	164,586,013	0.05	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
06/30/17	165,913,501	0.05	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
07/31/17	167,351,549	0.08	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
08/31/17	168,820,957	0.07	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
09/30/17	170,252,765	0.12	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
10/31/17	171,582,301	0.06	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
11/30/17	172,558,029	0.05	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
12/31/17	173,805,917	0.05	110,419,948	0.00	127,513,683	0.00	70,730,501	0.00
01/31/18	175,129,533	0.06	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
02/28/18	176,459,133	0.06	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
03/31/18	177,873,005	0.07	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
04/30/18	179,819,757	0.10	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00

Table F-7
Pumpage and Mass Removal
OU III Building 96 System

2024 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
05/31/18	181,512,109	0.14	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
06/30/18	182,855,949	0.04	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
07/31/18	184,237,757	0.04	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
08/31/18	185,619,645	0.03	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
09/30/18	187,090,045	0.06	110,420,028	0.00	127,513,683	0.00	70,730,501	0.00
10/31/18	188,471,805	0.03	110,420,076	0.00	127,513,683	0.00	70,730,501	0.00
11/30/18	189,854,333	0.03	110,923,940	0.00	127,513,683	0.00	70,730,501	0.00
12/31/18	191,288,573	0.03	112,331,444	0.01	127,513,683	0.00	70,730,501	0.00
01/31/19	192,762,653	0.03	113,703,804	0.03	127,513,683	0.00	70,730,501	0.00
02/28/19	194,011,005	0.02	114,939,900	0.03	127,513,683	0.00	70,730,501	0.00
03/31/19	195,336,413	0.02	116,261,380	0.02	127,513,683	0.00	70,730,501	0.00
04/30/19	196,714,301	0.03	117,580,684	0.02	127,513,683	0.00	70,730,501	0.00
05/31/19	197,767,005	0.10	117,650,428	0.00	127,513,683	0.00	70,730,501	0.00
06/30/19	198,285,813	0.02	118,666,428	0.02	127,513,683	0.00	70,730,501	0.00
07/31/19	200,955,783	0.32	119,388,220	0.02	127,513,683	0.00	70,730,501	0.00
08/31/19	203,496,000	0.25	119,843,164	0.01	127,513,683	0.00	70,730,501	0.00
09/30/19	206,273,619	0.23	120,592,564	0.02	127,513,683	0.00	70,730,501	0.00
10/31/19	207,125,487	0.06	121,062,652	0.01	127,513,683	0.00	70,730,501	0.00
11/30/19	209,203,372	0.15	121,620,452	0.01	127,513,683	0.00	70,730,501	0.00
12/31/19	211,854,146	0.17	123,046,316	0.02	127,513,683	0.00	70,730,501	0.00
01/31/20	214,155,342	0.14	124,372,444	0.01	127,513,683	0.00	70,730,501	0.00
02/29/20	216,584,932	0.14	125,797,804	0.00	127,513,683	0.00	70,730,501	0.00
03/31/20	219,103,105	0.11	127,183,652	0.00	127,513,683	0.00	70,730,501	0.00
04/30/20	221,273,701	0.12	128,463,636	0.00	127,513,683	0.00	70,730,501	0.00
05/31/20	224,052,848	0.17	129,987,788	0.02	127,513,683	0.00	70,730,501	0.00
06/30/20	226,477,212	0.12	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
07/31/20	226,656,046	0.01	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
08/31/20	228,421,948	0.03	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
09/30/20	230,594,699	0.09	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
10/31/20	233,008,716	0.11	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
11/30/20	234,035,240	0.04	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
12/31/20	236,429,017	0.10	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
01/31/21	238,982,898	0.10	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
02/28/21	241,168,489	0.08	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
03/31/21	243,620,901	0.09	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
04/30/21	246,069,267	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
05/31/21	248,604,713	0.09	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
06/30/21	251,029,249	0.08	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
07/31/21	253,563,268	0.08	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
08/31/21	256,068,169	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
09/30/21	258,444,137	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
10/31/21	261,077,319	0.09	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
11/30/21	263,458,961	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00

Table F-7
Pumpage and Mass Removal
OU III Building 96 System

2024 BNL Groundwater Status Report

	RTW-1		RTW-2		RTW-3		RTW-4	
Date	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*	**Total Pumped*** *(Gallons)*	**Mass Recovered** *(lbs)*
12/31/21	265,949,067	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
01/31/22	268,439,173	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
02/28/22	270,929,279	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
03/31/22	273,419,385	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
04/30/22	275,909,491	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
05/31/22	275,909,491	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
06/30/22	278,399,597	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
07/31/22	278,399,597	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
08/31/22	280,889,703	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
09/30/22	280,889,703	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
10/31/22	283,379,809	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
11/30/22	283,379,809	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
12/31/22	285,869,915	0.03	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
02/03/23	288,329,170	0.06	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
04/08/23	290,426,638	0.05	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
06/09/23	292,756,779	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
08/14/23	294,645,056	0.04	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
10/11/23	296,969,174	0.07	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
12/05/23	298,290,888	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
02/05/24	300,753,288	0.04	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
04/10/24	303,215,688	0.05	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
06/30/24	304,803,688	0.05	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
09/09/24	304,803,688	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00
12/16/24	304,803,688	0.00	129,987,788	0.00	127,513,683	0.00	70,730,501	0.00

System on stand-by since July 2024

Total	113.26	6.88	20.13	6.45

Total lbs. Removed = 146.72

NOTES:
Mass Removed: Total VOC concentration in µg/liter (ppb) x 3.785 liter/gallon x gallons pumped x 1 lb./454,000,000 µg = lbs.
* = Wells RTW-2, 3 and 4 placed off-line.
lb = pounds
µg/liter - micrograms per liter
ppb - parts per billion
NA - not available

Table F-8
Extraction Well VOC Data
OUIII Middle Road System

2024 BNL Groundwater Status Report

Site ID : 106-66 (RW-6)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	0.24	0	UG/L	
Chloroform	01/04/24	0.24	0.5	UG/L	J
1633 TPFAS	01/04/24	43.243	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	0.912	1.72	NG/L	J
Perfluorobutyric acid (PFBA)	01/04/24	21.5	7.75	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/04/24	8.56	1.77	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	0.739	1.94	NG/L	J
Perfluorooctane sulfonamide	01/04/24	1.24	1.94	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/04/24	6.87	1.8	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	2.48	1.94	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	0.942	1.82	NG/L	J
1,4-Dioxane	01/04/24	2.8	0.2	UG/L	
8260 TVOC	04/04/24	0.58	0	UG/L	
Chloroform	04/04/24	0.26	0.5	UG/L	J
Tetrachloroethylene	04/04/24	0.32	0.5	UG/L	J
8260 TVOC	08/22/24	0.75	0	UG/L	
Chloroform	08/22/24	0.42	0.5	UG/L	J
Tetrachloroethylene	08/22/24	0.33	0.5	UG/L	J
8260 TVOC	10/03/24	0.78	0	UG/L	
Chloroform	10/03/24	0.45	0.5	UG/L	J
Tetrachloroethylene	10/03/24	0.33	0.5	UG/L	J

Site ID : 113-23 (RW-1)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	0.45	0	UG/L	
Chloroform	01/04/24	0.45	0.5	UG/L	J
1633 TPFAS	01/04/24	36.309	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	0.898	1.78	NG/L	J
Perfluorobutyric acid (PFBA)	01/04/24	3.33	8.01	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/04/24	2.27	2	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/04/24	2.74	1.83	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	6.82	2	NG/L	
Perfluorononanoic acid (PFNA)	01/04/24	1.09	2	NG/L	J
(PFOSAm)	01/04/24	0.991	2	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/04/24	10.3	1.86	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	3.53	2	NG/L	
Perfluoropentanoic acid (PFPeA)	01/04/24	4.34	2	NG/L	
8260 TVOC	04/04/24	0.41	0	UG/L	
Chloroform	04/04/24	0.41	0.5	UG/L	J
8260 TVOC	08/22/24	0.61	0	UG/L	
Chloroform	08/22/24	0.61	0.5	UG/L	

Table F-8
Extraction Well VOC Data
OUIII Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-23 (RW-1)

8260 TVOC	10/03/24	0.93	0	UG/L	
Chloroform	10/03/24	0.72	0.5	UG/L	
Tetrachloroethylene	10/03/24	0.21	0.5	UG/L	J

Site ID : 113-24 (RW-2)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	4.74	0	UG/L	
Carbon tetrachloride	01/04/24	0.31	0.5	UG/L	J
Chloroform	01/04/24	0.32	0.5	UG/L	J
Tetrachloroethylene	01/04/24	3.8	0.5	UG/L	
Trichloroethylene	01/04/24	0.31	0.5	UG/L	J
1633 TPFAS	01/04/24	75.021	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	2.03	1.71	NG/L	
Perfluorobutyric acid (PFBA)	01/04/24	6.18	7.73	NG/L	J
Perfluoroheptanesulfonate (PFHpS)	01/04/24	0.711	1.84	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/04/24	1.92	1.93	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	30	1.77	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	6.07	1.93	NG/L	
Perfluorononanoic acid (PFNA)	01/04/24	2.21	1.93	NG/L	
Perfluorooctanesulfonate (PFOS)	01/04/24	13.5	1.79	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	7.11	1.93	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	2.09	1.82	NG/L	
Perfluoropentanoic acid (PFPeA)	01/04/24	3.2	1.93	NG/L	
1,4-Dioxane	01/04/24	0.52	0.2	UG/L	
8260 TVOC	04/04/24	5.07	0	UG/L	
Carbon tetrachloride	04/04/24	0.43	0.5	UG/L	J
Chloroform	04/04/24	0.4	0.5	UG/L	J
Tetrachloroethylene	04/04/24	3.9	0.5	UG/L	
Trichloroethylene	04/04/24	0.34	0.5	UG/L	J
8260 TVOC	08/22/24	4.46	0	UG/L	
Carbon tetrachloride	08/22/24	0.38	0.5	UG/L	J
Chloroform	08/22/24	0.4	0.5	UG/L	J
Tetrachloroethylene	08/22/24	3.4	0.5	UG/L	
Trichloroethylene	08/22/24	0.28	0.5	UG/L	J
8260 TVOC	10/03/24	4.5	0	UG/L	
Carbon tetrachloride	10/03/24	0.37	0.5	UG/L	J
Chloroform	10/03/24	0.38	0.5	UG/L	J
Tetrachloroethylene	10/03/24	3.4	0.5	UG/L	
Trichloroethylene	10/03/24	0.35	0.5	UG/L	J

Table F-8
Extraction Well VOC Data
OUIII Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-25 (RW-3)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/04/24	1	0.5	UG/L	
1,1-Dichloroethane	01/04/24	0.37	0.5	UG/L	J
1,1-Dichloroethylene	01/04/24	0.63	0.5	UG/L	
8260 TVOC	01/04/24	2	0	UG/L	
1633 TPFAS	01/04/24	24.56	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	0.689	1.69	NG/L	J
Perfluorobutyric acid (PFBA)	01/04/24	4.14	7.61	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	12.5	1.74	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	2.09	1.9	NG/L	
Perfluorooctanesulfonate (PFOS)	01/04/24	1.87	1.76	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	2.33	1.9	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	0.941	1.79	NG/L	J
1,4-Dioxane	01/04/24	1.3	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	1.4	0.5	UG/L	
1,1-Dichloroethane	04/04/24	0.36	0.5	UG/L	J
1,1-Dichloroethylene	04/04/24	0.6	0.5	UG/L	
8260 TVOC	04/04/24	3.19	0	UG/L	
Trichloroethylene	04/04/24	0.83	0.5	UG/L	
1,1,1-Trichloroethane	08/22/24	1.4	0.5	UG/L	
1,1-Dichloroethane	08/22/24	0.36	0.5	UG/L	J
1,1-Dichloroethylene	08/22/24	0.65	0.5	UG/L	
8260 TVOC	08/22/24	3.1	0	UG/L	
Trichloroethylene	08/22/24	0.69	0.5	UG/L	
1,1,1-Trichloroethane	10/03/24	1.4	0.5	UG/L	
1,1-Dichloroethane	10/03/24	0.33	0.5	UG/L	J
1,1-Dichloroethylene	10/03/24	0.44	0.5	UG/L	J
8260 TVOC	10/03/24	2.88	0	UG/L	
Trichloroethylene	10/03/24	0.71	0.5	UG/L	

Site ID : 113-26 (RW-4)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	1.62	0	UG/L	
Carbon tetrachloride	01/04/24	0.35	0.5	UG/L	J
Chloroform	01/04/24	0.54	0.5	UG/L	
Tetrachloroethylene	01/04/24	0.21	0.5	UG/L	J
Trichloroethylene	01/04/24	0.52	0.5	UG/L	
1633 TPFAS	01/04/24	63.201	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	1.7	1.62	NG/L	
Perfluorobutyric acid (PFBA)	01/04/24	5.1	7.32	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/04/24	0.951	1.83	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	35.9	1.67	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	4.62	1.83	NG/L	
Perfluorononanoic acid (PFNA)	01/04/24	1.22	1.83	NG/L	J

Table F-8
Extraction Well VOC Data
OUIII Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-26 (RW-4)

Perfluorooctanesulfonate (PFOS)	01/04/24	4.33	1.7	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	5.35	1.83	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	2.66	1.72	NG/L	
Perfluoropentanoic acid (PFPeA)	01/04/24	1.37	1.83	NG/L	J
1,4-Dioxane	01/04/24	1.8	0.2	UG/L	
1,1-Dichloroethylene	04/04/24	0.21	0.5	UG/L	J
8260 TVOC	04/04/24	1.78	0	UG/L	
Carbon tetrachloride	04/04/24	0.27	0.5	UG/L	J
Chloroform	04/04/24	0.61	0.5	UG/L	
Tetrachloroethylene	04/04/24	0.33	0.5	UG/L	J
Trichloroethylene	04/04/24	0.36	0.5	UG/L	J
1,1-Dichloroethylene	08/22/24	0.27	0.5	UG/L	J
8260 TVOC	08/22/24	1.93	0	UG/L	
Carbon tetrachloride	08/22/24	0.38	0.5	UG/L	J
Chloroform	08/22/24	0.57	0.5	UG/L	
Tetrachloroethylene	08/22/24	0.24	0.5	UG/L	J
Trichloroethylene	08/22/24	0.47	0.5	UG/L	J
8260 TVOC	10/03/24	1.61	0	UG/L	
Carbon tetrachloride	10/03/24	0.35	0.5	UG/L	J
Chloroform	10/03/24	0.56	0.5	UG/L	
Tetrachloroethylene	10/03/24	0.28	0.5	UG/L	J
Trichloroethylene	10/03/24	0.42	0.5	UG/L	J

Site ID : 113-27 (RW-5)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	0.7	0	UG/L	
Chloroform	01/04/24	0.7	0.5	UG/L	
1633 TPFAS	01/04/24	12.397	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	0.966	1.75	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	3.94	1.8	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	1.11	1.97	NG/L	J
Perfluorononanoic acid (PFNA)	01/04/24	0.93	1.97	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/04/24	2.56	1.83	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	1.44	1.97	NG/L	J
Perfluoropentanesulfonate (PFPeS)	01/04/24	0.636	1.86	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/04/24	0.815	1.97	NG/L	J
1,4-Dioxane	01/04/24	2.1	0.2	UG/L	
8260 TVOC	04/04/24	0.91	0	UG/L	
Chloroform	04/04/24	0.91	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	0.16	0.5	UG/L	J
8260 TVOC	08/22/24	0.88	0	UG/L	
Chloroform	08/22/24	0.72	0.5	UG/L	
8260 TVOC	10/03/24	0.67	0	UG/L	
Chloroform	10/03/24	0.67	0.5	UG/L	

Table F-8
Extraction Well VOC Data
OUIII Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-33 (RW-7)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/04/24	0.45	0.5	UG/L	J
1,1-Dichloroethylene	01/04/24	0.41	0.5	UG/L	J
8260 TVOC	01/04/24	36.87	0	UG/L	
Carbon tetrachloride	01/04/24	1.7	0.5	UG/L	
Chloroform	01/04/24	0.41	0.5	UG/L	J
Tetrachloroethylene	01/04/24	33	0.5	UG/L	
Trichloroethylene	01/04/24	0.9	0.5	UG/L	
1633 TPFAS	01/04/24	49.84	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	1.69	1.7	NG/L	J
Perfluorobutyric acid (PFBA)	01/04/24	7.25	7.68	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/04/24	1.31	1.92	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	19.3	1.75	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	3.54	1.92	NG/L	
Perfluorononanoic acid (PFNA)	01/04/24	1.04	1.92	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/04/24	7.16	1.78	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	5.16	1.92	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	1.61	1.81	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/04/24	1.78	1.92	NG/L	J
1,4-Dioxane	01/04/24	1.6	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.61	0.5	UG/L	
1,1,2,2-Tetrachloroethane	04/04/24	0.16	0.5	UG/L	J
1,1-Dichloroethylene	04/04/24	0.4	0.5	UG/L	J
8260 TVOC	04/04/24	35.65	0	UG/L	
Carbon tetrachloride	04/04/24	2.1	0.5	UG/L	
Chloroform	04/04/24	0.48	0.5	UG/L	J
Tetrachloroethylene	04/04/24	31	0.5	UG/L	
Trichloroethylene	04/04/24	0.9	0.5	UG/L	
1,1,1-Trichloroethane	08/22/24	0.51	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	0.39	0.5	UG/L	J
8260 TVOC	08/22/24	32.77	0	UG/L	
Carbon tetrachloride	08/22/24	1.6	0.5	UG/L	
Chloroform	08/22/24	0.46	0.5	UG/L	J
Tetrachloroethylene	08/22/24	29	0.5	UG/L	
Trichloroethylene	08/22/24	0.81	0.5	UG/L	
1,1,1-Trichloroethane	10/03/24	0.54	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	0.26	0.5	UG/L	J
8260 TVOC	10/03/24	30.73	0	UG/L	
Carbon tetrachloride	10/03/24	1.6	0.5	UG/L	
Chloroform	10/03/24	0.45	0.5	UG/L	J
Tetrachloroethylene	10/03/24	27	0.5	UG/L	
Trichloroethylene	10/03/24	0.88	0.5	UG/L	

J: The analyte was positively identified; the quantitation is an estimation

Table F-9
Air Stripper Influent VOC Data
OU III Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-34 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	1/4/2024	0.45	0.5	UG/L	J
1,1-Dichloroethylene	1/4/2024	0.37	0.5	UG/L	J
8260 TVOC	1/4/2024	13.34	0	UG/L	
Carbon tetrachloride	1/4/2024	0.63	0.5	UG/L	
Chloroform	1/4/2024	0.31	0.5	UG/L	J
Tetrachloroethylene	1/4/2024	11	0.5	UG/L	
Trichloroethylene	1/4/2024	0.58	0.5	UG/L	
1633 TPFAS	1/4/2024	46.184	0	NG/L	
Perfluorobutanesulfonate (PFBS)	1/4/2024	1.57	1.68	NG/L	J
Perfluorobutyric acid (PFBA)	1/4/2024	6.11	7.59	NG/L	J
Perfluoroheptanoic acid (PFHpA)	1/4/2024	1.08	1.9	NG/L	J
Perfluorohexanesulfonate (PFHxS)	1/4/2024	18.3	1.73	NG/L	
Perfluorohexanoic acid (PFHxA)	1/4/2024	3.34	1.9	NG/L	
Perfluorononanoic acid (PFNA)	1/4/2024	0.994	1.9	NG/L	J
Perfluorooctanesulfonate (PFOS)	1/4/2024	6.74	1.76	NG/L	
Perfluorooctanoic acid (PFOA)	1/4/2024	5	1.9	NG/L	
Perfluoropentanesulfonate (PFPeS)	1/4/2024	1.46	1.79	NG/L	J
Perfluoropentanoic acid (PFPeA)	1/4/2024	1.59	1.9	NG/L	J
1,4-Dioxane	1/4/2024	1	0.2	UG/L	
1,1,1-Trichloroethane	2/9/2024	0.68	0.5	UG/L	
1,1-Dichloroethylene	2/9/2024	0.32	0.5	UG/L	J
8260 TVOC	2/9/2024	16.98	0	UG/L	
Carbon tetrachloride	2/9/2024	0.95	0.5	UG/L	
Chloroform	2/9/2024	0.4	0.5	UG/L	J
Tetrachloroethylene	2/9/2024	14	0.5	UG/L	
Trichloroethylene	2/9/2024	0.63	0.5	UG/L	
1,1,1-Trichloroethane	3/14/2024	0.65	0.5	UG/L	
1,1-Dichloroethylene	3/14/2024	0.25	0.5	UG/L	J
8260 TVOC	3/14/2024	15.68	0	UG/L	
Carbon tetrachloride	3/14/2024	0.45	0.5	UG/L	J
Chloroform	3/14/2024	0.33	0.5	UG/L	J
Tetrachloroethylene	3/14/2024	14	0.5	UG/L	
1,1,1-Trichloroethane	4/4/2024	0.6	0.5	UG/L	
1,1-Dichloroethylene	4/4/2024	0.34	0.5	UG/L	J
8260 TVOC	4/4/2024	14.79	0	UG/L	
Carbon tetrachloride	4/4/2024	0.88	0.5	UG/L	
Chloroform	4/4/2024	0.36	0.5	UG/L	J
Tetrachloroethylene	4/4/2024	12	0.5	UG/L	
Trichloroethylene	4/4/2024	0.61	0.5	UG/L	
1633 TPFAS	4/4/2024	37.18	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	4/4/2024	18.3	1.7	NG/L	
Perfluorohexanoic acid (PFHxA)	4/4/2024	4.35	1.86	NG/L	
Perfluorooctanesulfonate (PFOS)	4/4/2024	8.43	1.72	NG/L	
Perfluorooctanoic acid (PFOA)	4/4/2024	6.1	1.86	NG/L	
1,4-Dioxane	4/4/2024	1.1	0.22	UG/L	B
1,1,1-Trichloroethane	5/6/2024	0.55	0.5	UG/L	

Table F-9
Air Stripper Influent VOC Data
OU III Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-34 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1-Dichloroethylene	5/6/2024	0.35	0.5	UG/L	J
8260 TVOC	5/6/2024	13.34	0	UG/L	
Benzene, 1-methylethyl-	5/6/2024	0.31	0.5	UG/L	J
Carbon tetrachloride	5/6/2024	0.17	0.5	UG/L	J
Chloroform	5/6/2024	0.34	0.5	UG/L	J
Tetrachloroethylene	5/6/2024	11	0.5	UG/L	
Trichloroethylene	5/6/2024	0.62	0.5	UG/L	
1,1-Dichloroethylene	6/5/2024	0.34	0.5	UG/L	J
8260 TVOC	6/5/2024	11.37	0	UG/L	
Chloroform	6/5/2024	0.36	0.5	UG/L	J
Tetrachloroethylene	6/5/2024	10	0.5	UG/L	
Trichloroethylene	6/5/2024	0.67	0.5	UG/L	
1,1,1-Trichloroethane	7/3/2024	0.54	0.5	UG/L	
1,1-Dichloroethylene	7/3/2024	0.29	0.5	UG/L	J
8260 TVOC	7/3/2024	11.45	0	UG/L	
Chloroform	7/3/2024	0.33	0.5	UG/L	J
Tetrachloroethylene	7/3/2024	9.7	0.5	UG/L	
Trichloroethylene	7/3/2024	0.59	0.5	UG/L	
1,1,1-Trichloroethane	8/10/2024	0.52	0.5	UG/L	
8260 TVOC	8/10/2024	14.76	0	UG/L	
Carbon tetrachloride	8/10/2024	1.3	0.5	UG/L	
Chloroform	8/10/2024	0.46	0.5	UG/L	J
Tetrachloroethylene	8/10/2024	12	0.5	UG/L	
Trichloroethylene	8/10/2024	0.48	0.5	UG/L	J
1,1,1-Trichloroethane	9/5/2024	0.44	0.5	UG/L	J
1,1-Dichloroethylene	9/5/2024	0.25	0.5	UG/L	J
8260 TVOC	9/5/2024	12.61	0	UG/L	
Chloroform	9/5/2024	0.38	0.5	UG/L	J
Tetrachloroethylene	9/5/2024	11	0.5	UG/L	
Trichloroethylene	9/5/2024	0.54	0.5	UG/L	
1,1,1-Trichloroethane	10/3/2024	0.52	0.5	UG/L	
1,1-Dichloroethylene	10/3/2024	0.23	0.5	UG/L	J
8260 TVOC	10/3/2024	11.62	0	UG/L	
Chloroform	10/3/2024	0.35	0.5	UG/L	J
Tetrachloroethylene	10/3/2024	10	0.5	UG/L	
Trichloroethylene	10/3/2024	0.52	0.5	UG/L	
1,1,1-Trichloroethane	11/7/2024	0.47	0.5	UG/L	J
1,1-Dichloroethylene	11/7/2024	0.3	0.5	UG/L	J
8260 TVOC	11/7/2024	10.79	0	UG/L	
Chloroform	11/7/2024	0.41	0.5	UG/L	J
Tetrachloroethylene	11/7/2024	9.1	0.5	UG/L	
Trichloroethylene	11/7/2024	0.51	0.5	UG/L	
1,4-Dioxane	11/21/2024	0.93	0.2	UG/L	
1633 TPFAS	11/21/2024	31.5	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/2024	15.4	1.76	NG/L	
Perfluorohexanoic acid (PFHxA)	11/21/2024	3.93	1.93	NG/L	

Table F-9
Air Stripper Influent VOC Data
OU III Middle Road System

2024 BNL Groundwater Status Report

Site ID : 113-34 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
Perfluorooctanesulfonate (PFOS)	11/21/2024	7.34	1.79	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/2024	4.83	1.93	NG/L	
1,1,1-Trichloroethane	12/13/2024	0.51	0.5	UG/L	
1,1-Dichloroethylene	12/13/2024	0.26	0.5	UG/L	J
8260 TVOC	12/13/2024	10.91	0	UG/L	
Carbon tetrachloride	12/13/2024	0.31	0.5	UG/L	J
Chloroform	12/13/2024	0.3	0.5	UG/L	J
Tetrachloroethylene	12/13/2024	9	0.5	UG/L	
Trichloroethylene	12/13/2024	0.53	0.5	UG/L	

J: The analyte was positively identified; the quantitation is an estimation.
B: Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.

Table F-10
Air Stripper Effluent VOC Data
OU III Middle Road System

2024 BNL Groundwater Status Report

Site ID : 095-126 (MR/SB/WSB Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	06/05/24	0	0	UG/L	
8260 TVOC	07/03/24	0	0	UG/L	
8260 TVOC	08/10/24	0	0	UG/L	
8260 TVOC	09/05/24	0	0	UG/L	
8260 TVOC	10/03/24	0	0	UG/L	
8260 TVOC	11/07/24	0	0	UG/L	
1,4-Dioxane	11/21/24	1.6	0.2	UG/L	
1633 TPFAS	11/21/24	45.17	0	NG/L	
Perfluorobutanesulfonate (PFBS)	11/21/24	2.25	1.63	NG/L	
Perfluorobutyric acid (PFBA)	11/21/24	8.33	7.36	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/24	16.1	1.68	NG/L	
Perfluorohexanoic acid (PFHxA)	11/21/24	3.9	1.84	NG/L	
Perfluorooctanesulfonate (PFOS)	11/21/24	5.29	1.71	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/24	4.4	1.84	NG/L	
Perfluoropentanesulfonate (PFPeS)	11/21/24	2.16	1.73	NG/L	
Perfluoropentanoic acid (PFPeA)	11/21/24	2.74	1.84	NG/L	
8260 TVOC	12/13/24	0	0	UG/L	

Site ID : 095-270 (MR/SB/WSB Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	0	0	UG/L	
1633 TPFAS	01/04/24	50.658	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	1.47	1.72	NG/L	J
Perfluorobutyric acid (PFBA)	01/04/24	6.86	7.75	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/04/24	1.18	1.94	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	21	1.77	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	3.13	1.94	NG/L	
Perfluorononanoic acid (PFNA)	01/04/24	0.728	1.94	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/04/24	7.53	1.8	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	5.63	1.94	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	1.73	1.82	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/04/24	1.4	1.94	NG/L	J
1,4-Dioxane	01/04/24	1.9	0.2	UG/L	
8260 TVOC	02/09/24	0	0	UG/L	
8260 TVOC	03/14/24	0	0	UG/L	
8260 TVOC	04/04/24	0	0	UG/L	
1633 TPFAS	04/04/24	30.12	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	04/04/24	15.6	1.65	NG/L	
Perfluorohexanoic acid (PFHxA)	04/04/24	3.64	1.81	NG/L	
Perfluorooctanesulfonate (PFOS)	04/04/24	6.2	1.68	NG/L	
Perfluorooctanoic acid (PFOA)	04/04/24	4.68	1.81	NG/L	
1,4-Dioxane	04/04/24	1.6	0.2	UG/L	B
8260 TVOC	05/06/24	0	0	UG/L	

J: The analyte was positively identified; the quantitation is an estimation
B: blank contamination; The analyte was detected above one-half the reporting limit in an associated blank.

Table F-11
Cumulative Mass Removal
OU III Middle Road System

2024 BNL Groundwater Status Report

Date Sampled	Total VOC's (µg/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/4/2024	13.34	412	1379.75
2/9/2024	16.98	367	1382.44
3/14/2024	15.68	448	1385.30
4/4/2024	14.79	387	1386.75
5/6/2024	13.34	364	1388.61
6/5/2024	11.37	413	1390.30
7/3/2024	11.45	28	1390.40
8/10/2024	14.76	377	1392.95
9/5/2024	12.61	368	1394.39
10/3/2024	11.62	409	1395.99
11/7/2024	10.79	417	1397.88
12/13/2024	10.91	309	1399.34

µg/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

Table F-12
Extraction Well VOC Data
OU III South Boundary System

2024 BNL Groundwater Status Report

Site ID : 121-15 (EW-5)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/05/24	0.58	0	UG/L	
Chloroform	01/05/24	0.31	0.5	UG/L	J
Tetrachloroethylene	01/05/24	0.27	0.5	UG/L	J
1633 TPFAS	01/05/24	51.98	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	1.26	1.73	NG/L	J
Perfluorobutyric acid (PFBA)	01/05/24	9.51	7.79	NG/L	
Perfluoroheptanoic acid (PFHpA)	01/05/24	1.4	1.95	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/05/24	16.6	1.78	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	4.24	1.95	NG/L	
Perfluorooctanesulfonate (PFOS)	01/05/24	10.1	1.81	NG/L	
Perfluorooctanoic acid (PFOA)	01/05/24	4.82	1.95	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	1.25	1.83	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/05/24	2.8	1.95	NG/L	
1,4-Dioxane	01/05/24	0.9	0.2	UG/L	
8260 TVOC	04/04/24	0.61	0	UG/L	
Chloroform	04/04/24	0.38	0.5	UG/L	J
Tetrachloroethylene	04/04/24	0.23	0.5	UG/L	J
1,1-Dichloroethylene	08/22/24	0.26	0.5	UG/L	J
8260 TVOC	08/22/24	0.91	0	UG/L	
Chloroform	08/22/24	0.25	0.5	UG/L	J
Tetrachloroethylene	08/22/24	0.4	0.5	UG/L	J
8260 TVOC	10/03/24	0.38	0	UG/L	
Chloroform	10/03/24	0.21	0.5	UG/L	J
Tetrachloroethylene	10/03/24	0.17	0.5	UG/L	J

Site ID : 121-16 (EW-4)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/05/24	0.7	0	UG/L	
Chloroform	01/05/24	0.24	0.5	UG/L	J
Tetrachloroethylene	01/05/24	0.46	0.5	UG/L	J
1633 TPFAS	01/05/24	80.929	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	1.93	1.66	NG/L	
Perfluorobutyric acid (PFBA)	01/05/24	3.86	7.5	NG/L	J
Perfluoroheptanesulfonate (PFHpS)	01/05/24	0.988	1.79	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/05/24	1.55	1.87	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/05/24	40.3	1.71	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	4.8	1.87	NG/L	
Perfluorononanoic acid (PFNA)	01/05/24	0.801	1.87	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/05/24	16.5	1.74	NG/L	
Perfluorooctanoic acid (PFOA)	01/05/24	6.48	1.87	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	1.93	1.76	NG/L	
Perfluoropentanoic acid (PFPeA)	01/05/24	1.79	1.87	NG/L	J
1,4-Dioxane	01/05/24	0.16	0.2	UG/L	J

Table F-12
Extraction Well VOC Data
OU III South Boundary System

2024 BNL Groundwater Status Report

Site ID : 121-16 (EW-4)

8260 TVOC	04/04/24	0.7	0	UG/L	
Chloroform	04/04/24	0.28	0.5	UG/L	J
Tetrachloroethylene	04/04/24	0.42	0.5	UG/L	J
8260 TVOC	08/22/24	0.88	0	UG/L	
Chloroform	08/22/24	0.32	0.5	UG/L	J
Tetrachloroethylene	08/22/24	0.56	0.5	UG/L	
8260 TVOC	10/03/24	0.97	0	UG/L	
Chloroform	10/03/24	0.32	0.5	UG/L	J
Tetrachloroethylene	10/03/24	0.65	0.5	UG/L	

Site ID : 121-17 (EW-3)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/05/24	2.12	0	UG/L	
Chloroform	01/05/24	0.26	0.5	UG/L	J
Methyl tert-butyl ether	01/05/24	0.36	0.5	UG/L	J
1633 TPFAS	01/05/24	20.888	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	0.752	1.67	NG/L	J
Perfluorobutyric acid (PFBA)	01/05/24	7.9	7.52	NG/L	
Perfluoroheptanoic acid (PFHpA)	01/05/24	0.635	1.88	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/05/24	4.27	1.72	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	1.19	1.88	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/05/24	2.93	1.74	NG/L	
Perfluorooctanoic acid (PFOA)	01/05/24	2.6	1.88	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	0.611	1.77	NG/L	J
1,4-Dioxane	01/05/24	0.54	0.2	UG/L	
8260 TVOC	04/04/24	1.84	0	UG/L	
Chloroform	04/04/24	0.27	0.5	UG/L	J
Methyl tert-butyl ether	04/04/24	0.27	0.5	UG/L	J
Tetrachloroethylene	04/04/24	1.3	0.5	UG/L	
8260 TVOC	08/22/24	6.51	0	UG/L	
Chloroform	08/22/24	0.32	0.5	UG/L	J
Methyl chloride	08/22/24	0.19	0.5	UG/L	J
Methyl tert-butyl ether	08/22/24	0.19	0.5	UG/L	J
Tetrachloroethylene	08/22/24	5.4	0.5	UG/L	
Trichloroethylene	08/22/24	0.41	0.5	UG/L	J
8260 TVOC	10/03/24	7.08	0	UG/L	
Chloroform	10/03/24	0.24	0.5	UG/L	J
Methyl tert-butyl ether	10/03/24	0.18	0.5	UG/L	J
Tetrachloroethylene	10/03/24	6.3	0.5	UG/L	
Trichloroethylene	10/03/24	0.36	0.5	UG/L	J

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Site ID : 121-46 (EW-17)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/05/24	0.21	0.5	UG/L	J
1,1-Dichloroethylene	01/05/24	0.29	0.5	UG/L	J
8260 TVOC	01/05/24	12.12	0	UG/L	
Carbon tetrachloride	01/05/24	1.3	0.5	UG/L	
Chloroform	01/05/24	0.41	0.5	UG/L	J
Tetrachloroethylene	01/05/24	9.5	0.5	UG/L	
Trichloroethylene	01/05/24	0.41	0.5	UG/L	J
1633 TPFAS	01/05/24	61.71	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	1.4	1.73	NG/L	J
Perfluorobutyric acid (PFBA)	01/05/24	7.07	7.8	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/05/24	1.54	1.95	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/05/24	28.5	1.78	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	4.6	1.95	NG/L	
Perfluorooctanesulfonate (PFOS)	01/05/24	8.8	1.81	NG/L	
Perfluorooctanoic acid (PFOA)	01/05/24	6.17	1.95	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	1.67	1.84	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/05/24	1.96	1.95	NG/L	
1,4-Dioxane	01/05/24	1.1	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.29	0.5	UG/L	J
1,1-Dichloroethylene	04/04/24	0.31	0.5	UG/L	J
8260 TVOC	04/04/24	12.64	0	UG/L	
Carbon tetrachloride	04/04/24	1.6	0.5	UG/L	
Chloroform	04/04/24	0.42	0.5	UG/L	J
Tetrachloroethylene	04/04/24	9.6	0.5	UG/L	
Trichloroethylene	04/04/24	0.42	0.5	UG/L	J
1,1,1-Trichloroethane	08/22/24	0.22	0.5	UG/L	J
1,1-Dichloroethylene	08/22/24	0.24	0.5	UG/L	J
8260 TVOC	08/22/24	11.41	0	UG/L	
Carbon tetrachloride	08/22/24	1.4	0.5	UG/L	
Chloroform	08/22/24	0.4	0.5	UG/L	J
Tetrachloroethylene	08/22/24	8.8	0.5	UG/L	
Trichloroethylene	08/22/24	0.35	0.5	UG/L	J
1,1-Dichloroethylene	10/03/24	0.24	0.5	UG/L	J
8260 TVOC	10/03/24	11.58	0	UG/L	
Carbon tetrachloride	10/03/24	1.6	0.5	UG/L	
Chloroform	10/03/24	0.48	0.5	UG/L	J
Tetrachloroethylene	10/03/24	8.9	0.5	UG/L	
Trichloroethylene	10/03/24	0.36	0.5	UG/L	J

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Extraction Well VOC Data
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Site ID : 122-12 (EW-8)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/05/24	11.28	0	UG/L	
cis-1,2-Dichloroethylene	01/05/24	6.3	0.5	UG/L	
Tetrachloroethylene	01/05/24	4.6	0.5	UG/L	
Trichloroethylene	01/05/24	0.38	0.5	UG/L	J
1633 TPFAS	01/05/24	74.172	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	0.89	1.72	NG/L	J
Perfluoroheptanesulfonate (PFHpS)	01/05/24	0.922	1.85	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/05/24	1.1	1.94	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/05/24	29.5	1.77	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	3.1	1.94	NG/L	
Perfluorooctanesulfonate (PFOS)	01/05/24	28.1	1.8	NG/L	
Perfluorooctanoic acid (PFOA)	01/05/24	7.86	1.94	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	1.19	1.83	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/05/24	1.51	1.94	NG/L	J
1,4-Dioxane	01/05/24	0.17	0.2	UG/L	J
8260 TVOC	04/04/24	13.77	0	UG/L	
cis-1,2-Dichloroethylene	04/04/24	7.7	0.5	UG/L	
Methylene chloride	04/04/24	1.1	0.5	UG/L	
Tetrachloroethylene	04/04/24	4.2	0.5	UG/L	
Toluene	04/04/24	0.34	0.5	UG/L	J
Trichloroethylene	04/04/24	0.43	0.5	UG/L	J
8260 TVOC	08/22/24	10.02	0	UG/L	
cis-1,2-Dichloroethylene	08/22/24	6.2	0.5	UG/L	
Tetrachloroethylene	08/22/24	3.4	0.5	UG/L	
Trichloroethylene	08/22/24	0.42	0.5	UG/L	J
8260 TVOC	10/03/24	10.86	0	UG/L	
cis-1,2-Dichloroethylene	10/03/24	6.7	0.5	UG/L	
Tetrachloroethylene	10/03/24	3.7	0.5	UG/L	
Trichloroethylene	10/03/24	0.46	0.5	UG/L	J

Site ID : 122-13 (RW-7)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/05/24	0.39	0	UG/L	
Tetrachloroethylene	01/05/24	0.39	0.5	UG/L	J
1633 TPFAS	01/05/24	48.04	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	1.62	1.73	NG/L	J
Perfluorobutyric acid (PFBA)	01/05/24	6.91	7.8	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/05/24	1.65	1.95	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/05/24	10.5	1.78	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	3.37	1.95	NG/L	
Perfluorononanoic acid (PFNA)	01/05/24	1.74	1.95	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/05/24	14.2	1.81	NG/L	

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Extraction Well VOC Data
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Site ID : 122-13 (RW-7)

Perfluorooctanoic acid (PFOA)	01/05/24	4.09	1.95	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	1.18	1.83	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/05/24	2.78	1.95	NG/L	
1,4-Dioxane	01/05/24	0.59	0.2	UG/L	
8260 TVOC	04/04/24	0.63	0	UG/L	
Chloroform	04/04/24	0.24	0.5	UG/L	J
Tetrachloroethylene	04/04/24	0.39	0.5	UG/L	J
1,1-Dichloroethylene	08/22/24	0.16	0.5	UG/L	J
8260 TVOC	08/22/24	0.79	0	UG/L	
Chloroform	08/22/24	0.19	0.5	UG/L	J
Tetrachloroethylene	08/22/24	0.44	0.5	UG/L	J
8260 TVOC	10/03/24	0.98	0	UG/L	
Chloroform	10/03/24	0.23	0.5	UG/L	J
Tetrachloroethylene	10/03/24	0.75	0.5	UG/L	

Site ID : 122-14 (EW-6)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/05/24	0.88	0	UG/L	
Chloroform	01/05/24	0.25	0.5	UG/L	J
Methylene chloride	01/05/24	0.26	0.5	UG/L	J
Tetrachloroethylene	01/05/24	0.37	0.5	UG/L	J
1633 TPFAS	01/05/24	77.16	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/05/24	1.97	1.78	NG/L	
Perfluorobutyric acid (PFBA)	01/05/24	12.5	8.02	NG/L	
Perfluoroheptanoic acid (PFHpA)	01/05/24	2.83	2.01	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/05/24	24.6	1.83	NG/L	
Perfluorohexanoic acid (PFHxA)	01/05/24	7.49	2.01	NG/L	
Perfluorononanoic acid (PFNA)	01/05/24	1.35	2.01	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/05/24	12.7	1.86	NG/L	
Perfluorooctanoic acid (PFOA)	01/05/24	4.97	2.01	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/05/24	2.76	1.89	NG/L	
Perfluoropentanoic acid (PFPeA)	01/05/24	5.99	2.01	NG/L	
1,4-Dioxane	01/05/24	1.1	0.2	UG/L	
8260 TVOC	04/04/24	0.83	0	UG/L	
Chloroform	04/04/24	0.26	0.5	UG/L	J
Tetrachloroethylene	04/04/24	0.4	0.5	UG/L	J
Trichloroethylene	04/04/24	0.17	0.5	UG/L	J
8260 TVOC	08/22/24	0.59	0	UG/L	
Chloroform	08/22/24	0.29	0.5	UG/L	J
Tetrachloroethylene	08/22/24	0.3	0.5	UG/L	J
8260 TVOC	10/03/24	0.74	0	UG/L	
Chloroform	10/03/24	0.31	0.5	UG/L	J
Tetrachloroethylene	10/03/24	0.43	0.5	UG/L	J

J: The analyte was positively identified; the quantitation is an estimation.

Table F-13
Air Stripper Influent VOC Data
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Site ID : 121-41 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1-Dichloroethylene	1/5/2024	0.32	0.5	UG/L	J
8260 TVOC	1/5/2024	11.36	0	UG/L	
Carbon tetrachloride	1/5/2024	1.3	0.5	UG/L	
Chloroform	1/5/2024	0.4	0.5	UG/L	J
Tetrachloroethylene	1/5/2024	9	0.5	UG/L	
Trichloroethylene	1/5/2024	0.34	0.5	UG/L	J
1633 TPFAS	1/5/2024	61.16	0	NG/L	
Perfluorobutanesulfonate (PFBS)	1/5/2024	1.49	1.68	NG/L	J
Perfluorobutyric acid (PFBA)	1/5/2024	7.07	7.57	NG/L	J
Perfluoroheptanoic acid (PFHpA)	1/5/2024	1.34	1.89	NG/L	J
Perfluorohexanesulfonate (PFHxS)	1/5/2024	30	1.73	NG/L	
Perfluorohexanoic acid (PFHxA)	1/5/2024	4.46	1.89	NG/L	
Perfluorooctanesulfonate (PFOS)	1/5/2024	7.07	1.76	NG/L	
Perfluorooctanoic acid (PFOA)	1/5/2024	6.05	1.89	NG/L	
Perfluoropentanesulfonate (PFPeS)	1/5/2024	1.72	1.78	NG/L	J
Perfluoropentanoic acid (PFPeA)	1/5/2024	1.96	1.89	NG/L	
1,4-Dioxane	1/5/2024	1.2	0.2	UG/L	
1,1-Dichloroethylene	2/9/2024	0.34	0.5	UG/L	J
8260 TVOC	2/9/2024	13.1	0	UG/L	
Carbon tetrachloride	2/9/2024	1.9	0.5	UG/L	
Chloroform	2/9/2024	0.46	0.5	UG/L	J
Tetrachloroethylene	2/9/2024	10	0.5	UG/L	
Trichloroethylene	2/9/2024	0.4	0.5	UG/L	J
1,1-Dichloroethylene	3/14/2024	0.27	0.5	UG/L	J
8260 TVOC	3/14/2024	12.71	0	UG/L	
Carbon tetrachloride	3/14/2024	1.7	0.5	UG/L	
Chloroform	3/14/2024	0.36	0.5	UG/L	J
Tetrachloroethylene	3/14/2024	10	0.5	UG/L	
Trichloroethylene	3/14/2024	0.38	0.5	UG/L	J
1,1,1-Trichloroethane	4/4/2024	0.28	0.5	UG/L	J
1,1-Dichloroethylene	4/4/2024	0.28	0.5	UG/L	J
8260 TVOC	4/4/2024	12.91	0	UG/L	
Carbon tetrachloride	4/4/2024	1.6	0.5	UG/L	
Chloroform	4/4/2024	0.43	0.5	UG/L	J
Tetrachloroethylene	4/4/2024	9.9	0.5	UG/L	
Trichloroethylene	4/4/2024	0.42	0.5	UG/L	J
1633 TPFAS	4/4/2024	46.93	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	4/4/2024	26.7	1.73	NG/L	
Perfluorohexanoic acid (PFHxA)	4/4/2024	4.96	1.9	NG/L	
Perfluorooctanesulfonate (PFOS)	4/4/2024	8.3	1.76	NG/L	
Perfluorooctanoic acid (PFOA)	4/4/2024	6.97	1.9	NG/L	
1,4-Dioxane	4/4/2024	1.1	0.2	UG/L	B

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Site ID : 121-41 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1-Dichloroethylene	5/6/2024	0.34	0.5	UG/L	J
8260 TVOC	5/6/2024	12.97	0	UG/L	
Carbon tetrachloride	5/6/2024	1.8	0.5	UG/L	
Chloroform	5/6/2024	0.43	0.5	UG/L	J
Tetrachloroethylene	5/6/2024	10	0.5	UG/L	
Trichloroethylene	5/6/2024	0.4	0.5	UG/L	J
1,1,1-Trichloroethane	6/5/2024	0.24	0.5	UG/L	J
8260 TVOC	6/5/2024	12.94	0	UG/L	
Carbon tetrachloride	6/5/2024	1.8	0.5	UG/L	
Chloroform	6/5/2024	0.45	0.5	UG/L	J
Tetrachloroethylene	6/5/2024	10	0.5	UG/L	
Trichloroethylene	6/5/2024	0.45	0.5	UG/L	J
1,1,1-Trichloroethane	7/3/2024	0.27	0.5	UG/L	J
1,1-Dichloroethylene	7/3/2024	0.32	0.5	UG/L	J
8260 TVOC	7/3/2024	11.65	0	UG/L	
Carbon tetrachloride	7/3/2024	1.7	0.5	UG/L	
Chloroform	7/3/2024	0.4	0.5	UG/L	J
Tetrachloroethylene	7/3/2024	8.6	0.5	UG/L	
Trichloroethylene	7/3/2024	0.36	0.5	UG/L	J
1,1,1-Trichloroethane	8/10/2024	0.33	0.5	UG/L	J
1,1-Dichloroethylene	8/10/2024	0.25	0.5	UG/L	J
8260 TVOC	8/10/2024	15.39	0	UG/L	
Carbon tetrachloride	8/10/2024	1.8	0.5	UG/L	
Chloroform	8/10/2024	0.51	0.5	UG/L	
Tetrachloroethylene	8/10/2024	12	0.5	UG/L	
Trichloroethylene	8/10/2024	0.5	0.5	UG/L	
1,1,1-Trichloroethane	9/5/2024	0.24	0.5	UG/L	J
1,1-Dichloroethylene	9/5/2024	0.29	0.5	UG/L	J
8260 TVOC	9/5/2024	13.83	0	UG/L	
Carbon tetrachloride	9/5/2024	1.5	0.5	UG/L	
Chloroform	9/5/2024	0.39	0.5	UG/L	J
Tetrachloroethylene	9/5/2024	11	0.5	UG/L	
Trichloroethylene	9/5/2024	0.41	0.5	UG/L	J
1,1-Dichloroethylene	10/3/2024	0.28	0.5	UG/L	J
8260 TVOC	10/3/2024	12.86	0	UG/L	
Carbon tetrachloride	10/3/2024	1.8	0.5	UG/L	
Chloroform	10/3/2024	0.46	0.5	UG/L	J
Tetrachloroethylene	10/3/2024	9.9	0.5	UG/L	
Trichloroethylene	10/3/2024	0.42	0.5	UG/L	J
1,1,1-Trichloroethane	11/7/2024	0.25	0.5	UG/L	J
1,1-Dichloroethylene	11/7/2024	0.25	0.5	UG/L	J
8260 TVOC	11/7/2024	11.7	0	UG/L	
Carbon tetrachloride	11/7/2024	1.6	0.5	UG/L	
Chloroform	11/7/2024	0.54	0.5	UG/L	
Tetrachloroethylene	11/7/2024	8.7	0.5	UG/L	
Trichloroethylene	11/7/2024	0.36	0.5	UG/L	J

Table F-13
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Site ID : 121-41 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	11/21/2024	1	0.2	UG/L	
1633 TPFAS	11/21/2024	47.73	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/2024	27.8	1.76	NG/L	
Perfluorohexanoic acid (PFHxA)	11/21/2024	5.38	1.93	NG/L	
Perfluorooctanesulfonate (PFOS)	11/21/2024	7.28	1.79	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/2024	7.27	1.93	NG/L	
1,1-Dichloroethylene	12/13/2024	0.31	0.5	UG/L	J
8260 TVOC	12/13/2024	11.56	0	UG/L	
Carbon tetrachloride	12/13/2024	1.6	0.5	UG/L	
Chloroform	12/13/2024	0.4	0.5	UG/L	J
Tetrachloroethylene	12/13/2024	8.9	0.5	UG/L	
Trichloroethylene	12/13/2024	0.35	0.5	UG/L	J

J: The analyte was positively identified; the quantitation is an estimation.
B: Blank contamination: The analyte was detected above one-half the reporting limit in an associated

Table F-14
Air Stripper Effluent VOC Data
OU III South Boundary System

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Site ID : 095-126 (MR/SB/WSB Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	06/05/24	0	0	UG/L	
8260 TVOC	07/03/24	0	0	UG/L	
8260 TVOC	08/10/24	0	0	UG/L	
8260 TVOC	09/05/24	0	0	UG/L	
8260 TVOC	10/03/24	0	0	UG/L	
8260 TVOC	11/07/24	0	0	UG/L	
1,4-Dioxane	11/21/24	1.6	0.2	UG/L	
1633 TPFAS	11/21/24	45.17	0	NG/L	
Perfluorobutanesulfonate (PFBS)	11/21/24	2.25	1.63	NG/L	
Perfluorobutyric acid (PFBA)	11/21/24	8.33	7.36	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/24	16.1	1.68	NG/L	
Perfluorohexanoic acid (PFHxA)	11/21/24	3.9	1.84	NG/L	
Perfluorooctanesulfonate (PFOS)	11/21/24	5.29	1.71	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/24	4.4	1.84	NG/L	
Perfluoropentanesulfonate (PFPeS)	11/21/24	2.16	1.73	NG/L	
Perfluoropentanoic acid (PFPeA)	11/21/24	2.74	1.84	NG/L	
8260 TVOC	12/13/24	0	0	UG/L	

Site ID : 095-270 (MR/SB/WSB Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/04/24	0	0	UG/L	
1633 TPFAS	01/04/24	50.658	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/04/24	1.47	1.72	NG/L	J
Perfluorobutyric acid (PFBA)	01/04/24	6.86	7.75	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/04/24	1.18	1.94	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/04/24	21	1.77	NG/L	
Perfluorohexanoic acid (PFHxA)	01/04/24	3.13	1.94	NG/L	
Perfluorononanoic acid (PFNA)	01/04/24	0.728	1.94	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/04/24	7.53	1.8	NG/L	
Perfluorooctanoic acid (PFOA)	01/04/24	5.63	1.94	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/04/24	1.73	1.82	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/04/24	1.4	1.94	NG/L	J
1,4-Dioxane	01/04/24	1.9	0.2	UG/L	
8260 TVOC	02/09/24	0	0	UG/L	
8260 TVOC	03/14/24	0	0	UG/L	
8260 TVOC	04/04/24	0	0	UG/L	
1633 TPFAS	04/04/24	30.12	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	04/04/24	15.6	1.65	NG/L	
Perfluorohexanoic acid (PFHxA)	04/04/24	3.64	1.81	NG/L	
Perfluorooctanesulfonate (PFOS)	04/04/24	6.2	1.68	NG/L	
Perfluorooctanoic acid (PFOA)	04/04/24	4.68	1.81	NG/L	
1,4-Dioxane	04/04/24	1.6	0.2	UG/L	B
8260 TVOC	05/06/24	0	0	UG/L	

J: The analyte was positively identified; the quantitation is an estimation

B: blank contamination; The analyte was detected above one-half the reporting limit in an associated blank.

Table F-15
Cumulative Mass Removal
OU III South Boundary System

2024 BNL Groundwater Status Report

Date Sampled	Total VOC's (µg/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/5/2024	11.36	57	3084.39
2/9/2024	13.1	87	3084.87
3/14/2024	12.71	83	3085.30
4/4/2024	12.91	141	3085.76
5/6/2024	12.97	132	3086.42
6/5/2024	12.94	93	3086.85
7/3/2024	11.65	11	3086.89
8/10/2024	15.39	87	3087.51
9/5/2024	13.83	133	3088.08
10/3/2024	12.86	150	3088.73
11/7/2024	11.7	151	3089.47
12/13/2024	11.56	109	3090.01

µg/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

Table F-16
Extraction Wells VOC Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 111-17 (WSB-3)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	0.44	0.5	UG/L	J
1,1-Dichloroethane	01/11/24	0.67	0.5	UG/L	
1,1-Dichloroethylene	01/11/24	2.8	0.5	UG/L	
8260 TVOC	01/11/24	5.46	0	UG/L	
Chloroform	01/11/24	1.1	0.5	UG/L	
Trichloroethylene	01/11/24	0.45	0.5	UG/L	J
1633 TPFAS	01/11/24	37.41	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/11/24	2.6	1.69	NG/L	
Perfluorobutyric acid (PFBA)	01/11/24	3.56	7.62	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/11/24	1.07	1.91	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/11/24	12.5	1.74	NG/L	
Perfluorohexanoic acid (PFHxA)	01/11/24	1.83	1.91	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/11/24	9.91	1.77	NG/L	
Perfluorooctanoic acid (PFOA)	01/11/24	3.88	1.91	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/11/24	2.06	1.79	NG/L	
1,4-Dioxane	01/11/24	2.2	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.4	0.5	UG/L	J
1,1-Dichloroethane	04/04/24	0.74	0.5	UG/L	
1,1-Dichloroethylene	04/04/24	2.8	0.5	UG/L	
8260 TVOC	04/04/24	5.48	0	UG/L	
Chloroform	04/04/24	1.1	0.5	UG/L	
Trichloroethylene	04/04/24	0.44	0.5	UG/L	J
1,1,1-Trichloroethane	08/22/24	0.25	0.5	UG/L	J
1,1-Dichloroethane	08/22/24	0.76	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	2.9	0.5	UG/L	
8260 TVOC	08/22/24	5.06	0	UG/L	
Chloroform	08/22/24	0.58	0.5	UG/L	
Tetrachloroethylene	08/22/24	0.2	0.5	UG/L	J
Trichloroethylene	08/22/24	0.37	0.5	UG/L	J
1,1-Dichloroethane	10/03/24	0.81	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	2.5	0.5	UG/L	
8260 TVOC	10/03/24	4.88	0	UG/L	
Chloroform	10/03/24	1.1	0.5	UG/L	
Trichloroethylene	10/03/24	0.47	0.5	UG/L	J

Table F-16
Extraction Wells VOC Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 119-13 (WSB-4)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	0.41	0.5	UG/L	J
1,1-Dichloroethane	01/11/24	0.67	0.5	UG/L	
1,1-Dichloroethylene	01/11/24	2.6	0.5	UG/L	
8260 TVOC	01/11/24	5.28	0	UG/L	
Chloroform	01/11/24	1.1	0.5	UG/L	
Trichloroethylene	01/11/24	0.5	0.5	UG/L	
1633 TPFAS	01/11/24	34.231	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/11/24	2.29	1.67	NG/L	
Perfluorobutyric acid (PFBA)	01/11/24	3.56	7.55	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/11/24	0.637	1.89	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/11/24	11.2	1.72	NG/L	
Perfluorohexanoic acid (PFHxA)	01/11/24	1.64	1.89	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/11/24	8.57	1.75	NG/L	
Perfluorooctanoic acid (PFOA)	01/11/24	3.75	1.89	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/11/24	1.81	1.78	NG/L	
Perfluoropentanoic acid (PFPeA)	01/11/24	0.774	1.89	NG/L	J
1,4-Dioxane	01/11/24	2.3	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.38	0.5	UG/L	J
1,1-Dichloroethane	04/04/24	0.6	0.5	UG/L	
1,1-Dichloroethylene	04/04/24	1	0.5	UG/L	
8260 TVOC	04/04/24	4.98	0	UG/L	
Dichlorodifluoromethane	04/04/24	3	0.5	UG/L	
1,1,1-Trichloroethane	08/22/24	1.4	0.5	UG/L	
1,1-Dichloroethane	08/22/24	0.5	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	3.5	0.5	UG/L	
8260 TVOC	08/22/24	6.65	0	UG/L	
Chloroform	08/22/24	0.21	0.5	UG/L	J
Dichlorodifluoromethane	08/22/24	0.42	0.5	UG/L	J
Trichloroethylene	08/22/24	0.62	0.5	UG/L	
1,1,1-Trichloroethane	10/03/24	1.3	0.5	UG/L	
1,1-Dichloroethane	10/03/24	0.62	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	3.6	0.5	UG/L	
8260 TVOC	10/03/24	6.32	0	UG/L	
Chloroform	10/03/24	0.24	0.5	UG/L	J
Trichloroethylene	10/03/24	0.56	0.5	UG/L	

Table F-16
Extraction Wells VOC Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 126-12 (WSB-1)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	2.9	0.5	UG/L	
1,1-Dichloroethylene	01/11/24	5.3	0.5	UG/L	
8260 TVOC	01/11/24	9.5	0	UG/L	
Chloroform	01/11/24	0.62	0.5	UG/L	
Trichloroethylene	01/11/24	0.68	0.5	UG/L	
1633 TPFAS	01/11/24	28.81	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/11/24	0.93	1.54	NG/L	J
Perfluorobutyric acid (PFBA)	01/11/24	5.51	6.96	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/11/24	12.5	1.59	NG/L	
Perfluorohexanoic acid (PFHxA)	01/11/24	1.37	1.74	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/11/24	3.84	1.62	NG/L	
Perfluorooctanoic acid (PFOA)	01/11/24	3.5	1.74	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/11/24	1.16	1.64	NG/L	J
1,4-Dioxane	01/11/24	3.3	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	2.4	0.5	UG/L	
1,1-Dichloroethylene	04/04/24	3.8	0.5	UG/L	
8260 TVOC	04/04/24	6.84	0	UG/L	
Chloroform	04/04/24	0.22	0.5	UG/L	J
Trichloroethylene	04/04/24	0.42	0.5	UG/L	J
1,1,1-Trichloroethane	08/22/24	1.1	0.5	UG/L	
1,1-Dichloroethane	08/22/24	0.53	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	2.7	0.5	UG/L	
8260 TVOC	08/22/24	6.28	0	UG/L	
Chloroform	08/22/24	0.17	0.5	UG/L	J
Dichlorodifluoromethane	08/22/24	1.3	0.5	UG/L	
Trichloroethylene	08/22/24	0.48	0.5	UG/L	J
1,1-Dichloroethylene	10/03/24	0.22	0.5	UG/L	J
8260 TVOC	10/03/24	0.22	0	UG/L	

Site ID : 127-05 (WSB-2)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	0.44	0.5	UG/L	J
1,1-Dichloroethylene	01/11/24	0.44	0.5	UG/L	J
8260 TVOC	01/11/24	2.56	0	UG/L	
Chloroform	01/11/24	0.28	0.5	UG/L	J
Trichloroethylene	01/11/24	1.4	0.5	UG/L	
1633 TPFAS	01/11/24	20.642	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/11/24	0.995	1.69	NG/L	J
Perfluorobutyric acid (PFBA)	01/11/24	6.07	7.64	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/11/24	7.16	1.74	NG/L	
Perfluorohexanoic acid (PFHxA)	01/11/24	0.757	1.91	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/11/24	2.46	1.77	NG/L	
Perfluorooctanoic acid (PFOA)	01/11/24	1.99	1.91	NG/L	

Table F-16
Extraction Wells VOC Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 127-05 (WSB-2)					
Perfluoropentanesulfonate (PFPeS)	01/11/24	1.21	1.8	NG/L	J
1,4-Dioxane	01/11/24	4	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.45	0.5	UG/L	J
1,1-Dichloroethylene	04/04/24	0.49	0.5	UG/L	J
8260 TVOC	04/04/24	2.48	0	UG/L	
Chloroform	04/04/24	0.24	0.5	UG/L	J
Trichloroethylene	04/04/24	1.3	0.5	UG/L	
1,1,1-Trichloroethane	08/22/24	0.58	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	0.71	0.5	UG/L	
8260 TVOC	08/22/24	2.6	0	UG/L	
Chloroform	08/22/24	0.21	0.5	UG/L	J
Trichloroethylene	08/22/24	1.1	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	0.38	0.5	UG/L	J
8260 TVOC	10/03/24	1.31	0	UG/L	
Trichloroethylene	10/03/24	0.93	0.5	UG/L	

Site ID : 130-12 (WSB-5)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	3.2	0.5	UG/L	
1,1-Dichloroethane	01/11/24	0.31	0.5	UG/L	J
1,1-Dichloroethylene	01/11/24	4.7	0.5	UG/L	
8260 TVOC	01/11/24	10.89	0	UG/L	
Chloroform	01/11/24	1.2	0.5	UG/L	
Dichlorodifluoromethane	01/11/24	0.58	0.5	UG/L	
Trichloroethylene	01/11/24	0.9	0.5	UG/L	
1633 TPFAS	01/11/24	27.055	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/11/24	1.21	1.64	NG/L	J
Perfluorobutyric acid (PFBA)	01/11/24	6.12	7.38	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/11/24	10.2	1.69	NG/L	
Perfluorohexanoic acid (PFHxA)	01/11/24	1.12	1.85	NG/L	J
(PFOSAm)	01/11/24	0.895	1.85	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/11/24	3.33	1.71	NG/L	
Perfluorooctanoic acid (PFOA)	01/11/24	2.94	1.85	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/11/24	1.24	1.74	NG/L	J
1,4-Dioxane	01/11/24	4.4	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.36	0.5	UG/L	J
1,1-Dichloroethane	04/04/24	0.57	0.5	UG/L	
1,1-Dichloroethylene	04/04/24	1.1	0.5	UG/L	
8260 TVOC	04/04/24	5.15	0	UG/L	
Dichlorodifluoromethane	04/04/24	2.9	0.5	UG/L	
Trichloroethylene	04/04/24	0.22	0.5	UG/L	J
1,1,1-Trichloroethane	08/22/24	0.33	0.5	UG/L	J
1,1-Dichloroethane	08/22/24	0.57	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	0.94	0.5	UG/L	
8260 TVOC	08/22/24	2.07	0	UG/L	

Table F-16
Extraction Wells VOC Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 130-12 (WSB-5)					
Trichloroethylene	08/22/24	0.23	0.5	UG/L	J
1,1,1-Trichloroethane	10/03/24	0.47	0.5	UG/L	J
1,1-Dichloroethane	10/03/24	0.62	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	1.2	0.5	UG/L	
8260 TVOC	10/03/24	2.48	0	UG/L	
Trichloroethylene	10/03/24	0.19	0.5	UG/L	J

Site ID : 130-13 (WSB-6)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	0.4	0.5	UG/L	J
1,1-Dichloroethane	01/11/24	0.49	0.5	UG/L	J
1,1-Dichloroethylene	01/11/24	0.98	0.5	UG/L	
8260 TVOC	01/11/24	5.16	0	UG/L	
Dichlorodifluoromethane	01/11/24	3.1	0.5	UG/L	
Trichloroethylene	01/11/24	0.19	0.5	UG/L	J
1633 TPFAS	01/11/24	0	0	NG/L	
1,4-Dioxane	01/11/24	6.5	0.2	UG/L	
1,1,1-Trichloroethane	04/04/24	0.35	0.5	UG/L	J
1,1-Dichloroethane	04/04/24	0.81	0.5	UG/L	
1,1-Dichloroethylene	04/04/24	3.7	0.5	UG/L	
8260 TVOC	04/04/24	6.28	0	UG/L	
Chloroform	04/04/24	0.97	0.5	UG/L	
Trichloroethylene	04/04/24	0.45	0.5	UG/L	J
1,1,1-Trichloroethane	08/22/24	0.31	0.5	UG/L	J
1,1-Dichloroethane	08/22/24	0.56	0.5	UG/L	
1,1-Dichloroethylene	08/22/24	0.83	0.5	UG/L	
8260 TVOC	08/22/24	1.92	0	UG/L	
Trichloroethylene	08/22/24	0.22	0.5	UG/L	J
1,1-Dichloroethane	10/03/24	0.6	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	0.89	0.5	UG/L	
8260 TVOC	10/03/24	5.07	0	UG/L	
Dichlorodifluoromethane	10/03/24	3.4	0.5	UG/L	
Trichloroethylene	10/03/24	0.18	0.5	UG/L	J

J: The analyte was positively identified; the quantitation is an estimation.

Table F-17
Air Stripper Influent Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 121-55 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/11/24	2.3	0.5	UG/L	
1,1-Dichloroethane	01/11/24	0.34	0.5	UG/L	J
1,1-Dichloroethylene	01/11/24	4.6	0.5	UG/L	
8260 TVOC	01/11/24	8.91	0	UG/L	
Chloroform	01/11/24	0.93	0.5	UG/L	
Trichloroethylene	01/11/24	0.74	0.5	UG/L	
1633 TPFAS	01/11/24	29.13	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/11/24	1.43	1.69	NG/L	J
Perfluorobutyric acid (PFBA)	01/11/24	5.16	7.63	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/11/24	11.1	1.74	NG/L	
Perfluorohexanoic acid (PFHxA)	01/11/24	1.3	1.91	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/11/24	5.4	1.77	NG/L	
Perfluorooctanoic acid (PFOA)	01/11/24	3.43	1.91	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/11/24	1.31	1.79	NG/L	J
1,4-Dioxane	01/11/24	3	0.2	UG/L	
1,1,1-Trichloroethane	02/09/24	1.2	0.5	UG/L	
1,1-Dichloroethane	02/09/24	0.62	0.5	UG/L	
1,1-Dichloroethylene	02/09/24	3	0.5	UG/L	
8260 TVOC	02/09/24	7.07	0	UG/L	
Chloroform	02/09/24	0.19	0.5	UG/L	J
Dichlorodifluoromethane	02/09/24	1.6	0.5	UG/L	
Trichloroethylene	02/09/24	0.46	0.5	UG/L	J
1,1,1-Trichloroethane	03/14/24	1.5	0.5	UG/L	
1,1-Dichloroethylene	03/14/24	2.3	0.5	UG/L	
8260 TVOC	03/14/24	12.89	0	UG/L	
Carbon tetrachloride	03/14/24	1.2	0.5	UG/L	
Chloroform	03/14/24	0.58	0.5	UG/L	
Tetrachloroethylene	03/14/24	6.8	0.5	UG/L	
Trichloroethylene	03/14/24	0.51	0.5	UG/L	
1,1,1-Trichloroethane	04/04/24	0.43	0.5	UG/L	J
1,1-Dichloroethane	04/04/24	0.64	0.5	UG/L	
1,1-Dichloroethylene	04/04/24	1.1	0.5	UG/L	
8260 TVOC	04/04/24	5.67	0	UG/L	
Dichlorodifluoromethane	04/04/24	3.3	0.5	UG/L	
Trichloroethylene	04/04/24	0.2	0.5	UG/L	J
1633 TPFAS	04/04/24	0	0	NG/L	
1,4-Dioxane	04/04/24	6.3	0.2	UG/L	B
1,1,1-Trichloroethane	05/06/24	3.5	0.5	UG/L	
1,1-Dichloroethane	05/06/24	0.37	0.5	UG/L	J
1,1-Dichloroethylene	05/06/24	6.7	0.5	UG/L	
8260 TVOC	05/06/24	12.08	0	UG/L	
Chloroform	05/06/24	0.8	0.5	UG/L	
Trichloroethylene	05/06/24	0.71	0.5	UG/L	
1,1,1-Trichloroethane	06/05/24	0.92	0.5	UG/L	
1,1-Dichloroethane	06/05/24	0.89	0.5	UG/L	
1,1-Dichloroethylene	06/05/24	2.6	0.5	UG/L	
8260 TVOC	06/05/24	5.04	0	UG/L	
Trichloroethylene	06/05/24	0.63	0.5	UG/L	

Table F-17
Air Stripper Influent Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 121-55 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	07/03/24	3.2	0.5	UG/L	
1,1-Dichloroethane	07/03/24	0.36	0.5	UG/L	J
1,1-Dichloroethylene	07/03/24	5.8	0.5	UG/L	
8260 TVOC	07/03/24	10.84	0	UG/L	
Chloroform	07/03/24	0.82	0.5	UG/L	
Trichloroethylene	07/03/24	0.66	0.5	UG/L	
1,1,1-Trichloroethane	08/10/24	1.1	0.5	UG/L	
1,1-Dichloroethane	08/10/24	0.7	0.5	UG/L	
1,1-Dichloroethylene	08/10/24	2.9	0.5	UG/L	
8260 TVOC	08/10/24	7.09	0	UG/L	
Chloroform	08/10/24	0.17	0.5	UG/L	J
Dichlorodifluoromethane	08/10/24	1.4	0.5	UG/L	
Methyl chloride	08/10/24	0.3	0.5	UG/L	J
Trichloroethylene	08/10/24	0.52	0.5	UG/L	
1,1,1-Trichloroethane	09/05/24	3.2	0.5	UG/L	
1,1-Dichloroethane	09/05/24	0.66	0.5	UG/L	
1,1-Dichloroethylene	09/05/24	7.3	0.5	UG/L	
1,2-Dichloroethane	09/05/24	0.15	0.5	UG/L	J
8260 TVOC	09/05/24	13.52	0	UG/L	
Chloroform	09/05/24	1.3	0.5	UG/L	
Tetrachloroethylene	09/05/24	0.17	0.5	UG/L	J
Trichloroethylene	09/05/24	0.74	0.5	UG/L	
1,1,1-Trichloroethane	10/03/24	1.1	0.5	UG/L	
1,1-Dichloroethane	10/03/24	0.63	0.5	UG/L	
1,1-Dichloroethylene	10/03/24	2.4	0.5	UG/L	
8260 TVOC	10/03/24	4.82	0	UG/L	
Chloroform	10/03/24	0.16	0.5	UG/L	J
Trichloroethylene	10/03/24	0.53	0.5	UG/L	
1,1,1-Trichloroethane	11/07/24	2.4	0.5	UG/L	
1,1-Dichloroethane	11/07/24	0.59	0.5	UG/L	
1,1-Dichloroethylene	11/07/24	5.2	0.5	UG/L	
8260 TVOC	11/07/24	10.36	0	UG/L	
Chloroform	11/07/24	1.2	0.5	UG/L	
Tetrachloroethylene	11/07/24	0.17	0.5	UG/L	J
Trichloroethylene	11/07/24	0.8	0.5	UG/L	
1633 TPFAS	11/21/24	22.07	0	NG/L	
Perfluorobutanesulfonate (PFBS)	11/21/24	1.71	1.61	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/24	11.7	1.66	NG/L	
Perfluorooctanesulfonate (PFOS)	11/21/24	5.44	1.69	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/24	3.22	1.82	NG/L	
1,4-Dioxane	11/21/24	3.7	0.2	UG/L	
1,1,1-Trichloroethane	12/13/24	1	0.5	UG/L	
1,1-Dichloroethane	12/13/24	0.65	0.5	UG/L	
1,1-Dichloroethylene	12/13/24	2.9	0.5	UG/L	
8260 TVOC	12/13/24	6.57	0	UG/L	
Chloroform	12/13/24	0.18	0.5	UG/L	J
Dichlorodifluoromethane	12/13/24	1.3	0.5	UG/L	
Trichloroethylene	12/13/24	0.54	0.5	UG/L	

J: The associated numerical value was an estimated quantity.

B: Blank Contamination: The analyte was detected above one-half the reporting limit in an associated blank.

Table F-18
Air Stripper Effluent Data
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Site ID : 095-126 (MR/SB/WSB Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	6/5/2024	0	0	UG/L	
8260 TVOC	7/3/2024	0	0	UG/L	
8260 TVOC	8/10/2024	0	0	UG/L	
8260 TVOC	9/5/2024	0	0	UG/L	
8260 TVOC	10/3/2024	0	0	UG/L	
8260 TVOC	11/7/2024	0	0	UG/L	
1,4-Dioxane	11/21/2024	1.6	0.2	UG/L	
1633 TPFAS	11/21/2024	45.17	0	NG/L	
Perfluorobutanesulfonate (PFBS)	11/21/2024	2.25	1.63	NG/L	
Perfluorobutyric acid (PFBA)	11/21/2024	8.33	7.36	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/2024	16.1	1.68	NG/L	
Perfluorohexanoic acid (PFHxA)	11/21/2024	3.9	1.84	NG/L	
Perfluorooctanesulfonate (PFOS)	11/21/2024	5.29	1.71	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/2024	4.4	1.84	NG/L	
Perfluoropentanesulfonate (PFPeS)	11/21/2024	2.16	1.73	NG/L	
Perfluoropentanoic acid (PFPeA)	11/21/2024	2.74	1.84	NG/L	
8260 TVOC	12/13/2024	0	0	UG/L	

Site ID : 095-270 (MR/SB/WSB Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	1/4/2024	0	0	UG/L	
1633 TPFAS	1/4/2024	50.658	0	NG/L	
Perfluorobutanesulfonate (PFBS)	1/4/2024	1.47	1.72	NG/L	J
Perfluorobutyric acid (PFBA)	1/4/2024	6.86	7.75	NG/L	J
Perfluoroheptanoic acid (PFHpA)	1/4/2024	1.18	1.94	NG/L	J
Perfluorohexanesulfonate (PFHxS)	1/4/2024	21	1.77	NG/L	
Perfluorohexanoic acid (PFHxA)	1/4/2024	3.13	1.94	NG/L	
Perfluorononanoic acid (PFNA)	1/4/2024	0.728	1.94	NG/L	J
Perfluorooctanesulfonate (PFOS)	1/4/2024	7.53	1.8	NG/L	
Perfluorooctanoic acid (PFOA)	1/4/2024	5.63	1.94	NG/L	
Perfluoropentanesulfonate (PFPeS)	1/4/2024	1.73	1.82	NG/L	J
Perfluoropentanoic acid (PFPeA)	1/4/2024	1.4	1.94	NG/L	J
1,4-Dioxane	1/4/2024	1.9	0.2	UG/L	
8260 TVOC	2/9/2024	0	0	UG/L	
8260 TVOC	3/14/2024	0	0	UG/L	
8260 TVOC	4/4/2024	0	0	UG/L	
1633 TPFAS	4/4/2024	30.12	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	4/4/2024	15.6	1.65	NG/L	
Perfluorohexanoic acid (PFHxA)	4/4/2024	3.64	1.81	NG/L	
Perfluorooctanesulfonate (PFOS)	4/4/2024	6.2	1.68	NG/L	
Perfluorooctanoic acid (PFOA)	4/4/2024	4.68	1.81	NG/L	
1,4-Dioxane	4/4/2024	1.6	0.2	UG/L	B
8260 TVOC	5/6/2024	0	0	UG/L	

J: The analyte was positively identified; the quantitation is an estimation.

B: Blank Contaminaion: The analyte was detected above one-half the reporting limit in an associated blank.

Table F-19
Cumulative Mass Removal
OU III Western South Boundary System

2024 BNL Groundwater Status Report

Date Sampled	Total VOCs (µg/L)	Flow Rates (gpm)	Cumulative VOCs (lbs)
1/11/2024	8.91	152	212.36
2/9/2024	7.07	179	212.83
3/14/2024	12.89	167	213.63
4/4/2024	5.67	99	213.84
5/6/2024	12.08	318	215.27
6/5/2024	5.04	205	215.65
7/3/2024	10.84	22	215.75
8/10/2024	7.09	175	216.20
9/5/2024	13.52	178	217.10
10/3/2024	4.82	199	217.45
11/7/2024	10.36	199	218.23
12/13/2024	6.57	151	218.59

NOTES:
µg/L - Micrograms per liter
gpm - Gallons per minute
lbs - Pounds

TABLE F-20
TVOC Influent, Effluent and Efficiency Performance
OU III Idustrial Park System

2024 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
9/29/1999	1900.00	184.42	90.29	70.02	3.03	95.67	49.45	3.08	93.77	158.10	10.70	93.23	284.50	29.19	89.74	90.69	1.97	97.83	NS	NS	0.00
10/07/99	1352.98	97.69	92.78	71.48	3.08	95.69	25.38	3.44	86.45	110.38	8.38	92.41	315.10	33.77	89.28	89.13	9.73	89.08	NS	NS	0.00
10/12/1999	1485.00	59.78	95.97	94.75	2.12	97.76	20.11	2.23	88.91	92.28	6.75	92.69	359.44	31.23	91.31	96.88	1.70	98.25	NS	NS	0.00
10/19/99	820.50	52.42	93.61	875.60	39.47	95.49	19.59	1.91	90.25	84.58	5.96	92.95	230.58	29.94	87.02	98.78	1.50	98.48	NS	NS	0.00
10/26/1999	730.22	47.73	93.46	571.49	25.18	95.59	18.56	1.15	93.80	77.02	4.10	94.68	192.19	25.99	86.48	90.21	1.39	98.46	NS	NS	0.00
11/2/1999^	608.70	23.48	96.14	461.20	11.25	97.56	16.26	1.63	89.98	72.14	4.73	93.44	181.98	22.39	87.70	95.15	1.78	98.13	43.62	4.79	89.02
11/9/1999#	574.00	26.60	95.37	420.50	8.95	97.87	15.62	1.09	93.02	69.44	3.92	94.35	170.97	21.01	87.71	NS	NS	-	32.12	2.58	91.97
11/16/1999~	602.30	36.06	94.01	383.30	14.05	96.33	23.37	0.92	96.06	77.12	3.49	95.47	181.90	23.91	86.86	NS	NS	-	38.06	6.43	83.11
11/23/1999%	461.18	15.28	96.69	245.86	7.25	97.05	19.58	2.13	89.12	63.16	4.43	92.99	143.04	16.23	88.65	NS	NS	-	32.92	6.92	78.98
12/7/1999$	410.00	27.07	93.40	265.80	11.10	95.82	14.41	0.00	100.00	62.33	4.42	92.91	152.74	16.90	88.94	133.08	12.53	90.58	35.90	4.82	86.57
12/14/1999	394.00	23.80	93.96	212.40	6.80	96.80	18.36	0.00	100.00	62.40	3.48	94.42	157.11	20.64	86.86	89.82	5.83	93.51	33.41	3.49	89.55
12/21/99	459.00	27.36	94.04	193.20	6.10	96.84	18.01	0.00	100.00	62.09	3.55	94.28	154.30	16.30	89.44	**	4.85	-	84.61	2.37	97.20
1/27/2000	85.26	33.14	61.13	125.69	6.48	94.84	18.23	1.26	93.09	70.91	5.67	92.00	161.47	22.44	86.10	84.33	9.92	88.24	34.94	4.18	88.04
2/24/2000	106.56	25.44	76.13	126.18	7.90	93.74	23.82	4.65	80.48	80.78	10.78	86.66	69.66	25.73	63.06	75.02	10.17	86.44	37.31	3.10	91.69
3/20/2000	439.47	27.69	93.70	138.15	9.69	92.99	21.41	1.78	91.69	94.02	8.62	90.83	219.34	16.19	92.62	71.94	4.11	94.29	34.30	2.44	92.89
4/18/2000	238.38	23.18	90.28	126.68	7.84	93.81	26.01	1.78	93.16	92.87	8.16	91.21	195.77	19.70	89.94	65.93	5.48	91.69	33.06	2.26	93.16
5/16/2000	375.40	16.50	95.60	92.10	7.80	91.53	24.90	1.60	93.57	117.60	5.30	95.49	195.10	19.70	89.90	67.60	3.10	95.41	29.90	1.10	96.32
6/14/2000	349.00	18.30	94.76	158.90	6.40	95.97	27.30	1.30	95.24	103.10	8.20	92.05	236.50	15.80	93.32	63.60	1.60	97.48	27.30	0.90	96.70
7/24/2000	319.10	25.70	91.95	157.30	7.30	95.36	28.10	1.80	93.59	106.10	9.60	90.95	234.00	19.60	91.62	69.30	1.60	97.69	30.00	0.80	97.33
8/15/2000	282.00	27.80	90.14	175.60	8.80	94.99	28.80	1.90	93.40	143.80	10.90	92.42	196.10	18.40	90.62	59.80	1.80	96.99	27.10	0.80	97.05
9/19/2000	272.60	20.70	92.41	203.70	8.90	95.63	28.20	1.70	93.97	101.60	6.80	93.31	NS	NS		56.50	2.50	95.58	49.10	1.20	97.56
10/24/2000	41.10	15.00	63.50	156.90	10.40	93.37	27.70	0.00	100.00	101.10	6.80	93.27	431.10	30.60	92.90	65.20	2.20	96.63	58.80	0.00	100.00
11/13/2000	185.20	15.10	91.85	153.70	11.20	92.71	33.30	0.00	100.00	85.50	10.50	87.72	274.80	23.70	91.38	70.50	0.00	100.00	73.90	0.00	100.00
12/19/2000	259.50	14.60	94.37	206.60	8.50	95.89	NS	NS		NS	NS		299.40	24.40	91.85	52.50	2.40	95.43	39.10	0.00	100.00
1/24/2001	200.00	12.50	93.75	242.90	12.60	94.81	45.60	1.70	96.27	124.80	4.00	96.79	326.60	22.20	93.20	96.40	4.30	95.54	44.40	3.30	92.57
2/26/2001	149.20	10.10	93.23	232.10	12.00	94.83	54.60	3.30	93.96	129.80	7.10	94.53	299.20	23.00	92.31	91.20	4.50	95.07	44.20	2.80	93.67
3/20/2001	157.10	8.10	94.84	230.80	12.30	94.67	53.00	3.40	93.58	120.80	4.00	96.69	NS	NS		102.90	4.40	95.72	41.00	3.20	92.20
4/19/2001	124.90	5.30	95.76	230.50	12.00	94.79	59.80	5.20	91.30	154.70	7.40	95.22	306.40	23.20	92.43	122.20	4.80	96.07	46.40	3.30	92.89
5/29/2001	72.81	5.99	91.77	173.20	13.31	92.32	64.49	5.55	91.39	162.34	9.29	94.28	291.82	21.19	92.74	105.34	5.20	95.06	43.86	3.53	91.95
6/26/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
7/31/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
8/31/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
9/30/2001	73.25	6.82	90.69	232.85	17.21	92.61	58.15	5.70	90.20	145.44	5.40	96.29	228.30	18.99	91.68	111.77	6.74	93.97	48.51	4.87	89.96
10/2/2001	67.76	5.93	91.25	254.28	15.84	93.77	74.34	8.21	88.96	155.95	18.55	88.11	312.77	14.69	95.30	117.30	5.94	94.94	41.93	2.98	92.89
11/2/2001	58.61	6.19	89.44	238.11	19.32	91.89	96.97	10.16	89.52	205.18	13.59	93.38	420.87	19.73	95.31	160.04	7.14	95.54	73.21	3.40	95.36
12/19/2001	56.33	3.19	94.34	172.19	17.36	89.92	63.98	4.22	93.40	151.04	14.66	90.29	303.89	15.26	94.98	141.04	5.15	96.35	82.96	4.31	94.80
1/14/2002	42.71	3.07	92.81	181.37	14.56	91.97	70.28	4.47	93.64	145.98	19.39	86.72	321.73	20.69	93.57	132.80	5.46	95.89	62.07	3.32	94.65
2/25/2002	25.64	2.62	89.78	208.09	15.21	92.69	66.69	5.34	91.99	134.41	17.81	86.75	278.49	14.41	94.83	152.11	6.51	95.72	63.16	4.22	93.32
3/25/2002	12.32	1.59	87.09	191.99	15.17	92.10	60.15	4.64	92.29	117.92	15.04	87.25	243.94	8.88	96.36	136.04	6.43	95.27	55.36	4.49	91.89
4/30/2002	0.00	0.00	0.00	224.95	16.80	92.53	82.43	6.30	92.36	111.75	18.13	83.78	281.15	13.96	95.03	138.72	6.88	95.04	57.88	4.15	92.83
5/29/2002	0.00	0.00	0.00	174.95	17.26	90.13	72.81	7.38	89.86	111.48	15.52	86.08	247.56	13.77	94.44	145.59	7.99	94.51	60.89	6.46	89.39
6/26/2002	9.31	1.17	87.43	207.51	18.40	91.13	64.07	5.21	91.87	95.49	13.02	86.37	216.80	9.69	95.53	131.10	6.07	95.37	55.57	4.64	91.65
7/25/2002	21.66	2.38	89.01	210.54	18.25	91.33	70.55	6.64	90.59	94.05	7.19	92.36	226.54	6.87	96.97	148.11	5.95	95.98	48.51	4.41	90.91

TABLE F-20
TVOC Influent, Effluent and Efficiency Performance
OU III Idustrial Park System

2024 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
8/27/2002	27.80	2.52	90.94	218.79	19.17	91.24	64.52	7.63	88.17	95.05	11.87	87.51	212.32	7.72	96.36	145.48	5.58	96.16	65.36	3.96	93.94
9/23/2002	22.42	1.66	92.60	239.94	20.13	91.61	73.34	6.22	91.52	100.22	9.40	90.62	207.98	15.28	92.65	158.22	4.10	97.41	65.36	3.96	93.94
10/29/2002	18.55	1.82	90.19	197.88	15.79	92.02	127.93	11.72	90.84	88.12	11.27	87.21	338.48	3.57	98.95	146.42	4.57	96.88	65.36	0.30	99.54
11/19/2002	14.40	0.00	100.00	154.00	13.20	91.43	66.30	5.30	92.01	100.90	5.30	94.75	168.10	11.40	93.22	146.42	4.57	96.88	61.60	0.00	100.00
12/19/2002	15.30	0.00	100.00	155.00	10.20	93.42	52.70	4.40	91.65	87.40	4.40	94.97	146.50	10.50	92.83	146.42	4.57	96.88	56.90	0.80	98.59
1/29/2003	9.8	0	100.00	188.2	14	92.56	51.8	3.7	92.86	103.2	9.5	90.79	168.7	8.9	94.72	185	6.8	96.32	61	2.1	96.56
2/25/2003	7.3	0.7	90.41	157.2	10.4	93.38	57.2	4.8	91.61	92.7	11.2	87.92	188.4	11.3	94.00	144	8.4	94.17	54.4	1.8	96.69
3/20/2003	6.1	0	100.00	129.5	10.5	91.89	58.2	4.8	91.75	93.6	13.1	86.00	154.4	9.5	93.85	148.7	10.1	93.21	58.7	2.7	95.40
4/30/2003	7.1	0	100.00	133.7	10.2	92.37	41.7	2.9	93.05	79.2	11.1	85.98	127.6	12	90.60	101.7	7.3	92.82	34.1	0.9	97.36
5/31/2003	7.1	0	100.00	123.6	10.5	91.50	51.7	5.1	90.14	87.3	12.9	85.22	144	14.9	89.65	183	8	95.63	50.4	2	96.03
6/30/2003	4.6	1	78.26	176.5	10.2	94.22	46	4.9	89.35	79	11.3	85.70	134.9	13.6	89.92	146.8	10.3	92.98	50.6	2.1	95.85
7/31/2003	5.4	1.2	77.78	153.1	14.6	90.46	2.2	0	100.00	73	13.3	81.78	147.3	13.9	90.56	153.1	13.5	91.18	51.7	1.8	96.52
8/31/2003	5.7	0.9	84.21	158.8	16.6	89.55	49.8	5.6	88.76	68.2	13.2	80.65	121.8	13.2	89.16	132.1	14	89.40	46.9	1	97.87
9/30/2003	5	0	100.00	158.8	16.6	89.55	49.3	5.2	89.45	61.9	12.5	79.81	121.7	12.5	89.73	124.7	12	90.38	54.1	0.8	98.52
10/31/2003	2.16	0	100.00	132.79	14.53	89.06	42.87	4.01	90.65	49.7	9.82	80.24	99.74	10.8	89.17	110.23	10.66	90.33	35.98	0.98	97.28
11/30/2003	3.79	0	100.00	226.15	20.3	91.02	33.86	2.88	91.49	46.57	9.35	79.92	97.64	10.75	88.99	103.49	10.59	89.77	40.4	1.5	96.29
12/31/2003	1.99	0	100.00	361	74.4	79.39	36.7	3.03	91.74	48.42	8	83.48	92.79	10.56	88.62	105.01	7.39	92.96	45.21	0.76	98.32
1/26/2004	1.99	0.00	100.00	151.26	23.04	84.77	36.7	3.03	91.74	46.33	8.08	82.56	86.35	10.27	88.11	100.20	14.96	85.07	NA	NA	NA
2/25/2004	1.99	0.73	63.32	149.61	13.53	90.96	36.7	3.03	91.74	46.33	17.54	62.14	99.76	10.28	89.70	106.66	9.28	91.30	70.37	1.58	97.75
3/24/2004	2.06	0.69	66.50	133.38	12.63	90.53	36.7	3.03	91.74	44.82	14.33	68.03	77.91	11.86	84.78	88.61	8.02	90.95	70.37	1.58	97.75
4/27/2004	1.53	1.10	28.10	100.13	17.10	82.92	36.7	3.03	91.74	47.43	12.70	73.22	77.91	11.86	84.78	96.83	11.27	88.36	66.79	3.42	94.88
5/27/2004	3.65	1.12	69.32	123.20	16.54	86.57	36.7	3.03	91.74	47.88	12.70	73.48	77.91	11.86	84.78	99.49	12.09	87.85	65.11	4.15	93.63
6/29/2004	4.59	4.10	10.68	123.20	21.02	82.94	124.00	14.14	88.60	47.54	9.50	80.02	91.17	14.42	84.18	82.67	10.87	86.85	58.85	3.69	93.73
7/23/2004	4.59	4.10	10.68	NA	NA	NA	56.04	5.32	90.51	47.54	9.50	80.02	91.17	14.42	84.18	82.67	10.87	86.85	58.85	3.69	93.73
8/26/2004	2.96	0.22	92.53	190.88	0.00	100.00	56.04	5.32	90.51	43.70	9.43	78.42	91.17	12.78	85.98	36.75	13.28	63.86	55.34	2.29	95.86
9/21/2004	3.06	0.25	91.83	190.88	0.00	100.00	56.04	5.32	90.51	46.90	12.38	73.60	89.51	9.95	88.88	91.49	9.91	89.17	54.95	2.43	95.58
10/26/2004	2.82	0.13	95.39	190.88	0.00	100.00	52.13	5.50	89.45	37.35	9.00	75.90	97.02	12.62	86.99	67.00	8.21	87.75	51.39	3.08	94.01
11/23/2004	1.89	0.00	100.00	NA	NA	NA	52.13	5.50	89.45	34.74	9.87	71.59	60.84	11.50	81.10	64.01	6.92	89.19	52.40	2.77	94.71
12/15/2004	5.49	0.00	100.00	190.88	0.00	100.00	52.13	5.50	89.45	36.32	9.60	73.57	92.09	12.41	86.52	65.59	7.08	89.21	57.16	2.77	95.15
1/31/2005	3.34	0.66	80.24	115.00	10.00	91.30	54.51	5.04	90.75	41.12	9.80	76.17	81.30	10.53	87.05	42.18	7.77	81.58	59.11	4.22	92.86
2/28/2005	2.77	0.33	88.09	40.40	1.81	95.52	51.00	4.20	91.76	41.12	9.80	76.17	26.91	1.51	94.39	24.45	7.01	71.33	20.60	3.53	82.86
3/31/2005	2.20	0.00	100.00	40.40	1.81	95.52	47.70	3.84	91.95	41.12	9.80	76.17	79.31	14.50	81.72	98.59	8.58	91.30	62.83	4.15	93.39
4/30/2005	2.2	0.00	100.00	40.40	1.81	95.52	35.14	3.44	90.21	41.12	9.80	76.17	105.42	9.06	91.41	86.16	6.25	92.75	47.5	3.1	93.47
5/31/2005	2.2	0.00	100.00	40.40	1.81	95.52	48.07	2.95	93.86	41.12	9.80	76.17	81.43	10.23	87.44	79.35	7.36	90.72	47.5	3.1	93.47
6/31/2005	2.2	0.00	100.00	40.40	1.81	95.52	48.64	3.15	93.52	41.12	9.80	76.17	75	11.19	85.08	139.7	7.54	94.60	47.5	3.1	93.47
7/31/2005	1.49	0.07	95.30	160	10	93.75	50	3	94.00	51	3.5	93.14	100	17.5	82.5	78.6	8.4	89.31	95	3	96.84
8/31/2005	1.49	0.07	95.30	160	10	93.75	50	3	94.00	51	3.5	93.14	100	17.5	82.5	74	5.52	92.54	95	3	96.84
9/30/2005	1.49	0.07	95.30	160	10	93.75	50	3	94.00	51	3.5	93.14	100	17.5	82.5	80.71	6.55	91.88	95	3	96.84
10/31/2005	1.49	0.07	95.30	182.00	10.00	94.51	56.53	8.06	85.74	1.67	0.87	47.90	124.34	17.49	85.93	70.06	6.55	90.65	143.91	6.38	95.57
11/30/2005	1.00	0.00	100.00	204.71	10.57	94.84	72.90	7.71	89.42	0.65	0.42	35.38	116.55	12.04	89.67	72.11	6.49	91.00	101.44	5.08	94.99
12/31/2005	1.49	0.07	95.30	204.71	10.57	94.84	56.67	8.41	85.16	0.27	0.16	40.74	104.44	10.36	90.08	71.47	4.58	93.59	81.23	3.22	96.04
1/31/2006	1.57	0.19	87.90	295.58	17.48	94.09	52.82	7.78	85.27	5.67	0.32	94.36	86.11	9.57	88.89	64.60	5.19	91.97	53.82	2.33	95.67
2/28/2006	1.65	0.2	87.88	270.80	19.18	92.92	55.59	7.80	85.97	3.50	0.30	91.43	90.83	9.90	89.10	68.19	5.35	92.15	55.49	2.38	95.71
3/31/2006	1.85	0.33	82.16	246.02	20.89	91.51	58.36	7.92	86.43	0.33	0.29	12.12	95.56	10.23	89.29	71.77	5.51	92.32	57.16	2.42	95.77

TABLE F-20
TVOC Influent, Effluent and Efficiency Performance
OU III Idustrial Park System

2024 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
4/30/2006	2.13	0.43	79.81	549.90	47.15	91.43	65.47	10.55	83.89	6.47	0.64	90.11	83.28	12.03	85.55	67.18	7.17	89.33	54.68	2.14	96.09
5/31/2006	2.10	0.62	70.48	343.56	25.48	92.58	59.23	10.57	82.15	0.77	0.31	59.74	83.17	11.12	86.63	62.12	5.55	91.07	49.15	3.00	93.90
6/30/2006	1.53	0.70	54.25	269.81	129.00	52.19	62.59	9.66	84.57	1.30	0.35	73.08	76.55	8.65	88.70	57.48	4.54	92.10	43.53	2.81	93.54
7/31/2006	2.19	0.79	63.93	244.73	34.89	85.74	73.36	12.79	82.57	6.20	0.40	93.55	84.98	10.62	87.50	55.36	5.11	90.77	44.72	3.38	92.44
8/31/2006	1.87	0.35	81.28	244.73	34.89	85.74	102.84	13.00	87.36	0.60	0.30	50.00	71.05	11.31	84.08	55.29	3.33	93.98	42.00	1.80	95.71
9/30/2006	2.07	0.22	89.37	244.73	34.89	85.74	132.32	14.12	89.33	2.24	0.00	100.00	65.90	8.98	86.37	53.35	4.31	91.92	46.83	1.59	96.60
10/31/2006	2.18	0.34	84.40	120.00	19.00	84.17	65.20	8.07	87.62	2.00	0.71	64.50	61.65	7.32	88.13	44.49	2.80	93.71	46.83	1.59	96.60
11/30/2006	1.19	0.40	66.39	60.00	8.00	86.67	64.78	8.65	86.65	1.53	0.37	75.82	61.65	7.32	88.13	44.49	2.80	93.71	100.96	0.35	99.65
12/31/2006	1.99	0.16	91.96	5.17	2.90	43.91	63.36	8.34	86.84	1.65	0.48	70.91	61.65	7.32	88.13	44.49	2.80	93.71	43.68	1.08	97.53
1/31/2007	1.75	0.25	85.71	8.40	2.18	74.05	52.83	7.99	84.88	2.76	0.50	81.88	127.06	12.95	89.81	199.58	0.56	99.72	0.58	0.46	20.69
2/28/2007	1.43	0.40	72.17	9.66	0.91	90.58	46.28	6.33	86.32	3.88	0.52	86.60	1.95	0.56	71.23	59.02	4.19	92.90	0.60	0.02	96.67
3/31/2007	1.60	0.53	66.79	0.45	0.36	20.00	52.97	5.36	89.88	1.07	0.39	63.55	2.32	0.94	59.70	191.48	4.65	97.57	0.74	0.07	90.54
4/30/2007	1.48	0.271	81.69	148.61	45.28	69.53	57.22	8.22	85.63	3.88	0.29	92.53	2.32	0.94	99.35	192.80	7.47	96.13	1.96	0.50	74.49
5/30/2007	1.48	0.271	81.69	6.02	1.70	71.76	45.11	7.51	83.35	44.79	7.95	82.25	142.76	0.94	88.24	142.76	3.30	97.69	23.83	2.12	91.10
6/30/2007	1.48	0.271	81.69	2.60	1.90	26.92	45.33	7.70	83.01	2.81	0.84	70.11	7.95	0.94	88.24	7.95	2.02	74.59	4.26	1.22	71.36
7/31/2007	1.48	0.271	81.69	2.60	1.90	26.92	45.33	7.70	83.01	20	5	75	7.95	0.94	88.24	113.95	3.42	97.00	2.13	0.75	64.79
8/31/2007	1.48	0.271	81.69	2.42	0.56	76.86	45.33	7.70	83.01	41.68	10.77	74.16	7.95	0.94	88.24	113.95	3.42	97.00	0.79	0.4	49.37
9/30/2007	1.48	0.271	81.69	2.42	0.56	76.86	45.33	7.70	83.01	41.68	10.77	74.16	7.95	0.94	88.24	113.95	3.42	97.00	0.79	0.4	49.37
10/31/2007	2.00	0.50	75.00	4.38	0.47	89.27	56.88	9.66	83.02	41.60	9.57	77.00	105.00	80.47	23.36	53.51	3.05	94.30	2.57	0.56	78.21
11/30/2007	2.00	0.50	75.00	234.51	16.99	92.76	56.88	9.66	83.02	27.94	7.81	72.05	83.32	68.27	18.06	43.02	1.72	96.00	40.79	2.08	94.90
12/31/2007	2.63	1.20	54.37	2.00	1.20	40.00	68.44	11.63	83.01	18.91	7.70	59.28	71.52	55.00	23.10	31.09	1.52	95.11	17.92	1.42	92.08
1/31/2008	2.42	0.82	66.12	1.3	0.7	46.15	58.13	10.63	81.71	27.2	7.81	71.29	2.93	1.02	65.19	32.29	1.16	96.41	15.43	1.07	93.07
2/28/2008	1.66	0.13	92.17	41.27	4.39	89.36	53.8	7.65	85.78	19.6	5.19	73.52	28.59	2.8	90.21	29.17	1.11	96.19	11.16	1.48	86.74
3/31/2008	0.88	0.19	78.41	8.65	6.52	24.62	44.46	7.22	83.76	32.51	8.49	73.88	28.59	2.8	90.21	28.89	1.08	96.26	12.81	1.6	87.51
4/30/2008	1.70	0.21	87.65	82.30	5.13	93.77	26.03	6.06	76.72	22.01	8.40	61.84	23.73	2.40	89.89	5.37	0.00	100.00	1.01	0.30	70.30
5/31/2008	1.22	0.47	61.48	82.30	5.13	93.77	28.84	5.00	82.66	17.20	5.90	65.70	3.83	1.44	62.40	30.59	5.40	82.35	1.01	0.30	70.30
6/30/2008	1.22	0.47	61.48	82.30	5.13	93.77	28.84	5.00	82.66	17.20	5.90	65.70	3.83	1.44	62.40	30.59	5.40	82.35	1.01	0.30	70.30
7/31/2008	2.14	0.40	81.31	42.62	2.60	93.90	85.00	12.00	85.88	9.10	2.00	78.02	72.00	6.50	90.97	30.00	3.00	90.00	2.00	0.40	80.00
8/31/2008	2.14	0.40	81.31	42.62	2.60	93.90	85.00	12.00	85.88	9.10	2.00	78.02	72.00	6.50	90.97	30.00	3.00	90.00	2.00	0.40	80.00
9/30/2008	3.06	0.40	86.93	2.91	0.45	84.54	141.90	19.19	86.48	1.06	0.28	73.58	139.85	9.72	93.05	29.74	1.13	96.20	3.06	0.25	91.83
10/31/2008	2.34	0.84	64.10	42.29	4.24	89.97	30.30	4.42	85.41	12.40	2.90	76.61	71.00	5.00	92.96	22.24	1.13	94.92	2.34	0.11	95.30
11/30/2008	3.06	0.27	91.18	39.10	3.43	91.23	24.16	3.54	85.35	12.50	3.90	68.80	71.00	5.00	92.96	20.71	1.13	94.54	3.06	0.78	74.51
12/31/2008	19.31	5.48	71.62	31.00	2.14	93.10	18.24	2.78	84.76	12.50	3.90	68.80	71.00	5.00	92.96	20.71	1.13	94.54	3.06	0.78	74.51
1/31/2009	9.90	2.40	75.76	15.00	1.20	92.00	19.00	2.10	88.95	5.46	1.20	78.02	3.10	0.30	90.32	36.86	5.35	85.49	0.70	0.11	84.29
2/28/2009	0.63	0.24	62.09	0.44	0.28	36.36	20.80	1.42	93.17	6.27	1.03	83.57	25.24	2.40	90.49	51.33	8.36	83.71	0.49	0.38	23.27
3/31/2009	0.90	0.25	72.35	0.21	0.18	14.29	30.01	3.00	90.00	4.74	1.16	75.53	1.63	0.17	89.57	51.33	8.36	83.71	0.39	0.17	56.41
4/30/2009	0.83	0.41	50.30	1.01	0.23	77.23	15.69	2.60	83.43	6.44	1.13	82.45	33.43	5.00	85.04	55.00	7.89	85.65	0.62	0.12	80.65
5/31/2009	6.21	4.10	33.98	1.96	0.23	88.27	15.25	2.10	86.23	6.07	1.53	74.79	19.61	2.53	87.10	61.38	7.49	87.80	0.77	0.11	85.71
6/30/2009	3.81	2.60	31.76	3.53	0.59	83.29	14.44	1.97	86.36	6.04	1.78	70.53	25.70	3.21	87.51	26.62	4.41	83.43	0.88	0.47	46.59
7/31/2009	3.14	2.36	24.84	1.36	1.36	0.00	11.75	1.88	84.00	5.40	2.20	59.26	6.22	6.22	0.00	21.08	2.24	89.37	0.74	0.61	17.57
8/31/2009	3.56	3.33	6.46	1.45	1.28	11.72	10.52	1.57	85.08	5.64	1.00	82.27	14.90	3.55	76.17	14.18	2.03	85.68	7.58	1.28	83.11
9/30/2009	4.82	2.90	39.83	1.45	1.28	11.72	10.56	2.31	78.13	5.49	1.79	67.40	3.89	0.95	75.58	14.43	2.49	82.74	1.16	0.22	81.03
10/31/2009	3.73	2.46	34.05	1.62	0.60	62.96	10.56	2.31	78.13	0.93	0.58	37.63	1.79	0.55	69.27	12.78	1.52	88.11	0.35	0.27	22.86
11/30/2009	3.86	2.65	31.35	2.06	0.65	68.45	10.56	2.31	78.13	0.60	0.30	50.00	1.99	0.46	76.88	13.64	1.82	86.66	0.66	0.66	0.00

TABLE F-20
TVOC Influent, Effluent and Efficiency Performance
OU III Idustrial Park System

2024 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**	**Inf**	**Eff**	**Efficiency**
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
12/31/2009	4.19	2.67	36.28	3.69	0.45	87.80	10.56	2.31	78.13	0.26	0.08	69.23	1.99	1.15	42.21	13.64	1.82	86.66	0.89	0.32	64.04
1/31/2010	3.70	2.29	38.11	1.27	0.25	80.31	15.00	0.00	100.00	3.64	0.94	74.18	15.00	1.15	92.33	16.00	1.82	88.63	0.24	0.00	100.00
2/28/2010	4.89	2.60	46.83	1.96	0.48	75.51	15.00	0.00	100.00	4.24	0.95	77.59	15.00	1.15	92.33	16.00	1.82	88.63	7.55	1.91	74.70
3/31/2010	4.47	3.80	14.99	1.63	1.00	38.65	15.00	0.00	100.00	3.40	1.60	52.94	15.00	1.15	92.33	16.00	1.82	88.63	2.47	1.76	28.74
4/30/2010	4.25	3.52	17.18	32.80	3.64	88.90	17.50	1.30	92.57	0.42	0.33	21.43	25.00	3.25	87.00	13.68	2.00	85.38	2.31	0.00	100.00
5/31/2010	5.61	3.86	31.19	16.47	1.04	93.69	20.53	2.60	87.34	0.61	0.50	18.03	35.64	5.42	84.79	12.31	2.32	81.15	0.68	0.00	100.00
6/30/2010	3.32	2.42	27.11	0.76	0.36	52.63	13.17	2.01	84.74	0.56	0.46	17.86	19.30	2.92	84.87	10.56	2.32	78.03	0.49	0.00	100.00
7/31/2010	3.72	2.43	34.68	1.07	1.00	6.54	12.15	2.72	77.61	0.87	0.49	43.68	19.19	3.44	82.07	13.59	2.32	82.93	0.88	0.61	30.68
8/31/2010	3.69	2.00	45.80	12.91	1.83	85.82	10.68	3.65	65.82	5.69	2.36	58.52	17.78	4.53	74.52	11.62	2.32	80.03	1.24	1.10	11.29
9/30/2010	2.94	2.02	31.29	0.86	0.71	17.44	7.79	2.17	72.14	2.91	1.59	45.36	13.37	2.86	78.61	9.71	2.32	76.11	0.99	0.83	16.16
10/31/2010	2.83	2.00	29.33	1.20	1.07	10.83	10.28	2.54	75.29	1.88	1.17	37.77	5.36	1.55	71.08	13.00	5.50	57.69	1.49	1.25	16.11
11/30/2010	2.55	1.70	33.33	1.22	0.83	31.97	7.93	1.83	76.92	2.53	1.23	51.38	16.69	2.77	83.40	17.61	9.56	45.71	1.49	1.25	16.11
12/31/2010	2.28	1.60	29.82	8.72	1.11	87.27	9.28	1.63	82.44	2.60	0.92	64.62	17.11	2.41	85.91	23.74	9.56	59.73	1.49	1.25	16.11
1/31/2011	1.60	1.00	37.50	11.50	1.15	90.00	9.07	1.45	84.01	2.20	0.96	56.36	15.11	2.20	85.44	17.65	2.50	85.84	3.74	1.30	65.24
2/28/2011	1.13	0.70	38.05	14.71	1.15	92.18	8.86	1.30	85.33	1.97	0.97	50.76	13.50	2.00	85.19	17.65	2.50	85.84	6.11	1.35	77.91
3/31/2011	1.27	0.50	60.63	13.47	1.23	90.87	6.21	1.17	81.16	1.17	0.20	82.91	10.28	2.00	80.54	11.56	2.50	78.37	0.40	0.24	40.00
4/30/2011	1.33	0.34	74.44	16.59	1.40	91.56	6.96	1.42	79.60	2.66	1.82	31.58	8.12	1.65	79.68	10.75	2.50	76.74	5.78	1.06	81.66
5/31/2011	1.39	0.54	61.15	16.92	1.55	90.84	7.25	1.32	81.79	2.66	1.82	31.58	8.12	1.65	79.68	10.75	2.50	76.74	5.85	1.00	82.91
6/30/2011	1.45	0.74	48.97	17.25	1.69	90.20	7.57	1.25	83.49	4.15	3.44	17.11	8.12	1.65	79.68	10.75	2.50	76.74	5.92	0.85	85.64
7/31/2011	1.57	0.85	45.86	23.50	2.40	89.79	7.78	1.54	80.21	0.37	0.00	100.00	32.18	21.00	34.74	0.48	0.00	100.00	4.78	1.31	72.59
8/31/2011	1.20	1.20	0.00	0.84	0.00	100.00	8.06	1.88	76.67	0.59	0.00	100.00	27.40	19.00	30.66	0.57	0.00	100.00	4.25	1.56	63.29
9/30/2011	1.43	0.86	39.86	1.01	0.60	40.59	6.46	1.25	80.65	0.59	0.00	100.00	27.44	18.00	34.40	10.51	1.88	82.11	4.10	1.24	69.76
10/31/2011	0.86	0.30	65.12	0.30	0.28	6.67	6.24	1.06	83.01	1.00	0.36	64.00	24.38	1.46	94.01	9.87	1.54	84.40	4.83	0.92	80.95
11/30/2011	0.87	0.40	54.02	0.40	0.22	45.00	5.67	0.89	84.30	1.86	0.72	61.29	17.52	2.68	84.70	7.92	1.50	81.06	0.29	0.27	6.90
12/31/2011	0.99	0.36	63.64	0.11	0.11	0.00	5.61	2.10	62.57	1.72	0.80	53.49	12.72	1.90	85.06	7.72	1.39	81.99	3.89	0.70	82.01
1/31/2012	0.85	0.19	77.65	0.10	0.00	100.00	5.26	2.95	43.92	1.22	0.39	68.03	9.70	1.11	88.56	6.48	1.05	83.80	4.26	0.40	90.61
2/28/2012	0.83	0.08	90.36	0.16	0.00	100.00	3.88	2.89	25.52	1.40	0.39	72.14	8.13	1.15	85.85	5.73	1.01	82.37	0.22	0.15	31.82
3/31/2012	1.04	0.50	51.92	0.26	0.23	11.54	6.85	3.74	45.40	1.29	0.72	44.19	6.45	1.14	82.33	5.81	1.12	80.72	0.40	0.05	88.75
4/30/2012	0.90	0.30	66.67	0.20	0.00	100.00	6.86	3.40	50.44	1.38	0.48	65.22	5.54	0.81	85.38	5.25	0.75	85.71	0.25	0.00	100.00
5/31/2012	0.93	0.00	100.00	0.10	0.00	100.00	6.10	1.14	81.31	1.75	0.56	68.00	6.52	1.38	78.83	5.88	1.26	78.57	0.55	0.20	63.64
6/30/2012	1.55	0.90	41.94	0.10	0.00	100.00	5.90	1.18	80.00	2.01	0.94	53.23	7.02	1.54	78.06	6.77	1.29	80.95	1.17	0.58	50.43
7/31/2012	1.48	0.93	37.16	0.43	0.36	16.28	4.31	1.02	76.33	1.90	1.00	47.37	7.00	1.63	76.71	3.60	0.81	77.50	0.84	0.55	34.52
8/31/2012	1.48	0.93	37.16	0.43	0.36	16.28	4.31	1.02	76.33	1.90	1.00	47.37	7.00	1.63	76.71	3.60	0.81	77.50	0.84	0.55	34.52
9/30/2012	1.48	0.93	37.16	0.43	0.36	16.28	4.31	1.02	76.33	1.90	1.00	47.37	7.00	1.63	76.71	3.60	0.81	77.50	0.84	0.55	34.52
10/31/2012	1.43	0.86	39.86	0.76	0.72	5.26	2.73	0.09	96.89	1.78	1.05	41.01	7.00	1.71	75.57	0.44	0.33	25.00	0.60	0.52	13.33
11/30/2012	1.41	0.59	58.16	1.04	0.28	73.08	6.62	0.85	87.16	1.57	0.75	52.23	7.56	1.35	82.14	0.27	0.20	25.93	0.31	0.28	9.68
12/31/2012	1.62	1.20	25.93	1.04	0.76	26.92	2.93	1.20	59.04	1.88	0.70	62.77	7.72	1.47	80.96	0.27	0.20	25.93	0.81	0.55	32.10
1/31/2013	1.19	0.57	52.10	0.40	0.24	41.25	0.92	0.33	63.70	1.56	0.70	55.13	7.60	1.23	83.82	15.93	0.25	98.43	0.57	0.21	63.51
2/28/2013	1.44	0.75	47.92	0.43	0.27	37.21	0.55	0.24	56.36	1.72	0.94	45.35	7.86	1.56	80.15	12.12	1.77	85.40	2.05	0.21	89.85
3/31/2013	1.69	1.03	39.05	0.46	0.31	32.39	0.19	0.16	19.07	1.88	1.18	37.23	8.12	1.89	76.72	8.31	1.52	81.71	3.54	0.40	88.70
4/30/2013	1.45	0.76	47.59	0.29	0.21	27.59	4.91	0.36	92.67	1.66	0.88	46.99	8.12	2.01	75.25	6.55	0.80	87.79	1.67	0.19	88.62
5/31/2013																					
6/30/2013																					
7/30/2013	1.22			0.38			1.04			2.37			34.96			11.06			0.31		

TABLE F-20
TVOC Influent, Effluent and Efficiency Performance
OU III Idustrial Park System

2024 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
8/31/2013																					
9/30/2013																					
10/31/2013	1.58			0.47			0.29			3.46			54.02			15.57			0.34		
11/30/2013																					
12/31/2013																					
1/31/2014	1.11			1.08			2.98			3.71			51.14			14.57			0		
2/28/2014																					
3/21/2014	1.22						6.6	0.81	87.73	3.46	1.01	70.81	17.41	3.78	78.29	8.65	1.28	85.20	0.19	0.18	5.26
4/17/2014	1.6			261.92			0.3		100.00	2.86	0.86	69.93	11.26	2.9	74.25	6.55	1.4	78.63	3.07		
5/15/2014							1.62	0.86	46.91				8.65	2.37	72.60	4.88	1.01	79.30			
6/17/2014							4.038	3.16	21.74				10.18	6.11	39.98	4.68	1.07	77.14			
7/29/2014	2.2			10.81						2.58	1.19		14.58	2.33	84.02	4.93	0.72	85.40	2.81		
8/27/2014								1.31		2.96	1.28		8.53	1.80	78.90	0.91	0.90	1.10			
9/30/2014								0.94		2.44	0.96					0.37	0.30	18.92			
10/29/2014				14.38						2.03						0.23	1.27		2.7		
11/30/2014																					
12/31/2014																					
1/31/2015																					
2/28/2015																					
3/31/2015																					
6/25/2015	0.48			3.19			1.87			2.09			33.58			0.66			3.34		
7/22/2015	1.058			5.62			3.35			4.16			15.12			1.42			3		
8/28/2015							3.33	0.62	81.38	1.77	0.74	58.19	8.18	2.33	71.52	1.08	0.24	77.78	3.32		
9/24/2015							1.65	0.57	65.45	1.53	0.7	54.25	5.79	1.89	67.36						
10/29/2015	1.09			2			3.66	0.79	78.42	1.64	0.7	57.32	5.42	1.62	70.11	0.43	0.31	27.91	2.65		
11/20/2015							3.34	0.65	80.54	1.25	0.64	48.80	7.9	2.11	73.29	0.28	0.19	32.14			
12/23/2015							3.28	0.68	79.27	0.91	0.52	42.86	6.3	1.44	77.14	0.29	0.19	34.48			
1/21/2016	0.774			1.85			1.53	0.56	63.40	1.11	0.67	39.64	9.56	1.81	81.07	0.40	0.00	100.00	7.36		
2/15/2016																					
3/24/2016							4.18	0.79	81.10	1.64	0.77	53.05									
4/27/2016	0.65			1.92			3.24	0.85	73.77	1.85	1.53	17.30	7.01	1.49	78.74	0.64	0.22	65.63	0.55		
5/25/2016							3.90	0.74	81.03	2.05	1.51	26.34	5.60	0.80	85.71	0.35	0.11	68.57			
6/16/2016							3.49	0.90	74.21	1.72	0.88	48.84				0.23	0.11	52.17			
7/27/2016	0.47			1.61			2.45	0.68	72.24	0.71	0.38	46.48	4.51	0.65	85.59	0.92	0.14	84.78	0.40		
8/24/2016							1.25	0.66	47.20	0.94	0.92	2.13	3.63	0.74	79.61	0.48	0.22	54.17			
9/15/2016							1.69	0.77	54.44	1.10	0.97	11.82	3.59	0.77	78.55	0.49	0.29	40.82			
10/19/2016	1.60			1.34			0.13	0.00	100.00	0.80	0.59	26.25	3.79	0.54	85.75	0.61	0.00	100.00	1.04		
11/22/2016							0.52	0.50	3.85	1.16	0.61	47.41	3.25	0.20	93.85	2.06	0.44	78.64			
12/21/2016										0.81	0.44	45.68	4.05	0.28	93.09	2.27	0.42	81.50			
1/25/2017				1.57						0.75	0.59	21.33	3.55	0.14	96.06	2.06	0.28	86.41	0.00		
4/26/2017				1.53			0			1.34			6.98			4.14			0.35		
7/26/2017	9.51			1.4			0.12			1.95			16.15			4.27			0.39		
10/26/2017	3.6			1.92			0.24			2.08			16.02			4.13			0.1		
1/25/2018	0			1.94			0.54			1.65			18.27			2.69			0		

TABLE F-20
TVOC Influent, Effluent and Efficiency Performance
OU III Idustrial Park System

2024 BNL Groundwater Status Report

Date	UVB1			UVB2			UVB3			UVB4			UVB5			UVB6			UVB7		
	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency	Inf	Eff	Efficiency
Units	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*	*(ug/l)*	*(ug/l)*	*(%)*
4/5/2018	0			1.9			0			1.74			22.76			2.08			0		
7/26/2018	1.23			2.17			0.32			1.29			26.09			1.07			0.41		
10/26/2018	0.41						0			1.31			26.61			0.46			0		
1/30/2019	0						0			0.95			28.01			0			0		
4/17/2019	0						0			1.1			24.2			0			0		
7/30/2019	0			1.23			0.27			0.74			17.33			0.23			0		
10/30/2019	0						0			0			16.24			0			0		
1/23/2020	0			33.20			0			1.09			11.86			0.00			0		
7/30/2020	0.88			2.68						2.31			17.27			0.30			1.1		
10/27/2020	0			1.83			0.11			2.50			14.18			0.20			0.19		
1/27/2021	0.32			2.08			0.00			0.94			12.18			0.18			0.00		
4/22/2021	0.51			1.89			0.36			0.96			12.45			0.21			0.22		
7/26/2021	0.22			1.46			0.16			0.51			13.40			0.48			0.46		
10/29/2021	0			1.43			0.00			0.00			13.77			0.30			0.28		
1/27/2022	0.00			0.28			0.00			0.00			10.28			0.00			0.00		
4/13/2022	0.22						0.00			0.00			10.99			0.00			0.00		
7/18/2022	0.44						0.27			0.00			12.11			0.59			0.35		
10/17/2022	0.00						0.00			0.24			8.28			0.00			0.00		

NOTE: The system was placed in stand-by mode on May 1, 2013 and put back into full time operation in March 2014, and placed in stand-by mode again January 2017 and remained so in 2023.

Average Efficiency	**NA**		**NA**		**NA**		**NA**		**NA**		**NA**			**NA**
1st qtr. 2024 Average Efficiency	**NA**		**NA**		**NA**		**NA**		**NA**		**NA**			**NA**
2nd qtr. 2024 Average Efficiency	**NA**		**NA**		**NA**		**NA**		**NA**		**NA**			**NA**
3rd qtr. 2024 Average Efficiency	**NA**		**NA**		**NA**		**NA**		**NA**		**NA**			**NA**
4th qtr. 2024 Average Efficiency	**NA**		**NA**		**NA**		**NA**		**NA**		**NA**			**NA**

1st qtr. 2024 AVERAGE SYSTEM EFFICIENCY	**NA**
2nd qtr. 2024 AVERAGE SYSTEM EFFICIENCY	**NA**
3rd qtr. 2024 AVERAGE SYSTEM EFFICIENCY	**NA**
4th qtr. 2024 AVERAGE SYSTEM EFFICIENCY	**NA**
2024 AVERAGE SYSTEM EFFICIENCY	**NA**

Wells 1,2 and 7 were not counted in average efficency as they were on stand-by for the year.

Efficiency Percent = 100 - (effluent concentration/influent concentration) * 100
NS = Not Sampled
** Laboratory lost sample.

TABLE F-21
Cumulative Mass Recovery
OU III Industrial Park System

2024 BNL Groundwater Status Report

Date	UVB1	UVB1	UVB1	UVB2	UVB2	UVB2	UVB3	UVB3	UVB3	UVB4	UVB4	UVB4	UVB5	UVB5	UVB5	UVB6	UVB6	UVB6	UVB7	UVB7	UVB7	Total	Cumulative
	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Mass Recovered	Mass Recovered
		(Gallons)	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*	*(lbs)*	*(lbs)*
1/31/2015	0	136,203,638	0	0	247,893,471	0	0	317,805,477	0.00	0	360,499,061	0.00	0	343,567,833	0.00	0	373,388,318	0.00	0	244,889,959	0.00	0.00	1063.85
2/28/2015	0	136,203,638	0	0	247,893,471	0	0	317,805,477	0.00	0	360,499,061	0.00	0	343,567,833	0.00	0	373,388,318	0.00	0	244,889,959	0.00	0.00	1063.85
3/31/2015	0	136,203,638	0	0	247,893,471	0	0	317,805,477	0.00	0	360,499,061	0.00	0	343,567,833	0.00	0	373,388,318	0.00	0	244,889,959	0.00	0.00	1063.85
4/30/2015	0	136,203,638	0	0	247,893,471	0	0	317,805,477	0.00	0	360,499,061	0.00	0	343,567,833	0.00	0	373,388,318	0.00	0	244,889,959	0.00	0.00	1063.85
5/31/2015	0	136,203,638	0	0	247,893,471	0	0	317,805,477	0.00	0	360,499,061	0.00	0	343,567,833	0.00	0	373,388,318	0.00	0	244,889,959	0.00	0.00	1063.85
6/30/2015	0	136,203,638	0	0	247,893,471	0	0	317,805,477	0.00	0	360,499,061	0.00	0	343,567,833	0.00	0	373,388,318	0.00	0	244,889,959	0.00	0.00	1063.85
7/31/2015	0	136,203,638	0	0	247,893,471	0	1,672,000	319,477,477	0.02	1,672,000	362,171,061	0.06	1,672,000	345,239,833	0.21	1,742,000	375,130,318	0.00	0	244,889,959	0.00	0.29	1064.14
8/31/2015	0	136,203,638	0	0	247,893,471	0	3,353,000	322,830,477	0.08	3,127,000	365,298,061	0.03	381,000	345,620,833	0.02	3,313,000	378,443,318	0.00	0	244,889,959	0.00	0.13	1064.26
9/30/2015	0	136,203,638	0	0	247,893,471	0	1,292,000	324,122,477	0.01	2,736,000	368,034,061	0.02	2,887,000	348,507,833	0.09	343,000	378,786,318	0.00	0	244,889,959	0.00	0.13	1064.39
10/31/2015	0	136,203,638	0	0	247,893,471	0	1,967,000	326,089,477	0.05	2,185,000	370,219,061	0.02	2,240,000	350,747,833	0.07	2,103,000	380,889,318	0.00	0	244,889,959	0.00	0.14	1064.53
11/30/2015	0	136,203,638	0	0	247,893,471	0	2,154,000	328,243,477	0.05	2,653,000	372,872,061	0.01	2,051,000	352,798,833	0.10	2,653,000	383,542,318	0.00	0	244,889,959	0.00	0.16	1064.69
12/31/2015	0	136,203,638	0	0	247,893,471	0	1,840,000	330,083,477	0.04	2,785,000	375,657,061	0.01	2,131,000	354,929,833	0.09	2,795,000	386,337,318	0.00	0	244,889,959	0.00	0.14	1064.83
1/31/2016	0	136,203,638	0	0	247,893,471	0	557,000	330,640,477	0.01	1,783,000	377,440,061	0.01	0	354,929,833	0.00	2,182,000	388,519,318	0.00	0	244,889,959	0.00	0.02	1064.85
2/29/2016	0	136,203,638	0	0	247,893,471	0	0	330,640,477	0.00	0	377,440,061	0.00	0	354,929,833	0.00	0	388,519,318	0.00	0	244,889,959	0.00	0.00	1064.85
3/31/2016	0	136,203,638	0	0	247,893,471	0	503,000	331,143,477	0.00	475,000	377,915,061	0.00	601,000	355,530,833	0.00	124,000	388,643,318	0.00	0	244,889,959	0.00	0.00	1064.85
4/30/2016	0	136,203,638	0	0	247,893,471	0	2,652,000	333,795,477	0.08	2,584,000	380,499,061	0.02	2,093,000	357,623,833	0.00	2,247,000	390,890,318	0.00	0	244,889,959	0.00	0.09	1064.94
5/31/2016	0	136,203,638	0	0	247,893,471	0	1,661,000	335,456,477	0.03	1,695,000	382,194,061	0.00	2,433,000	360,056,833	0.11	2,806,000	393,696,318	0.01	0	244,889,959	0.00	0.16	1065.11
6/30/2016	0	136,203,638	0	0	247,893,471	0	1,796,000	337,252,477	0.05	1,695,000	383,889,061	0.01	1,543,000	361,599,833	0.06	2,564,000	396,260,318	0.01	0	244,889,959	0.00	0.12	1065.23
7/31/2016	0	136,203,638	0	0	247,893,471	0	1,078,000	338,330,477	0.02	2,589,000	386,478,061	0.02	2,262,000	363,861,833	0.00	2,990,000	399,250,318	0.00	0	244,889,959	0.00	0.04	1065.27
8/31/2016	0	136,203,638	0	0	247,893,471	0	1,914,000	340,244,477	0.03	535,000	387,013,061	0.00	840,000	364,701,833	0.03	2,695,000	401,945,318	0.02	0	244,889,959	0.00	0.07	1065.35
9/30/2016	0	136,203,638	0	0	247,893,471	0	1,780,000	342,024,477	0.01	1,244,000	388,257,061	0.00	1,205,000	365,906,833	0.03	2,317,000	404,262,318	0.01	0	244,889,959	0.00	0.04	1065.39
10/31/2016	0	136,203,638	0	0	247,893,471	0	2,065,000	344,089,477	0.02	1,811,000	390,068,061	0.00	1,947,000	367,853,833	0.05	2,500,000	406,762,318	0.00	0	244,889,959	0.00	0.07	1065.46
11/30/2016	0	136,203,638	0	0	247,893,471	0	1,413,000	345,502,477	0.00	16,500	390,084,561	0.00	155,000	368,008,833	0.00	1,907,000	408,669,318	0.01	0	244,889,959	0.00	0.02	1065.48
12/31/2016	0	136,203,638	0	0	247,893,471	0	362,000	345,864,477	0.00	2,373,000	392,457,561	0.01	2,199,000	370,207,833	0.06	2,846,000	411,515,318	0.04	0	244,889,959	0.00	0.11	1065.58
1/31/2017	0	136,203,638	0	0	247,893,471	0	8,200	345,872,677	0.00	60,000	392,517,561	0.00	46,000	370,253,833	0.00	68,500	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.58
2/28/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
5/31/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
10/31/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2017	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
1/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
2/28/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
5/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62

TABLE F-21
Cumulative Mass Recovery
OU III Industrial Park System

2024 BNL Groundwater Status Report

Date	UVB1	UVB1	UVB1	UVB2	UVB2	UVB2	UVB3	UVB3	UVB3	UVB4	UVB4	UVB4	UVB5	UVB5	UVB5	UVB6	UVB6	UVB6	UVB7	UVB7	UVB7	Total	Cumulative
	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Mass Recovered	Mass Recovered
		(Gallons)	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*	*(lbs)*	*(lbs)*
10/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2018	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
1/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
2/28/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
5/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
10/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2019	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
1/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
2/28/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
5/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
10/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2020	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
1/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
2/28/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
5/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
10/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2021	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
1/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
2/28/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62

TABLE F-21
Cumulative Mass Recovery
OU III Industrial Park System

2024 BNL Groundwater Status Report

Date	UVB1	UVB1	UVB1	UVB2	UVB2	UVB2	UVB3	UVB3	UVB3	UVB4	UVB4	UVB4	UVB5	UVB5	UVB5	UVB6	UVB6	UVB6	UVB7	UVB7	UVB7	Total	Cumulative
	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Monthly Total	Total Pumped	Mass Recovered	Mass Recovered	Mass Recovered
		(Gallons)	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*		*(Gallons)*	*(lbs)*	*(lbs)*	*(lbs)*
5/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
10/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2022	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
1/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
2/28/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
3/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
4/30/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
5/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
6/30/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
7/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
8/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
9/29/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
10/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
11/30/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62
12/31/2023	0	136,203,638	0	0	247,893,471	0	0	345,872,677	0.00	0	392,517,561	0.00	0	370,253,833	0.00	0	411,583,818	0.00	0	244,889,959	0.00	0.00	1065.62

NOTES: The system was placed in stand-by mode on May 1, 2013 and resumed full time operations in March 2014, and back into stand-by mode in January 2017 and remained in stand-by mode all of 2024.

Mass recovered = total gallons pumped * influent concentration (ug/L) * (percent efficiency/100) * 8.4 X 10-9 (conversion factor)

NO = Not operational

Total from all wells: 1075.06 lbs.

* = Unable to calculate mass due to missing influent and effluent well data

No Samples were taken in April 2001 and the pounds removed were estimated using the 2nd quarter's average values for influent concentrations and system efficiency

TABLE F-22
AIR FLOW RATES
OU III INDUSTRIAL PARK SYSTEM

2024 BNL Groundwater Status Report

Note: System in Stand-By Mode.

Table F-23
Extraction Well VOC Data
OU III Industrial Park System

2024 BNL Groundwater Status Report

Date	IP-EW-8, 9 Combined Effluent
Units	(ug/l)
01/04/17	0.11
01/17/17	0.11
02/01/17	0.094
02/13/17	0.12
03/06/17	0.12
03/20/17	0.15
04/05/17	0.54
04/19/17	0.16
05/02/17	0.16
05/16/17	0.14
06/07/17	0.28
06/20/17	0.19
07/06/17	0.16
07/25/17	0.16
08/01/17	0.17
08/15/17	0.2
09/07/17	0.2
09/19/17	0.21
10/05/17	0.38
10/18/17	0.4
11/01/17	0.21
11/15/17	0.41
12/05/17	0.39
12/19/17	0.59
01/10/18	0.38
01/23/18	0.46
03/06/18	0.0
03/20/18	0.0
05/03/18	0.0
05/15/18	0.0
07/03/18	0.0
07/17/18	0.0
09/05/18	0.0
09/18/18	0.0
11/01/18	0.0
11/15/18	0.0
01/10/19	0.0
01/22/19	0.0
03/12/19	0.0
03/28/19	0.0
05/02/19	0.0
05/14/19	0.0

Date	IP-EW-8 Influent	IP-EW-9 Influent
	(ug/l)	(ug/l)
01/04/17	2.83	2.89
02/01/17	2.62	2.73
03/06/17	3.14	3
04/05/17	2.91	2.41
05/02/17	3.1	2.49
06/07/17	2.74	2.67
07/06/17	3.5	2.43
08/01/17	3.05	2.75
09/07/17	2.71	2.96
10/05/17	2.87	2.74
11/01/17	3.27	2.59
12/05/17	2.6	1.27
01/10/18	3.16	5.42
03/06/18	2.48	1.92
05/03/18	2.71	1.98
07/03/18	2.34	1.91
09/05/18	2.03	2.04
11/01/18	2.8	1.77
01/10/19	2.56	2.4
04/10/19	2.49	4.04
07/09/19	1.85	3.68
10/16/19	2.28	4.73
01/07/20	1.31	3.16
04/03/20	1.23	3.42
07/09/20	1.42	2.78
10/06/20	2.5	4.7
01/05/21	1.96	4.56
04/22/21	1.45	3.73
07/15/21	2.1	4.53
10/06/21	2.73	6.17
01/27/22	0.86	2.9
04/13/22	1.59	4.01
07/18/22	1.73	5.95
10/17/22	0.61	2.59
01/12/23	1.57	3.23
04/13/23	1.57	2.01
07/12/23	1.4	1.85
10/12/23	1.57	3.65
01/12/24	0.47	4.32
04/10/24	1.59	3.57
07/10/24	0.81	3.34
10/10/24	1.33	2.63

Table F-24
Cumulative Mass Removal
OU III North Street System

2024 BNL Groundwater Status Report

OU III North Street Treatment System was in standby mode during 2024.

Table F-25
Extraction Wells VOC Data and Tritium Data
OU III North Street System

2024 BNL Groundwater Status Report

OU III North Street Treatment System was in standby mode during 2024.

Table F-26
Carbon Influent VOC Data
OU III North Street System

2024 BNL Groundwater Status Report

OU III North Street Treatment System was in standby mode during 2024.

Table F-27
Carbon Effluent VOC and Tritium Data
OU III North Street System

2024 BNL Groundwater Status Report

OU III North Street Treatment System was in standby mode during 2024.

Table F-28
Extraction Wells VOC Data
OU III North Street East System

2024 BNL Groundwater Status Report

Site ID : 000-561 (NSE-EDB-EW-3)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,1,1-Trichloroethane	01/09/24	0.25	0.5	UG/L	J
8260 TVOC	01/09/24	1.76	0	UG/L	
Chloroform	01/09/24	1.1	0.5	UG/L	
Trichloroethylene	01/09/24	0.41	0.5	UG/L	J
1633 TPFAS	01/09/24	35.37	0	NG/L	
Perfluorobutyric acid (PFBA)	01/09/24	32.5	7.96	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/09/24	1.49	1.82	NG/L	J
Perfluorooctanoic acid (PFOA)	01/09/24	1.38	1.99	NG/L	J
1,4-Dioxane	01/09/24	0.77	0.2	UG/L	
1,1,1-Trichloroethane	04/08/24	0.2	0.5	UG/L	J
8260 TVOC	04/08/24	1.85	0	UG/L	
Chloroform	04/08/24	1.1	0.5	UG/L	
Tetrachloroethylene	04/08/24	0.16	0.5	UG/L	J
Trichloroethylene	04/08/24	0.39	0.5	UG/L	J
8260 TVOC	07/11/24	1.57	0	UG/L	
Chloroform	07/11/24	0.9	0.5	UG/L	
Tetrachloroethylene	07/11/24	0.24	0.5	UG/L	J
Trichloroethylene	07/11/24	0.43	0.5	UG/L	J
8260 TVOC	10/07/24	1.69	0	UG/L	
Chloroform	10/07/24	0.97	0.5	UG/L	
Tetrachloroethylene	10/07/24	0.23	0.5	UG/L	J
Trichloroethylene	10/07/24	0.49	0.5	UG/L	J

Site ID : 000-562 (NSE-EDB-EW-4)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/09/24	1.79	0	UG/L	
Chloroform	01/09/24	0.94	0.5	UG/L	
Tetrachloroethylene	01/09/24	0.85	0.5	UG/L	
1633 TPFAS	01/09/24	18.69	0	NG/L	
Perfluorobutyric acid (PFBA)	01/09/24	12.1	7.76	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/09/24	3.68	1.77	NG/L	
Perfluorooctanesulfonate (PFOS)	01/09/24	1.18	1.8	NG/L	J
Perfluorooctanoic acid (PFOA)	01/09/24	1.73	1.94	NG/L	J
1,4-Dioxane	01/09/24	0.39	0.2	UG/L	
8260 TVOC	04/08/24	1.91	0	UG/L	
Chloroform	04/08/24	0.81	0.5	UG/L	
Tetrachloroethylene	04/08/24	0.87	0.5	UG/L	
Trichloroethylene	04/08/24	0.23	0.5	UG/L	J
8260 TVOC	07/11/24	3.08	0	UG/L	
Chloroform	07/11/24	0.66	0.5	UG/L	
Tetrachloroethylene	07/11/24	2.2	0.5	UG/L	
Trichloroethylene	07/11/24	0.22	0.5	UG/L	J
8260 TVOC	10/07/24	1.8	0	UG/L	
Chloroform	10/07/24	0.65	0.5	UG/L	
Tetrachloroethylene	10/07/24	0.93	0.5	UG/L	
Trichloroethylene	10/07/24	0.22	0.5	UG/L	J

J: The analyte was positively identified; the quantitation is an estimation.

Table F-29
Carbon Influent VOC Data
OU III North Street East System

2024 BNL Groundwater Status Report

Site ID : 000-441 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	1/9/2024	1.74	0	UG/L	
Chloroform	1/9/2024	0.92	0.5	UG/L	
Tetrachloroethylene	1/9/2024	0.53	0.5	UG/L	
Trichloroethylene	1/9/2024	0.29	0.5	UG/L	J
1633 TPFAS	1/9/2024	27.501	0	NG/L	
Perfluorobutyric acid (PFBA)	1/9/2024	22.2	7.26	NG/L	
Perfluorohexanesulfonate (PFHxS)	1/9/2024	3.05	1.66	NG/L	
Perfluorooctanesulfonate (PFOS)	1/9/2024	0.751	1.69	NG/L	J
Perfluorooctanoic acid (PFOA)	1/9/2024	1.5	1.82	NG/L	J
1,4-Dioxane	1/9/2024	0.57	0.2	UG/L	
8260 TVOC	2/7/2024	1.65	0	UG/L	
Chloroform	2/7/2024	1	0.5	UG/L	
Tetrachloroethylene	2/7/2024	0.35	0.5	UG/L	J
Trichloroethylene	2/7/2024	0.3	0.5	UG/L	J
8260 TVOC	3/6/2024	1.13	0	UG/L	
Chloroform	3/6/2024	0.89	0.5	UG/L	
Trichloroethylene	3/6/2024	0.24	0.5	UG/L	J
8260 TVOC	4/8/2024	1.74	0	UG/L	
Chloroform	4/8/2024	0.93	0.5	UG/L	
Tetrachloroethylene	4/8/2024	0.52	0.5	UG/L	
Trichloroethylene	4/8/2024	0.29	0.5	UG/L	J
1633 TPFAS	4/8/2024	24.65	0	NG/L	
Perfluorobutyric acid (PFBA)	4/8/2024	19.9	7.4	NG/L	
Perfluorohexanesulfonate (PFHxS)	4/8/2024	2.73	1.69	NG/L	
Perfluorooctanoic acid (PFOA)	4/8/2024	2.02	1.85	NG/L	
1,4-Dioxane	4/8/2024	0.52	0.2	UG/L	
8260 TVOC	6/10/2024	1.46	0	UG/L	
Chloroform	6/10/2024	1.1	0.5	UG/L	
Trichloroethylene	6/10/2024	0.36	0.5	UG/L	J
8260 TVOC	8/5/2024	2.66	0	UG/L	
Chloroform	8/5/2024	0.71	0.5	UG/L	
Tetrachloroethylene	8/5/2024	1.6	0.5	UG/L	
Trichloroethylene	8/5/2024	0.35	0.5	UG/L	J
8260 TVOC	10/7/2024	1.79	0	UG/L	
Chloroform	10/7/2024	0.84	0.5	UG/L	
Tetrachloroethylene	10/7/2024	0.61	0.5	UG/L	
Trichloroethylene	10/7/2024	0.34	0.5	UG/L	J
1633 TPFAS	11/21/2024	20.78	0	NG/L	
Perfluorobutyric acid (PFBA)	11/21/2024	14.1	7.6	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/2024	3.67	1.74	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/2024	3.01	1.9	NG/L	
1,4-Dioxane	11/21/2024	0.47	0.2	UG/L	
8260 TVOC	12/9/2024	1.26	0	UG/L	
Chloroform	12/9/2024	0.86	0.5	UG/L	J
Tetrachloroethylene	12/9/2024	0.4	0.5	UG/L	J

J: The analyte was positively identified; the quantitation is an estimation.

Table F-30
Carbon Effluent VOC Data
OU III North Street East System

2024 BNL Groundwater Status Report

Site ID : 000-444 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	1/9/2024	1.1	0	UG/L	
Chloroform	1/9/2024	1.1	0.5	UG/L	
1633 TPFAS	1/9/2024	42.8	0	NG/L	
Perfluorobutyric acid (PFBA)	1/9/2024	42.8	7.74	NG/L	
1,4-Dioxane	1/9/2024	0.59	0.2	UG/L	
8260 TVOC	2/7/2024	1.3	0	UG/L	
Chloroform	2/7/2024	1.3	0.5	UG/L	
8260 TVOC	3/6/2024	1.1	0	UG/L	
Chloroform	3/6/2024	1.1	0.5	UG/L	
8260 TVOC	4/8/2024	1.2	0	UG/L	
Chloroform	4/8/2024	1.2	0.5	UG/L	
1633 TPFAS	4/8/2024	36.5	0	NG/L	
Perfluorobutyric acid (PFBA)	4/8/2024	36.5	7.44	NG/L	
1,4-Dioxane	4/8/2024	0.51	0.2	UG/L	
8260 TVOC	6/10/2024	1.2	0	UG/L	
Chloroform	6/10/2024	1.2	0.5	UG/L	
8260 TVOC	8/5/2024	1.8	0	UG/L	
Chloroform	8/5/2024	1.8	0.5	UG/L	
8260 TVOC	10/7/2024	1.1	0	UG/L	
Chloroform	10/7/2024	1.1	0.5	UG/L	
1633 TPFAS	11/21/2024	47	0	NG/L	
Perfluorobutyric acid (PFBA)	11/21/2024	47	7.91	NG/L	
1,4-Dioxane	11/21/2024	0.45	0.2	UG/L	
8260 TVOC	12/9/2024	1.1	0	UG/L	
Chloroform	12/9/2024	1.1	0.5	UG/L	

Table F-31
Cumulative Mass Removal
OU III North Street East System

2024 BNL Groundwater Status Report

Date Sampled	Total VOCs (µg/L)	Flow Rates (gpm)	Cumulative VOCs (lbs)
1/9/2024	1.74	216	49.93
2/7/2024	1.65	222	50.05
3/6/2024	1.13	233	50.14
4/8/2024	1.74	213	50.29
6/10/2024	1.46	153	50.37
8/8/2024	2.66	213	50.57
10/7/2024	1.79	227	50.72
12/9/2024	1.26	251	50.83

NOTES:
µg/L - Micrograms per liter
gpm - Gallons per minute
lbs - Pounds

Table F-32
Cumulative Mass Removal
OU III LIPA/Airport System

2024 BNL Groundwater Status Report

Date Sampled	Total VOC's (µg/L)	Flow Rates (gpm)	Cumulative VOC's (lbs)
1/10/2024	3.22	333	505.96
2/8/2024	3.53	334	506.37
3/4/2024	3.42	423	506.80
4/11/2024	3.27	391	507.39
5/6/2024	3.4	404	507.80
6/6/2024	3.17	421	508.29
7/10/2024	3.09	493	508.92
8/5/2024	2.81	393	509.26
9/9/2024	2.93	386	509.74
10/10/2024	2.99	404	510.18
11/7/2024	3.24	414	510.64
12/9/2024	4.78	459	511.48

µg/L Micrograms per liter
gpm Gallons per minute
lbs Pounds

Table F-33
Extraction Well VOC Data
OU III LIPA/Airport System

2024 BNL Groundwater Status Report

Site ID : 000-453 (EW-1L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	3.3	0.2	UG/L	
1,1,1-Trichloroethane	01/10/24	0.46	0.5	UG/L	J
1,2-Dichloroethane	01/10/24	0.26	0.5	UG/L	J
8260 TVOC	01/10/24	1.99	0	UG/L	
Chloroform	01/10/24	0.63	0.5	UG/L	
Trichloroethylene	01/10/24	0.64	0.5	UG/L	
1633 TPFAS	01/10/24	8.43	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/10/24	2.49	1.76	NG/L	
Perfluorooctanesulfonate (PFOS)	01/10/24	4.68	1.79	NG/L	
Perfluorooctanoic acid (PFOA)	01/10/24	1.26	1.93	NG/L	J
1,1,1-Trichloroethane	04/11/24	0.4	0.5	UG/L	J
1,1-Dichloroethylene	04/11/24	0.54	0.5	UG/L	
1,2-Dichloroethane	04/11/24	0.22	0.5	UG/L	J
8260 TVOC	04/11/24	2.33	0	UG/L	
Chloroform	04/11/24	0.57	0.5	UG/L	
Trichloroethylene	04/11/24	0.6	0.5	UG/L	
1,1-Dichloroethylene	07/10/24	0.26	0.5	UG/L	J
1,2-Dichloroethane	07/10/24	0.21	0.5	UG/L	J
8260 TVOC	07/10/24	0.75	0	UG/L	
Trichloroethylene	07/10/24	0.28	0.5	UG/L	J
1,1-Dichloroethylene	10/10/24	0.43	0.5	UG/L	J
1,2-Dichloroethane	10/10/24	0.24	0.5	UG/L	J
8260 TVOC	10/10/24	2.07	0	UG/L	
Chloroform	10/10/24	0.56	0.5	UG/L	
cis-1,2-Dichloroethylene	10/10/24	0.18	0.5	UG/L	J
Trichloroethylene	10/10/24	0.66	0.5	UG/L	

Site ID : 000-455 (EW-2L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	0.17	0.2	UG/L	J
1,1,1-Trichloroethane	01/10/24	0.22	0.5	UG/L	J
8260 TVOC	01/10/24	1.56	0	UG/L	
Chloroform	01/10/24	0.93	0.5	UG/L	
Trichloroethylene	01/10/24	0.41	0.5	UG/L	J
1633 TPFAS	01/10/24	9.48	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/10/24	5.33	1.84	NG/L	
Perfluorooctanesulfonate (PFOS)	01/10/24	4.15	1.87	NG/L	
1,1,1-Trichloroethane	04/11/24	0.23	0.5	UG/L	J
8260 TVOC	04/11/24	1.72	0	UG/L	
Chloroform	04/11/24	0.92	0.5	UG/L	
Methyl chloride	04/11/24	0.2	0.5	UG/L	J
Trichloroethylene	04/11/24	0.37	0.5	UG/L	J
8260 TVOC	07/10/24	1.36	0	UG/L	
Chloroform	07/10/24	1	0.5	UG/L	

Table F-33
Extraction Well VOC Data
OU III LIPA/Airport System

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Site ID : 000-455 (EW-2L)

Trichloroethylene	07/10/24	0.36	0.5	UG/L	J
1,1,1-Trichloroethane	10/10/24	0.2	0.5	UG/L	J
8260 TVOC	10/10/24	1.44	0	UG/L	
Chloroform	10/10/24	0.87	0.5	UG/L	
Trichloroethylene	10/10/24	0.37	0.5	UG/L	J

Site ID : 000-457 (EW-3L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	01/10/24	2.19	0	UG/L	
Chloroform	01/10/24	2	0.5	UG/L	
Trichloroethylene	01/10/24	0.19	0.5	UG/L	J
1633 TPFAS	01/10/24	2.04	0	NG/L	
Perfluorooctanesulfonate (PFOS)	01/10/24	2.04	1.77	NG/L	
8260 TVOC	04/11/24	1.8	0	UG/L	
Chloroform	04/11/24	1.4	0.5	UG/L	
Methyl chloride	04/11/24	0.21	0.5	UG/L	J
Toluene	04/11/24	0.19	0.5	UG/L	J
8260 TVOC	07/10/24	1.2	0	UG/L	
Chloroform	07/10/24	1.2	0.5	UG/L	
8260 TVOC	10/10/24	1.4	0	UG/L	
Chloroform	10/10/24	1.4	0.5	UG/L	

Site ID : 000-461 (EW-4L)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	0.14	0.2	UG/L	J
8260 TVOC	01/10/24	6.5	0	UG/L	
Carbon tetrachloride	01/10/24	0.78	0.5	UG/L	
Chloroform	01/10/24	0.82	0.5	UG/L	
Tetrachloroethylene	01/10/24	3.8	0.5	UG/L	
Trichloroethylene	01/10/24	1.1	0.5	UG/L	
1633 TPFAS	01/10/24	10.156	0	NG/L	
Perfluoroheptanoic acid (PFHpA)	01/10/24	1.19	1.91	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/10/24	0.586	1.75	NG/L	J
Perfluorohexanoic acid (PFHxA)	01/10/24	2.39	1.91	NG/L	
Perfluorooctanesulfonate (PFOS)	01/10/24	1.64	1.77	NG/L	J
Perfluorooctanoic acid (PFOA)	01/10/24	1.2	1.91	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/10/24	3.15	1.91	NG/L	
1,1,1-Trichloroethane	04/11/24	0.21	0.5	UG/L	J
8260 TVOC	04/11/24	6.09	0	UG/L	
Carbon tetrachloride	04/11/24	0.77	0.5	UG/L	
Chloroform	04/11/24	0.69	0.5	UG/L	
Methyl chloride	04/11/24	0.23	0.5	UG/L	J
Tetrachloroethylene	04/11/24	3.2	0.5	UG/L	
Trichloroethylene	04/11/24	0.99	0.5	UG/L	

Table F-33
Extraction Well VOC Data
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Site ID : 000-461 (EW-4L)

8260 TVOC	07/10/24	4.54	0	UG/L	
Carbon tetrachloride	07/10/24	0.29	0.5	UG/L	J
Chloroform	07/10/24	0.47	0.5	UG/L	J
Tetrachloroethylene	07/10/24	3.1	0.5	UG/L	
Trichloroethylene	07/10/24	0.68	0.5	UG/L	
8260 TVOC	10/10/24	3.67	0	UG/L	
Chloroform	10/10/24	0.47	0.5	UG/L	J
Tetrachloroethylene	10/10/24	2.6	0.5	UG/L	
Trichloroethylene	10/10/24	0.6	0.5	UG/L	

Site ID : 800-109 (RTW-1A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	0.41	0.2	UG/L	
8260 TVOC	01/10/24	1.46	0	UG/L	
Chloroform	01/10/24	0.84	0.5	UG/L	
Trichloroethylene	01/10/24	0.62	0.5	UG/L	
1633 TPFAS	01/10/24	7.333	0	NG/L	
Perfluorobutanesulfonate (PFBS)	01/10/24	0.752	1.57	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/10/24	1.54	1.62	NG/L	J
Perfluorohexanoic acid (PFHxA)	01/10/24	1.66	1.78	NG/L	J
Perfluorooctane sulfonamide (PFOSAm)	01/10/24	0.651	1.78	NG/L	J
Perfluorooctanoic acid (PFOA)	01/10/24	1.21	1.78	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/10/24	1.52	1.78	NG/L	J
8260 TVOC	04/11/24	1.59	0	UG/L	
Carbon tetrachloride	04/11/24	0.59	0.5	UG/L	
Chloroform	04/11/24	0.63	0.5	UG/L	
Trichloroethylene	04/11/24	0.37	0.5	UG/L	J
8260 TVOC	07/10/24	1.48	0	UG/L	
Carbon tetrachloride	07/10/24	0.6	0.5	UG/L	
Chloroform	07/10/24	0.65	0.5	UG/L	
Trichloroethylene	07/10/24	0.23	0.5	UG/L	J
8260 TVOC	10/10/24	1.57	0	UG/L	
Carbon tetrachloride	10/10/24	0.53	0.5	UG/L	
Chloroform	10/10/24	0.7	0.5	UG/L	
Trichloroethylene	10/10/24	0.34	0.5	UG/L	J

Site ID : 800-110 (RTW-2A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	1	0.2	UG/L	
8260 TVOC	01/10/24	0.59	0	UG/L	
Carbon tetrachloride	01/10/24	0.59	0.5	UG/L	
1633 TPFAS	01/10/24	0.681	0	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/10/24	0.681	1.78	NG/L	J
8260 TVOC	04/11/24	0.96	0	UG/L	

Table F-33
Extraction Well VOC Data
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Site ID : 800-110 (RTW-2A)

Carbon tetrachloride	04/11/24	0.54	0.5	UG/L	
Chloroform	04/11/24	0.42	0.5	UG/L	J
8260 TVOC	07/10/24	1.08	0	UG/L	
Carbon tetrachloride	07/10/24	0.61	0.5	UG/L	
Chloroform	07/10/24	0.47	0.5	UG/L	J
8260 TVOC	10/10/24	0.93	0	UG/L	
Carbon tetrachloride	10/10/24	0.48	0.5	UG/L	J
Chloroform	10/10/24	0.45	0.5	UG/L	J

Site ID : 800-111 (RTW-3A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	0.59	0.2	UG/L	
8260 TVOC	01/10/24	2.14	0	UG/L	
Carbon tetrachloride	01/10/24	0.73	0.5	UG/L	
Chloroform	01/10/24	0.59	0.5	UG/L	
Trichloroethylene	01/10/24	0.82	0.5	UG/L	
1633 TPFAS	01/10/24	20.07	0	NG/L	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/10/24	3.72	6.81	NG/L	J
Perfluorobutanesulfonate (PFBS)	01/10/24	3.79	1.59	NG/L	
Perfluoroheptanoic acid (PFHpA)	01/10/24	1.01	1.79	NG/L	J
Perfluorohexanesulfonate (PFHxS)	01/10/24	1.17	1.64	NG/L	J
Perfluorohexanoic acid (PFHxA)	01/10/24	2.85	1.79	NG/L	
Perfluorooctane sulfonamide (PFOSAm)	01/10/24	0.82	1.79	NG/L	J
Perfluorooctanesulfonate (PFOS)	01/10/24	1.08	1.66	NG/L	J
Perfluorooctanoic acid (PFOA)	01/10/24	2.58	1.79	NG/L	
Perfluoropentanoic acid (PFPeA)	01/10/24	3.05	1.79	NG/L	
1,1,1-Trichloroethane	04/11/24	0.24	0.5	UG/L	J
1,1-Dichloroethylene	04/11/24	0.17	0.5	UG/L	J
8260 TVOC	04/11/24	2.71	0	UG/L	
Carbon tetrachloride	04/11/24	0.76	0.5	UG/L	
Chloroform	04/11/24	0.53	0.5	UG/L	
Methyl chloride	04/11/24	0.28	0.5	UG/L	J
Trichloroethylene	04/11/24	0.73	0.5	UG/L	
8260 TVOC	07/10/24	1.31	0	UG/L	
Chloroform	07/10/24	0.64	0.5	UG/L	
Trichloroethylene	07/10/24	0.67	0.5	UG/L	
8260 TVOC	10/10/24	1.52	0	UG/L	
Carbon tetrachloride	10/10/24	0.41	0.5	UG/L	J
Chloroform	10/10/24	0.37	0.5	UG/L	J
Trichloroethylene	10/10/24	0.74	0.5	UG/L	

Table F-33
Extraction Well VOC Data
OU III LIPA/Airport System

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Site ID : 800-112 (RTW-4A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	2.1	0.2	UG/L	
1,1,1-Trichloroethane	01/10/24	0.17	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	01/10/24	0.38	0.5	UG/L	J
1,1-Dichloroethylene	01/10/24	0.18	0.5	UG/L	J
8260 TVOC	01/10/24	3.18	0	UG/L	
Carbon tetrachloride	01/10/24	0.25	0.5	UG/L	J
Chloroform	01/10/24	1.1	0.5	UG/L	
Trichloroethylene	01/10/24	1.1	0.5	UG/L	
1633 TPFAS	01/10/24	17.07	0	NG/L	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/10/24	2.59	7	NG/L	J
Perfluorobutanesulfonate (PFBS)	01/10/24	1.39	1.63	NG/L	J
Perfluorobutyric acid (PFBA)	01/10/24	8.16	7.37	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/10/24	0.564	1.68	NG/L	J
Perfluorohexanoic acid (PFHxA)	01/10/24	1.31	1.84	NG/L	J
Perfluorooctane sulfonamide (PFOSAm)	01/10/24	0.859	1.84	NG/L	J
Perfluorooctanoic acid (PFOA)	01/10/24	0.937	1.84	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/10/24	1.26	1.84	NG/L	J
1,1,1-Trichloroethane	04/11/24	0.19	0.5	UG/L	J
1,1,2,2-Tetrachloroethane	04/11/24	0.31	0.5	UG/L	J
1,1-Dichloroethylene	04/11/24	0.26	0.5	UG/L	J
8260 TVOC	04/11/24	3.05	0	UG/L	
Carbon tetrachloride	04/11/24	0.26	0.5	UG/L	J
Chloroform	04/11/24	0.93	0.5	UG/L	
Trichloroethylene	04/11/24	1.1	0.5	UG/L	
1,1,2,2-Tetrachloroethane	07/10/24	0.33	0.5	UG/L	J
1,1-Dichloroethylene	07/10/24	0.18	0.5	UG/L	J
8260 TVOC	07/10/24	2.72	0	UG/L	
Carbon tetrachloride	07/10/24	0.23	0.5	UG/L	J
Chloroform	07/10/24	0.88	0.5	UG/L	
Trichloroethylene	07/10/24	1.1	0.5	UG/L	
1,1,2,2-Tetrachloroethane	10/10/24	0.31	0.5	UG/L	J
1,1-Dichloroethylene	10/10/24	0.17	0.5	UG/L	J
8260 TVOC	10/10/24	2.67	0	UG/L	
Carbon tetrachloride	10/10/24	0.18	0.5	UG/L	J
Chloroform	10/10/24	0.81	0.5	UG/L	
Trichloroethylene	10/10/24	1.2	0.5	UG/L	

Site ID : 800-113 (RTW-5A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	2.7	0.2	UG/L	
8260 TVOC	01/10/24	0.66	0	UG/L	
Chloroform	01/10/24	0.66	0.5	UG/L	
1633 TPFAS	01/10/24	31.2	0	NG/L	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/10/24	7.22	7.05	NG/L	
Perfluorobutyric acid (PFBA)	01/10/24	22.2	7.42	NG/L	

Table F-33
Extraction Well VOC Data
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Site ID : 800-113 (RTW-5A)

Perfluorooctane sulfonamide (PFOSAm)	01/10/24	1.78	1.86	NG/L	J
8260 TVOC	04/11/24	0.74	0	UG/L	
Chloroform	04/11/24	0.74	0.5	UG/L	
8260 TVOC	07/10/24	0.6	0	UG/L	
Chloroform	07/10/24	0.6	0.5	UG/L	
8260 TVOC	10/10/24	0.54	0	UG/L	
Chloroform	10/10/24	0.54	0.5	UG/L	

Site ID : 800-132 (RW-6A)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	01/10/24	0.65	0.2	UG/L	
8260 TVOC	01/10/24	5.07	0	UG/L	
Carbon tetrachloride	01/10/24	1.3	0.5	UG/L	
Chloroform	01/10/24	0.67	0.5	UG/L	
Trichloroethylene	01/10/24	3.1	0.5	UG/L	
1633 TPFAS	01/10/24	58.706	0	NG/L	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/10/24	6.2	6.61	NG/L	J
Perfluorobutanesulfonate (PFBS)	01/10/24	4.23	1.54	NG/L	
Perfluorobutyric acid (PFBA)	01/10/24	5.41	6.96	NG/L	J
Perfluoroheptanoic acid (PFHpA)	01/10/24	3.95	1.74	NG/L	
Perfluorohexanesulfonate (PFHxS)	01/10/24	3.23	1.59	NG/L	
Perfluorohexanoic acid (PFHxA)	01/10/24	11.2	1.74	NG/L	
Perfluorooctanesulfonate (PFOS)	01/10/24	1.91	1.61	NG/L	
Perfluorooctanoic acid (PFOA)	01/10/24	4.68	1.74	NG/L	
Perfluoropentanesulfonate (PFPeS)	01/10/24	0.596	1.64	NG/L	J
Perfluoropentanoic acid (PFPeA)	01/10/24	17.3	1.74	NG/L	
1,1-Dichloroethylene	04/11/24	0.23	0.5	UG/L	J
8260 TVOC	04/11/24	4.98	0	UG/L	
Carbon tetrachloride	04/11/24	1.3	0.5	UG/L	
Chloroform	04/11/24	0.65	0.5	UG/L	
Trichloroethylene	04/11/24	2.8	0.5	UG/L	
8260 TVOC	07/10/24	4.61	0	UG/L	
Carbon tetrachloride	07/10/24	1.3	0.5	UG/L	
Chloroform	07/10/24	0.61	0.5	UG/L	
Trichloroethylene	07/10/24	2.7	0.5	UG/L	
8260 TVOC	10/10/24	4.56	0	UG/L	
Carbon tetrachloride	10/10/24	1.1	0.5	UG/L	
Chloroform	10/10/24	0.56	0.5	UG/L	
Trichloroethylene	10/10/24	2.9	0.5	UG/L	

J: The analyte was positively identified; the quantitation is an estimation.

Table F-34
Carbon Influent VOC Data
OU III LIPA/Airport System

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Site ID : 800-122 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	1/10/2024	1.2	0.2	UG/L	
8260 TVOC	1/10/2024	3.22	0	UG/L	
Carbon tetrachloride	1/10/2024	0.66	0.5	UG/L	
Chloroform	1/10/2024	0.76	0.5	UG/L	
Trichloroethylene	1/10/2024	1.8	0.5	UG/L	
1633 TPFAS	1/10/2024	36.57	0	NG/L	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	1/10/2024	3.62	7.54	NG/L	J
Perfluorobutanesulfonate (PFBS)	1/10/2024	2.64	1.76	NG/L	
Perfluorobutyric acid (PFBA)	1/10/2024	4.96	7.93	NG/L	J
Perfluoroheptanoic acid (PFHpA)	1/10/2024	2.23	1.98	NG/L	
Perfluorohexanesulfonate (PFHxS)	1/10/2024	1.89	1.81	NG/L	
Perfluorohexanoic acid (PFHxA)	1/10/2024	6.03	1.98	NG/L	
Perfluorooctane sulfonamide (PFOSAm)	1/10/2024	2.17	1.98	NG/L	
Perfluorooctanesulfonate (PFOS)	1/10/2024	1.32	1.84	NG/L	J
Perfluorooctanoic acid (PFOA)	1/10/2024	3.04	1.98	NG/L	
Perfluoropentanoic acid (PFPeA)	1/10/2024	8.67	1.98	NG/L	
8260 TVOC	2/8/2024	3.53	0	UG/L	
Carbon tetrachloride	2/8/2024	0.85	0.5	UG/L	
Chloroform	2/8/2024	0.78	0.5	UG/L	
Trichloroethylene	2/8/2024	1.9	0.5	UG/L	
8260 TVOC	3/4/2024	3.42	0	UG/L	
Carbon tetrachloride	3/4/2024	0.87	0.5	UG/L	
Chloroform	3/4/2024	0.75	0.5	UG/L	
Trichloroethylene	3/4/2024	1.8	0.5	UG/L	
8260 TVOC	4/11/2024	3.27	0	UG/L	
Carbon tetrachloride	4/11/2024	0.75	0.5	UG/L	
Chloroform	4/11/2024	0.72	0.5	UG/L	
Trichloroethylene	4/11/2024	1.8	0.5	UG/L	
1633 TPFAS	4/11/2024	28	0	NG/L	
Perfluorobutanesulfonate (PFBS)	4/11/2024	2.93	1.78	NG/L	
Perfluoroheptanoic acid (PFHpA)	4/11/2024	2.48	2.01	NG/L	
Perfluorohexanesulfonate (PFHxS)	4/11/2024	2.14	1.83	NG/L	
Perfluorohexanoic acid (PFHxA)	4/11/2024	6.96	2.01	NG/L	
Perfluorooctanoic acid (PFOA)	4/11/2024	3.5	2.01	NG/L	
Perfluoropentanoic acid (PFPeA)	4/11/2024	9.99	2.01	NG/L	
1,4-Dioxane	4/11/2024	1	0.2	UG/L	
1,1-Dichloroethylene	5/6/2024	0.17	0.5	UG/L	J
8260 TVOC	5/6/2024	3.4	0	UG/L	
Carbon tetrachloride	5/6/2024	0.86	0.5	UG/L	
Chloroform	5/6/2024	0.67	0.5	UG/L	
Trichloroethylene	5/6/2024	1.7	0.5	UG/L	
8260 TVOC	6/6/2024	3.17	0	UG/L	
Carbon tetrachloride	6/6/2024	0.75	0.5	UG/L	
Chloroform	6/6/2024	0.72	0.5	UG/L	
Trichloroethylene	6/6/2024	1.7	0.5	UG/L	

Table F-34
Carbon Influent VOC Data
OU III LIPA/Airport System

2024 BNL Groundwater Status Report

Site ID : 800-122 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
8260 TVOC	7/10/2024	3.09	0	UG/L	
Carbon tetrachloride	7/10/2024	0.77	0.5	UG/L	
Chloroform	7/10/2024	0.62	0.5	UG/L	
Trichloroethylene	7/10/2024	1.7	0.5	UG/L	
8260 TVOC	8/5/2024	2.81	0	UG/L	
Carbon tetrachloride	8/5/2024	0.7	0.5	UG/L	
Chloroform	8/5/2024	0.61	0.5	UG/L	
Trichloroethylene	8/5/2024	1.5	0.5	UG/L	
1,1-Dichloroethylene	9/9/2024	0.2	0.5	UG/L	J
8260 TVOC	9/9/2024	2.93	0	UG/L	
Carbon tetrachloride	9/9/2024	0.58	0.5	UG/L	
Chloroform	9/9/2024	0.65	0.5	UG/L	
Trichloroethylene	9/9/2024	1.5	0.5	UG/L	
1,1-Dichloroethylene	10/10/2024	0.22	0.5	UG/L	J
8260 TVOC	10/10/2024	2.99	0	UG/L	
Carbon tetrachloride	10/10/2024	0.6	0.5	UG/L	
Chloroform	10/10/2024	0.67	0.5	UG/L	
Trichloroethylene	10/10/2024	1.5	0.5	UG/L	
1,1-Dichloroethylene	11/7/2024	0.17	0.5	UG/L	J
8260 TVOC	11/7/2024	3.24	0	UG/L	
Carbon tetrachloride	11/7/2024	0.79	0.5	UG/L	
Chloroform	11/7/2024	0.78	0.5	UG/L	
Trichloroethylene	11/7/2024	1.5	0.5	UG/L	
1633 TPFAS	11/21/2024	32.93	0	NG/L	
Perfluorobutanesulfonate (PFBS)	11/21/2024	3.19	1.73	NG/L	
Perfluoroheptanoic acid (PFHpA)	11/21/2024	2.94	1.95	NG/L	
Perfluorohexanesulfonate (PFHxS)	11/21/2024	2.37	1.79	NG/L	
Perfluorohexanoic acid (PFHxA)	11/21/2024	8.22	1.95	NG/L	
Perfluorooctanoic acid (PFOA)	11/21/2024	3.11	1.95	NG/L	
Perfluoropentanoic acid (PFPeA)	11/21/2024	13.1	1.95	NG/L	
1,4-Dioxane	11/21/2024	1.1	0.2	UG/L	
8260 TVOC	12/9/2024	4.78	0	UG/L	
Carbon tetrachloride	12/9/2024	0.75	0.5	UG/L	J
Chloroform	12/9/2024	0.73	0.5	UG/L	J
Methylene chloride	12/9/2024	1.72	0.5	UG/L	J
Trichloroethylene	12/9/2024	1.58	0.5	UG/L	

J: The analyte was positively identified; the quantitation is an estimation.

Table F-35
Carbon Effluent VOC Data
OU III LIPA/Airport System

2024 BNL Groundwater Status Report

Site ID : 800-124 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Qual
1,4-Dioxane	1/10/2024	1.2	0.2	UG/L	
8260 TVOC	1/10/2024	0.47	0	UG/L	
Chloroform	1/10/2024	0.47	0.5	UG/L	J
1633 TPFAS	1/10/2024	44.71	0	NG/L	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	1/10/2024	38.7	6.97	NG/L	
Perfluorobutyric acid (PFBA)	1/10/2024	4.14	7.34	NG/L	J
Perfluorooctane sulfonamide (PFOSAm)	1/10/2024	1.87	1.84	NG/L	
8260 TVOC	2/8/2024	0.75	0	UG/L	
Chloroform	2/8/2024	0.75	0.5	UG/L	
8260 TVOC	3/4/2024	0.89	0	UG/L	
Chloroform	3/4/2024	0.89	0.5	UG/L	
8260 TVOC	4/11/2024	0.88	0	UG/L	
Chloroform	4/11/2024	0.88	0.5	UG/L	
1633 TPFAS	4/11/2024	10.97	0	NG/L	
Perfluorobutyric acid (PFBA)	4/11/2024	7.72	7.29	NG/L	
Perfluoropentanoic acid (PFPeA)	4/11/2024	3.25	1.82	NG/L	
1,4-Dioxane	4/11/2024	1.1	0.2	UG/L	
8260 TVOC	5/6/2024	0.9	0	UG/L	
Chloroform	5/6/2024	0.9	0.5	UG/L	
8260 TVOC	6/6/2024	0.9	0	UG/L	
Chloroform	6/6/2024	0.9	0.5	UG/L	
8260 TVOC	7/10/2024	0	0	UG/L	
8260 TVOC	8/5/2024	0	0	UG/L	
8260 TVOC	9/9/2024	0.29	0	UG/L	
Chloroform	9/9/2024	0.29	0.5	UG/L	J
8260 TVOC	10/10/2024	0.55	0	UG/L	
Chloroform	10/10/2024	0.55	0.5	UG/L	
8260 TVOC	11/7/2024	0.86	0	UG/L	
Chloroform	11/7/2024	0.86	0.5	UG/L	
1633 TPFAS	11/21/2024	0	0	NG/L	
1,4-Dioxane	11/21/2024	1.1	0.2	UG/L	
8260 TVOC	12/9/2024	2.79	0	UG/L	
Chloroform	12/9/2024	0.81	0.5	UG/L	J
Methylene chloride	12/9/2024	1.98	0.5	UG/L	J

J: The analyte was positivly identified; the quantitation is an estimation.

Table F-36
Extraction Well Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID : 065-368 (SR-1)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	01/16/24	37.6	0.774	1.77	PCI/L	0		W
1633 TPFAS	01/16/24	42.074	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	1	1.78	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	10.7	8.02	0	NG/L	0		W
Perfluoroheptanoic acid (PFHpA)	01/16/24	2.36	2.01	0	NG/L	0		W
Perfluorohexanesulfonate (PFHxS)	01/16/24	0.954	1.83	0	NG/L	0	J	W
Perfluorohexanoic acid (PFHxA)	01/16/24	2.13	2.01	0	NG/L	0		W
Perfluorononanoic acid (PFNA)	01/16/24	2.13	2.01	0	NG/L	0		W
Perfluorooctane sulfonamide (PFOSAm)	01/16/24	1.64	2.01	0	NG/L	0	J	W
Perfluorooctanesulfonate (PFOS)	01/16/24	12.9	1.86	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	6.39	2.01	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	1.87	2.01	0	NG/L	0	J	W
Strontium-90	02/12/24	23.8	0.631	1.69	PCI/L	0		W
Strontium-90	03/14/24	35.5	0.787	2.36	PCI/L	0		W
Strontium-90	04/10/24	28.5	0.526	1.62	PCI/L	0		W
Strontium-90	05/03/24	32.6	0.882	1.13	PCI/L	0		W
Strontium-90	06/05/24	36.3	0.532	2.01	PCI/L	0		W
Strontium-90	07/15/24	35	0.589	1.92	PCI/L	0		W
Strontium-90	08/14/24	41.5	0.545	2.17	PCI/L	0		W
Strontium-90	09/12/24	40.6	0.547	2.21	PCI/L	0		W
Strontium-90	10/09/24	36.1	0.543	0.959	PCI/L	0		W
Strontium-90	11/08/24	22.7	0.512	0.722	PCI/L	0		W
Strontium-90	12/11/24	25.8	0.74	0.873	PCI/L	0		W

Site ID : 065-369 (SR-2)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	01/16/24	1.83	0.76	0.539	PCI/L	0		W
1633 TPFAS	01/16/24	31.71	0	0	NG/L	0		W
Perfluorobutyric acid (PFBA)	01/16/24	7.32	8.18	0	NG/L	0	J	W
Perfluoroheptanoic acid (PFHpA)	01/16/24	1.32	2.05	0	NG/L	0	J	W
Perfluorohexanesulfonate (PFHxS)	01/16/24	1.69	1.87	0	NG/L	0	J	W
Perfluorohexanoic acid (PFHxA)	01/16/24	1.61	2.05	0	NG/L	0	J	W
Perfluorononanoic acid (PFNA)	01/16/24	1.39	2.05	0	NG/L	0	J	W
Perfluorooctane sulfonamide (PFOSAm)	01/16/24	1.67	2.05	0	NG/L	0	J	W
Perfluorooctanesulfonate (PFOS)	01/16/24	10.5	1.9	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	3.76	2.05	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	2.45	2.05	0	NG/L	0		W
Strontium-90	02/12/24	2.25	0.553	0.581	PCI/L	0		W
Strontium-90	03/14/24	1.43	0.758	0.572	PCI/L	0		W
Strontium-90	04/10/24	1.09	0.325	0.231	PCI/L	0		W
Strontium-90	05/03/24	3.28	0.703	0.502	PCI/L	0		W
Strontium-90	06/05/24	2.14	0.614	0.569	PCI/L	0		W
Strontium-90	07/15/24	1.48	0.527	0.463	PCI/L	0		W
Strontium-90	08/14/24	2.26	0.78	0.628	PCI/L	0		W
Strontium-90	09/12/24	1.96	0.638	0.559	PCI/L	0		W
Strontium-90	10/09/24	1.3	0.421	0.293	PCI/L	0		W
Strontium-90	11/08/24	0.904	0.396	0.267	PCI/L	0		W

Table F-36
Extraction Well Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID : 075-676 (SR-3)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
1633 TPFAS	01/16/24	15.013	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	0.806	1.67	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	5.3	7.51	0	NG/L	0	J	W
Perfluoroheptanoic acid (PFHpA)	01/16/24	0.7	1.88	0	NG/L	0	J	W
Perfluorohexanesulfonate (PFHxS)	01/16/24	0.904	1.72	0	NG/L	0	J	W
Perfluorohexanoic acid (PFHxA)	01/16/24	0.963	1.88	0	NG/L	0	J	W
Perfluorooctanesulfonate (PFOS)	01/16/24	2.48	1.74	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	2.7	1.88	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	1.16	1.88	0	NG/L	0	J	W
Strontium-90	01/17/24	2.32	0.765	0.59	PCI/L	0		W
Strontium-90	04/10/24	1.24	0.666	0.523	PCI/L	0		W
Strontium-90	11/08/24	8.86	0.524	0.577	PCI/L	0		W
Strontium-90	12/11/24	4.95	0.724	0.562	PCI/L	0		W

Site ID : 075-677 (SR-4)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
1633 TPFAS	01/16/24	20.461	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	0.661	1.74	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	5.79	7.85	0	NG/L	0	J	W
Perfluorohexanesulfonate (PFHxS)	01/16/24	1.45	1.79	0	NG/L	0	J	W
Perfluorohexanoic acid (PFHxA)	01/16/24	1.31	1.96	0	NG/L	0	J	W
Perfluorooctanesulfonate (PFOS)	01/16/24	6.72	1.82	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	3.11	1.96	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	1.42	1.96	0	NG/L	0	J	W
Strontium-90	01/17/24	3.86	0.766	0.646	PCI/L	0		W
Strontium-90	04/10/24	2.33	0.641	0.634	PCI/L	0		W
Strontium-90	07/15/24	4.3	0.761	0.837	PCI/L	0		W
Strontium-90	10/09/24	3.41	0.474	0.601	PCI/L	0		W

Site ID : 075-678 (SR-5)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
1633 TPFAS	01/16/24	25.049	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	1.21	1.76	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	7.64	7.94	0	NG/L	0	J	W
Perfluoroheptanoic acid (PFHpA)	01/16/24	0.919	1.98	0	NG/L	0	J	W
Perfluorohexanesulfonate (PFHxS)	01/16/24	2.72	1.81	0	NG/L	0		W
Perfluorohexanoic acid (PFHxA)	01/16/24	1.49	1.98	0	NG/L	0	J	W
Perfluorooctanesulfonate (PFOS)	01/16/24	5.47	1.84	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	3.82	1.98	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	1.78	1.98	0	NG/L	0	J	W

Site ID : 065-403 (SR-6)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
1633 TPFAS	01/16/24	24.563	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	0.699	1.83	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	5.41	8.26	0	NG/L	0	J	W
Perfluoroheptanoic acid (PFHpA)	01/16/24	0.817	2.07	0	NG/L	0	J	W
Perfluorohexanesulfonate (PFHxS)	01/16/24	1.79	1.89	0	NG/L	0	J	W
Perfluorohexanoic acid (PFHxA)	01/16/24	2.52	2.07	0	NG/L	0		W
Perfluorooctane sulfonamide (PFOSAm)	01/16/24	0.847	2.07	0	NG/L	0	J	W
Perfluorooctanesulfonate (PFOS)	01/16/24	6.93	1.92	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	3.34	2.07	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	2.21	2.07	0	NG/L	0		W
Strontium-90	07/15/24	0.796	0.795	0.525	PCI/L	0	N2	W

Table F-36
Extraction Well Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID : 075-702 (SR-7)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	01/16/24	1.23	0.757	0.511	PCI/L	0	N2	W
1633 TPFAS	01/16/24	38.68	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	1.86	1.7	0	NG/L	0		W
Perfluorobutyric acid (PFBA)	01/16/24	11.3	7.67	0	NG/L	0		W
Perfluoroheptanoic acid (PFHpA)	01/16/24	2.24	1.92	0	NG/L	0		W
Perfluorohexanesulfonate (PFHxS)	01/16/24	2.34	1.75	0	NG/L	0		W
Perfluorohexanoic acid (PFHxA)	01/16/24	5.12	1.92	0	NG/L	0		W
Perfluorooctanesulfonate (PFOS)	01/16/24	4.61	1.78	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	6.48	1.92	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	4.73	1.92	0	NG/L	0		W
Strontium-90	04/10/24	1.09	0.61	0.474	PCI/L	0		W
Strontium-90	10/09/24	2.04	1.25	0.852	PCI/L	0	N2	W

Site ID : 075-703 (SR-8)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
1633 TPFAS	01/16/24	29.37	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	1.55	1.79	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	8.22	8.06	0	NG/L	0		W
Perfluoroheptanoic acid (PFHpA)	01/16/24	1.7	2.01	0	NG/L	0	J	W
Perfluorohexanoic acid (PFHxA)	01/16/24	2.79	2.01	0	NG/L	0		W
Perfluorooctanesulfonate (PFOS)	01/16/24	4.98	1.87	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	5.56	2.01	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	2.28	2.01	0	NG/L	0		W
Strontium-90	10/09/24	1.97	0.739	0.613	PCI/L	0		W

Site ID : 075-704 (SR-9)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual	Matrix
Strontium-90	01/16/24	1.43	0.758	0.522	PCI/L	0		W
1633 TPFAS	01/16/24	34.1	0	0	NG/L	0		W
Perfluorobutanesulfonate (PFBS)	01/16/24	1.52	1.82	0	NG/L	0	J	W
Perfluorobutyric acid (PFBA)	01/16/24	9.14	8.19	0	NG/L	0		W
Perfluoroheptanoic acid (PFHpA)	01/16/24	1.93	2.05	0	NG/L	0	J	W
Perfluorohexanesulfonate (PFHxS)	01/16/24	2.13	1.87	0	NG/L	0		W
Perfluorohexanoic acid (PFHxA)	01/16/24	4.06	2.05	0	NG/L	0		W
Perfluorooctanesulfonate (PFOS)	01/16/24	6.42	1.9	0	NG/L	0		W
Perfluorooctanoic acid (PFOA)	01/16/24	5.78	2.05	0	NG/L	0		W
Perfluoropentanoic acid (PFPeA)	01/16/24	3.12	2.05	0	NG/L	0		W
Strontium-90	04/10/24	0.912	0.561	0.429	PCI/L	0		W
Strontium-90	07/15/24	1.4	0.79	0.571	PCI/L	0		W

J: Indicates an estimated value.
N2: Not usable based on the results that are not distinguishable from background. The reported concentration value is less than or equal to the sum of the MDC and the uncertainty or the RDL.

Table F-37
System Influent Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID: 066-216 (Influent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	1/16/2024	0.51	0.5	0	UG/L	0	J
8260 TVOC	1/16/2024	2.12	0	0	UG/L	0	
Bromoform	1/16/2024	0.97	0.5	0	UG/L	0	J
Chloroform	1/16/2024	0.64	0.5	0	UG/L	0	J
Strontium-90	1/16/2024	1.58	0.765	0.519	PCI/L	0	
1633 TPFAS	1/16/2024	32.261	0	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	1/16/2024	0.606	1.73	0	NG/L	0	J
Perfluorobutyric acid (PFBA)	1/16/2024	6.76	7.81	0	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	1/16/2024	0.965	1.95	0	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	1/16/2024	1.92	1.79	0	NG/L	0	
Perfluorohexanoic acid (PFHxA)	1/16/2024	2.04	1.95	0	NG/L	0	
Perfluorononanoic acid (PFNA)	1/16/2024	1.37	1.95	0	NG/L	0	J
(PFOSAm)	1/16/2024	2.08	1.95	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	1/16/2024	10.5	1.81	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	1/16/2024	4.02	1.95	0	NG/L	0	
Perfluoropentanoic acid (PFPeA)	1/16/2024	2	1.95	0	NG/L	0	
8260 TVOC	2/12/2024	6.57	0	0	UG/L	0	
Bromodichloromethane	2/12/2024	0.82	0.5	0	UG/L	0	J
Bromoform	2/12/2024	2.16	0.5	0	UG/L	0	
Chloroform	2/12/2024	1.43	0.5	0	UG/L	0	
Dibromochloromethane	2/12/2024	1.58	0.5	0	UG/L	0	
Methylene chloride	2/12/2024	0.58	0.5	0	UG/L	0	JB
Strontium-90	2/12/2024	2.32	0.754	0.707	PCI/L	0	
1,1,1-Trichloroethane	3/14/2024	0.51	0.5	0	UG/L	0	J
8260 TVOC	3/14/2024	2.49	0	0	UG/L	0	
Bromoform	3/14/2024	0.79	0.5	0	UG/L	0	J
Chloroform	3/14/2024	0.6	0.5	0	UG/L	0	J
Dibromochloromethane	3/14/2024	0.59	0.5	0	UG/L	0	J
Strontium-90	3/14/2024	4.04	0.786	0.83	PCI/L	0	
1633 TPFAS	4/10/2024	22.41	0	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	4/10/2024	2	1.76	0	NG/L	0	
Perfluorohexanoic acid (PFHxA)	4/10/2024	2.27	1.93	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	4/10/2024	13.5	1.79	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	4/10/2024	4.64	1.93	0	NG/L	0	
1,1,1-Trichloroethane	4/10/2024	0.46	0.5	0	UG/L	0	J
8260 TVOC	4/10/2024	0.85	0	0	UG/L	0	
Chloroform	4/10/2024	0.39	0.5	0	UG/L	0	J
Strontium-90	4/10/2024	3.19	0.66	0.693	PCI/L	0	
1,1,1-Trichloroethane	5/3/2024	0.51	0.5	0	UG/L	0	J
8260 TVOC	5/3/2024	0.51	0	0	UG/L	0	
Strontium-90	5/3/2024	3.55	0.638	0.685	PCI/L	0	
1,1,1-Trichloroethane	6/5/2024	0.39	0.5	0	UG/L	0	J
8260 TVOC	6/5/2024	0.39	0	0	UG/L	0	
Strontium-90	6/5/2024	4.89	0.625	0.772	PCI/L	0	
1,1,1-Trichloroethane	7/15/2024	0.37	0.5	0	UG/L	0	J
8260 TVOC	7/15/2024	0.37	0	0	UG/L	0	

Table F-37
System Influent Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID: 066-216 (Influent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	7/15/2024	6.31	0.772	0.972	PCI/L	0	
8260 TVOC	8/14/2024	0	0	0	UG/L	0	
Strontium-90	8/14/2024	4.58	0.697	0.889	PCI/L	0	
8260 TVOC	9/12/2024	0	0	0	UG/L	0	
Strontium-90	9/12/2024	4.55	0.578	0.771	PCI/L	0	
1,1,1-Trichloroethane	10/9/2024	0.41	0.5	0	UG/L	0	J
8260 TVOC	10/9/2024	0.41	0	0	UG/L	0	
Strontium-90	10/9/2024	3.94	0.791	0.567	PCI/L	0	
8260 TVOC	11/8/2024	0.6	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	11/8/2024	0.6	0.5	0	UG/L	0	J
Strontium-90	11/8/2024	4.04	0.386	0.351	PCI/L	0	
1633 TPFAS	11/20/2024	19.33	0	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/20/2024	2.19	1.71	0	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/20/2024	2.73	1.87	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/20/2024	10.2	1.74	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/20/2024	4.21	1.87	0	NG/L	0	
1,1,1-Trichloroethane	12/11/2024	0.43	0.5	0	UG/L	0	J
8260 TVOC	12/11/2024	0.97	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	12/11/2024	0.54	0.5	0	UG/L	0	J
Strontium-90	12/11/2024	3.16	0.873	0.591	PCI/L	0	

J: The analyte was positively identified; the quantitation is an estimation

Table F-38
System Effluent Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID: 066-219 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
1,1,1-Trichloroethane	01/16/24	0.57	0.5	0	UG/L	0	J
8260 TVOC	01/16/24	1.57	0	0	UG/L	0	
Chloroform	01/16/24	0.5	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	01/16/24	0.5	0.5	0	UG/L	0	J
1633 TPFAS	01/16/24	24.513	0	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/16/24	0.966	1.68	0	NG/L	0	J
Perfluorobutyric acid (PFBA)	01/16/24	7.18	7.58	0	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	01/16/24	1.36	1.89	0	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/16/24	1.16	1.73	0	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	01/16/24	2.32	1.89	0	NG/L	0	
Perfluorononanoic acid (PFNA)	01/16/24	0.977	1.89	0	NG/L	0	J
Perfluorooctane sulfonamide	01/16/24	2.26	1.89	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	01/16/24	2.65	1.76	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/16/24	3.82	1.89	0	NG/L	0	
Perfluoropentanoic acid (PFPeA)	01/16/24	1.82	1.89	0	NG/L	0	J
8260 TVOC	02/12/24	3.56	0	0	UG/L	0	
Bromodichloromethane	02/12/24	0.5	0.5	0	UG/L	0	J
Chloroform	02/12/24	1.26	0.5	0	UG/L	0	
Dibromochloromethane	02/12/24	0.59	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	02/12/24	0.59	0.5	0	UG/L	0	J
Methylene chloride	02/12/24	0.62	0.5	0	UG/L	0	JB
Strontium-90	02/12/24	3.7	1.16	0.996	PCI/L	0	
1,1,1-Trichloroethane	03/14/24	0.6	0.5	0	UG/L	0	J
8260 TVOC	03/14/24	3.99	0	0	UG/L	0	
Bromodichloromethane	03/14/24	0.51	0.5	0	UG/L	0	J
Bromoform	03/14/24	0.68	0.5	0	UG/L	0	J
Chloroform	03/14/24	0.88	0.5	0	UG/L	0	J
Dibromochloromethane	03/14/24	0.79	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	03/14/24	0.53	0.5	0	UG/L	0	J
1633 TPFAS	04/10/24	24.92	0	0	NG/L	0	
Perfluorobutyric acid (PFBA)	04/10/24	7.36	7.02	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/10/24	1.81	1.6	0	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/10/24	3.3	1.75	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	04/10/24	5.22	1.63	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/10/24	5.35	1.75	0	NG/L	0	
Perfluoropentanoic acid (PFPeA)	04/10/24	1.88	1.75	0	NG/L	0	
1,1,1-Trichloroethane	04/10/24	0.57	0.5	0	UG/L	0	J
8260 TVOC	04/10/24	2.44	0	0	UG/L	0	
Bromoform	04/10/24	0.46	0.5	0	UG/L	0	J
Chloroform	04/10/24	0.52	0.5	0	UG/L	0	J
Dibromochloromethane	04/10/24	0.54	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	04/10/24	0.35	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	05/03/24	0.72	0.5	0	UG/L	0	J
8260 TVOC	05/03/24	2.56	0	0	UG/L	0	
Bromoform	05/03/24	0.41	0.5	0	UG/L	0	J
Chloroform	05/03/24	0.44	0.5	0	UG/L	0	J
Dibromochloromethane	05/03/24	0.4	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	05/03/24	0.59	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	06/05/24	0.63	0.5	0	UG/L	0	J

Table F-38
System Effluent Data
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Site ID: 066-219 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
8260 TVOC	06/05/24	1.44	0	0	UG/L	0	
Chloroform	06/05/24	0.37	0.5	0	UG/L	0	J
Ethene, 1,2-dichloro-, (E)-	06/05/24	0.44	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	07/15/24	0.55	0.5	0	UG/L	0	J
8260 TVOC	07/15/24	0.95	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	07/15/24	0.4	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	08/14/24	0.52	0.5	0	UG/L	0	J
8260 TVOC	08/14/24	1.04	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	08/14/24	0.52	0.5	0	UG/L	0	J
1,1,1-Trichloroethane	09/12/24	0.44	0.5	0	UG/L	0	J
8260 TVOC	09/12/24	0.79	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	09/12/24	0.35	0.5	0	UG/L	0	J
Strontium-90	09/12/24	0.774	0.656	0.458	PCI/L	0	J
1,1,1-Trichloroethane	10/09/24	0.49	0.5	0	UG/L	0	J
8260 TVOC	10/09/24	0.49	0	0	UG/L	0	
Strontium-90	10/09/24	0.886	0.609	0.378	PCI/L	0	N2
8260 TVOC	11/08/24	0.88	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	11/08/24	0.88	0.5	0	UG/L	0	J
Strontium-90	11/08/24	0.623	0.403	0.255	PCI/L	0	N2
1633 TPFAS	11/20/24	16.51	0	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/20/24	1.84	1.74	0	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/20/24	2.73	1.91	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/20/24	7.07	1.77	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/20/24	4.87	1.91	0	NG/L	0	
8260 TVOC	12/11/24	0.43	0	0	UG/L	0	
Ethene, 1,2-dichloro-, (E)-	12/11/24	0.43	0.5	0	UG/L	0	J
Strontium-90	12/11/24	1.64	0.437	0.313	PCI/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
6/20/05	79.0	18927	1495238	0.001	0.16
7/13/05	349.0	769968	268718798	0.269	0.43
7/21/05	251	212755	53401576	0.053	0.48
7/27/05	223	322086	71825077	0.072	0.56
8/3/05	376	970829	365031863	0.365	0.92
8/11/05	436	1167095	508853618	0.509	1.43
8/17/05	401	325905	130687917	0.131	1.56
8/24/05	285	1029515	293411679	0.293	1.85
9/1/05	175	1342269	234897105	0.235	2.09
9/28/05	245	2176949	533352428	0.533	2.62
10/6/05	273	983420	268473579	0.268	2.89
10/13/05	373	1026013	382702907	0.383	3.27
10/19/05	315	537881	169432363	0.169	3.44
10/25/05	271	657772	178256234	0.178	3.62
11/8/05	278	565056	157085565	0.157	3.78
11/18/05	266	1057530	281303112	0.281	4.06
11/22/05	254	373794	94943745	0.095	4.15
1/13/06	386	639364	246794359	0.247	4.40
1/20/06	317	860992	272934437	0.273	4.67
1/25/06	304	585895	178111983	0.178	4.85
2/1/06	243	822120	199775043	0.200	5.05
2/10/06	184	1068451	196595059	0.197	5.25
2/15/06	191	559862	106933719	0.107	5.36
2/23/06	150	1016811	152521623	0.153	5.51
3/3/06	174	838669	145928465	0.146	5.65
3/8/06	71.6	339468	24305920	0.024	5.68
3/14/06	63.4	570091	36143743	0.036	5.72
3/21/06	52	806490	41937457	0.042	5.76
3/29/06	164	541480	88802793	0.089	5.85
4/18/06	130	973892	126605937	0.127	5.97
4/25/06	155	887433	137552117	0.138	6.11
5/3/06	187	1220932	228314206	0.228	6.34
5/9/06	140	629158	88082142	0.088	6.43
5/16/06	158	1046462	165340988	0.165	6.59
5/24/06	114	999894	113987895	0.114	6.71
6/7/06	104	1837568	191107030	0.191	6.90
6/14/06	96.4	778133	75012025	0.075	6.97
6/22/06	108	1062902	114793415	0.115	7.09
6/28/06	105	1023992	107519133	0.108	7.19
7/6/06	90.1	1200449	108160429	0.108	7.30
7/12/06	99.7	775256	77293035	0.077	7.38
7/19/06	91.9	936746	86086918	0.086	7.47
7/26/06	91.4	1036090	94698619	0.095	7.56
8/2/06	98.3	875721	86083370	0.086	7.65
8/8/06	90.8	690838	62728059	0.063	7.71
8/16/06	93.5	1097232	102591182	0.103	7.81
8/23/06	97.8	958409	93732448	0.094	7.91
8/30/06	84.8	938487	79583686	0.080	7.99
9/6/06	89.2	960401	85667735	0.086	8.07
10/4/06	101	1152268	116379068	0.116	8.19

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

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Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
10/11/06	102	948477	96744610	0.097	8.28
10/18/06	96.1	951406	91430162	0.091	8.38
11/9/06	127	818546	103955354	0.104	8.48
11/15/06	97.2	817649	79475478	0.079	8.56
11/29/06	167	1090199	182063166	0.182	8.74
12/5/06	125	643384	80422966	0.080	8.82
12/14/06	150	1125176	168776371	0.169	8.99
12/20/06	139	939191	130547542	0.131	9.12
12/27/06	148	941129	139287104	0.139	9.26
1/10/07	112	1883114	210908731	0.211	9.47
1/17/07	122	941557	114869934	0.115	9.59
1/24/07	137	941557	128993286	0.129	9.71
1/31/07	121	941557	113928377	0.114	9.83
2/7/07	103	879162	90553675	0.091	9.92
2/14/07	122	879162	107257751	0.107	10.03
3/2/07	47.2	1758293	82991453	0.083	10.11
3/8/07	50.6	22712	1149251	0.001	10.11
4/11/07	40.7	2882970	117336864	0.117	10.23
4/19/07	40.7	678346	27608674	0.028	10.26
4/25/07	41.1	508759	20910009	0.021	10.28
5/3/07	44.5	678346	30186388	0.030	10.31
5/8/07	38.9	413197	16073349	0.016	10.32
5/16/07	264	661115	174534254	0.175	10.50
5/24/07	415	663204	275229721	0.275	10.77
6/1/07	504	578475	291551539	0.292	11.06
6/12/07	451	506587	228470520	0.228	11.29
6/21/07	426	414480	176568429	0.177	11.47
6/27/07	426	276320	117712286	0.118	11.59
7/3/07	445	145360	64685117	0.065	11.65
9/6/07	391	143770	56214047	0.056	11.71
9/26/07	401	479233	192172487	0.192	11.90
10/18/07	308	1703057	524541485	0.525	12.42
11/8/07	363	1939077	703885022	0.704	13.13
11/20/07	321	1399088	449107313	0.449	13.58
12/6/07	209	1877564	392410929	0.392	13.97
12/20/07	114	1792392	204332744	0.204	14.17
1/4/08	137	1051966	144119334	0.144	14.32
1/15/08	127	824463	104706762	0.105	14.42
2/21/08	41.1	2095282	86116099	0.086	14.51
3/12/08	65.2	1196966	78042192	0.078	14.59
3/25/08	74.4	946069	70387537	0.070	14.66
4/9/08	61.3	1012219	62049032	0.062	14.72
4/22/08	65.9	939918	61940580	0.062	14.78
5/8/08	85.7	1474796	126390055	0.126	14.91
5/19/08	95.4	1232530	117583370	0.118	15.03
6/4/08	60.1	1685265	101284447	0.101	15.13
6/19/08	44.9	1697757	76229298	0.076	15.20
7/2/08	61.2	1130173	69166560	0.069	15.27
7/29/08	52.5	2502006	131355304	0.131	15.40
8/28/08	105	654119	68682512	0.069	15.47

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

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Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
9/12/08	59.7	1526278	91118799	0.091	15.56
9/23/08	55.9	1199218	67036312	0.067	15.63
10/10/08	73.4	2316672	170043726	0.170	15.80
10/22/08	53.2	1499023	79748027	0.080	15.88
11/5/08	43.4	1831534	79488560	0.079	15.96
11/19/08	44.6	1831534	81686401	0.082	16.04
12/2/08	35.1	1651045	57951687	0.058	16.10
12/17/08	25.6	1589873	40700748	0.041	16.14
1/13/09	33.1	3444725	114020389	0.114	16.25
1/27/09	36.6	1854852	67887575	0.068	16.32
2/10/09	32.6	1665581	54297947	0.054	16.38
3/25/09	53.9	3198673	172408473	0.172	16.55
4/1/09	50.9	715443	36416040	0.036	16.58
4/15/09	39.7	1788607	71007701	0.071	16.66
5/4/09	29.3	2265569	66381171	0.066	16.72
5/21/09	28.7	2104310	60393709	0.060	16.78
6/3/09	31.5	1485396	46789961	0.047	16.83
6/18/09	35.3	2225822	78571521	0.079	16.91
7/16/09	44.4	3040443	134995658	0.135	17.04
7/28/09	30.1	944839	28439647	0.028	17.07
8/10/09	20.8	792665	16487437	0.016	17.09
10/22/09	52.1	2639416	137513586	0.138	17.23
10/30/09	28.7	554184	15905089	0.016	17.24
11/10/09	51	921116	46976896	0.047	17.29
12/8/09	49.1	2540011	124714556	0.125	17.41
12/30/09	40.3	2109708	85021249	0.085	17.50
1/6/10	38.3	522387	20007416	0.020	17.52
1/27/10	37.6	1828354	68746107	0.069	17.59
2/4/10	32.5	696516	22636763	0.023	17.61
2/17/10	30	2066835	62005045	0.062	17.67
3/3/10	33.7	2066835	69652334	0.070	17.74
3/17/10	31.7	1960843	62158733	0.062	17.80
4/1/10	29.6	1820783	53895179	0.054	17.86
4/14/10	25.3	1640329	41500316	0.042	17.90
5/4/10	30.1	2398346	72190217	0.072	17.97
5/19/10	28.7	1423050	40841531	0.041	18.01
6/15/10	27.7	2122412	58790820	0.059	18.07
8/17/10	90.2	2176574	196326969	0.196	18.27
8/24/10	25.7	529958	13619912	0.014	18.28
9/1/10	51.7	529958	27398811	0.027	18.31
9/13/10	44.2	766137	33863258	0.034	18.34
10/6/10	24.3	2182184	53027069	0.053	18.39
10/19/10	35.3	1233408	43539313	0.044	18.44
11/4/10	28.5	1306739	37242070	0.037	18.48
11/15/10	53.6	723487	38778894	0.039	18.51
12/2/10	44.5	1127973	50194808	0.050	18.56
12/16/10	37	989802	36622671	0.037	18.60
1/7/11	30.5	1533470	46770845	0.047	18.65
1/19/11	31.8	808564	25712334	0.026	18.67
3/3/11	24.9	1667474	41520100	0.042	18.72

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
3/24/11	25.5	1486531	37906546	0.038	18.75
5/2/11	59.6	2949105	175766632	0.176	18.93
5/27/11	95.8	822759	78820337	0.079	19.01
6/13/11	61	3134272	191190577	0.191	19.20
7/6/11	51	5005514	255281233	0.255	19.45
7/19/11	48.7	2288872	111468064	0.111	19.57
8/9/11	49.7	3873203	192498193	0.192	19.76
8/26/11	38.7	3719546	143946416	0.144	19.90
9/2/11	40.7	1174485	47801522	0.048	19.95
9/29/11	88.1	1086758	95743350	0.096	20.05
10/5/11	39.4	1194449	47061284	0.047	20.09
10/25/11	136	3981496	541483474	0.541	20.63
11/10/11	63.9	2951561	188604766	0.189	20.82
11/15/11	68.8	978094	67292842	0.067	20.89
12/14/11	43.3	5010814	216968244	0.217	21.11
12/20/11	60.8	889943	54108519	0.054	21.16
1/4/12	33.9	2113657	71652959	0.072	21.23
1/25/12	48.5	2530998	122753415	0.123	21.36
2/13/12	21	3823395	80291287	0.080	21.44
2/22/12	43.4	2146328	93150656	0.093	21.53
3/2/12	27.6	2369539	65399279	0.065	21.59
3/14/12	24.1	4201035	101244940	0.101	21.70
4/6/12	22.1	7633245	168694715	0.169	21.86
4/16/12	23.3	2802454	65297176	0.065	21.93
5/2/12	16.8	4699566	78952709	0.079	22.01
5/15/12	16.2	5044849	81726547	0.082	22.09
6/6/12	22.9	7302968	167237964	0.167	22.26
6/19/12	24.5	3210976	78668901	0.079	22.34
6/25/12	24.5	1481989	36308724	0.036	22.37
7/24/12	20.3	1473097	29903865	0.030	22.40
7/30/12	14	304786	4267007	0.004	22.41
8/8/12	23.6	324031	7647138	0.008	22.41
8/20/12	29.3	486047	14241173	0.014	22.43
9/6/12	21.2	1331844	28235096	0.028	22.46
9/18/12	16.3	1853610	30213846	0.030	22.49
10/1/12	17.5	3394606	59405603	0.059	22.55
10/16/12	17.3	3602766	62327846	0.062	22.61
11/20/12	20.6	5711051	117647646	0.118	22.73
11/30/12	15.5	1174235	18200638	0.018	22.74
12/5/12	20.2	1494481	30188508	0.030	22.77
12/18/12	17.3	3885650	67221736	0.067	22.84
1/3/13	14.2	4338990	61613664	0.062	22.90
1/15/13	13.6	3008948	40921695	0.041	22.94
2/5/13	16	4497069	71953107	0.072	23.02
2/20/13	26	2207652	57398956	0.057	23.07
3/11/13	15.4	3819443	58819417	0.059	23.13
3/21/13	13.2	2642028	34874772	0.035	23.17
4/3/13	19	2542956	48316171	0.048	23.22
4/15/13	15.2	852444	12957156	0.013	23.23
5/7/13	14.7	2396980	35235599	0.035	23.26

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
5/28/13	13.6	3992568	54298931	0.054	23.32
6/4/13	13.7	1484570	20338614	0.020	23.34
6/17/13	22.2	3589059	79677103	0.080	23.42
7/2/13	13.4	3917542	52495057	0.052	23.47
7/19/13	14.6	2784575	40654801	0.041	23.51
8/6/13	17.5	3481167	60920421	0.061	23.57
8/20/13	18.1	3918560	70925934	0.071	23.64
9/4/13	15.7	3504103	55014413	0.055	23.70
9/17/13	11.5	2291677	26354285	0.026	23.72
10/3/13	19.9	2756374	54851845	0.055	23.78
10/22/13	24	2944017	70656407	0.071	23.85
11/6/13	13.6	3115367	42368997	0.042	23.89
11/19/13	12.4	3728472	46233048	0.046	23.94
12/2/13	10.7	3559900	38090927	0.038	23.98
12/16/13	14.2	2835273	40260883	0.040	24.02
1/8/14	14.1	5479989	77267848	0.077	24.09
1/23/14	11.7	4579118	53575681	0.054	24.15
2/4/14	16.3	3282558	53505690	0.054	24.20
4/8/14	30.1	6922761	208375109	0.208	24.41
4/21/14	19	3055963	58063296	0.058	24.47
5/7/14	21.7	3390215	73567661	0.074	24.54
5/19/14	20.7	2184940	45228252	0.045	24.59
6/5/14	19.5	3321453	64768330	0.065	24.65
6/17/14	15.8	3164619	50000987	0.050	24.70
7/1/14	13.1	3955774	51820643	0.052	24.75
7/16/14	15	2292067	34381003	0.034	24.79
8/5/14	16.6	3259065	54100486	0.054	24.84
8/18/14	10.5	2911580	30571588	0.031	24.87
9/9/14	9.85	3230429	31819724	0.032	24.90
9/30/14	9.85	1362445	13420087	0.013	24.92
11/6/14	16.5	1801303	29721505	0.030	24.95
11/18/14	13.4	3580076	47973017	0.048	25.00
12/2/14	14.4	3894515	56081015	0.056	25.05
12/16/14	14.4	4559366	65654867	0.066	25.12
1/6/15	14.9	4559366	67934550	0.068	25.18
1/21/15	13.7	1596460	21871496	0.022	25.21
2/12/15	18.3	3092167	56586649	0.057	25.26
2/25/15	16.5	2196849	36248002	0.036	25.30
3/10/15	13.7	3132943	42921320	0.043	25.34
3/23/15	10.7	3413771	36527354	0.037	25.38
4/1/15	11.8	2331144	27507495	0.028	25.41
4/14/15	13.4	2994696	40128927	0.040	25.45
5/6/15	10.3	5287554	54461807	0.054	25.50
5/27/15	6.3	5606210	35375185	0.035	25.54
6/10/15	18.7	2365413	44233223	0.044	25.58
6/22/15	13.0	1557485	20247305	0.020	25.60
7/10/15	13.6	2885998	39249572	0.039	25.64
7/22/15	10.2	2216737	22610719	0.023	25.66
8/5/15	14.8	2654331	39284095	0.039	25.70
8/18/15	12.7	2578623	32748506	0.033	25.73

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
9/2/15	10.2	3132807	31954629	0.032	25.77
9/23/15	8.8	5818935	50915681	0.051	25.82
10/1/15	9.5	2171691	20631062	0.021	25.84
10/20/15	9.9	4433035	43665397	0.044	25.88
11/5/15	7.2	3516065	25456308	0.025	25.91
11/23/15	12.6	3418454	43072520	0.043	25.95
12/2/15	8.4	1722347	14536611	0.015	25.97
12/15/15	10.1	2697659	27246352	0.027	25.99
1/7/16	7.1	4288429	30233422	0.030	26.02
2/9/16	46.7	5255859	245448606	0.245	26.27
2/18/16	8.3	1330690	10978189	0.011	26.28
3/3/16	7.9	2167977	17148700	0.017	26.30
3/29/16	8.4	4693684	39286131	0.039	26.34
4/11/16	8.2	3033228	24902800	0.025	26.36
4/25/16	5.8	3266553	18848011	0.019	26.38
5/4/16	7.8	2305217	17980695	0.018	26.40
5/17/16	7.1	3700422	26198986	0.026	26.42
6/7/16	10.1	5455119	55096703	0.055	26.48
6/21/16	8.9	2940099	26078679	0.026	26.50
7/18/16	8.6	6430945	55434748	0.055	26.56
7/25/16	6.4	1774722	11304980	0.011	26.57
8/3/16	7.5	2125285	15854629	0.016	26.59
8/16/16	7.5	2617745	19502198	0.020	26.61
9/20/16	9.8	4832078	47499328	0.047	26.65
10/4/16	7.9	1246135	9794620	0.010	26.66
10/26/16	16.4	2425586	39779609	0.040	26.70
11/17/16	9.4	4014887	37780089	0.038	26.74
11/29/16	7.5	2444907	18361249	0.018	26.76
12/8/16	9.7	2245502	21669099	0.022	26.78
12/19/16	9.0	2296980	20649853	0.021	26.80
1/5/17	9.5	1717438	16332831	0.016	26.82
1/18/17	7.2	3671437	26287488	0.026	26.84
2/2/17	6.2	3909032	24196908	0.024	26.87
3/7/17	7.1	4146506	29440193	0.029	26.90
3/20/17	8.1	1964428	15911868	0.016	26.91
4/5/17	8.3	2729801	22711940	0.023	26.94
4/20/17	3.7	3008778	11162566	0.011	26.95
5/3/17	8.6	2970678	25399294	0.025	26.97
5/17/17	7.2	4502520	32373120	0.032	27.01
6/6/17	7.1	6174817	43841199	0.044	27.05
6/20/17	8.1	3902025	31450323	0.031	27.08
7/14/17	8.2	6742803	55290982	0.055	27.14
7/25/17	6.4	3143368	20117556	0.020	27.16
8/1/17	7.7	1971215	15198070	0.015	27.17
8/16/17	5.3	3850218	20213645	0.020	27.19
9/7/17	6.1	5962894	36075510	0.036	27.23
9/19/17	5.2	3621731	18651913	0.019	27.25
10/6/17	7.9	4154853	32657143	0.033	27.28
10/18/17	8.6	2169677	18680918	0.019	27.30
11/2/17	4.3	2801636	12047036	0.012	27.31

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
11/15/17	3.5	2932494	10263730	0.010	27.32
12/13/17	9.6	5236368	50269130	0.050	27.37
12/19/17	4.4	855102	3728244	0.004	27.37
1/3/18	4.6	2206214	10170645	0.010	27.38
1/18/18	3.3	3198881	10396364	0.010	27.40
2/1/18	4.8	2922281	14026949	0.014	27.41
2/13/18	4.1	1799009	7375938	0.007	27.42
3/7/18	8.1	3659165	29639233	0.030	27.45
3/20/18	9.2	2619319	24176319	0.024	27.47
4/3/18	8.2	3350161	27471323	0.027	27.50
4/17/18	13.1	2658321	34824000	0.035	27.53
5/15/18	7.9	5319310	41916162	0.042	27.57
5/22/18	7.9	1330406	10510205	0.011	27.59
6/5/18	8.3	2238681	18581054	0.019	27.60
6/21/18	15.0	1690111	25351660	0.025	27.63
7/3/18	11.1	1546121	17161945	0.017	27.65
8/1/18	14.9	5662397	84369714	0.084	27.73
8/14/18	16.5	1365637	22533003	0.023	27.75
9/6/18	8.9	3024839	26800076	0.027	27.78
9/18/18	10.5	2688112	28225174	0.028	27.81
10/11/18	5.7	4164400	23612146	0.024	27.83
10/25/18	10.5	1878912	19728575	0.020	27.85
11/1/18	9.0	814583	7298662	0.007	27.86
01/17/19	19.4	1902953	36917288	0.037	27.90
02/05/19	19	3958042	75202793	0.075	27.97
03/12/19	11.5	4252918	48908554	0.049	28.02
04/02/19	13.3	2910853	38714345	0.039	28.06
05/02/19	13.5	4600025	62100335	0.062	28.12
06/06/19	17.2	5613599	96553905	0.097	28.22
07/31/19	21.1	5347068	112823141	0.113	28.33
08/31/19	16.5	4483271	73973978	0.074	28.40
9/31/2019	13.4	2616590	35062309	0.035	28.44
10/31/19	15.4	4238041	65265832	0.065	28.50
11/30/19	12.9	5477445	70659046	0.071	28.57
12/31/19	13	4063469	52825100	0.053	28.63
01/31/20	4.27	6572179	28063204	0.028	28.66
02/29/20	12.2	3810248	46485024	0.046	28.70
03/31/20	9.68	5301889	51322289	0.051	28.75
04/30/20	7.98	1931014	15409494	0.015	28.77
05/31/20	5.41	6297237	34068052	0.034	28.80
06/30/20	14.4	4140548	59623888	0.060	28.86
07/31/20	11.5	333949	3840414	0.004	28.87
08/31/20	11.5	1144709	13164148	0.013	28.88
09/30/20	8.62	6357489	54801558	0.055	28.93
10/31/20	2.36	4454018	10511482	0.011	28.95
11/30/20	5.03	6253591	31455563	0.031	28.98
12/31/20	7.63	1764793	13465371	0.013	28.99
01/31/21	1.01	5267491	5320166	0.005	29.00
02/28/21	8.15	3457989	28182609	0.028	29.02
03/31/21	20.5	5753186	117940317	0.118	29.14

Table F-39
Cumulative Mass Removal
OU III BGRR/WCF Sr-90 System

2024 BNL Groundwater Status Report

Sample date	Influent Concentration (pCi/L)	Liters Pumped	picoCuries pumped	milliCuries pumped	Cumulative mCi
04/30/21	9.99	4228517	42242884	0.042	29.18
05/31/21	10.6	6287141	66643697	0.067	29.25
06/30/21	13.7	2311437	31666684	0.032	29.28
07/31/21	5.7	6092363	34726468	0.035	29.32
08/31/21	7.9	4264808	33691981	0.034	29.35
09/30/21	3.97	6369326	25286226	0.025	29.38
10/31/21	5.05	3599158	18175749	0.018	29.39
11/30/21	4.79	4501422	21561813	0.022	29.42
12/31/21	18.6	1414677	26312983	0.026	29.44
01/14/22	4.34	4967304	21558101	0.022	29.46
02/10/22	5.37	4114538	22095070	0.022	29.49
03/12/22	6.09	6072542	36981784	0.037	29.52
04/08/22	5.98	4267064	25517042	0.026	29.55
05/11/22	15	1759096	26386440	0.026	29.57
06/15/22	10.2	3348969	34159483	0.034	29.61
07/07/22	10.4	1759096	18294598	0.018	29.63
08/10/22	10.2	1582514	16141644	0.016	29.64
09/08/22	10.2	1114141	11364242	0.011	29.65
10/12/22	9.22	2092848	19296060	0.019	29.67
11/10/22	8.79	2003107	17607314	0.018	29.69
12/08/22	7.66	3592980	27522230	0.028	29.72
01/11/23	6.91	2003107	13841472	0.014	29.73
02/10/23	6.81	3348969	22806479	0.023	29.76
03/13/23	6.57	1759096	11557261	0.012	29.77
04/12/23	4.85	3348969	16242499	0.016	29.78
05/01/23	8.72	1759096	15339317	0.015	29.80
06/12/23	8.26	1759096	14530133	0.015	29.81
07/14/23	8.88	2195580	19496755	0.019	29.83
08/15/23	9.82	776388	7624130	0.008	29.84
09/20/23	5.59	341732	1910281	0.002	29.84
10/18/23	5.23	2248137	11757757	0.012	29.85
11/06/23	5.11	1923133	9827210	0.010	29.86
12/04/23	3.62	2013279	7288069	0.007	29.87
01/16/24	1.58	1907287	3013514	0.003	29.87
02/12/24	2.32	1907287	4424907	0.004	29.88
03/14/24	4.04	1823300	7366134	0.007	29.89
04/10/24	3.19	1823300	5816328	0.006	29.89
05/03/24	3.55	1823300	6472716	0.006	29.90
06/05/24	4.89	1747600	8545763	0.009	29.91
07/15/24	6.31	1823300	11505025	0.012	29.92
08/14/24	4.58	1823300	8350716	0.008	29.93
09/12/24	4.55	1823300	8296017	0.008	29.93
10/09/24	3.94	2698783	10633204	0.011	29.95
11/08/24	4.04	2947242	11906858	0.012	29.96
12/11/24	3.16	2756340	8710034	0.009	29.97

Table F-40
Extraction Well Data
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Site ID : 106-92 (EW-1)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	01/08/24	18.5	0.757	1.56	PCI/L	0	
Strontium-90	04/08/24	13	0.779	0.966	PCI/L	0	
Strontium-90	08/22/24	12.6	0.702	1.33	PCI/L	0	
Strontium-90	11/20/24	13.6	0.774	1.21	PCI/L	0	

Site ID : 106-123 (EW-2)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	01/08/24	1.48	0.759	0.574	PCI/L	0	
Strontium-90	04/08/24	2.59	0.786	0.538	PCI/L	0	
Strontium-90	08/22/24	1.93	0.701	0.557	PCI/L	0	
Strontium-90	11/20/24	2.59	0.783	0.661	PCI/L	0	

Site ID : 106-124 (EW-3)

Chemical Name	Sample Date	Value	Detlim	Error	Units	Depth	Qual
Strontium-90	01/08/24	0.409	0.748	0.448	PCI/L	0	U
Strontium-90	04/08/24	1.03	0.766	0.492	PCI/L	0	N2
Strontium-90	08/22/24	0.366	0.47	0.285	PCI/L	0	U
Strontium-90	11/20/24	5.69	0.786	0.907	PCI/L	0	

Table F-41
System Influent Data
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

No Influent samples collected as sytem has been in stand-by mode since 7/1/2018.

Table F-42
System Effluent Data
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Site ID: 106-118 (Effluent)

No samples were collected due to the system being in stand-by mode since 7/1/2018.

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
December 31, 2003	31.7	0.884	
January 2, 2004	35.7	0.002	0.887
January 5, 2004	31.8	0.003	0.890
January 7, 2004	37.8	0.000	0.890
January 9, 2004	31.7	0.002	0.892
January 12, 2004	35.9	0.002	0.894
January 14, 2004	38.2	0.002	0.897
January 16, 2004	34.5	0.002	0.899
January 21, 2004	35.3	0.006	0.905
January 23, 2004	32.4	0.002	0.907
January 26, 2004	34.3	0.003	0.910
January 28, 2004	34.7	0.002	0.913
January 30, 2004	33.8	0.002	0.915
February 2, 2004	34.4	0.003	0.918
February 4, 2004	33.2	0.002	0.920
February 6, 2004	37.4	0.002	0.923
February 9, 2004	39.5	0.004	0.927
February 11, 2004	35.6	0.002	0.929
February 13, 2004	41.2	0.003	0.932
February 18, 2004	37.1	0.004	0.936
February 20, 2004	32.1	0.002	0.938
February 23, 2004	46.1	0.001	0.939
February 25, 2004	35.2	0.002	0.941
February 27, 2004	34.6	0.002	0.944
March 1, 2004	36.8	0.004	0.947
March 3, 2004	35.0	0.002	0.950
March 5, 2004	36.7	0.002	0.952
March 8, 2004	40.7	0.004	0.956
March 10, 2004	38.4	0.003	0.958
March 12, 2004	34.9	0.002	0.961
March 15, 2004	36.8	0.004	0.964
April 2, 2004	66.7	0.004	0.969
April 5, 2004	57.1	0.006	0.974
May 21, 2004	169.0	0.006	0.980
May 25, 2004	82.8	0.011	0.991
May 28, 2004	78.6	0.008	0.998
June 2, 2004	66.5	0.011	1.009
June 8, 2004	52.9	0.010	1.020
June 11, 2004	56.6	0.006	1.025
June 15, 2004	51.4	0.007	1.032
June 18, 2004	62.8	0.006	1.038
June 22, 2004	51.8	0.007	1.045
June 25, 2004	67.6	0.007	1.052
June 29, 2004	61.5	0.008	1.060
July 2, 2004	68.5	0.007	1.066
July 7, 2004	93.1	0.015	1.082
July 9, 2004	73.9	0.005	1.086
July 13, 2004	71.1	0.009	1.096
July 16, 2004	64.4	0.006	1.102
October 15, 2004	124.0	0.024	1.126
January 12, 2005	181.0	0.086	1.213

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
January 14, 2005	136.0	0.004	1.217
January 18, 2005	185.0	0.012	1.229
January 21, 2005	157.0	0.005	1.234
January 31, 2005	278.0	0.045	1.280
May 26, 2005	566.0	0.296	1.576
June 1, 2005	496.0	0.097	1.673
June 7, 2005	277.0	0.054	1.728
June 15, 2005	204.0	0.053	1.781
June 22, 2005	162.0	0.037	1.818
June 28, 2005	119.0	0.023	1.841
July 7, 2005	102	0.030	1.871
July 13, 2005	73.9	0.002	1.873
July 26, 2005	56.3	0.013	1.886
August 3, 2005	80.7	0.021	1.907
August 11, 2005	68.3	0.020	1.927
August 17, 2005	57.5	0.014	1.941
August 24, 2005	55.7	0.013	1.954
September 1, 2005	50.8	0.013	1.967
September 8, 2005	50	0.011	1.979
September 15, 2005	50.6	0.013	1.992
September 20, 2005	46.4	0.007	1.999
September 27, 2005	42.7	0.010	2.009
October 6, 2005	44.1	0.013	2.022
October 13, 2005	43.9	0.010	2.032
October 19, 2005	37	0.007	2.039
October 25, 2005	37.2	0.007	2.046
November 1, 2005	33	0.003	2.050
November 8, 2005	31.8	0.007	2.057
November 18, 2005	33.6	0.007	2.064
November 22, 2005	37.8	0.006	2.070
December 1, 2005	32.2	0.012	2.081
February 9, 2006	36	0.000	2.081
February 15, 2006	40	0.008	2.089
February 23, 2006	32.2	0.008	2.098
February 28, 2006	27.1	0.003	2.101
March 8, 2006	31.4	0.008	2.109
March 14, 2006	33.6	0.007	2.116
March 21, 2006	36.9	0.008	2.124
March 29, 2006	31.1	0.009	2.133
April 4, 2006	26.3	0.003	2.137
April 10, 2006	24.1	0.004	2.140
April 18, 2006	23	0.005	2.145
April 25, 2006	28.7	0.005	2.150
May 1, 2006	31.7	0.005	2.154
May 9, 2006	34.3	0.009	2.163
May 16, 2006	24.9	0.006	2.169
May 24, 2006	22.7	0.006	2.174
May 31, 2006	26.3	0.006	2.180
June 7, 2006	26.7	0.005	2.185
June 14, 2006	24.6	0.005	2.190
June 22, 2006	27.7	0.006	2.196

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
June 28, 2006	26.2	0.004	2.200
July 6, 2006	16	0.003	2.203
July 12, 2006	23.9	0.005	2.208
August 8, 2006	22	0.010	2.218
August 16, 2006	21.7	0.006	2.224
August 23, 2006	25.6	0.007	2.231
August 30, 2006	25.9	0.003	2.234
September 6, 2006	27.6	0.008	2.241
September 12, 2006	24.3	0.006	2.247
September 19, 2006	19	0.005	2.252
September 28, 2006	21.6	0.007	2.260
October 4, 2006	24.1	0.007	2.266
October 11, 2006	20.9	0.005	2.271
October 18, 2006	20.1	0.006	2.277
October 25, 2006	21.6	0.006	2.283
November 1, 2006	18.5	0.004	2.287
November 9, 2006	19.9	0.006	2.293
November 20, 2006	22.8	0.004	2.297
November 29, 2006	26.1	0.010	2.307
December 5, 2006	18.1	0.004	2.311
December 14, 2006	20.4	0.006	2.318
December 20, 2006	20.4	0.004	2.322
December 27, 2006	22.6	0.006	2.328
January 3, 2007	22.8	0.006	2.333
January 10, 2007	17.2	0.005	2.338
January 17, 2007	20.7	0.006	2.345
January 24, 2007	19.4	0.006	2.350
January 31, 2007	14.5	0.004	2.355
February 7, 2007	18.2	0.005	2.359
February 14, 2007	17.1	0.004	2.363
February 27, 2007	17.3	0.008	2.371
March 2, 2007	18.5	0.002	2.373
March 15, 2007	18.5	0.009	2.382
March 28, 2007	6.26	0.003	2.385
April 5, 2007	16.6	0.004	2.389
April 11, 2007	17.6	0.003	2.392
April 19, 2007	18.7	0.005	2.397
April 25, 2007	18.1	0.003	2.400
May 3, 2007	17.3	0.004	2.404
May 8, 2007	16.9	0.002	2.407
May 16, 2007	18	0.004	2.411
May 24, 2007	17.4	0.004	2.415
May 30, 2007	18.4	0.003	2.418
June 12, 2007	22.9	0.002	2.419
June 21, 2007	22.7	0.001	2.421
July 27, 2007	26.6	0.007	2.427
August 14, 2007	28.8	0.008	2.435
September 6, 2007	31.6	0.012	2.446
September 25, 2007	32.5	0.012	2.459
October 4, 2007	32.2	0.008	2.467
October 10, 2007	29.1	0.005	2.471

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
October 17, 2007	26.8	0.005	2.476
November 15, 2007	78.7	0.040	2.516
November 20, 2007	66.4	0.003	2.519
November 30, 2007	62	0.005	2.524
December 4, 2007	47	0.013	2.537
December 13, 2007	40.1	0.026	2.563
December 20, 2007	36.7	0.018	2.581
December 26, 2007	41.2	0.018	2.599
January 4, 2008	38.5	0.030	2.629
January 15, 2008	36.8	0.035	2.664
January 23, 2008	32.7	0.023	2.687
January 31, 2008	35.9	0.025	2.712
February 6, 2008	30.3	0.012	2.724
February 12, 2008	51.4	0.021	2.745
February 20, 2008	30.8	0.016	2.761
February 27, 2008	34.1	0.015	2.776
March 5, 2008	34.9	0.015	2.791
March 11, 2008	28.5	0.012	2.804
March 17, 2008	28.9	0.012	2.816
March 25, 2008	27.9	0.016	2.832
April 2, 2008	32.5	0.017	2.850
April 9, 2008	33.4	0.018	2.867
April 14, 2008	28.3	0.013	2.880
April 21, 2008	39.1	0.021	2.901
April 25, 2008	26.2	0.008	2.909
May 6, 2008	19.8	0.013	2.922
May 12, 2008	18.4	0.005	2.927
May 19, 2008	18.2	0.006	2.932
May 29, 2008	19.3	0.008	2.941
June 4, 2008	21.5	0.008	2.949
June 9, 2008	23.7	0.009	2.958
June 16, 2008	23.3	0.012	2.970
June 23, 2008	15	0.008	2.978
July 1, 2008	18.2	0.006	2.984
July 16, 2008	15.8	0.009	2.993
July 22, 2008	20.5	0.005	2.998
July 28, 2008	17.3	0.004	3.002
August 11, 2008	33.4	0.033	3.035
August 22, 2008	23.5	0.018	3.053
August 28, 2008	23.7	0.010	3.063
September 3, 2008	21.8	0.006	3.070
September 9, 2008	18.5	0.005	3.075
September 17, 2008	15.2	0.006	3.081
September 22, 2008	13	0.003	3.084
September 29, 2008	12.1	0.004	3.088
October 7, 2008	43.2	0.028	3.116
October 13, 2008	41.4	0.018	3.133
October 22, 2008	22.4	0.014	3.148
October 27, 2008	23.3	0.008	3.156
November 5, 2008	26.6	0.016	3.172
November 13, 2008	15.5	0.008	3.180

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
November 18, 2008	16.5	0.005	3.186
November 24, 2008	14.3	0.006	3.191
December 2, 2008	13.2	0.013	3.205
December 9, 2008	28.2	0.021	3.225
December 19, 2008	40.9	0.043	3.269
December 26, 2008	51.2	0.038	3.307
December 31, 2008	45.8	0.024	3.331
January 8, 2009	25.1	0.008	3.339
January 16, 2009	15.6	0.005	3.343
January 21, 2009	15.1	0.003	3.346
February 4, 2009	30.2	0.016	3.363
February 9, 2009	28.8	0.006	3.369
February 19, 2009	22.7	0.010	3.378
February 23, 2009	22.7	0.004	3.382
March 4, 2009	26.4	0.012	3.394
March 10, 2009	15.9	0.006	3.400
March 16, 2009	14.8	0.005	3.405
March 24, 2009	12.6	0.006	3.411
April 1, 2009	10.6	0.003	3.414
April 7, 2009	25	0.014	3.428
April 14, 2009	23.1	0.013	3.442
April 20, 2009	16.8	0.008	3.450
April 27, 2009	18.3	0.010	3.460
May 7, 2009	13.4	0.011	3.471
May 11, 2009	20.8	0.007	3.478
May 21, 2009	18.7	0.016	3.494
May 27, 2009	17.4	0.009	3.502
June 3, 2009	14.6	0.008	3.511
June 8, 2009	17.1	0.006	3.517
June 18, 2009	17.8	0.013	3.531
June 24, 2009	15.3	0.007	3.538
July 6, 2009	13.2	0.010	3.547
July 15, 2009	8.56	0.005	3.552
July 23, 2009	11.3	0.006	3.558
July 28, 2009	9.81	0.003	3.561
August 4, 2009	11.3	0.005	3.566
August 10, 2009	20.1	0.009	3.576
August 18, 2009	21.7	0.013	3.589
August 25, 2009	20.2	0.011	3.600
September 2, 2009	17.5	0.010	3.609
September 8, 2009	13	0.005	3.615
September 16, 2009	8.47	0.005	3.619
September 21, 2009	11.3	0.004	3.623
October 1, 2009	9.66	0.007	3.630
October 8, 2009	21.4	0.014	3.644
October 12, 2009	22.2	0.008	3.652
October 19, 2009	19.7	0.013	3.665
November 4, 2009	15.6	0.018	3.683
December 16, 2009	49.8	0.088	3.771
December 29, 2009	33.7	0.022	3.793
January 6, 2010	14	0.005	3.798

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
January 20, 2010	10.2	0.009	3.806
February 2, 2010	12.1	0.009	3.815
February 17, 2010	23	0.037	3.852
March 2, 2010	20.9	0.027	3.878
March 15, 2010	9.19	0.009	3.887
April 1, 2010	5.95	0.007	3.894
April 13, 2010	17.1	0.016	3.910
May 4, 2010	14	0.022	3.932
May 17, 2010	6.42	0.005	3.938
June 3, 2010	9.53	0.011	3.949
June 15, 2010	18.7	0.021	3.970
July 1, 2010	13.6	0.021	3.991
July 14, 2010	13	0.014	4.005
August 4, 2010	8.33	0.014	4.019
August 16, 2010	6.06	0.005	4.024
September 1, 2010	5.98	0.006	4.030
September 13, 2010	11.5	0.007	4.038
October 6, 2010	7.36	0.009	4.047
October 19, 2010	6.14	0.005	4.051
November 4, 2010	16.1	0.015	4.066
November 15, 2010	13.7	0.009	4.075
December 1, 2010	20.3	0.020	4.095
December 14, 2010	14.3	0.005	4.100
January 6, 2011	6.68	0.006	4.106
January 19, 2011	22.3	0.024	4.130
February 7, 2011	16.6	0.022	4.152
February 14, 2011	6.3	0.000	4.152
March 1, 2011	8.38	0.008	4.160
March 14, 2011	15.4	0.010	4.170
April 5, 2011	9.49	0.018	4.188
April 18, 2011	7.28	0.005	4.193
May 5, 2011	15.8	0.017	4.210
May 19, 2011	19.5	0.027	4.237
June 2, 2011	15.6	0.021	4.257
June 13, 2011	8.3	0.006	4.264
July 6, 2011	13	0.021	4.285
July 18, 2011	15.5	0.015	4.300
August 3, 2011	10.7	0.012	4.312
August 15, 2011	7.14	0.006	4.318
September 8, 2011	19.8	0.030	4.348
September 27, 2011	13.2	0.014	4.362
October 4, 2011	15.8	0.006	4.368
October 17, 2011	9.82	0.006	4.374
November 2, 2011	12.1	0.011	4.385
November 15, 2011	14.2	0.018	4.403
December 6, 2011	12.2	0.022	4.424
December 13, 2011	6.71	0.002	4.427
January 4, 2012	12.3	0.017	4.444
January 18, 2012	12.6	0.021	4.465
February 1, 2012	8.51	0.010	4.476
February 14, 2012	6.34	0.003	4.480

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
March 1, 2012	4.41	0.002	4.483
March 13, 2012	14.5	0.004	4.485
April 3, 2012	12.1	0.003	4.489
April 16, 2012	5.06	0.006	4.492
May 2, 2012	7.55	0.011	4.499
May 16, 2012	8.4	0.012	4.510
June 5, 2012	8.27	0.002	4.523
June 19, 2012	3.55	0.010	4.525
July 11, 2012	7.16	0.009	4.535
July 24, 2012	8.15	0.002	4.545
August 1, 2012	4.13	0.002	4.547
August 13, 2012	3.39	0.009	4.550
September 5, 2012	6.13	0.010	4.559
September 17, 2012	8.43	0.005	4.569
October 4, 2012	4.51	0.002	4.575
October 16, 2012	2.59	0.002	4.577
November 5, 2012	4.04	0.006	4.584
November 19, 2012	5.41	0.007	4.592
December 4, 2012	5.37	0.007	4.600
December 18, 2012	2.52	0.002	4.602
January 2, 2013	1.33	0.001	4.601
January 15, 2013	4.94	0.007	4.608
January 22, 2013	4.43	0.003	4.611
February 4, 2013	4.24	0.005	4.615
February 20, 2013	1.98	0.001	4.617
March 5, 2013	4.98	0.003	4.619
March 27, 2013	7.58	0.007	4.626
April 2, 2013	6.54	0.002	4.628
April 15, 2013	2.06	0.001	4.629
May 1, 2013	2.69	0.002	4.632
May 14, 2013	5.95	0.010	4.642
June 3, 2013	4.11	0.009	4.651
June 17, 2013	1.09	0.001	4.652
July 2, 2013	3.07	0.003	4.655
July 15, 2013	11.8	0.010	4.665
August 5, 2013	3.8	0.005	4.670
August 20, 2013	1.62	0.001	4.672
September 4, 2013	2.21	0.002	4.674
September 16, 2013	4.73	0.006	4.681
November 18, 2013	8.5	0.025	4.705
November 25, 2013	7.3	0.003	4.709
January 10, 2014	7.57	0.003	4.711
January 31, 2014	7.88	0.006	4.718
March 4, 2014	6.84	0.003	4.721
March 18, 2014	5.5	0.008	4.729
May 6, 2014	4.61	0.010	4.738
May 19, 2014	5.13	0.008	4.746
July 8, 2014	4.23	0.008	4.755
July 24, 2014	3.59	0.002	4.757
September 3, 2014	5.03	0.003	4.759
September 17, 2014	4.12	0.005	4.764

Table F-43
Cumulative Mass Removal
OU III Chemical/Animal Holes Sr-90 System

2024 BNL Groundwater Status Report

Sample Date	Influent Concentration (pCi/L)	mCi pumped	Cumulative mCi
December 2, 2014	5.93	0.011	4.775
December 23, 2014	5.08	0.010	4.785
March 6, 2015	6.05	0.008	4.818
March 23, 2015	2.61	0.006	4.824
June 2, 2015	8.83	0.002	4.826
June 30, 2015	4.33	0.015	4.840
September 2, 2015	6.79	0.002	4.842
September 16, 2015	3.46	0.006	4.848
November 23, 2015	5.07	0.021	4.869
December 1, 2015	5.22	0.002	4.872
December 15, 2015	2.45	0.004	4.876
January 5, 2016	2.25	0.005	4.881
February 17, 2016	4.45	0.004	4.885
March 2, 2016	4.34	0.003	4.887
March 15, 2016	3.81	0.006	4.893
April 15, 2016	1.64	0.003	4.897
April 25, 2016	7	0.000	4.897
May 4, 2016	5.15	0.001	4.897
May 17, 2016	3.15	0.002	4.899
June 8, 2016	2.92	0.004	4.903
June 21, 2016	1.9	0.003	4.906
July 11, 2016	3.26	0.004	4.909
July 25, 2016	2.55	0.001	4.911
September 1, 2016	1.66	0.000	4.911
September 12, 2016	1.83	0.001	4.912
November 1, 2016	1.36	0.003	4.915
November 14, 2016	0.904	0.000	4.916
December 1, 2016	1.78	0.001	4.917
December 15, 2016	1.67	0.00001	4.917
January 15, 2017	2.69	0.00187	4.920
January 30, 2017	0.79	0.00055	4.921
March 15, 2017	3.42	0.00123	4.922
March 31, 2017	0.63	0.00028	4.923
June 6, 2017	2.31	0.00130	4.924
July 12, 2017	3	0.00155	4.925
July 25, 2017	1.37	0.00112	4.926
September 14, 2017	3.76	0.00160	4.928
September 26, 2017	1.17	0.00061	4.929
November 30, 2017	1	0.00085	4.930
January 9, 2018	2.63	0.00252	4.932
March 1, 2018	0.94	0.00039	4.932
March 14, 2018	2.78	0.00115	4.934
May 2, 2018	3.45	0.00146	4.935
May 16, 2018	5.09	0.00215	4.937

*System in stand-by mode as of July 2018

Table F-44
Extraction Well VOC Data
OU VI EDB Pump and Treat System

2024 BNL Groundwater Status Report

Site ID: 000-503 (EW-1)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/29/24	0.73	0	UG/L	0	
Chloroform	01/29/24	0.73	0.5	UG/L	0	
8260 TVOC	04/08/24	0.72	0	UG/L	0	
Chloroform	04/08/24	0.72	0.5	UG/L	0	
8260 TVOC	07/11/24	0.48	0	UG/L	0	
Chloroform	07/11/24	0.48	0.5	UG/L	0	J
8260 TVOC	10/10/24	0.32	0	UG/L	0	
Chloroform	10/10/24	0.32	0.5	UG/L	0	J

Site ID : 000-504 (EW-2)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/29/24	0.73	0	UG/L	0	
Chloroform	01/29/24	0.73	0.5	UG/L	0	
8260 TVOC	04/08/24	0.99	0	UG/L	0	
Chloroform	04/08/24	0.99	0.5	UG/L	0	
8260 TVOC	07/11/24	1.1	0	UG/L	0	
Chloroform	07/11/24	1.1	0.5	UG/L	0	
8260 TVOC	10/10/24	5.33	0	UG/L	0	
Chloroform	10/10/24	0.5	0.5	UG/L	0	
m/p xylene	10/10/24	0.18	1	UG/L	0	J
Naphthalene	10/10/24	0.42	0.5	UG/L	0	J
o-Xylene	10/10/24	1.6	0.5	UG/L	0	
Toluene	10/10/24	0.83	0.5	UG/L	0	
Xylene (total)	10/10/24	1.8	1.5	UG/L	0	

Site ID : 000-578 (EW-3E)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/29/24	0.66	0	UG/L	0	
Chloroform	01/29/24	0.66	0.5	UG/L	0	
EDB	01/29/24	0.15	0.011	UG/L	0	
8260 TVOC	01/31/24	0.66	0	UG/L	0	
Chloroform	01/31/24	0.66	0.5	UG/L	0	
EDB	01/31/24	0.18	0.011	UG/L	0	
8260 TVOC	02/02/24	0.61	0	UG/L	0	
Chloroform	02/02/24	0.61	0.5	UG/L	0	
EDB	02/02/24	0.19	0.01	UG/L	0	
8260 TVOC	02/05/24	0.54	0	UG/L	0	
Chloroform	02/05/24	0.54	0.5	UG/L	0	
EDB	02/05/24	0.16	0.01	UG/L	0	
1,4-Dioxane	02/05/24	0.36	0.2	UG/L	0	

Table F-44
Extraction Well VOC Data
OU VI EDB Pump and Treat System

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Site ID : 000-578 (EW-3E)

1633 TPFAS	02/05/24	0.853	0	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/05/24	0.853	2.2	NG/L	0	J
8260 TVOC	02/15/24	0.53	0	UG/L	0	
Chloroform	02/15/24	0.53	0.5	UG/L	0	
EDB	02/15/24	0.16	0.01	UG/L	0	
8260 TVOC	02/23/24	0.43	0	UG/L	0	
Chloroform	02/23/24	0.43	0.5	UG/L	0	J
EDB	02/23/24	0.17	0.011	UG/L	0	
8260 TVOC	02/28/24	0.41	0	UG/L	0	
Chloroform	02/28/24	0.41	0.5	UG/L	0	J
EDB	02/28/24	0.15	0.01	UG/L	0	
8260 TVOC	03/06/24	0.37	0	UG/L	0	
Chloroform	03/06/24	0.37	0.5	UG/L	0	J
EDB	03/06/24	0.12	0.01	UG/L	0	
8260 TVOC	03/15/24	0.4	0	UG/L	0	
Chloroform	03/15/24	0.4	0.5	UG/L	0	J
EDB	03/15/24	0.13	0.011	UG/L	0	
8260 TVOC	03/22/24	0.38	0	UG/L	0	
Chloroform	03/22/24	0.38	0.5	UG/L	0	J
EDB	03/22/24	0.13	0.011	UG/L	0	
8260 TVOC	03/26/24	0.4	0	UG/L	0	
Chloroform	03/26/24	0.4	0.5	UG/L	0	J
EDB	03/26/24	0.14	0.01	UG/L	0	
8260 TVOC	04/08/24	0.48	0	UG/L	0	
Chloroform	04/08/24	0.48	0.5	UG/L	0	J
EDB	04/08/24	0.11	0.01	UG/L	0	
8260 TVOC	05/06/24	0.42	0	UG/L	0	
Chloroform	05/06/24	0.42	0.5	UG/L	0	J
EDB	05/06/24	0.11	0.01	UG/L	0	
8260 TVOC	06/06/24	0.49	0	UG/L	0	
Chloroform	06/06/24	0.49	0.5	UG/L	0	J
EDB	06/06/24	0.12	0.011	UG/L	0	
8260 TVOC	07/11/24	0.46	0	UG/L	0	
Chloroform	07/11/24	0.46	0.5	UG/L	0	J
EDB	07/11/24	0.086	0.011	UG/L	0	
8260 TVOC	08/05/24	0.44	0	UG/L	0	
Chloroform	08/05/24	0.44	0.5	UG/L	0	J
EDB	08/05/24	0.08	0.01	UG/L	0	
8260 TVOC	09/09/24	0.45	0	UG/L	0	
Chloroform	09/09/24	0.45	0.5	UG/L	0	J
EDB	09/09/24	0.059	0.01	UG/L	0	
8260 TVOC	10/07/24	0.53	0	UG/L	0	
Chloroform	10/07/24	0.53	0.5	UG/L	0	
EDB	10/07/24	0.06	0.01	UG/L	0	
8260 TVOC	11/07/24	0.61	0	UG/L	0	
Chloroform	11/07/24	0.61	0.5	UG/L	0	

Table F-44
Extraction Well VOC Data
OU VI EDB Pump and Treat System

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Site ID : 000-578 (EW-3E)

EDB	11/07/24	0.055	0.02	UG/L	0	
8260 TVOC	12/09/24	0.45	0	UG/L	0	
Chloroform	12/09/24	0.45	0.5	UG/L	0	J
EDB	12/09/24	0.0454	0.1	UG/L	0	

Site ID : 000-579 (EW-4E)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	01/29/24	0.59	0	UG/L	0	
Chloroform	01/29/24	0.23	0.5	UG/L	0	J
EDB	01/29/24	0.36	0.5	UG/L	0	J
EDB	01/29/24	0.31	0.01	UG/L	0	
8260 TVOC	01/31/24	0.72	0	UG/L	0	
Chloroform	01/31/24	0.3	0.5	UG/L	0	J
EDB	01/31/24	0.42	0.5	UG/L	0	J
EDB	01/31/24	0.46	0.053	UG/L	0	D
8260 TVOC	02/02/24	0.92	0	UG/L	0	
Chloroform	02/02/24	0.31	0.5	UG/L	0	J
EDB	02/02/24	0.61	0.5	UG/L	0	
EDB	02/02/24	0.71	0.052	UG/L	0	D
8260 TVOC	02/05/24	1.09	0	UG/L	0	
Chloroform	02/05/24	0.35	0.5	UG/L	0	J
EDB	02/05/24	0.74	0.5	UG/L	0	
EDB	02/05/24	0.76	0.052	UG/L	0	D
1,4-Dioxane	02/05/24	0.19	0.2	UG/L	0	J
1633 TPFAS	02/05/24	1.04	0	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/05/24	1.04	2.09	NG/L	0	J
8260 TVOC	02/15/24	0.97	0	UG/L	0	
Chloroform	02/15/24	0.42	0.5	UG/L	0	J
EDB	02/15/24	0.92	0.1	UG/L	0	D
EDB	02/15/24	0.55	0.5	UG/L	0	
8260 TVOC	02/23/24	0.98	0	UG/L	0	
Chloroform	02/23/24	0.38	0.5	UG/L	0	J
EDB	02/23/24	0.6	0.5	UG/L	0	
EDB	02/23/24	0.76	0.1	UG/L	0	D
8260 TVOC	02/28/24	0.83	0	UG/L	0	
Chloroform	02/28/24	0.3	0.5	UG/L	0	J
EDB	02/28/24	0.53	0.5	UG/L	0	
EDB	02/28/24	0.69	0.1	UG/L	0	D
8260 TVOC	03/06/24	0.71	0	UG/L	0	
Chloroform	03/06/24	0.39	0.5	UG/L	0	J
EDB	03/06/24	0.37	0.021	UG/L	0	D
EDB	03/06/24	0.32	0.5	UG/L	0	J
8260 TVOC	03/15/24	0.8	0	UG/L	0	
Chloroform	03/15/24	0.44	0.5	UG/L	0	J

Table F-44
Extraction Well VOC Data
OU VI EDB Pump and Treat System

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Site ID : 000-579 (EW-4E)

EDB	03/15/24	0.36	0.5	UG/L	0	J
EDB	03/15/24	0.42	0.011	UG/L	0	
8260 TVOC	03/22/24	0.8	0	UG/L	0	
Chloroform	03/22/24	0.42	0.5	UG/L	0	J
EDB	03/22/24	0.42	0.01	UG/L	0	
EDB	03/22/24	0.38	0.5	UG/L	0	J
8260 TVOC	03/26/24	0.85	0	UG/L	0	
Chloroform	03/26/24	0.43	0.5	UG/L	0	J
EDB	03/26/24	0.42	0.5	UG/L	0	J
EDB	03/26/24	0.42	0.011	UG/L	0	
8260 TVOC	04/08/24	0.77	0	UG/L	0	
Chloroform	04/08/24	0.45	0.5	UG/L	0	J
EDB	04/08/24	0.37	0.01	UG/L	0	
EDB	04/08/24	0.32	0.5	UG/L	0	J
8260 TVOC	05/06/24	0.73	0	UG/L	0	
Chloroform	05/06/24	0.51	0.5	UG/L	0	
EDB	05/06/24	0.22	0.5	UG/L	0	J
EDB	05/06/24	0.35	0.052	UG/L	0	D
8260 TVOC	06/06/24	0.65	0	UG/L	0	
Chloroform	06/06/24	0.65	0.5	UG/L	0	
EDB	06/06/24	0.29	0.01	UG/L	0	
8260 TVOC	07/11/24	0.77	0	UG/L	0	
Chloroform	07/11/24	0.56	0.5	UG/L	0	
EDB	07/11/24	0.21	0.5	UG/L	0	J
EDB	07/11/24	0.22	0.021	UG/L	0	D
8260 TVOC	08/05/24	0.53	0	UG/L	0	
Chloroform	08/05/24	0.53	0.5	UG/L	0	
EDB	08/05/24	0.18	0.01	UG/L	0	
8260 TVOC	09/09/24	0.54	0	UG/L	0	
Chloroform	09/09/24	0.54	0.5	UG/L	0	
EDB	09/09/24	0.15	0.01	UG/L	0	
8260 TVOC	10/07/24	0.65	0	UG/L	0	
Chloroform	10/07/24	0.65	0.5	UG/L	0	
EDB	10/07/24	0.14	0.01	UG/L	0	
8260 TVOC	11/07/24	0.66	0	UG/L	0	
Chloroform	11/07/24	0.66	0.5	UG/L	0	
EDB	11/07/24	0.11	0.02	UG/L	0	
8260 TVOC	12/09/24	0.57	0	UG/L	0	
Chloroform	12/09/24	0.57	0.5	UG/L	0	J
EDB	12/09/24	0.107	0.1	UG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.

Table F-45
System Influent VOC Data
OU VI EDB Pump and Treat System

2024 BNL Groundwater Status Report

Site ID: 000-512 (Combined Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	1/29/2024	0.66	0	UG/L	0	
Chloroform	1/29/2024	0.42	0.5	UG/L	0	J
EDB	1/29/2024	0.24	0.5	UG/L	0	J
EDB	1/29/2024	0.26	0.01	UG/L	0	
8260 TVOC	2/5/2024	0.88	0	UG/L	0	
Chloroform	2/5/2024	0.48	0.5	UG/L	0	J
EDB	2/5/2024	0.54	0.053	UG/L	0	D
EDB	2/5/2024	0.4	0.5	UG/L	0	J
1,4-Dioxane	2/5/2024	0.27	0.23	UG/L	0	
8260 TVOC	3/6/2024	0.33	0	UG/L	0	
Chloroform	3/6/2024	0.33	0.5	UG/L	0	J
EDB	3/6/2024	0.25	0.021	UG/L	0	D
8260 TVOC	4/8/2024	0.66	0	UG/L	0	
Chloroform	4/8/2024	0.43	0.5	UG/L	0	J
EDB	4/8/2024	0.23	0.011	UG/L	0	
EDB	4/8/2024	0.23	0.5	UG/L	0	J
1,4-Dioxane	4/8/2024	0.23	0.2	UG/L	0	
8260 TVOC	5/6/2024	0.4	0	UG/L	0	
Chloroform	5/6/2024	0.4	0.5	UG/L	0	J
EDB	5/6/2024	0.21	0.01	UG/L	0	
8260 TVOC	6/6/2024	0.53	0	UG/L	0	
Chloroform	6/6/2024	0.53	0.5	UG/L	0	
EDB	6/6/2024	0.21	0.01	UG/L	0	
8260 TVOC	7/11/2024	0.46	0	UG/L	0	
Chloroform	7/11/2024	0.46	0.5	UG/L	0	J
EDB	7/11/2024	0.17	0.01	UG/L	0	
8260 TVOC	8/5/2024	0.49	0	UG/L	0	
Chloroform	8/5/2024	0.49	0.5	UG/L	0	J
EDB	8/5/2024	0.15	0.01	UG/L	0	
8260 TVOC	9/9/2024	0.48	0	UG/L	0	
Chloroform	9/9/2024	0.48	0.5	UG/L	0	J
EDB	9/9/2024	0.1	0.01	UG/L	0	
8260 TVOC	10/7/2024	0.58	0	UG/L	0	
Chloroform	10/7/2024	0.58	0.5	UG/L	0	
EDB	10/7/2024	0.09	0.01	UG/L	0	
8260 TVOC	11/7/2024	0.64	0	UG/L	0	
Chloroform	11/7/2024	0.64	0.5	UG/L	0	
EDB	11/7/2024	0.084	0.02	UG/L	0	
1,4-Dioxane	11/21/2024	0.2	0.2	UG/L	0	
8260 TVOC	12/9/2024	0.58	0	UG/L	0	
Chloroform	12/9/2024	0.58	0.5	UG/L	0	J
EDB	12/9/2024	0.0823	0.1	UG/L	0	

J - Estimated value.
B - Compound was found in both the sample and associated laboratory blank.

Table F-46
System Effluent VOC Data
OU VI EDB Pump and Treat System

2024 BNL Groundwater Status Report

Site ID: 000-510 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	1/29/2024	0.32	0	UG/L	0	
Chloroform	1/29/2024	0.32	0.5	UG/L	0	J
8260 TVOC	2/5/2024	0	0	UG/L	0	
1,4-Dioxane	2/5/2024	0.27	0.2	UG/L	0	
8260 TVOC	3/6/2024	0	0	UG/L	0	
8260 TVOC	4/8/2024	0.24	0	UG/L	0	
Chloroform	4/8/2024	0.24	0.5	UG/L	0	J
1,4-Dioxane	4/8/2024	0.24	0.21	UG/L	0	
8260 TVOC	5/6/2024	0.33	0	UG/L	0	
Chloroform	5/6/2024	0.33	0.5	UG/L	0	J
8260 TVOC	6/6/2024	0.43	0	UG/L	0	
Chloroform	6/6/2024	0.43	0.5	UG/L	0	J
8260 TVOC	7/11/2024	0	0	UG/L	0	
8260 TVOC	8/5/2024	0	0	UG/L	0	
8260 TVOC	9/9/2024	0	0	UG/L	0	
8260 TVOC	10/7/2024	0.26	0	UG/L	0	
Chloroform	10/7/2024	0.26	0.5	UG/L	0	J
8260 TVOC	11/7/2024	0.49	0	UG/L	0	
Chloroform	11/7/2024	0.49	0.5	UG/L	0	J
1,4-Dioxane	11/21/2024	0.2	0.2	UG/L	0	
8260 TVOC	12/9/2024	0.48	0	UG/L	0	
Chloroform	12/9/2024	0.48	0.5	UG/L	0	J

J - Estimated Value below the method detection limit of 0.50 UG/L

B - Compound was found in both the sample and associated laboratory blank.

Table F-47
Extraction Well Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID : 073-34 (CF-RW-A)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	385.59	0	NG/L	0	
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	01/25/24	1.1	5.9	NG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/25/24	1.1	5.9	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	01/25/24	6.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	01/25/24	5.2	5.9	NG/L	0	J
Perfluorodecanoic acid (PFDA)	01/25/24	0.31	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	01/25/24	3.1	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	01/25/24	6.1	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	01/25/24	73	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	17	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	01/25/24	1.3	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.58	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	240	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	6.7	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	01/25/24	6.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	01/25/24	17	3	NG/L	0	
1633 TPFAS	02/22/24	707.3	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/22/24	2.4	5.9	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	02/22/24	8.1	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	02/22/24	6.6	5.9	NG/L	0	
Perfluorodecanoic acid (PFDA)	02/22/24	0.22	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	02/22/24	7.1	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	02/22/24	9.8	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	02/22/24	140	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	27	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	02/22/24	1.4	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.68	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	460	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	11	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	02/22/24	11	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	02/22/24	22	3	NG/L	0	
1633 TPFAS	03/27/24	1092.84	0	NG/L	0	
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	03/27/24	2.5	5.7	NG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/27/24	4	5.7	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	03/27/24	9.7	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	03/27/24	7.9	5.7	NG/L	0	
Perfluorodecanoic acid (PFDA)	03/27/24	0.44	1.4	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	03/27/24	17	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	03/27/24	14	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/27/24	240	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/27/24	31	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	03/27/24	2.1	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/27/24	1.2	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/27/24	700	14	NG/L	0	D
Perfluorooctanoic acid (PFOA)	03/27/24	20	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	03/27/24	16	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	03/27/24	27	2.9	NG/L	0	
1633 TPFAS	04/19/24	1645.7	0	NG/L	0	
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	04/19/24	2.7	6.2	NG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	04/19/24	4.7	6.2	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	04/19/24	12	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	04/19/24	9	6.2	NG/L	0	
Perfluorodecanoic acid (PFDA)	04/19/24	0.5	1.6	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	04/19/24	26	1.6	NG/L	0	

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Site ID : 073-34 (CF-RW-A)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoroheptanoic acid (PFHpA)	04/19/24	17	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/19/24	250	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/19/24	41	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	04/19/24	2.3	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	1.5	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	1200	16	NG/L	0	D
Perfluorooctanoic acid (PFOA)	04/19/24	23	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	04/19/24	21	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	04/19/24	35	3.1	NG/L	0	
1633 TPFAS	05/11/24	1772.2	0	NG/L	0	
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	05/11/24	3	7	NG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	05/11/24	10	7	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/11/24	18	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	05/11/24	13	7	NG/L	0	
Perfluorodecanoic acid (PFDA)	05/11/24	0.6	1.8	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	05/11/24	37	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	05/11/24	23	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/11/24	380	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	69	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	05/11/24	3.4	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/11/24	2.2	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	05/11/24	1100	18	NG/L	0	D
Perfluorooctanoic acid (PFOA)	05/11/24	36	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	05/11/24	28	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	05/11/24	49	3.5	NG/L	0	
1633 TPFAS	06/08/24	1371.35	0	NG/L	0	
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	06/08/24	1.9	5.9	NG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	06/08/24	5.7	5.9	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	06/08/24	13	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	06/08/24	7.6	5.9	NG/L	0	
Perfluorodecanoic acid (PFDA)	06/08/24	0.35	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	06/08/24	11	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	06/08/24	15	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/08/24	260	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	06/08/24	40	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	06/08/24	1.8	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	06/08/24	950	15	NG/L	0	D
Perfluorooctanoic acid (PFOA)	06/08/24	21	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	06/08/24	18	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	06/08/24	26	2.9	NG/L	0	
1633 TPFAS	07/27/24	1197.1	0	NG/L	0	
Perfluorobutyric acid (PFBA)	07/27/24	8.1	19	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	07/27/24	12	9.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	07/27/24	260	9.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/27/24	30	9.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/27/24	810	9.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	31	9.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	07/27/24	20	9.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	07/27/24	26	9.7	NG/L	0	
1633 TPFAS	08/17/24	1286.3	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/17/24	10	9.5	NG/L	0	
Perfluorobutyric acid (PFBA)	08/17/24	5.7	19	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	08/17/24	9.6	9.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	08/17/24	200	9.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	08/17/24	27	9.5	NG/L	0	

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanesulfonate (PFOS)	08/17/24	980	9.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	18	9.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	08/17/24	15	9.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	08/17/24	21	9.5	NG/L	0	
1633 TPFAS	09/19/24	961.7	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	09/19/24	3	3.6	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	09/19/24	10	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	09/19/24	7.1	3.6	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	09/19/24	11	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	09/19/24	8.1	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	150	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	09/19/24	20	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	09/19/24	3.1	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	09/19/24	1.4	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	09/19/24	700	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	14	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	09/19/24	15	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	09/19/24	19	1.8	NG/L	0	
1633 TPFAS	10/05/24	876.7	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	10/05/24	2.1	3.3	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	10/05/24	8.5	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	10/05/24	5.4	3.3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	10/05/24	9.4	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/05/24	6.7	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/05/24	120	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/05/24	17	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	10/05/24	2.6	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	660	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	15	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/05/24	12	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	10/05/24	18	1.7	NG/L	0	
1633 TPFAS	11/09/24	707.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	11/09/24	7.5	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	11/09/24	4.6	3.5	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	11/09/24	8.1	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/09/24	5.3	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/09/24	84	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/09/24	14	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	11/09/24	2.9	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/09/24	550	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/09/24	8.8	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/09/24	9.3	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/09/24	13	1.7	NG/L	0	
1633 TPFAS	12/14/24	635.3	0	NG/L	0	
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	12/14/24	1.7	3	NG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	12/14/24	1.4	3	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	12/14/24	4.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	12/14/24	3.2	3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	12/14/24	4.9	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/14/24	3.7	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/14/24	57	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/14/24	10	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	12/14/24	5.2	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/14/24	1.3	1.5	NG/L	0	J

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanesulfonate (PFOS)	12/14/24	520	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	6.7	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/14/24	6.1	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/14/24	9.7	1.5	NG/L	0	

Site ID : 073-35 (CF-RW-B)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	63.6	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/25/24	0.38	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	01/25/24	0.56	6.1	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	01/25/24	0.44	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/25/24	7.6	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	1.1	1.5	NG/L	0	J
Perfluorononanoic acid (PFNA)	01/25/24	1.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	01/25/24	49	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	0.97	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	01/25/24	0.33	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	01/25/24	0.66	3	NG/L	0	J
Perfluorotridecanoic acid (PFTrDA)	01/25/24	0.58	1.5	NG/L	0	J
Perfluoroundecanoic acid (PFUdA)	01/25/24	0.28	1.5	NG/L	0	J
1633 TPFAS	02/22/24	72.24	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/22/24	0.28	1.6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	02/22/24	0.39	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	02/22/24	6.2	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	1	1.6	NG/L	0	J
Perfluorononanoic acid (PFNA)	02/22/24	1.4	1.6	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.35	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	60	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	0.95	1.6	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	02/22/24	0.28	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	02/22/24	0.45	3.1	NG/L	0	J
Perfluorotridecanoic acid (PFTrDA)	02/22/24	0.58	1.6	NG/L	0	J
Perfluoroundecanoic acid (PFUdA)	02/22/24	0.36	1.6	NG/L	0	J
1633 TPFAS	03/27/24	40.54	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	03/27/24	0.2	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	03/27/24	0.29	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	03/27/24	4	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/27/24	0.61	1.5	NG/L	0	J
Perfluorononanoic acid (PFNA)	03/27/24	2.9	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/27/24	0.29	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/27/24	31	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/27/24	0.86	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	03/27/24	0.39	3	NG/L	0	J
1633 TPFAS	04/19/24	59.45	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/19/24	0.28	1.6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	04/19/24	0.33	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	04/19/24	4.9	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/19/24	0.83	1.6	NG/L	0	J
Perfluorononanoic acid (PFNA)	04/19/24	5.2	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	0.3	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	45	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/19/24	1.1	1.6	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	04/19/24	0.24	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	04/19/24	0.51	3.1	NG/L	0	J
Perfluorotridecanoic acid (PFTrDA)	04/19/24	0.43	1.6	NG/L	0	J

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoroundecanoic acid (PFUdA)	04/19/24	0.33	1.6	NG/L	0	J
1633 TPFAS	05/11/24	87.86	0	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	05/11/24	0.5	1.8	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	05/11/24	7.5	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	1.2	1.8	NG/L	0	J
Perfluorononanoic acid (PFNA)	05/11/24	7.5	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/11/24	0.35	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	68	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/11/24	1.2	1.8	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	05/11/24	0.64	3.5	NG/L	0	J
Perfluorotridecanoic acid (PFTrDA)	05/11/24	0.49	1.8	NG/L	0	J
Perfluoroundecanoic acid (PFUdA)	05/11/24	0.48	1.8	NG/L	0	J
1633 TPFAS	06/08/24	58.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/08/24	0.31	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	06/08/24	0.35	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	06/08/24	6.4	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	06/08/24	4.1	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	06/08/24	0.38	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	06/08/24	45	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/08/24	1.1	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	06/08/24	0.41	3	NG/L	0	J
Perfluoroundecanoic acid (PFUdA)	06/08/24	0.45	1.5	NG/L	0	J
1633 TPFAS	07/27/24	84.2	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	07/27/24	11	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	07/27/24	6.3	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/27/24	65	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	1.9	1.7	NG/L	0	
1633 TPFAS	08/17/24	90.26	0	NG/L	0	
Perfluorobutyric acid (PFBA)	08/17/24	0.26	3.3	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	08/17/24	17	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	08/17/24	3.9	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/17/24	67	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	2.1	1.6	NG/L	0	
1633 TPFAS	09/19/24	128.6	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	28	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	09/19/24	5.1	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/19/24	93	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	2.5	1.7	NG/L	0	
1633 TPFAS	10/05/24	154.64	0	NG/L	0	
Perfluorobutyric acid (PFBA)	10/05/24	0.8	3.4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	10/05/24	0.84	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	10/05/24	35	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	10/05/24	4.7	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	110	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	3.3	1.7	NG/L	0	
1633 TPFAS	11/09/24	139.1	0	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/09/24	0.84	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	11/09/24	29	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	11/09/24	5.4	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/09/24	100	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/09/24	3.3	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/09/24	0.56	1.7	NG/L	0	J
1633 TPFAS	12/14/24	134.07	0	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/14/24	0.74	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/14/24	24	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/14/24	1.3	1.7	NG/L	0	J
Perfluorononanoic acid (PFNA)	12/14/24	4.9	1.7	NG/L	0	

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanesulfonate (PFOS)	12/14/24	99	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	3	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/14/24	0.62	1.7	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	12/14/24	0.51	1.7	NG/L	0	J

Site ID : 083-45 (CF-RW-C)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	4.24	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/25/24	0.21	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/25/24	0.79	1.5	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	01/25/24	0.31	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.23	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	1.7	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	1	1.5	NG/L	0	J
1,4-Dioxane	01/25/24	1	0.2	UG/L	0	
1633 TPFAS	02/22/24	4.02	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/22/24	0.18	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	02/22/24	0.66	1.5	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	02/22/24	0.32	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.28	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	1.6	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	0.98	1.5	NG/L	0	J
1,4-Dioxane	02/22/24	1	0.21	UG/L	0	
1633 TPFAS	03/27/24	3.42	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/27/24	0.84	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	03/27/24	0.47	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/27/24	1.4	1.5	NG/L	0	J
Perfluorooctanoic acid (PFOA)	03/27/24	0.71	1.5	NG/L	0	J
1,4-Dioxane	03/27/24	1.5	0.2	UG/L	0	
1633 TPFAS	04/19/24	3.28	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/19/24	0.69	1.6	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	04/19/24	0.18	1.6	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	0.18	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	1.4	1.6	NG/L	0	J
Perfluorooctanoic acid (PFOA)	04/19/24	0.83	1.6	NG/L	0	J
1,4-Dioxane	04/19/24	0.94	0.21	UG/L	0	B
1633 TPFAS	05/11/24	3.7	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/11/24	1	1.8	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	05/11/24	0.19	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	1.7	1.8	NG/L	0	J
Perfluorooctanoic acid (PFOA)	05/11/24	0.81	1.8	NG/L	0	J
1,4-Dioxane	05/11/24	0.83	0.2	UG/L	0	
1633 TPFAS	06/08/24	1.84	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/08/24	0.64	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	06/08/24	1.2	1.5	NG/L	0	J
1,4-Dioxane	06/08/24	0.7	0.2	UG/L	0	
1633 TPFAS	07/27/24	0.82	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	0.82	1.7	NG/L	0	J
1,4-Dioxane	07/27/24	0.71	0.2	UG/L	0	
1633 TPFAS	08/17/24	0	0	NG/L	0	
1,4-Dioxane	08/17/24	0.68	0.2	UG/L	0	
1,4-Dioxane	08/19/24	0.77	0.23	UG/L	0	
1633 TPFAS	09/19/24	3.96	0	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	09/19/24	1.3	1.7	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	09/19/24	2	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	0.66	1.7	NG/L	0	J

Table F-47
Extraction Well Data
OU X PFAS CFH System

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Site ID : 083-45 (CF-RW-C)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	10/05/24	2.27	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	1.5	1.7	NG/L	0	J
Perfluorooctanoic acid (PFOA)	10/05/24	0.77	1.7	NG/L	0	J
1,4-Dioxane	10/05/24	2.1	0.23	UG/L	0	
1633 TPFAS	11/09/24	1.6	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/09/24	1.6	1.6	NG/L	0	
1,4-Dioxane	11/09/24	0.73	0.21	UG/L	0	
1633 TPFAS	12/14/24	1.91	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/14/24	1.2	1.6	NG/L	0	J
Perfluorooctanoic acid (PFOA)	12/14/24	0.71	1.6	NG/L	0	J
1,4-Dioxane	12/14/24	0.57	0.25	UG/L	0	

Site ID : 083-46 (CF-RW-D)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	71.463	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/25/24	0.55	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	01/25/24	0.76	6	NG/L	0	J
Perfluorodecanoic acid (PFDA)	01/25/24	0.093	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	01/25/24	0.49	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/25/24	8.8	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	1.7	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	01/25/24	1.1	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.16	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	55	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	1.3	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	01/25/24	0.46	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	01/25/24	0.71	3	NG/L	0	J
Perfluoroundecanoic acid (PFUdA)	01/25/24	0.34	1.5	NG/L	0	J
1,4-Dioxane	01/25/24	0.17	0.2	UG/L	0	J
1633 TPFAS	02/22/24	82.22	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/22/24	0.52	1.6	NG/L	0	J
Perfluorobutyric acid (PFBA)	02/22/24	0.71	6.4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	02/22/24	0.51	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	02/22/24	8.9	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	1.6	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	02/22/24	1.1	1.6	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.27	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	66	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	1.2	1.6	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	02/22/24	0.42	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	02/22/24	0.7	3.2	NG/L	0	J
Perfluoroundecanoic acid (PFUdA)	02/22/24	0.29	1.6	NG/L	0	J
1,4-Dioxane	02/22/24	0.22	0.22	UG/L	0	
1633 TPFAS	03/27/24	52.85	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	03/27/24	0.41	1.4	NG/L	0	J
Perfluorobutyric acid (PFBA)	03/27/24	0.64	5.8	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	03/27/24	0.42	1.4	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	03/27/24	7.3	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/27/24	1.2	1.4	NG/L	0	J
Perfluorononanoic acid (PFNA)	03/27/24	0.77	1.4	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	03/27/24	0.21	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/27/24	40	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/27/24	0.95	1.4	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	03/27/24	0.36	1.4	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	03/27/24	0.59	2.9	NG/L	0	J
1,4-Dioxane	03/27/24	0.21	0.2	UG/L	0	
1633 TPFAS	04/19/24	66.09	0	NG/L	0	

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Site ID : 083-46 (CF-RW-D)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorobutanesulfonate (PFBS)	04/19/24	0.49	1.4	NG/L	0	J
Perfluorobutyric acid (PFBA)	04/19/24	0.72	5.7	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	04/19/24	0.41	1.4	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	04/19/24	7.7	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/19/24	1.2	1.4	NG/L	0	J
Perfluorononanoic acid (PFNA)	04/19/24	0.9	1.4	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	0.27	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	52	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/19/24	1.3	1.4	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	04/19/24	0.41	1.4	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	04/19/24	0.69	2.9	NG/L	0	J
1633 TPFAS	05/11/24	69.19	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/11/24	0.61	1.8	NG/L	0	J
Perfluorobutyric acid (PFBA)	05/11/24	0.81	7	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	05/11/24	0.47	1.8	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	05/11/24	9.3	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	1.6	1.8	NG/L	0	J
Perfluorononanoic acid (PFNA)	05/11/24	0.95	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	53	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/11/24	1.3	1.8	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	05/11/24	0.4	1.8	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	05/11/24	0.75	3.5	NG/L	0	J
1,4-Dioxane	05/11/24	0.19	0.2	UG/L	0	J
1633 TPFAS	06/08/24	47.64	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/08/24	0.55	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	06/08/24	0.71	5.9	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	06/08/24	0.39	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	06/08/24	6.6	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	06/08/24	1.5	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	06/08/24	0.82	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	06/08/24	0.18	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	06/08/24	35	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/08/24	1	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	06/08/24	0.31	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	06/08/24	0.58	2.9	NG/L	0	J
1,4-Dioxane	06/08/24	0.2	0.2	UG/L	0	
1633 TPFAS	07/27/24	44.23	0	NG/L	0	
Perfluorobutyric acid (PFBA)	07/27/24	0.78	3.3	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	07/27/24	5.2	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/27/24	36	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	1.5	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	07/27/24	0.75	1.6	NG/L	0	J
1,4-Dioxane	07/27/24	0.17	0.2	UG/L	0	J
1633 TPFAS	08/17/24	39.61	0	NG/L	0	
Perfluorobutyric acid (PFBA)	08/17/24	0.71	3.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	08/17/24	5.6	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/17/24	32	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	1.3	1.7	NG/L	0	J
1,4-Dioxane	08/17/24	0.14	0.2	UG/L	0	J
1,4-Dioxane	08/19/24	0.11	0.22	UG/L	0	J
1633 TPFAS	09/19/24	29.81	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	3.6	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	09/19/24	0.96	1.7	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	09/19/24	0.55	1.7	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	09/19/24	23	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	1.7	1.7	NG/L	0	
1633 TPFAS	10/05/24	25.56	0	NG/L	0	
Perfluorobutyric acid (PFBA)	10/05/24	0.86	3.6	NG/L	0	J

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OU X PFAS CFH System

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Site ID : 083-46 (CF-RW-D)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorohexanesulfonate (PFHxS)	10/05/24	3.4	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	20	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	1.3	1.8	NG/L	0	J
1633 TPFAS	11/09/24	22.08	0	NG/L	0	
Perfluorobutyric acid (PFBA)	11/09/24	0.85	3.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	11/09/24	3.4	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/09/24	16	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/09/24	1.3	1.7	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	11/09/24	0.53	1.7	NG/L	0	J
1633 TPFAS	12/14/24	22.61	0	NG/L	0	
Perfluorobutyric acid (PFBA)	12/14/24	0.62	3.2	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	12/14/24	0.45	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/14/24	2.6	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/14/24	1.1	1.6	NG/L	0	J
Perfluorononanoic acid (PFNA)	12/14/24	0.47	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	12/14/24	15	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	1.8	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/14/24	0.57	1.6	NG/L	0	J

Site ID : 084-102 (CF-RW-E)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	648.28	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/25/24	0.71	6.1	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	01/25/24	5.3	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	01/25/24	3.2	6.1	NG/L	0	J
Perfluorodecanoic acid (PFDA)	01/25/24	0.17	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	01/25/24	6.3	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	01/25/24	3.7	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	01/25/24	99	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	16	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	01/25/24	31	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	1.8	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	01/25/24	450	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	01/25/24	8.9	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	01/25/24	8.2	3	NG/L	0	
1,4-Dioxane	01/25/24	0.21	0.23	UG/L	0	J
1633 TPFAS	02/22/24	642.17	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/22/24	0.62	6	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	02/22/24	4.3	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	02/22/24	2.9	6	NG/L	0	J
Perfluorodecanoic acid (PFDA)	02/22/24	0.15	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	02/22/24	6.6	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	02/22/24	3.5	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	02/22/24	94	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	14	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	02/22/24	29	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	1.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	02/22/24	460	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	11	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	02/22/24	7.3	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	02/22/24	7.1	3	NG/L	0	
1,4-Dioxane	02/22/24	0.24	0.22	UG/L	0	
1633 TPFAS	05/11/24	678.3	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/11/24	4.6	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	05/11/24	2.9	7	NG/L	0	J

Table F-47
Extraction Well Data
OU X PFAS CFH System

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Site ID : 084-102 (CF-RW-E)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoroheptanesulfonate (PFHpS)	05/11/24	6.2	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	05/11/24	3.6	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/11/24	100	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	13	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	05/11/24	31	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/11/24	2.3	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	05/11/24	490	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/11/24	9.9	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	05/11/24	7	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	05/11/24	7.8	3.5	NG/L	0	
1,4-Dioxane	05/11/24	0.21	0.22	UG/L	0	J
1633 TPFAS	06/08/24	538.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/08/24	3.9	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	06/08/24	2.4	5.7	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	06/08/24	4.9	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	06/08/24	2.9	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/08/24	85	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	06/08/24	12	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	06/08/24	27	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	06/08/24	1.5	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	06/08/24	380	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/08/24	7.9	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	06/08/24	5.6	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	06/08/24	5.8	2.9	NG/L	0	
1,4-Dioxane	06/08/24	0.23	0.2	UG/L	0	
1633 TPFAS	07/27/24	624.4	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	07/27/24	4.6	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	07/27/24	2.6	3.3	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	07/27/24	5.1	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	07/27/24	2.9	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	07/27/24	80	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/27/24	13	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	07/27/24	39	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/27/24	450	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	14	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	07/27/24	6.4	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	07/27/24	6.8	1.7	NG/L	0	
1,4-Dioxane	07/27/24	0.2	0.2	UG/L	0	
1633 TPFAS	08/17/24	538.1	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/17/24	4.1	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	08/17/24	2.1	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	08/17/24	2.6	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	08/17/24	77	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	08/17/24	11	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	08/17/24	36	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	08/17/24	1.9	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/17/24	380	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	11	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	08/17/24	6.4	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	08/17/24	6	1.7	NG/L	0	
1,4-Dioxane	08/17/24	0.19	0.2	UG/L	0	J
1,4-Dioxane	08/19/24	0.21	0.21	UG/L	0	
1633 TPFAS	09/19/24	604.8	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	09/19/24	4	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	09/19/24	2.2	3.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	09/19/24	2.6	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	83	1.8	NG/L	0	

Table F-47
Extraction Well Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID : 084-102 (CF-RW-E)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorohexanoic acid (PFHxA)	09/19/24	9.8	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	09/19/24	29	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	09/19/24	1.5	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	09/19/24	450	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	10	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	09/19/24	6.8	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	09/19/24	5.9	1.8	NG/L	0	
1633 TPFAS	10/05/24	522.6	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	10/05/24	3.8	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	10/05/24	2.6	3.6	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	10/05/24	3.3	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/05/24	2.7	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/05/24	71	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/05/24	11	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	10/05/24	27	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	10/05/24	1.4	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	10/05/24	380	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	9.2	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/05/24	5.1	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	10/05/24	5.5	1.8	NG/L	0	
1,4-Dioxane	10/05/24	0.23	0.24	UG/L	0	J
1633 TPFAS	11/09/24	515.4	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	11/09/24	3.4	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	11/09/24	2.4	3.2	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	11/09/24	2.7	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/09/24	2.7	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/09/24	78	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/09/24	11	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	11/09/24	24	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	11/09/24	1.3	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	11/09/24	370	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/09/24	8.4	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/09/24	6	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/09/24	5.5	1.6	NG/L	0	
1,4-Dioxane	11/09/24	0.21	0.2	UG/L	0	
1633 TPFAS	12/14/24	456	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	12/14/24	3.5	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	12/14/24	1.8	3.4	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	12/14/24	3.9	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/14/24	2.9	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/14/24	71	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/14/24	10	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	12/14/24	22	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/14/24	1.1	1.7	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	12/14/24	320	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	8.9	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/14/24	5.4	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/14/24	5.5	1.7	NG/L	0	

Site ID : 102-32 (CF-RW-F)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	2.93	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	01/25/24	1	1.5	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	01/25/24	0.17	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.16	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	1.6	1.5	NG/L	0	

Table F-47
Extraction Well Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID : 102-32 (CF-RW-F)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	02/22/24	3.12	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	02/22/24	1	1.6	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	02/22/24	0.25	1.6	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.27	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	1.6	1.6	NG/L	0	
1633 TPFAS	03/27/24	2.6	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/27/24	1.1	1.4	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	03/27/24	0.2	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/27/24	1.3	1.4	NG/L	0	J
1633 TPFAS	04/19/24	3.01	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/19/24	0.94	1.5	NG/L	0	J
Perfluorohexanoic acid (PFHxA)	04/19/24	0.22	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	0.35	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	1.5	1.5	NG/L	0	
1633 TPFAS	05/11/24	3.1	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/11/24	1.2	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	1.9	1.8	NG/L	0	
1633 TPFAS	06/08/24	2.12	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/08/24	0.8	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	06/08/24	0.22	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	06/08/24	1.1	1.5	NG/L	0	J
1633 TPFAS	07/27/24	0.94	0	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	0.94	1.5	NG/L	0	J
1633 TPFAS	08/17/24	3.01	0	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	08/17/24	0.43	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	08/17/24	1.9	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	0.68	1.8	NG/L	0	J
1633 TPFAS	09/19/24	0.36	0	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	09/19/24	0.36	1.7	NG/L	0	J
1633 TPFAS	10/05/24	1.62	0	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	1.1	1.7	NG/L	0	J
Perfluorooctanoic acid (PFOA)	10/05/24	0.52	1.7	NG/L	0	J
1633 TPFAS	11/09/24	0	0	NG/L	0	
1633 TPFAS	12/14/24	0.68	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/14/24	0.68	1.6	NG/L	0	J

Site ID : 102-33 (CF-RW-G)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	23.3	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/25/24	2.6	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	01/25/24	0.77	6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	01/25/24	0.34	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/25/24	3.4	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	1.3	1.5	NG/L	0	J
Perfluorononanoic acid (PFNA)	01/25/24	0.25	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.28	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	12	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	1.2	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	01/25/24	0.35	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	01/25/24	0.81	3	NG/L	0	J
1633 TPFAS	02/22/24	22.39	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/22/24	2.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	02/22/24	0.66	5.9	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	02/22/24	0.3	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	02/22/24	3.3	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	1.3	1.5	NG/L	0	J

Table F-47
Extraction Well Data
OU X PFAS CFH System

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Site ID : 102-33 (CF-RW-G)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorononanoic acid (PFNA)	02/22/24	0.25	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	12	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	1.1	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	02/22/24	0.39	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	02/22/24	0.69	3	NG/L	0	J
1633 TPFAS	03/28/24	17.45	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	03/28/24	2.3	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	03/28/24	0.6	5.8	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	03/28/24	0.32	1.4	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	03/28/24	2.7	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/28/24	1	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/28/24	9.1	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/28/24	0.83	1.4	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	03/28/24	0.6	2.9	NG/L	0	J
1633 TPFAS	04/19/24	20.14	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/19/24	2.6	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	04/19/24	0.68	6.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	04/19/24	0.3	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	04/19/24	2.9	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/19/24	1.1	1.6	NG/L	0	J
Perfluorononanoic acid (PFNA)	04/19/24	0.22	1.6	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	0.36	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	10	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/19/24	0.93	1.6	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	04/19/24	0.32	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	04/19/24	0.73	3.1	NG/L	0	J
1633 TPFAS	05/11/24	22.71	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/11/24	3.3	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	05/11/24	0.82	7.1	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	05/11/24	0.33	1.8	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	05/11/24	3.4	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	1.3	1.8	NG/L	0	J
Perfluorononanoic acid (PFNA)	05/11/24	0.27	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	11	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/11/24	1.1	1.8	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	05/11/24	0.33	1.8	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	05/11/24	0.86	3.5	NG/L	0	J
1633 TPFAS	06/08/24	14.01	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/08/24	2.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	06/08/24	0.59	5.8	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	06/08/24	0.22	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	06/08/24	2.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	06/08/24	0.23	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	06/08/24	6.8	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/08/24	0.76	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	06/08/24	0.51	2.9	NG/L	0	J
1633 TPFAS	07/27/24	14.46	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	07/27/24	2.4	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	07/27/24	0.46	3.2	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	07/27/24	2.4	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/27/24	0.6	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	07/27/24	7.5	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	1.1	1.6	NG/L	0	J
1633 TPFAS	08/17/24	13.72	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/17/24	2.4	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	08/17/24	0.52	3.3	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	08/17/24	3.2	1.7	NG/L	0	

Table F-47
Extraction Well Data
OU X PFAS CFH System

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Site ID : 102-33 (CF-RW-G)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanesulfonate (PFOS)	08/17/24	6.2	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	1.4	1.7	NG/L	0	J
1633 TPFAS	09/19/24	15.94	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	09/19/24	2.3	1.9	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	3.9	1.9	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/19/24	8.8	1.9	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	0.94	1.9	NG/L	0	J
1633 TPFAS	10/05/24	15.2	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	10/05/24	2.6	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/05/24	0.6	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	10/05/24	3.1	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	7.7	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	1.2	1.7	NG/L	0	J
1633 TPFAS	11/09/24	15.46	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	11/09/24	2.4	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	11/09/24	0.76	3.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	11/09/24	4.1	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/09/24	8.2	1.8	NG/L	0	
1633 TPFAS	12/14/24	17.81	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	12/14/24	3	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/14/24	0.27	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/14/24	3.6	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/14/24	0.71	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	12/14/24	8.4	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	1.4	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	12/14/24	0.43	1.5	NG/L	0	J

Site ID : 102-34 (CF-RW-H)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	97.69	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/25/24	1.4	1.6	NG/L	0	J
Perfluorobutyric acid (PFBA)	01/25/24	1.5	6.2	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	01/25/24	0.51	1.6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	01/25/24	0.83	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/25/24	20	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	4.2	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	01/25/24	2.2	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.15	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	61	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	2.4	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	01/25/24	1.6	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	01/25/24	1.9	3.1	NG/L	0	J
1,4-Dioxane	01/25/24	0.67	0.2	UG/L	0	
1633 TPFAS	02/22/24	104.82	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/22/24	1.3	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	02/22/24	1.4	5.9	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	02/22/24	0.44	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	02/22/24	0.8	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	02/22/24	17	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	4.2	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	02/22/24	1.8	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.38	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	72	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	2.3	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	02/22/24	1.4	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	02/22/24	1.8	3	NG/L	0	J

Table F-47
Extraction Well Data
OU X PFAS CFH System

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Site ID : 102-34 (CF-RW-H)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1,4-Dioxane	02/22/24	0.61	0.22	UG/L	0	
1633 TPFAS	03/28/24	91.64	0	NG/L	0	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	03/28/24	0.47	6	NG/L	0	J
Perfluoro-3-methoxypropanoic acid (PFMPA)	03/28/24	0.63	3	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	03/28/24	1.1	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	03/28/24	1.3	6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	03/28/24	0.81	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	03/28/24	17	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/28/24	3.6	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	03/28/24	1.7	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/28/24	0.13	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/28/24	60	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/28/24	2.1	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	03/28/24	1.1	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	03/28/24	1.7	3	NG/L	0	J
1,4-Dioxane	03/28/24	0.52	0.2	UG/L	0	
1633 TPFAS	04/19/24	97.818	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/19/24	1.3	1.4	NG/L	0	J
Perfluorobutyric acid (PFBA)	04/19/24	1.4	5.7	NG/L	0	J
Perfluorodecanoic acid (PFDA)	04/19/24	0.078	1.4	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	04/19/24	0.56	1.4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	04/19/24	0.86	1.4	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	04/19/24	18	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/19/24	4.1	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	04/19/24	1.6	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	0.22	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/19/24	64	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/19/24	2.4	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	04/19/24	1.4	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	04/19/24	1.9	2.9	NG/L	0	J
1,4-Dioxane	04/19/24	0.48	0.2	UG/L	0	B
1633 TPFAS	05/11/24	117.21	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	05/11/24	3.5	7	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	05/11/24	1.5	1.8	NG/L	0	J
Perfluorobutyric acid (PFBA)	05/11/24	1.5	7	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	05/11/24	1	1.8	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	05/11/24	24	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	4.4	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	05/11/24	1.9	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/11/24	0.21	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	73	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/11/24	2.5	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	05/11/24	1.6	1.8	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	05/11/24	2.1	3.5	NG/L	0	J
1,4-Dioxane	05/11/24	0.66	0.2	UG/L	0	
1633 TPFAS	06/08/24	71.09	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/08/24	1.2	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	06/08/24	1.1	6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	06/08/24	0.74	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	06/08/24	16	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	06/08/24	2.6	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	06/08/24	1.2	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	06/08/24	0.15	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	06/08/24	44	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/08/24	1.7	1.5	NG/L	0	

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Site ID : 102-34 (CF-RW-H)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanesulfonate (PFPeS)	06/08/24	1.2	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	06/08/24	1.2	3	NG/L	0	J
1,4-Dioxane	06/08/24	0.62	0.2	UG/L	0	
1633 TPFAS	07/27/24	74.8	0	NG/L	0	
Perfluorobutyric acid (PFBA)	07/27/24	1.2	3.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	07/27/24	15	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/27/24	3.1	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/27/24	50	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	3	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	07/27/24	1.1	1.8	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	07/27/24	1.4	1.8	NG/L	0	J
1,4-Dioxane	07/27/24	0.75	0.2	UG/L	0	
1633 TPFAS	08/17/24	69.39	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/17/24	1.3	1.6	NG/L	0	J
Perfluorobutyric acid (PFBA)	08/17/24	1.1	3.2	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	08/17/24	0.59	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	08/17/24	13	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	08/17/24	3	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/17/24	47	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	2.1	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	08/17/24	1.3	1.6	NG/L	0	J
1,4-Dioxane	08/17/24	0.55	0.2	UG/L	0	
1,4-Dioxane	08/19/24	0.56	0.22	UG/L	0	
1633 TPFAS	09/19/24	62.95	0	NG/L	0	
Perfluorobutyric acid (PFBA)	09/19/24	0.89	3.4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	09/19/24	0.66	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	09/19/24	13	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/19/24	45	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	2.2	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	09/19/24	1.2	1.7	NG/L	0	J
1633 TPFAS	10/05/24	65.66	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	10/05/24	1.1	1.7	NG/L	0	J
Perfluorobutyric acid (PFBA)	10/05/24	1	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	10/05/24	0.86	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	10/05/24	12	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/05/24	2.5	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	10/05/24	1.3	1.7	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	10/05/24	44	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	1.7	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	10/05/24	1.2	1.7	NG/L	0	J
1,4-Dioxane	10/05/24	0.46	0.21	UG/L	0	
1633 TPFAS	12/14/24	58.23	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	12/14/24	0.95	1.5	NG/L	0	J
Perfluorobutyric acid (PFBA)	12/14/24	0.84	2.9	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	12/14/24	0.71	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/14/24	11	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/14/24	4	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/14/24	36	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	2.2	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/14/24	0.83	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	12/14/24	1.7	1.5	NG/L	0	
1,4-Dioxane	12/14/24	0.23	0.26	UG/L	0	J

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Extraction Well Data
OU X PFAS CFH System

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Site ID : 102-35 (CF-RW-I)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/25/24	15.93	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/25/24	0.31	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	01/25/24	0.22	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	01/25/24	6.6	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/25/24	0.79	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	01/25/24	0.23	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/25/24	6.1	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/25/24	1.2	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	01/25/24	0.48	1.5	NG/L	0	J
1633 TPFAS	02/22/24	15.24	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/22/24	0.34	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	02/22/24	0.21	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	02/22/24	5.9	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/22/24	0.71	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	02/22/24	0.22	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/22/24	6.4	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/22/24	1	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	02/22/24	0.46	1.5	NG/L	0	J
1633 TPFAS	03/27/24	9.88	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/27/24	4.4	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/27/24	0.12	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	03/27/24	4.4	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/27/24	0.96	1.5	NG/L	0	J
1633 TPFAS	04/19/24	12.08	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/19/24	0.23	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	04/19/24	0.24	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	04/19/24	4.2	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/19/24	0.46	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	04/19/24	1.8	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	04/19/24	3.8	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/19/24	1.1	1.5	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	04/19/24	0.25	1.5	NG/L	0	J
1633 TPFAS	05/11/24	14.79	0	NG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	05/11/24	1.7	7	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	05/11/24	0.37	1.8	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	05/11/24	5.4	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/11/24	0.54	1.8	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	05/11/24	0.23	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/11/24	5.1	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/11/24	1.1	1.8	NG/L	0	J
Perfluoropentanesulfonate (PFPeS)	05/11/24	0.35	1.8	NG/L	0	J
1633 TPFAS	06/08/24	7.72	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/08/24	3.6	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	06/08/24	3.3	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/08/24	0.82	1.5	NG/L	0	J
1633 TPFAS	07/27/24	7.97	0	NG/L	0	
Perfluorobutyric acid (PFBA)	07/27/24	0.37	3.3	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	07/27/24	4	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/27/24	2.3	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/27/24	1.3	1.7	NG/L	0	J
1633 TPFAS	08/17/24	8.37	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	08/17/24	3.5	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/17/24	3.9	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/17/24	0.97	1.7	NG/L	0	J
1633 TPFAS	09/19/24	6.63	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	3	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/19/24	2.8	1.8	NG/L	0	

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Site ID : 102-35 (CF-RW-I)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanoic acid (PFOA)	09/19/24	0.83	1.8	NG/L	0	J
1633 TPFAS	10/05/24	5.62	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/05/24	2.6	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/05/24	2.3	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/05/24	0.72	1.6	NG/L	0	J
1633 TPFAS	11/23/24	7	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/23/24	3	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/23/24	2.7	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/23/24	1.3	1.5	NG/L	0	J
1633 TPFAS	12/14/24	5.35	0	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/14/24	2.2	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/14/24	2.3	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/14/24	0.85	1.7	NG/L	0	J

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.
D = Results are reported from a diluted aliquot of the sample.

Table F-48
System Influent Data
OU X PFAS CFH System

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Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	1/1/2024	142.08	0	NG/L	0	
8260 TVOC	1/1/2024	0.43	0	UG/L	0	
Chloroform	1/1/2024	0.43	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	1/1/2024	2	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	1/1/2024	1.2	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	1/1/2024	0.82	1.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	1/1/2024	1.2	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	1/1/2024	26	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	1/1/2024	4.2	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	1/1/2024	5.2	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	1/1/2024	0.46	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	1/1/2024	93	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	1/1/2024	3.1	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	1/1/2024	2.2	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	1/1/2024	2.7	3.1	NG/L	0	J
1,4-Dioxane	1/1/2024	0.1	0.2	UG/L	0	J
1,4-Dioxane	1/22/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	1/22/2024	141.79	0	NG/L	0	
8260 TVOC	1/22/2024	0.44	0	UG/L	0	
Chloroform	1/22/2024	0.44	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	1/22/2024	1.8	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	1/22/2024	1.4	5.7	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	1/22/2024	1.3	1.4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	1/22/2024	1.4	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	1/22/2024	25	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	1/22/2024	4.4	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	1/22/2024	4.7	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	1/22/2024	0.49	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	1/22/2024	93	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	1/22/2024	3.4	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	1/22/2024	2	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	1/22/2024	2.9	2.8	NG/L	0	
1633 TPFAS	2/8/2024	210.27	0	NG/L	0	
8260 TVOC	2/8/2024	0.48	0	UG/L	0	
Chloroform	2/8/2024	0.48	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	2/8/2024	2.4	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	2/8/2024	1.9	6.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	2/8/2024	1.6	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	2/8/2024	2.3	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	2/8/2024	37	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	2/8/2024	7	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	2/8/2024	4.8	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	2/8/2024	0.47	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	2/8/2024	140	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	2/8/2024	4.2	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	2/8/2024	3.4	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	2/8/2024	5.2	3.3	NG/L	0	
1,4-Dioxane	2/8/2024	0.11	0.2	UG/L	0	J
1633 TPFAS	2/21/2024	226.03	0	NG/L	0	

Table F-48
System Influent Data
OU X PFAS CFH System

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Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	2/21/2024	0.44	0	UG/L	0	
Chloroform	2/21/2024	0.44	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	2/21/2024	2.2	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	2/21/2024	1.7	5.8	NG/L	0	J
Perfluorodecanoic acid (PFDA)	2/21/2024	0.11	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	2/21/2024	1.9	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	2/21/2024	2.3	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	2/21/2024	35	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	2/21/2024	6.5	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	2/21/2024	4.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	2/21/2024	0.42	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	2/21/2024	160	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	2/21/2024	4.1	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	2/21/2024	2.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	2/21/2024	4.5	2.9	NG/L	0	
1633 TPFAS	3/6/2024	130.78	0	NG/L	0	
8260 TVOC	3/6/2024	0.22	0	UG/L	0	
Chloroform	3/6/2024	0.22	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	3/6/2024	1.4	1.6	NG/L	0	J
Perfluorobutyric acid (PFBA)	3/6/2024	1.2	6.5	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	3/6/2024	0.86	1.6	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	3/6/2024	22	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	3/6/2024	3.3	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	3/6/2024	4.6	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	3/6/2024	0.32	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	3/6/2024	91	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	3/6/2024	3.2	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	3/6/2024	1.3	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	3/6/2024	1.6	3.3	NG/L	0	J
1,4-Dioxane	3/6/2024	0.15	0.24	UG/L	0	J
1,4-Dioxane	3/21/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	3/21/2024	274.06	0	NG/L	0	
8260 TVOC	3/21/2024	0.4	0	UG/L	0	
Chloroform	3/21/2024	0.4	0.5	UG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	3/21/2024	0.72	5.9	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	3/21/2024	3.7	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	3/21/2024	2.4	5.9	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	3/21/2024	2.6	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	3/21/2024	3.1	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	3/21/2024	71	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	3/21/2024	8.7	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	3/21/2024	4.7	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	3/21/2024	0.54	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	3/21/2024	160	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	3/21/2024	5.4	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	3/21/2024	4.2	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	3/21/2024	7	3	NG/L	0	
1633 TPFAS	4/17/2024	417.99	0	NG/L	0	
8260 TVOC	4/17/2024	0.61	0	UG/L	0	

Table F-48
System Influent Data
OU X PFAS CFH System

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Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Chloroform	4/17/2024	0.38	0.5	UG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	4/17/2024	1.2	5.6	NG/L	0	J
Methyl chloride	4/17/2024	0.23	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	4/17/2024	3.5	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	4/17/2024	2.5	5.6	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	4/17/2024	5.5	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	4/17/2024	4	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	4/17/2024	69	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	4/17/2024	11	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	4/17/2024	1.8	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	4/17/2024	0.49	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	4/17/2024	300	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	4/17/2024	6.3	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	4/17/2024	5	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	4/17/2024	7.7	2.8	NG/L	0	
1633 TPFAS	5/3/2024	369.74	0	NG/L	0	
8260 TVOC	5/3/2024	0.43	0	UG/L	0	
Chloroform	5/3/2024	0.43	0.5	UG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5/3/2024	1.4	6.3	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	5/3/2024	3.6	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	5/3/2024	2.5	6.3	NG/L	0	J
Perfluorodecanoic acid (PFDA)	5/3/2024	0.14	1.6	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	5/3/2024	4.4	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	5/3/2024	4	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	5/3/2024	75	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	5/3/2024	12	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	5/3/2024	4.9	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	5/3/2024	1.1	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	5/3/2024	240	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	5/3/2024	7.7	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	5/3/2024	5.3	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	5/3/2024	7.7	3.1	NG/L	0	
1,4-Dioxane	5/3/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	5/13/2024	443.87	0	NG/L	0	
8260 TVOC	5/13/2024	0.42	0	UG/L	0	
Chloroform	5/13/2024	0.42	0.5	UG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5/13/2024	2.4	7	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	5/13/2024	4.6	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	5/13/2024	2.8	7	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	5/13/2024	6.2	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	5/13/2024	4.5	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	5/13/2024	80	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	5/13/2024	14	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	5/13/2024	6.3	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	5/13/2024	0.67	1.8	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	5/13/2024	300	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	5/13/2024	7.5	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	5/13/2024	5.4	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	5/13/2024	9.5	3.5	NG/L	0	

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System Influent Data
OU X PFAS CFH System

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1,4-Dioxane	5/13/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	6/3/2024	449.97	0	NG/L	0	
8260 TVOC	6/3/2024	0.53	0	UG/L	0	
Chloroform	6/3/2024	0.53	0.5	UG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	6/3/2024	1.1	5.8	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	6/3/2024	3.6	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	6/3/2024	2.5	5.8	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	6/3/2024	4.9	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	6/3/2024	3.8	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	6/3/2024	67	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	6/3/2024	11	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	6/3/2024	5.7	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	6/3/2024	0.77	1.4	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	6/3/2024	330	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	6/3/2024	7.4	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	6/3/2024	4.9	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	6/3/2024	7.3	2.9	NG/L	0	
1,4-Dioxane	6/3/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	6/20/2024	464.2	0	NG/L	0	
8260 TVOC	6/20/2024	0.49	0	UG/L	0	
Chloroform	6/20/2024	0.49	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	6/20/2024	3.9	2	NG/L	0	
Perfluorobutyric acid (PFBA)	6/20/2024	2.3	3.9	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	6/20/2024	3.9	2	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	6/20/2024	3.2	2	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	6/20/2024	72	2	NG/L	0	
Perfluorohexanoic acid (PFHxA)	6/20/2024	8.5	2	NG/L	0	
Perfluorononanoic acid (PFNA)	6/20/2024	7.4	2	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	6/20/2024	2.2	2	NG/L	0	
Perfluorooctanesulfonate (PFOS)	6/20/2024	340	2	NG/L	0	
Perfluorooctanoic acid (PFOA)	6/20/2024	9.1	2	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	6/20/2024	5.2	2	NG/L	0	
Perfluoropentanoic acid (PFPeA)	6/20/2024	6.5	2	NG/L	0	
1,4-Dioxane	6/20/2024	0.17	0.2	UG/L	0	J
1633 TPFAS	7/2/2024	397	0	NG/L	0	
8260 TVOC	7/2/2024	0.45	0	UG/L	0	
Chloroform	7/2/2024	0.45	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	7/2/2024	6	2	NG/L	0	
Perfluorobutyric acid (PFBA)	7/2/2024	2.7	4	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	7/2/2024	3.7	2	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	7/2/2024	84	2	NG/L	0	
Perfluorohexanoic acid (PFHxA)	7/2/2024	10	2	NG/L	0	
Perfluorononanoic acid (PFNA)	7/2/2024	5.6	2	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	7/2/2024	1.2	2	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	7/2/2024	260	2	NG/L	0	
Perfluorooctanoic acid (PFOA)	7/2/2024	8.1	2	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	7/2/2024	6.6	2	NG/L	0	
Perfluoropentanoic acid (PFPeA)	7/2/2024	9.1	2	NG/L	0	
1633 TPFAS	7/20/2024	361	0	NG/L	0	

Table F-48
System Influent Data
OU X PFAS CFH System

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Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	7/20/2024	0.44	0	UG/L	0	
Chloroform	7/20/2024	0.44	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	7/20/2024	3.6	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	7/20/2024	2.4	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	7/20/2024	3.3	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	7/20/2024	67	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	7/20/2024	8.6	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	7/20/2024	6.9	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	7/20/2024	250	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	7/20/2024	8.1	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	7/20/2024	5.3	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	7/20/2024	5.8	1.7	NG/L	0	
1,4-Dioxane	7/20/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	8/4/2024	323.6	0	NG/L	0	
8260 TVOC	8/4/2024	0.75	0	UG/L	0	
Chloroform	8/4/2024	0.41	0.5	UG/L	0	J
Methyl bromide	8/4/2024	0.34	0.5	UG/L	0	J B
Perfluorobutanesulfonate (PFBS)	8/4/2024	3.9	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	8/4/2024	1.9	3.6	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	8/4/2024	4	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	8/4/2024	2.7	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	8/4/2024	61	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	8/4/2024	7	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	8/4/2024	6.1	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	8/4/2024	220	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	8/4/2024	6.9	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	8/4/2024	4.8	1.8	NG/L	0	
Perfluoropentanoic acid (PFPeA)	8/4/2024	5.3	1.8	NG/L	0	
1,4-Dioxane	8/4/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	8/21/2024	447.3	0	NG/L	0	
8260 TVOC	8/21/2024	0.49	0	UG/L	0	
Chloroform	8/21/2024	0.49	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	8/21/2024	2.8	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	8/21/2024	1.5	3.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	8/21/2024	3.9	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	8/21/2024	2.4	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	8/21/2024	47	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	8/21/2024	6.7	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	8/21/2024	6.4	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	8/21/2024	1	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	8/21/2024	360	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	8/21/2024	6.8	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	8/21/2024	4.3	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	8/21/2024	4.5	1.6	NG/L	0	
1,4-Dioxane	8/21/2024	0.14	0.21	UG/L	0	J
1633 TPFAS	9/5/2024	353.1	0	NG/L	0	
8260 TVOC	9/5/2024	0.71	0	UG/L	0	
Chloroform	9/5/2024	0.46	0.5	UG/L	0	J
Methyl chloride	9/5/2024	0.25	0.5	UG/L	0	J

Table F-48
System Influent Data
OU X PFAS CFH System

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Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorobutanesulfonate (PFBS)	9/5/2024	3.3	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	9/5/2024	1.6	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	9/5/2024	2.3	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	9/5/2024	57	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	9/5/2024	5.7	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	9/5/2024	8.1	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	9/5/2024	1.1	1.6	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	9/5/2024	260	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	9/5/2024	5.6	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	9/5/2024	3.7	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	9/5/2024	4.7	1.6	NG/L	0	
1,4-Dioxane	9/5/2024	0.11	0.2	UG/L	0	J
1633 TPFAS	9/16/2024	283.2	0	NG/L	0	
8260 TVOC	9/16/2024	0.51	0	UG/L	0	
Chloroform	9/16/2024	0.51	0.5	UG/L	0	
Perfluorobutanesulfonate (PFBS)	9/16/2024	2.5	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	9/16/2024	2	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	9/16/2024	50	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	9/16/2024	7.2	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	9/16/2024	8.2	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	9/16/2024	200	2	NG/L	0	
Perfluorooctanoic acid (PFOA)	9/16/2024	5.4	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	9/16/2024	3.3	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	9/16/2024	4.6	1.6	NG/L	0	
1633 TPFAS	10/2/2024	279.8	0	NG/L	0	
8260 TVOC	10/2/2024	0.42	0	UG/L	0	
Chloroform	10/2/2024	0.42	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	10/2/2024	2.7	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	10/2/2024	1.8	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	10/2/2024	2.2	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/2/2024	49	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/2/2024	5.5	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	10/2/2024	6.4	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/2/2024	200	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/2/2024	4.9	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/2/2024	3	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	10/2/2024	4.3	1.6	NG/L	0	
1633 TPFAS	10/17/2024	277.8	0	NG/L	0	
8260 TVOC	10/17/2024	0.48	0	UG/L	0	
Chloroform	10/17/2024	0.48	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	10/17/2024	2.9	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	10/17/2024	1.3	3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	10/17/2024	1.8	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/17/2024	38	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/17/2024	5.7	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	10/17/2024	7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/17/2024	210	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/17/2024	4.7	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/17/2024	2.7	1.5	NG/L	0	

Table F-48
System Influent Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanoic acid (PFPeA)	10/17/2024	3.7	1.5	NG/L	0	
1633 TPFAS	11/6/2024	302.9	0	NG/L	0	
8260 TVOC	11/6/2024	0.62	0	UG/L	0	
Chloroform	11/6/2024	0.62	0.5	UG/L	0	
Perfluorobutanesulfonate (PFBS)	11/6/2024	2.5	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	11/6/2024	1.4	3.1	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	11/6/2024	2.1	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/6/2024	41	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/6/2024	6	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	11/6/2024	8.4	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/6/2024	230	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/6/2024	5	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/6/2024	2.8	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/6/2024	3.7	1.6	NG/L	0	
1633 TPFAS	11/23/2024	195.59	0	NG/L	0	
8260 TVOC	11/23/2024	0.48	0	UG/L	0	
Chloroform	11/23/2024	0.48	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	11/23/2024	2	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	11/23/2024	1.2	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	11/23/2024	1.4	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	11/23/2024	30	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/23/2024	4.2	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	11/23/2024	7.1	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	11/23/2024	0.39	1.7	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	11/23/2024	140	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/23/2024	3.9	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/23/2024	2.4	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/23/2024	3	1.7	NG/L	0	
1633 TPFAS	12/4/2024	162.1	0	NG/L	0	
8260 TVOC	12/4/2024	0.46	0	UG/L	0	
Chloroform	12/4/2024	0.46	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	12/4/2024	2	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	12/4/2024	1.1	3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	12/4/2024	1.4	1.5	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/4/2024	22	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/4/2024	3.7	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	12/4/2024	4.8	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/4/2024	120	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/4/2024	2.9	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/4/2024	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/4/2024	2.5	1.5	NG/L	0	

Table F-48
System Influent Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID: 084-99 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	12/16/2024	173.8	0	NG/L	0	
8260 TVOC	12/16/2024	0.46	0	UG/L	0	
Chloroform	12/16/2024	0.46	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	12/16/2024	1.8	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	12/16/2024	1.2	3.3	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	12/16/2024	1.2	1.7	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	12/16/2024	23	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/16/2024	4	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	12/16/2024	5	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/16/2024	130	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/2024	3.1	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/16/2024	2	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/2024	2.5	1.7	NG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.

Table F-49
System Effluent Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID: 084-101 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/01/24	0	0	NG/L	0	
8260 TVOC	01/01/24	0	0	UG/L	0	
1,4-Dioxane	01/01/24	0.1	0.2	UG/L	0	J
1,4-Dioxane	01/22/24	0.13	0.2	UG/L	0	J
1633 TPFAS	01/22/24	0	0	NG/L	0	
8260 TVOC	01/22/24	0	0	UG/L	0	
1633 TPFAS	02/08/24	0	0	NG/L	0	
8260 TVOC	02/08/24	0	0	UG/L	0	
1,4-Dioxane	02/08/24	0.12	0.2	UG/L	0	J
8260 TVOC	02/21/24	0	0	UG/L	0	
1633 TPFAS	03/06/24	0	0	NG/L	0	
8260 TVOC	03/06/24	0	0	UG/L	0	
1,4-Dioxane	03/06/24	0.13	0.2	UG/L	0	J
1,4-Dioxane	03/21/24	0.18	0.2	UG/L	0	J
1633 TPFAS	03/21/24	0.12	0	NG/L	0	
8260 TVOC	03/21/24	0	0	UG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/21/24	0.12	1.5	NG/L	0	J
1633 TPFAS	04/17/24	0.1	0	NG/L	0	
8260 TVOC	04/17/24	0	0	UG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/17/24	0.1	1.6	NG/L	0	J
1633 TPFAS	05/03/24	0.1	0	NG/L	0	
8260 TVOC	05/03/24	0	0	UG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/03/24	0.1	1.5	NG/L	0	J
1,4-Dioxane	05/03/24	0.13	0.2	UG/L	0	J
1633 TPFAS	05/13/24	1.1	0	NG/L	0	
8260 TVOC	05/13/24	0	0	UG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	05/13/24	1.1	7	NG/L	0	J
1,4-Dioxane	05/13/24	0.16	0.2	UG/L	0	J
1633 TPFAS	06/03/24	0.94	0	NG/L	0	
8260 TVOC	06/03/24	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	06/03/24	0.94	6	NG/L	0	J
1,4-Dioxane	06/03/24	0.14	0.2	UG/L	0	J
1633 TPFAS	06/20/24	1.5	0	NG/L	0	
8260 TVOC	06/20/24	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	06/20/24	1.5	3.1	NG/L	0	J
1,4-Dioxane	06/20/24	0.15	0.2	UG/L	0	J
1633 TPFAS	07/02/24	15.63	0	NG/L	0	
8260 TVOC	07/02/24	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	07/02/24	8.6	4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/02/24	0.93	2	NG/L	0	J

Table F-49
System Effluent Data
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Site ID: 084-101 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctane sulfonamide (PFOSAm)	07/02/24	1.3	2	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	07/02/24	4.8	2	NG/L	0	
1,4-Dioxane	07/02/24	0.14	0.2	UG/L	0	H
1633 TPFAS	07/20/24	0	0	NG/L	0	
8260 TVOC	07/20/24	0	0	UG/L	0	
1633 TPFAS	08/04/24	0	0	NG/L	0	
8260 TVOC	08/04/24	0	0	UG/L	0	
1,4-Dioxane	08/04/24	0.16	0.2	UG/L	0	J
1633 TPFAS	08/21/24	0	0	NG/L	0	
8260 TVOC	08/21/24	0	0	UG/L	0	
1,4-Dioxane	08/21/24	0.14	0.21	UG/L	0	J
1633 TPFAS	09/05/24	1.3	0	NG/L	0	
8260 TVOC	09/05/24	0	0	UG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	09/05/24	1.3	1.5	NG/L	0	J
1,4-Dioxane	09/05/24	0.12	0.2	UG/L	0	J
1633 TPFAS	09/16/24	0	0	NG/L	0	
8260 TVOC	09/16/24	0	0	UG/L	0	
1,4-Dioxane	09/16/24	0.12	0.2	UG/L	0	J
1633 TPFAS	10/02/24	0	0	NG/L	0	
8260 TVOC	10/02/24	0	0	UG/L	0	
1633 TPFAS	10/17/24	0	0	NG/L	0	
8260 TVOC	10/17/24	0	0	UG/L	0	
1633 TPFAS	11/06/24	0	0	NG/L	0	
8260 TVOC	11/06/24	0	0	UG/L	0	
1,4-Dioxane	11/06/24	0.12	0.22	UG/L	0	J
1633 TPFAS	11/23/24	0	0	NG/L	0	
8260 TVOC	11/23/24	0	0	UG/L	0	
1,4-Dioxane	11/23/24	0.11	0.2	UG/L	0	J
1633 TPFAS	12/04/24	0.38	0	NG/L	0	
8260 TVOC	12/04/24	0	0	UG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/04/24	0.38	1.5	NG/L	0	J
1633 TPFAS	12/16/24	0	0	NG/L	0	
8260 TVOC	12/16/24	0	0	UG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.
H = Qualified due to holding time violation

Table F-50
Pumpage And Mass Removal
OU X PFAS CFH System

2024 BNL Groundwater Status Report

Date Sampled	Gallons Pumped	Total PFAS (NG/L)	Mass Removed	Total Mass Removed (lbs)
10/24/22	4,078,294	516.43	0.0175	0.0175
10/25/22	169,929	452.62	0.0006	0.0181
10/26/22	169,929	439.13	0.0006	0.0187
10/27/22	169,929	435.8	0.0006	0.0194
10/28/22	169,929	312.03	0.0004	0.0198
10/31/22	509,787	379.04	0.0016	0.0214
11/08/22	3,466,637	334.98	0.0096	0.0310
11/14/22	2,559,980	294.24	0.0063	0.0373
11/21/22	3,033,310	260.87	0.0066	0.0439
11/28/22	3,033,310	206.07	0.0052	0.0490
12/05/22	3,266,790	292.01	0.0079	0.0570
12/12/22	3,360,182	171.4	0.0048	0.0617
12/20/22	2,840,208	205.42	0.0048	0.0666
01/04/23	2,512,628	232.19	0.0048	0.0714
01/11/23	4,397,099	215.53	0.0079	0.0793
01/19/23	5,025,256	263.17	0.0110	0.0903
01/24/23	3,140,785	256.92	0.0067	0.0970
02/02/23	5,284,375	211.03	0.0093	0.1062
02/13/23	4,880,018	243.45	0.0099	0.1161
02/24/23	4,880,018	239.36	0.0097	0.1258
03/02/23	3,070,354	226.78	0.0058	0.1316
03/10/23	5,183,208	263.91	0.0114	0.1429
03/17/23	4,535,307	268.75	0.0101	0.1530
03/22/23	3,239,505	207.11	0.0056	0.1586
03/29/23	4,535,307	216.08	0.0081	0.1667
04/06/23	4,661,718	213.08	0.0082	0.1750
04/22/23	8,975,776	263.79	0.0197	0.1946
05/05/23	7,191,503	273.09	0.0163	0.2109
05/18/23	7,029,399	236.82	0.0138	0.2247
06/09/23	12,085,698	248.02	0.0249	0.2496
06/20/23	6,179,921	210.46	0.0108	0.2604
07/03/23	7,983,439	213.85	0.0142	0.2746
07/20/23	7,983,439	228.67	0.0152	0.2897
08/03/23	8,066,419	188.82	0.0126	0.3024
08/14/23	8,066,419	237.61	0.0159	0.3183
09/05/23	7,611,674	155.84	0.0098	0.3281
09/18/23	7,611,674	159.86	0.0101	0.3382
10/05/23	9,319,425	172.13	0.0133	0.3516
10/16/23	9,319,425	182.4	0.0141	0.3657
11/02/23	8,675,632	157.73	0.0114	0.3770
11/18/23	8,675,632	142.31	0.0102	0.3873
12/05/23	9,710,230	153.43	0.0124	0.3996
12/16/23	9,710,230	139.91	0.0113	0.4109
01/01/24	10,238,693	142.08	0.0121	0.4230
01/22/24	10,238,693	141.79	0.0120	0.4350
02/08/24	10,095,243	210.27	0.0176	0.4526
02/21/24	10,095,243	226.03	0.0189	0.4716
03/06/24	9,232,472	130.78	0.0100	0.4816
03/21/24	9,232,472	274.06	0.0210	0.5026
04/17/24	16,482,179	417.99	0.0572	0.5598
05/03/24	9,332,919	369.74	0.0286	0.5884
05/13/24	9,332,919	443.87	0.0344	0.6228
06/03/24	8,931,521	449.97	0.0334	0.6562
06/20/24	8,931,521	464.2	0.0344	0.6906
07/02/24	9,342,484	397	0.0308	0.7214
07/20/24	9,342,484	361	0.0280	0.7494
08/04/24	9,253,030	323.6	0.0249	0.7742
08/21/24	9,253,020	447.3	0.0344	0.8086
09/05/24	9,246,653	353.1	0.0271	0.8357
09/16/24	9,246,653	283.2	0.0217	0.8574
10/02/24	8,274,024	279.8	0.0192	0.8766
10/17/24	8,274,024	277.8	0.0191	0.8957
11/06/24	7,172,080	302.9	0.0180	0.9137
11/23/24	7,172,080	195.59	0.0116	0.9254
12/04/24	8,116,813	162.1	0.0109	0.9363
12/16/24	8,116,813	173.8	0.0117	0.9480

Table F-51
Extraction Well Data
OU X FFAS CFH System

2024 BNL Groundwater Status Report

Site ID : 085-414 (FF-RW-A)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/08/24	177.3	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/08/24	2.2	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	01/08/24	8.1	5.8	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	01/08/24	1.6	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	01/08/24	2.5	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	01/08/24	51	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/08/24	14	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	01/08/24	1.4	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	01/08/24	11	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	01/08/24	65	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/08/24	15	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	01/08/24	1.3	1.4	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	01/08/24	4.2	2.9	NG/L	0	
1633 TPFAS	02/23/24	183.84	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/23/24	2.5	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	02/23/24	8.4	5.9	NG/L	0	
Perfluorodecanoic acid (PFDA)	02/23/24	0.14	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	02/23/24	1.7	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	02/23/24	2.7	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	02/23/24	49	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/23/24	12	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	02/23/24	1.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/23/24	7.8	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	02/23/24	80	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/23/24	13	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	02/23/24	1.1	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	02/23/24	4	3	NG/L	0	
Strontium-90	02/23/24	0.489	0.317	PCI/L	0	N2
1633 TPFAS	03/25/24	179.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	03/25/24	2.6	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	03/25/24	8.2	6	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	03/25/24	1.6	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	03/25/24	2.6	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/25/24	50	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/25/24	15	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	03/25/24	2.1	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/25/24	9.4	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	03/25/24	70	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/25/24	13	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	03/25/24	1	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	03/25/24	4	3	NG/L	0	
1633 TPFAS	04/18/24	190.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/18/24	2.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	04/18/24	8.7	5.9	NG/L	0	
Perfluorodecanoic acid (PFDA)	04/18/24	0.1	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	04/18/24	2.1	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	04/18/24	3.1	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/18/24	52	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/18/24	14	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	04/18/24	2.4	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/18/24	8.1	1.5	NG/L	0	

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Site ID : 085-414 (FF-RW-A)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanesulfonate (PFOS)	04/18/24	78	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/18/24	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	04/18/24	1.1	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	04/18/24	4.5	3	NG/L	0	
1633 TPFAS	05/02/24	192.2	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/02/24	2.5	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	05/02/24	8.9	6	NG/L	0	
Perfluorodecanoic acid (PFDA)	05/02/24	0.1	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	05/02/24	1.8	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	05/02/24	2.9	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/02/24	58	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/02/24	13	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	05/02/24	2.3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/02/24	12	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	05/02/24	69	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/02/24	16	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	05/02/24	1.3	1.5	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	05/02/24	4.4	3	NG/L	0	
1,4-Dioxane	05/02/24	0.17	0.23	UG/L	0	J
1633 TPFAS	06/27/24	230.6	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/27/24	2.7	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	06/27/24	8.8	3.2	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	06/27/24	1.4	1.6	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	06/27/24	2.8	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/27/24	70	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	06/27/24	12	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	06/27/24	3.6	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	06/27/24	13	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	06/27/24	88	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/27/24	22	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	06/27/24	1.3	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	06/27/24	5	1.6	NG/L	0	
1633 TPFAS	08/26/24	215.1	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/26/24	2.5	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	08/26/24	7.9	3.1	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	08/26/24	2.6	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	08/26/24	52	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	08/26/24	12	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	08/26/24	1.7	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	08/26/24	15	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/26/24	96	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/26/24	21	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	08/26/24	4.4	1.6	NG/L	0	
1633 TPFAS	09/18/24	213.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	09/18/24	2.5	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	09/18/24	8.1	3.4	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	09/18/24	2.5	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	09/18/24	3.2	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/18/24	54	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	09/18/24	11	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	09/18/24	1.9	1.7	NG/L	0	

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Site ID : 085-414 (FF-RW-A)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctane sulfonamide (PFOSAm)	09/18/24	13	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/18/24	91	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/18/24	21	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	09/18/24	1.3	1.7	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	09/18/24	4	1.7	NG/L	0	
1633 TPFAS	10/17/24	278.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	10/17/24	2.8	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	10/17/24	8.3	3.3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/17/24	3.1	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/17/24	93	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/17/24	17	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	10/17/24	1.8	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	10/17/24	14	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/17/24	110	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/17/24	23	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/17/24	1.5	1.6	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	10/17/24	4.4	1.6	NG/L	0	
1633 TPFAS	11/23/24	355.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	11/23/24	2.9	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	11/23/24	8.2	3.3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	11/23/24	5.3	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/23/24	3.2	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/23/24	120	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/23/24	20	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	11/23/24	2.1	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	11/23/24	11	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/23/24	150	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/23/24	26	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/23/24	1.7	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/23/24	5.1	1.7	NG/L	0	
1633 TPFAS	12/16/24	366.3	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	12/16/24	3	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	12/16/24	8	3.3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	12/16/24	6.4	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/16/24	3.1	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/16/24	130	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/16/24	19	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	12/16/24	2.1	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/16/24	10	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/16/24	150	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/24	28	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/16/24	1.9	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/24	4.8	1.7	NG/L	0	

Site ID : 096-132 (FF-RW-B)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/08/24	153.2	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/08/24	2.4	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	01/08/24	6.1	5.7	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	01/08/24	1.6	1.4	NG/L	0	

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Site ID : 096-132 (FF-RW-B)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoroheptanoic acid (PFHpA)	01/08/24	2.6	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	01/08/24	54	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/08/24	13	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	01/08/24	6	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	01/08/24	2.4	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	01/08/24	44	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/08/24	16	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	01/08/24	1.4	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	01/08/24	3.7	2.9	NG/L	0	
1,4-Dioxane	01/08/24	0.11	0.2	UG/L	0	J
1633 TPFAS	02/23/24	185.02	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/23/24	2.6	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	02/23/24	6	5.7	NG/L	0	
Perfluorodecanoic acid (PFDA)	02/23/24	0.12	1.4	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	02/23/24	2.3	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	02/23/24	2.8	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	02/23/24	63	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/23/24	13	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	02/23/24	5.5	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/23/24	2.5	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	02/23/24	66	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/23/24	16	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	02/23/24	1.6	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	02/23/24	3.6	2.9	NG/L	0	
1,4-Dioxane	02/23/24	0.2	0.2	UG/L	0	
1,4-Dioxane	03/25/24	0.15	0.2	UG/L	0	J
1633 TPFAS	03/25/24	163.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	03/25/24	2.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	03/25/24	5.6	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	03/25/24	2.1	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	03/25/24	2.5	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/25/24	64	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/25/24	11	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	03/25/24	5.4	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	03/25/24	2.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	03/25/24	47	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/25/24	16	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	03/25/24	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	03/25/24	3.5	3	NG/L	0	
1633 TPFAS	04/18/24	171.4	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/18/24	2.9	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	04/18/24	5.8	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	04/18/24	2.7	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	04/18/24	2.8	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/18/24	61	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/18/24	13	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	04/18/24	5.3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/18/24	2.3	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	04/18/24	54	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/18/24	16	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	04/18/24	1.9	1.5	NG/L	0	

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanoic acid (PFPeA)	04/18/24	3.7	3	NG/L	0	
1,4-Dioxane	04/18/24	0.15	0.2	UG/L	0	J
1633 TPFAS	05/02/24	180.6	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/02/24	2.7	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	05/02/24	5.9	5.9	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	05/02/24	2.1	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	05/02/24	2.9	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/02/24	73	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/02/24	12	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	05/02/24	5.8	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/02/24	2.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	05/02/24	50	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/02/24	18	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	05/02/24	1.9	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	05/02/24	3.6	3	NG/L	0	
1633 TPFAS	06/27/24	230.4	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	06/27/24	3.4	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	06/27/24	6.2	3.2	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	06/27/24	2.7	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	06/27/24	3.5	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	06/27/24	84	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	06/27/24	13	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	06/27/24	9.4	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	06/27/24	3.9	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	06/27/24	71	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	06/27/24	27	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	06/27/24	1.8	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	06/27/24	4.5	1.6	NG/L	0	
1,4-Dioxane	06/27/24	0.13	0.2	UG/L	0	J
1633 TPFAS	07/29/24	221.71	0	NG/L	0	
Perfluoro-3-methoxypropanoic acid (PFMPA)	07/29/24	0.51	1.6	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	07/29/24	3	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	07/29/24	6.5	3.2	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	07/29/24	2.8	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	07/29/24	3.7	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	07/29/24	84	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/29/24	15	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	07/29/24	9.2	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	07/29/24	3.5	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/29/24	60	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/29/24	27	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	07/29/24	2.2	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	07/29/24	4.3	1.6	NG/L	0	
1,4-Dioxane	07/29/24	0.13	0.2	UG/L	0	J
1633 TPFAS	08/26/24	249	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/26/24	3.1	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	08/26/24	6.2	3.3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	08/26/24	3.8	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	08/26/24	72	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	08/26/24	16	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	08/26/24	14	1.6	NG/L	0	

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctane sulfonamide (PFOSAm)	08/26/24	6.6	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/26/24	94	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/26/24	29	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	08/26/24	4.3	1.6	NG/L	0	
1,4-Dioxane	08/26/24	0.11	0.2	UG/L	0	J
1633 TPFAS	09/19/24	183.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	09/19/24	3.2	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	09/19/24	4.1	3.3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	09/19/24	1.7	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	09/19/24	3.1	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/19/24	66	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	09/19/24	13	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	09/19/24	1.6	1.7	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	09/19/24	2.8	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/19/24	54	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/19/24	30	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	09/19/24	1.7	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	09/19/24	2.7	1.7	NG/L	0	
1633 TPFAS	10/17/24	222.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	10/17/24	2.9	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	10/17/24	5.2	3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/17/24	3.2	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/17/24	86	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/17/24	16	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	10/17/24	7.6	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	10/17/24	3.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/17/24	65	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/17/24	28	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/17/24	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	10/17/24	3.5	1.5	NG/L	0	
1,4-Dioxane	10/17/24	0.13	0.2	UG/L	0	J
1633 TPFAS	11/23/24	262.3	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	11/23/24	2.9	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	11/23/24	5.8	3.2	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	11/23/24	3.5	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/23/24	3.5	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/23/24	100	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/23/24	16	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	11/23/24	12	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	11/23/24	2.8	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/23/24	74	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/23/24	35	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/23/24	2.6	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/23/24	4.2	1.6	NG/L	0	
1,4-Dioxane	11/23/24	0.16	0.2	UG/L	0	J
1633 TPFAS	12/16/24	238	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	12/16/24	3	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	12/16/24	5.5	3.2	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	12/16/24	3	1.6	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/16/24	4	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/16/24	91	1.6	NG/L	0	

Table F-51
Extraction Well Data
OU X FFAS CFH System

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Site ID : 096-132 (FF-RW-B)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorohexanoic acid (PFHxA)	12/16/24	16	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	12/16/24	11	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/16/24	2.4	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/16/24	63	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/24	33	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/16/24	2.1	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/24	4	1.6	NG/L	0	

Site ID : 105-79 (FF-RW-C)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	01/08/24	124.49	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	01/08/24	1.8	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	01/08/24	5.9	6	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	01/08/24	1.8	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	01/08/24	2.5	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	01/08/24	49	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	01/08/24	9.4	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	01/08/24	1.7	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	01/08/24	0.89	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	01/08/24	32	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	01/08/24	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	01/08/24	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	01/08/24	3.7	3	NG/L	0	
1,4-Dioxane	01/08/24	0.17	0.2	UG/L	0	J
1633 TPFAS	02/23/24	147.66	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	02/23/24	2	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	02/23/24	5.8	6.1	NG/L	0	J
Perfluorodecanoic acid (PFDA)	02/23/24	0.14	1.5	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	02/23/24	2.2	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	02/23/24	2.6	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	02/23/24	55	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	02/23/24	11	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	02/23/24	1.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	02/23/24	0.82	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	02/23/24	46	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	02/23/24	15	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	02/23/24	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	02/23/24	3.9	3	NG/L	0	
1,4-Dioxane	02/23/24	0.18	0.21	UG/L	0	J
1,4-Dioxane	03/25/24	0.16	0.2	UG/L	0	J
1633 TPFAS	03/25/24	119.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	03/25/24	1.9	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	03/25/24	5.3	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	03/25/24	1.7	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	03/25/24	2.3	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	03/25/24	53	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	03/25/24	8.3	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	03/25/24	1.2	1.5	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	03/25/24	1	1.5	NG/L	0	J

Table F-51
Extraction Well Data
OU X FFAS CFH System

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Site ID : 105-79 (FF-RW-C)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorooctanesulfonate (PFOS)	03/25/24	29	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	03/25/24	11	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	03/25/24	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	03/25/24	3.4	3	NG/L	0	
1633 TPFAS	04/18/24	133.41	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	04/18/24	2.1	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	04/18/24	5.7	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	04/18/24	2.2	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	04/18/24	2.5	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	04/18/24	54	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	04/18/24	8.7	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	04/18/24	1.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	04/18/24	0.91	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	04/18/24	36	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	04/18/24	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	04/18/24	1.9	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	04/18/24	3.9	3	NG/L	0	
1,4-Dioxane	04/18/24	0.12	0.2	UG/L	0	J
1633 TPFAS	05/02/24	134.8	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	05/02/24	2.1	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	05/02/24	5.6	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	05/02/24	1.8	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	05/02/24	2.6	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	05/02/24	56	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	05/02/24	11	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	05/02/24	1.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	05/02/24	1.3	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	05/02/24	34	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	05/02/24	13	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	05/02/24	2	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	05/02/24	3.9	3.1	NG/L	0	
1,4-Dioxane	05/02/24	0.16	0.2	UG/L	0	J
1633 TPFAS	07/29/24	160.9	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	07/29/24	2.8	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	07/29/24	6.4	3.4	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	07/29/24	2.6	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	07/29/24	2.9	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	07/29/24	64	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	07/29/24	11	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	07/29/24	2.6	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	07/29/24	2.4	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	07/29/24	42	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	07/29/24	17	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	07/29/24	2.4	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	07/29/24	4.8	1.7	NG/L	0	
1,4-Dioxane	07/29/24	0.16	0.2	UG/L	0	J
1633 TPFAS	08/26/24	139.4	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	08/26/24	2.5	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	08/26/24	5.3	3.2	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	08/26/24	2.6	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	08/26/24	50	1.6	NG/L	0	

Table F-51
Extraction Well Data
OU X FFAS CFH System

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Site ID : 105-79 (FF-RW-C)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorohexanoic acid (PFHxA)	08/26/24	11	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	08/26/24	2.1	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	08/26/24	1.8	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	08/26/24	42	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	08/26/24	16	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	08/26/24	2.1	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	08/26/24	4	1.6	NG/L	0	
1,4-Dioxane	08/26/24	0.16	0.2	UG/L	0	J
1633 TPFAS	09/18/24	125.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	09/18/24	1.8	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	09/18/24	5.4	3.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	09/18/24	2.6	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	09/18/24	49	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	09/18/24	10	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	09/18/24	34	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	09/18/24	17	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	09/18/24	1.8	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	09/18/24	3.9	1.7	NG/L	0	
1,4-Dioxane	09/18/24	0.18	0.2	UG/L	0	J
1633 TPFAS	10/17/24	123.4	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	10/17/24	2.1	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	10/17/24	5.5	3.3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/17/24	2.3	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/17/24	46	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/17/24	9.7	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	10/17/24	1.7	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	10/17/24	1.1	1.7	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	10/17/24	34	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/17/24	16	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/17/24	1.3	1.7	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	10/17/24	3.7	1.7	NG/L	0	
1,4-Dioxane	10/17/24	0.17	0.2	UG/L	0	J
1633 TPFAS	11/23/24	150.5	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	11/23/24	2.1	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	11/23/24	5.9	3.3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/23/24	2.9	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/23/24	59	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/23/24	11	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	11/23/24	2.3	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/23/24	43	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/23/24	18	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/23/24	2	1.7	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/23/24	4.3	1.7	NG/L	0	
1,4-Dioxane	11/23/24	0.2	0.2	UG/L	0	
1633 TPFAS	12/16/24	126.81	0	NG/L	0	
Perfluorobutanesulfonate (PFBS)	12/16/24	2	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	12/16/24	5.7	3.1	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	12/16/24	1.8	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/16/24	2.7	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/16/24	48	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/16/24	10	1.5	NG/L	0	

Table F-51
Extraction Well Data
OU X FFAS CFH System

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Site ID : 105-79 (FF-RW-C)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorononanoic acid (PFNA)	12/16/24	2.1	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/16/24	0.71	1.5	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	12/16/24	33	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/24	15	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/16/24	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/24	4	1.5	NG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.
N2 = Not usable based on the results that are not distinguishable from background

Table F-52
System Influent Data
OU X PFAS FFH System

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Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	1/1/2024	158	0	NG/L	0	
8260 TVOC	1/1/2024	0.29	0	UG/L	0	
Chloroform	1/1/2024	0.29	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	1/1/2024	2.3	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	1/1/2024	5.8	6.1	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	1/1/2024	1.9	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	1/1/2024	2.5	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	1/1/2024	56	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	1/1/2024	11	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	1/1/2024	2.8	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	1/1/2024	3.3	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	1/1/2024	53	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	1/1/2024	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	1/1/2024	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	1/1/2024	3.7	3	NG/L	0	
1,4-Dioxane	1/1/2024	0.14	0.2	UG/L	0	J
1,4-Dioxane	1/22/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	1/22/2024	161.3	0	NG/L	0	
8260 TVOC	1/22/2024	0.4	0	UG/L	0	
Chloroform	1/22/2024	0.4	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	1/22/2024	2.4	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	1/22/2024	6.4	5.6	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	1/22/2024	2.1	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	1/22/2024	2.8	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	1/22/2024	59	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	1/22/2024	12	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	1/22/2024	2.9	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	1/22/2024	2.8	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	1/22/2024	51	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	1/22/2024	15	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	1/22/2024	1.6	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	1/22/2024	3.3	2.8	NG/L	0	
1633 TPFAS	2/8/2024	169.1	0	NG/L	0	
8260 TVOC	2/8/2024	0.39	0	UG/L	0	
Chloroform	2/8/2024	0.39	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	2/8/2024	2.4	1.7	NG/L	0	
Perfluorobutyric acid (PFBA)	2/8/2024	6.2	6.7	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	2/8/2024	2	1.7	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	2/8/2024	2.6	1.7	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	2/8/2024	60	1.7	NG/L	0	
Perfluorohexanoic acid (PFHxA)	2/8/2024	12	1.7	NG/L	0	
Perfluorononanoic acid (PFNA)	2/8/2024	2.8	1.7	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	2/8/2024	3.3	1.7	NG/L	0	
Perfluorooctanesulfonate (PFOS)	2/8/2024	57	1.7	NG/L	0	
Perfluorooctanoic acid (PFOA)	2/8/2024	15	1.7	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	2/8/2024	1.6	1.7	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	2/8/2024	4.2	3.3	NG/L	0	
1,4-Dioxane	2/8/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	2/21/2024	166.6	0	NG/L	0	
8260 TVOC	2/21/2024	0.25	0	UG/L	0	
Chloroform	2/21/2024	0.25	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	2/21/2024	2.1	1.5	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

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Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorobutyric acid (PFBA)	2/21/2024	6.4	5.9	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	2/21/2024	2.1	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	2/21/2024	2.8	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	2/21/2024	55	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	2/21/2024	12	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	2/21/2024	2.9	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	2/21/2024	3.1	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	2/21/2024	61	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	2/21/2024	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	2/21/2024	1.6	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	2/21/2024	3.6	3	NG/L	0	
1,4-Dioxane	2/21/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	3/6/2024	158.4	0	NG/L	0	
8260 TVOC	3/6/2024	0.36	0	UG/L	0	
Chloroform	3/6/2024	0.36	0.5	UG/L	0	J
Perfluorobutyric acid (PFBA)	3/6/2024	9.5	63	NG/L	0	J
Perfluorohexanesulfonate (PFHxS)	3/6/2024	61	16	NG/L	0	
Perfluorohexanoic acid (PFHxA)	3/6/2024	11	16	NG/L	0	J
Perfluorooctane sulfonamide (PFOSAm)	3/6/2024	4.8	16	NG/L	0	J
Perfluorooctanesulfonate (PFOS)	3/6/2024	53	16	NG/L	0	
Perfluorooctanoic acid (PFOA)	3/6/2024	15	16	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	3/6/2024	4.1	32	NG/L	0	J
1,4-Dioxane	3/6/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	3/21/2024	181	0	NG/L	0	
8260 TVOC	3/21/2024	0.3	0	UG/L	0	
Chloroform	3/21/2024	0.3	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	3/21/2024	2.6	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	3/21/2024	6.8	5.8	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	3/21/2024	1.9	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	3/21/2024	2.9	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	3/21/2024	73	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	3/21/2024	12	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	3/21/2024	3.1	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	3/21/2024	3.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	3/21/2024	53	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	3/21/2024	16	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	3/21/2024	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	3/21/2024	4.2	2.9	NG/L	0	
1633 TPFAS	4/3/2024	159.6	0	NG/L	0	
8260 TVOC	4/3/2024	0.37	0	UG/L	0	
Chloroform	4/3/2024	0.37	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	4/3/2024	2.2	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	4/3/2024	5.7	5.9	NG/L	0	J
Perfluoroheptanesulfonate (PFHpS)	4/3/2024	1.7	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	4/3/2024	2.5	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	4/3/2024	60	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	4/3/2024	14	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	4/3/2024	2.9	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	4/3/2024	2.8	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	4/3/2024	48	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	4/3/2024	14	1.5	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

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Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanesulfonate (PFPeS)	4/3/2024	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	4/3/2024	4.1	2.9	NG/L	0	
1,1,1-Trichloroethane	4/17/2024	0.18	0.5	UG/L	0	J
1633 TPFAS	4/17/2024	162.3	0	NG/L	0	
8260 TVOC	4/17/2024	0.82	0	UG/L	0	
Chloroform	4/17/2024	0.43	0.5	UG/L	0	J
Methyl chloride	4/17/2024	0.21	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	4/17/2024	2.5	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	4/17/2024	6.5	6.2	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	4/17/2024	2.2	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	4/17/2024	3	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	4/17/2024	60	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	4/17/2024	12	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	4/17/2024	3.3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	4/17/2024	3.2	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	4/17/2024	50	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	4/17/2024	14	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	4/17/2024	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	4/17/2024	3.8	3.1	NG/L	0	
1,4-Dioxane	4/17/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	5/2/2024	156.4	0	NG/L	0	
8260 TVOC	5/2/2024	0.39	0	UG/L	0	
Chloroform	5/2/2024	0.39	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	5/2/2024	2.4	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	5/2/2024	6.4	5.9	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	5/2/2024	1.8	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	5/2/2024	2.7	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	5/2/2024	60	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	5/2/2024	11	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	5/2/2024	3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	5/2/2024	3.3	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	5/2/2024	44	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	5/2/2024	16	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	5/2/2024	1.9	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	5/2/2024	3.9	3	NG/L	0	
1,4-Dioxane	5/2/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	5/13/2024	193.94	0	NG/L	0	
8260 TVOC	5/13/2024	0.31	0	UG/L	0	
Chloroform	5/13/2024	0.31	0.5	UG/L	0	J
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5/13/2024	0.94	7	NG/L	0	J
Perfluorobutanesulfonate (PFBS)	5/13/2024	3.2	1.8	NG/L	0	
Perfluorobutyric acid (PFBA)	5/13/2024	7.8	7	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	5/13/2024	2.2	1.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	5/13/2024	3.2	1.8	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	5/13/2024	73	1.8	NG/L	0	
Perfluorohexanoic acid (PFHxA)	5/13/2024	14	1.8	NG/L	0	
Perfluorononanoic acid (PFNA)	5/13/2024	3.7	1.8	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	5/13/2024	4.1	1.8	NG/L	0	
Perfluorooctanesulfonate (PFOS)	5/13/2024	58	1.8	NG/L	0	
Perfluorooctanoic acid (PFOA)	5/13/2024	17	1.8	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	5/13/2024	2	1.8	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

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Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanoic acid (PFPeA)	5/13/2024	4.8	3.5	NG/L	0	
1,4-Dioxane	5/13/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	6/3/2024	169.5	0	NG/L	0	
8260 TVOC	6/3/2024	0.35	0	UG/L	0	
Chloroform	6/3/2024	0.35	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	6/3/2024	2.3	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	6/3/2024	6.7	5.6	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	6/3/2024	2.6	1.4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	6/3/2024	2.6	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	6/3/2024	61	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	6/3/2024	11	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	6/3/2024	3.3	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	6/3/2024	3.4	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	6/3/2024	53	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	6/3/2024	18	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	6/3/2024	1.7	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	6/3/2024	3.9	2.8	NG/L	0	
1,4-Dioxane	6/3/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	6/20/2024	234.7	0	NG/L	0	
8260 TVOC	6/20/2024	0.35	0	UG/L	0	
Chloroform	6/20/2024	0.35	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	6/20/2024	3.4	2	NG/L	0	
Perfluorobutyric acid (PFBA)	6/20/2024	7.6	4	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	6/20/2024	1.7	2	NG/L	0	J
Perfluoroheptanoic acid (PFHpA)	6/20/2024	3.8	2	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	6/20/2024	78	2	NG/L	0	
Perfluorohexanoic acid (PFHxA)	6/20/2024	13	2	NG/L	0	
Perfluorononanoic acid (PFNA)	6/20/2024	7.2	2	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	6/20/2024	7.6	2	NG/L	0	
Perfluorooctanesulfonate (PFOS)	6/20/2024	82	2	NG/L	0	
Perfluorooctanoic acid (PFOA)	6/20/2024	24	2	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	6/20/2024	1.8	2	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	6/20/2024	4.6	2	NG/L	0	
1,4-Dioxane	6/20/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	7/2/2024	213.9	0	NG/L	0	
8260 TVOC	7/2/2024	0.35	0	UG/L	0	
Chloroform	7/2/2024	0.35	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	7/2/2024	2.8	2	NG/L	0	
Perfluorobutyric acid (PFBA)	7/2/2024	7.5	4	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	7/2/2024	3.1	2	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	7/2/2024	73	2	NG/L	0	
Perfluorohexanoic acid (PFHxA)	7/2/2024	14	2	NG/L	0	
Perfluorononanoic acid (PFNA)	7/2/2024	6.6	2	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	7/2/2024	7	2	NG/L	0	
Perfluorooctanesulfonate (PFOS)	7/2/2024	72	2	NG/L	0	
Perfluorooctanoic acid (PFOA)	7/2/2024	22	2	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	7/2/2024	1.5	2	NG/L	0	J
Perfluoropentanoic acid (PFPeA)	7/2/2024	4.4	2	NG/L	0	
1,4-Dioxane	7/2/2024	0.13	0.2	UG/L	0	H
1,1-Dichloroethylene	7/20/2024	0.24	0.5	UG/L	0	J
1633 TPFAS	7/20/2024	234.5	0	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

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Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
8260 TVOC	7/20/2024	0.65	0	UG/L	0	
Chloroform	7/20/2024	0.41	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	7/20/2024	3.5	1.6	NG/L	0	
Perfluorobutyric acid (PFBA)	7/20/2024	6.2	3.2	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	7/20/2024	3.4	1.6	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	7/20/2024	81	1.6	NG/L	0	
Perfluorohexanoic acid (PFHxA)	7/20/2024	16	1.6	NG/L	0	
Perfluorononanoic acid (PFNA)	7/20/2024	8.6	1.6	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	7/20/2024	3.7	1.6	NG/L	0	
Perfluorooctanesulfonate (PFOS)	7/20/2024	77	1.6	NG/L	0	
Perfluorooctanoic acid (PFOA)	7/20/2024	29	1.6	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	7/20/2024	2.1	1.6	NG/L	0	
Perfluoropentanoic acid (PFPeA)	7/20/2024	4	1.6	NG/L	0	
1,4-Dioxane	7/20/2024	0.12	0.2	UG/L	0	J
1633 TPFAS	8/4/2024	194.9	0	NG/L	0	
8260 TVOC	8/4/2024	0.41	0	UG/L	0	
Chloroform	8/4/2024	0.41	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	8/4/2024	2.8	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	8/4/2024	6	3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	8/4/2024	2.8	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	8/4/2024	3.1	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	8/4/2024	75	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	8/4/2024	14	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	8/4/2024	5.6	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	8/4/2024	1.7	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	8/4/2024	55	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	8/4/2024	22	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	8/4/2024	2.2	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	8/4/2024	4.7	1.5	NG/L	0	
1,4-Dioxane	8/4/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	8/21/2024	192.8	0	NG/L	0	
8260 TVOC	8/21/2024	0.38	0	UG/L	0	
Chloroform	8/21/2024	0.38	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	8/21/2024	2.8	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	8/21/2024	7	2.8	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	8/21/2024	2.9	1.4	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	8/21/2024	64	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	8/21/2024	14	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	8/21/2024	3.5	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	8/21/2024	4.6	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	8/21/2024	66	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	8/21/2024	22	1.4	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	8/21/2024	2	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	8/21/2024	4	1.4	NG/L	0	
1,4-Dioxane	8/21/2024	0.18	0.2	UG/L	0	J
1633 TPFAS	9/5/2024	171.2	0	NG/L	0	
8260 TVOC	9/5/2024	0.35	0	UG/L	0	
Chloroform	9/5/2024	0.35	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	9/5/2024	2.8	1.4	NG/L	0	
Perfluorobutyric acid (PFBA)	9/5/2024	7.3	2.9	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	9/5/2024	2.8	1.4	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

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Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluorohexanesulfonate (PFHxS)	9/5/2024	55	1.4	NG/L	0	
Perfluorohexanoic acid (PFHxA)	9/5/2024	10	1.4	NG/L	0	
Perfluorononanoic acid (PFNA)	9/5/2024	2.1	1.4	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	9/5/2024	5.1	1.4	NG/L	0	
Perfluorooctanesulfonate (PFOS)	9/5/2024	63	1.4	NG/L	0	
Perfluorooctanoic acid (PFOA)	9/5/2024	19	1.4	NG/L	0	
Perfluoropentanoic acid (PFPeA)	9/5/2024	4.1	1.4	NG/L	0	
1,4-Dioxane	9/5/2024	0.12	0.2	UG/L	0	J
1633 TPFAS	9/16/2024	180	0	NG/L	0	
8260 TVOC	9/16/2024	0.33	0	UG/L	0	
Chloroform	9/16/2024	0.33	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	9/16/2024	2.3	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	9/16/2024	7.1	3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	9/16/2024	2.9	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	9/16/2024	62	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	9/16/2024	11	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	9/16/2024	2.3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	9/16/2024	5.4	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	9/16/2024	64	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	9/16/2024	17	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	9/16/2024	1.8	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	9/16/2024	4.2	1.5	NG/L	0	
1,4-Dioxane	9/16/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	10/2/2024	218.3	0	NG/L	0	
8260 TVOC	10/2/2024	0.4	0	UG/L	0	
Chloroform	10/2/2024	0.4	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	10/2/2024	2.8	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	10/2/2024	7	3.1	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/2/2024	3.7	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/2/2024	79	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/2/2024	12	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	10/2/2024	4.7	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	10/2/2024	5.2	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/2/2024	72	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/2/2024	26	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/2/2024	1.6	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	10/2/2024	4.3	1.5	NG/L	0	
1,4-Dioxane	10/2/2024	0.12	0.2	UG/L	0	J
1633 TPFAS	10/17/2024	196.1	0	NG/L	0	
8260 TVOC	10/17/2024	0.34	0	UG/L	0	
Chloroform	10/17/2024	0.34	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	10/17/2024	2.7	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	10/17/2024	5.9	3	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	10/17/2024	3.3	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	10/17/2024	74	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	10/17/2024	13	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	10/17/2024	4.5	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	10/17/2024	5	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	10/17/2024	60	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	10/17/2024	22	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	10/17/2024	1.9	1.5	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

2024 BNL Groundwater Status Report

Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanoic acid (PFPeA)	10/17/2024	3.8	1.5	NG/L	0	
1,4-Dioxane	10/17/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	11/6/2024	246.8	0	NG/L	0	
8260 TVOC	11/6/2024	0.42	0	UG/L	0	
Chloroform	11/6/2024	0.42	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	11/6/2024	2.5	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	11/6/2024	6.4	3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	11/6/2024	2.5	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/6/2024	3.3	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/6/2024	91	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/6/2024	16	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	11/6/2024	4.8	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	11/6/2024	5.6	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/6/2024	84	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/6/2024	25	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/6/2024	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/6/2024	4	1.5	NG/L	0	
1,4-Dioxane	11/6/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	11/23/2024	266.5	0	NG/L	0	
8260 TVOC	11/23/2024	3.15	0	UG/L	0	
Bromoform	11/23/2024	1.5	0.5	UG/L	0	
Chloroform	11/23/2024	0.35	0.5	UG/L	0	J
Dibromochloromethane	11/23/2024	1.3	0.5	UG/L	0	
Perfluorobutanesulfonate (PFBS)	11/23/2024	2.9	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	11/23/2024	6.6	3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	11/23/2024	3.9	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	11/23/2024	3.4	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	11/23/2024	98	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	11/23/2024	16	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	11/23/2024	6.3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	11/23/2024	4.9	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	11/23/2024	92	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	11/23/2024	26	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	11/23/2024	1.9	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	11/23/2024	4.6	1.5	NG/L	0	
1,4-Dioxane	11/23/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	12/4/2024	233.3	0	NG/L	0	
8260 TVOC	12/4/2024	0.35	0	UG/L	0	
Chloroform	12/4/2024	0.35	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	12/4/2024	2.8	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	12/4/2024	6.4	2.9	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	12/4/2024	3	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/4/2024	3.4	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/4/2024	83	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/4/2024	15	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	12/4/2024	5.3	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/4/2024	5.4	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/4/2024	77	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/4/2024	26	1.5	NG/L	0	

Table F-52
System Influent Data
OU X PFAS FFH System

2024 BNL Groundwater Status Report

Site ID: 076-422 (Influent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
Perfluoropentanesulfonate (PFPeS)	12/4/2024	1.7	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/4/2024	4.3	1.5	NG/L	0	
1633 TPFAS	12/16/2024	250.2	0	NG/L	0	
8260 TVOC	12/16/2024	0.34	0	UG/L	0	
Chloroform	12/16/2024	0.34	0.5	UG/L	0	J
Perfluorobutanesulfonate (PFBS)	12/16/2024	2.8	1.5	NG/L	0	
Perfluorobutyric acid (PFBA)	12/16/2024	6.6	3	NG/L	0	
Perfluoroheptanesulfonate (PFHpS)	12/16/2024	3.6	1.5	NG/L	0	
Perfluoroheptanoic acid (PFHpA)	12/16/2024	3	1.5	NG/L	0	
Perfluorohexanesulfonate (PFHxS)	12/16/2024	93	1.5	NG/L	0	
Perfluorohexanoic acid (PFHxA)	12/16/2024	15	1.5	NG/L	0	
Perfluorononanoic acid (PFNA)	12/16/2024	5.6	1.5	NG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	12/16/2024	5	1.5	NG/L	0	
Perfluorooctanesulfonate (PFOS)	12/16/2024	84	1.5	NG/L	0	
Perfluorooctanoic acid (PFOA)	12/16/2024	25	1.5	NG/L	0	
Perfluoropentanesulfonate (PFPeS)	12/16/2024	2.1	1.5	NG/L	0	
Perfluoropentanoic acid (PFPeA)	12/16/2024	4.5	1.5	NG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.

Table F-53
System Effluent Data
OU X PFAS FFH System

2024 BNL Groundwater Status Report

Site ID:076-424 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	1/1/2024	4.7	0	NG/L	0	
8260 TVOC	1/1/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	1/1/2024	4.7	5.8	NG/L	0	J
1,4-Dioxane	1/1/2024	0.14	0.2	UG/L	0	J
1,4-Dioxane	1/22/2024	0.18	0.2	UG/L	0	J
1633 TPFAS	1/22/2024	6.8	0	NG/L	0	
8260 TVOC	1/22/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	1/22/2024	6.8	5.7	NG/L	0	
Strontium-90	1/22/2024	0.39	0.325	PCI/L	0	N2
1633 TPFAS	2/8/2024	8.5	0	NG/L	0	
8260 TVOC	2/8/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	2/8/2024	8.5	6	NG/L	0	
1,4-Dioxane	2/8/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	2/21/2024	9.7	0	NG/L	0	
8260 TVOC	2/21/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	2/21/2024	9.7	6.5	NG/L	0	
Strontium-90	2/21/2024	0.431	0.273	PCI/L	0	N2
1,4-Dioxane	2/21/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	3/6/2024	11	0	NG/L	0	
8260 TVOC	3/6/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	3/6/2024	11	5.9	NG/L	0	
1,4-Dioxane	3/6/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	3/21/2024	12	0	NG/L	0	
8260 TVOC	3/21/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	3/21/2024	12	6	NG/L	0	
1,4-Dioxane	3/21/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	4/3/2024	11	0	NG/L	0	
8260 TVOC	4/3/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	4/3/2024	11	6.2	NG/L	0	
1633 TPFAS	4/17/2024	12	0	NG/L	0	
8260 TVOC	4/17/2024	0.39	0	UG/L	0	
Methyl chloride	4/17/2024	0.39	0.5	UG/L	0	J
Perfluorobutyric acid (PFBA)	4/17/2024	12	5.8	NG/L	0	
1,4-Dioxane	4/17/2024	0.13	0.2	UG/L	0	J
1633 TPFAS	5/2/2024	0	0	NG/L	0	
8260 TVOC	5/2/2024	0	0	UG/L	0	
1633 TPFAS	5/13/2024	0.73	0	NG/L	0	
8260 TVOC	5/13/2024	0	0	UG/L	0	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	5/13/2024	0.73	7	NG/L	0	J
1633 TPFAS	6/3/2024	0	0	NG/L	0	
8260 TVOC	6/3/2024	0	0	UG/L	0	
1,4-Dioxane	6/3/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	6/20/2024	0	0	NG/L	0	
8260 TVOC	6/20/2024	0	0	UG/L	0	
1,4-Dioxane	6/20/2024	0.16	0.2	UG/L	0	J
1633 TPFAS	7/2/2024	0.66	0	NG/L	0	
8260 TVOC	7/2/2024	0	0	UG/L	0	
Perfluorooctane sulfonamide (PFOSAm)	7/2/2024	0.66	2	NG/L	0	J
1,4-Dioxane	7/2/2024	0.13	0.2	UG/L	0	H

Table F-53
System Effluent Data
OU X PFAS FFH System

2024 BNL Groundwater Status Report

Site ID:076-424 (Effluent)

Chemical Name	Sample Date	Value	Detlim	Units	Depth	Qual
1633 TPFAS	7/20/2024	0	0	NG/L	0	
8260 TVOC	7/20/2024	0	0	UG/L	0	
1,4-Dioxane	7/20/2024	0.11	0.2	UG/L	0	J
1633 TPFAS	8/4/2024	0	0	NG/L	0	
8260 TVOC	8/4/2024	0	0	UG/L	0	
1,4-Dioxane	8/4/2024	0.16	0.21	UG/L	0	J
1633 TPFAS	8/21/2024	0	0	NG/L	0	
8260 TVOC	8/21/2024	0	0	UG/L	0	
1,4-Dioxane	8/21/2024	0.22	0.2	UG/L	0	
1633 TPFAS	9/5/2024	0	0	NG/L	0	
8260 TVOC	9/5/2024	0	0	UG/L	0	
1,4-Dioxane	9/5/2024	0.12	0.2	UG/L	0	J
1633 TPFAS	9/16/2024	0	0	NG/L	0	
8260 TVOC	9/16/2024	0	0	UG/L	0	
1,4-Dioxane	9/16/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	10/2/2024	0.81	0	NG/L	0	
8260 TVOC	10/2/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	10/2/2024	0.81	3.3	NG/L	0	J
1,4-Dioxane	10/2/2024	0.14	0.2	UG/L	0	J
1633 TPFAS	10/17/2024	1.1	0	NG/L	0	
8260 TVOC	10/17/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	10/17/2024	1.1	3.2	NG/L	0	J
1,4-Dioxane	10/17/2024	0.13	0.22	UG/L	0	J
1633 TPFAS	11/6/2024	2.5	0	NG/L	0	
8260 TVOC	11/6/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	11/6/2024	2.5	3.2	NG/L	0	J
1,4-Dioxane	11/6/2024	0.12	0.22	UG/L	0	J
1633 TPFAS	11/23/2024	4.7	0	NG/L	0	
8260 TVOC	11/23/2024	2.6	0	UG/L	0	
Bromoform	11/23/2024	1.6	0.5	UG/L	0	
Dibromochloromethane	11/23/2024	1	0.5	UG/L	0	
Perfluorobutyric acid (PFBA)	11/23/2024	4.7	3.2	NG/L	0	
1,4-Dioxane	11/23/2024	0.15	0.2	UG/L	0	J
1633 TPFAS	12/4/2024	5.4	0	NG/L	0	
8260 TVOC	12/4/2024	0	0	UG/L	0	
Perfluorobutyric acid (PFBA)	12/4/2024	5.4	3	NG/L	0	
1633 TPFAS	12/16/2024	7.4	0	NG/L	0	
8260 TVOC	12/16/2024	0.32	0	UG/L	0	
Methyl chloride	12/16/2024	0.32	0.5	UG/L	0	J
Perfluorobutyric acid (PFBA)	12/16/2024	7.4	3.2	NG/L	0	

J = Estimated Value below the method detection limit of 0.50 UG/L
B = Compound was found in both the sample and associated laboratory blank.

Table F-54
Pumpage and Mass Removal
OU X PFAS FFH System

2024 BNL Groundwater Status Report

DATE	Gallons Pumped	TPFAS (NG/L)	LBS/DAY	CUM. LBS
1/26/2023	1,883,697	337.35	0.0053	0.0053
1/27/2023	72,450	333.10	0.0002	0.0055
1/30/2023	217,350	319.44	0.0006	0.0061
1/31/2023	72,450	280.10	0.0002	0.0062
2/1/2023	345,313	302.79	0.0009	0.0071
2/6/2023	1,726,569	298.11	0.0043	0.0114
2/13/2023	2,417,197	230.44	0.0046	0.0160
2/22/2023	3,107,825	252.23	0.0065	0.0225
3/1/2023	2,762,511	248.38	0.0057	0.0282
3/6/2023	1,778,687	222.93	0.0033	0.0315
3/15/2023	3,201,636	256.62	0.0068	0.0383
3/20/2023	1,778,687	242.93	0.0036	0.0419
3/29/2023	3,201,636	258.42	0.0069	0.0488
4/7/2023	2,698,328	164.26	0.0037	0.0525
4/29/2023	7,420,402	228.59	0.0141	0.0665
5/5/2023	2,023,746	213.25	0.0036	0.0701
5/15/2023	3,372,910	207.12	0.0058	0.0759
6/7/2023	7,717,693	214.82	0.0138	0.0897
6/20/2023	4,384,783	179.52	0.0065	0.0962
7/3/2023	5,162,687	175.43	0.0075	0.1037
7/20/2023	5,162,687	190.02	0.0081	0.1119
8/2/2023	5,314,644	144.60	0.0064	0.1182
8/14/2023	5,314,644	174.80	0.0077	0.1260
9/5/2023	4,081,651	156.50	0.0053	0.1313
9/18/2023	4,081,651	157.79	0.0053	0.1366
10/5/2023	3,375,217	185.60	0.0052	0.1418
10/16/2023	3,375,217	163.49	0.0046	0.1464
11/2/2023	4,970,972	159.80	0.0066	0.1530
11/18/2023	4,970,972	151.30	0.0062	0.1592
12/5/2023	4,752,113	183.30	0.0072	0.1664
12/16/2023	4,752,113	168.70	0.0067	0.1731
1/1/2024	5,168,542	158.00	0.0068	0.1799
1/22/2024	5,168,542	161.30	0.0069	0.1868
2/8/2024	4,826,661	169.10	0.0068	0.1936
2/21/2024	4,826,661	166.60	0.0067	0.2002
3/6/2024	5,042,010	158.40	0.0066	0.2069
3/21/2024	5,042,010	181.00	0.0076	0.2145
4/3/2024	4,374,562	159.60	0.0058	0.2202
4/17/2024	4,374,562	162.30	0.0059	0.2261
5/2/2024	4,965,576	156.40	0.0064	0.2326
5/13/2024	4,965,576	193.90	0.0080	0.2406
6/3/2024	4,050,490	169.50	0.0057	0.2463
6/20/2024	4,050,490	234.70	0.0079	0.2542
7/2/2024	2,247,954	213.90	0.0040	0.2582
7/20/2024	2,247,954	234.50	0.0044	0.2625
8/4/2024	3,995,520	194.90	0.0065	0.2690
8/21/2024	3,995,520	192.80	0.0064	0.2754
9/5/2024	4,164,378	171.20	0.0059	0.2813
9/16/2024	4,164,378	180.00	0.0062	0.2875
10/2/2024	4,556,708	218.30	0.0083	0.2958
10/17/2024	4,556,708	196.10	0.0074	0.3032
11/6/2024	4,947,550	246.80	0.0101	0.3133
11/23/2024	4,947,550	266.50	0.0109	0.3243
12/4/2024	4,361,840	233.30	0.0084	0.3327
12/16/2024	4,361,840	250.20	0.0091	0.3418

APPENDIX G

USABILITY REPORTS

Attachment 1

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project	SITEWD - O3S
Sampling Contractor	EPD Field Sampling Team
Analytical Laboratory	General Engineering
Analytical Method	EPA 905.0/DOE RP501
Sample Delivery Group	45822
COC No./Sample IDs	45822 / 075-701, 075-664
Date Sampled	12/13/2023
Parameter(s)	Radionuclides

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs	X			
Detection Limits (CRDL)	X			
Duplicates			X	
Matrix Spike (MS/MSD)	X			
MS/MSD Recoveries	X			
Field Blanks			X	
Equipment Blanks			X	
Method Blanks	X			
Chain-of-Custody Forms	X			
Field Sampling Logs			X	
Holding Times	X			
Nonconformance			X	
Other			X	

Reviewed by : _____
(Project Manager)

Larry D. Singh EI.80.QR.24

Date : _____

02/08/2024

Site ID Verification Data

Sample ID	Site ID
45822-001	075-701
45822-002	
45822-002	
45822-002	
45822-002	075-664

January 25, 2024

Mr. Larry Singh
Brookhaven National Laboratory
2 Center Street
Upton, New York 11973

RE: Data Validation Report – Eurofins Buffalo – 480-216056-1

Dear Mr. Singh:

A Stage 2B validation was performed on the semi-volatile organic data (1,4-Dioxane only) for seven aqueous samples and one field blank for Brookhaven National Labs - SITEWD-WFWS, which were reported in a single data package under Job No. 480-216056-1. The following samples were reported:

45853-001 (117-01)	45853-002 (117-02)	45853-003 (BD-1)
45853-004 (FB-1)	45853-005 (117-05)	45853-006 (109-03)
45853-007 (117-04)	45853-008 (117-06)	

Analyses were performed in accordance with USEPA Method 8270D using Selected Ion Monitoring (SIM) and Isotope Dilution. The review was performed in accordance with the analytical method, and to the extent possible, the project *Quality Assurance Project Plan (QAPP) For 90-Day Hazardous Waste Accumulation Areas: Bldg. 526 HAZ-STOR™ Shed, Bldg. 830 HAZ-STOR™ Shed, Bldg. 905 Room 121 Caged Area*, August 2023. Professional judgment is applied as necessary and appropriate. Qualifiers consistent with those defined by National Functional Guidelines for Organic Data Review are applied as necessary and appropriate.

Qualifier definitions are provided in Attachment A. A copy of the chain of custody record is provided in Attachment B.

The data were evaluated based on the parameters summarized in the table below, where applicable:

- Data Completeness
- Chain of Custody and receiving conditions
- Holding times and preservation
- Analyte lists and reporting limits
- Requested methods
- Blanks (method, field, and trip)
- Surrogate recoveries
- LCS/LCSD recoveries
- MS/MSD recoveries

- Internal standards
- Field and laboratory duplicates
- GC/MS Instrument Performance Check
- Initial and Continuing Calibrations
- Target Compound Identification
- System Performance

Overall Evaluation of Data

Sample results are not qualified as a result of the validation effort.

BD-1 was submitted as a duplicate of 117-02. 1,4-Dioxane was not detected in either sample.

Documentation

The client sample identifications (IDs) reported by the laboratory do not match the Sample Information documented on the chain of custody (COC). A cross reference table identifying the site ID was provided (see Attachment B).

Holding Times, Preservation, Sample Integrity:

A copy of the applicable chain of custody (COC) record was included in the data package, documenting collection dates of December 27 and 28, 2023. The samples were shipped on December 28, 2023 and received by the laboratory on December 29, 2023. The validator presumes the samples collected on December 27, 2023 were properly stored from time of collection to time of shipping. Samples were properly preserved and all analytical method required holding times were met.

Please feel free to contact me at (908) 370-3431 or richjerirossi513@gmail.com if you have any questions regarding this data package review report or need further information.

Sincerely,



Jeri L Rossi, CEAC
Environmental Consulting Chemist

ATTACHMENT A

Qualifier Definitions

EPA Qualifier Definitions

U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

ATTACHMENT B

CHAIN OF CUSTODY RECORD

Page 1 of 1

BROOKHAVEN NATIONAL LABORATORY

P.O. # _____

Chain of Custody No. 45853

Requires EDD X

SAMPLING CHAIN OF CUSTODY

Analysis Requested By	Sampling Contractor	Analytical Laboratory
Name: L. Singh	Name: EPD - No Charge	Name: Eurofins TestAmerica, Buffalo
Life No: 26271 Ext. 8125	Contact: Rich Lagattolla	Address: 10 Hazelwood Dr.
Acct. No: 224851234568 Dept: EPD	Phone: 631-344-7129	City: Amherst St: NY Zip:
Email Reports To:	Email/Fax: rlagattolla@bnl.gov	Contact:
1 LSingh	Sampler: N. Sherret	Phone:
2		Email/Fax:
Project Name:	Project Manager:	Field Engineer:
SITEWD-WFWS	L. Singh	Rich Lagattolla

Comments:

Type			Sample Information					Additional Sample Information					Analysis Requested											
UID	Smp	Coll	Site ID/Bldg/Life #	Depth/RWP	Date	Time	Matrix	Name/Description	Cont. Vol./Units	Cont. Type	# of Cont.	Preservative	Alpha/Beta	Tritium	Gamma	Strontium	524.2	624	Nuclide-specific Alpha	PCBs	Metals	1,4-Dioxane 8270SIM		
001	E	G	117-01	85	12/27/23	0934	W		250mL	AG	2	none										X		
002			117-02	79		1047		use for MS/MSD			6											X		
003			BD-1	—		0000		~~field blank~~ NS 12/27/23 blind duplicate			2											X		
004			FB-1	0		1050		field blank														X		
005			117-05	135		1134																X		
006			109-03	130	12/28/23	0954																X		
007			117-04	135		1038																X		
008			117-06	135		1125																X		

NS
12/28/23

480-216056 Chain of Custody

1 Relinquished By/Date/Time	2 Relinquished By/Date/Time	3 Relinquished By/Date/Time
Print Nancy Sherret 12/28/23	Print	Print
Signature 1330	Signature	Signature
1 Received By/Date/Time	2 Received By/Date/Time	3 Received By/Date/Time
Print Parker Lugo 12/29/23	Print	Print
Signature 1030	Signature	Signature

Contractor Lab Sample Disposal:
- ☐ Return To Client
- X Disposal by Lab
- ☐ Archive For ____ Months

Data Package: X Full ☐ Summary

Turn-Around Time Required:
- ☐ Rush (1 Day)
- ☐ 14 Days
- X 30 Days
- ☐ 7 Days
- ☐ Other ( )

Temp 2.7# ice

Sample Summary

Client: Brookhaven National Labs
Job ID: 480-216056-1

Project/Site: BNL - SITEWD-WFWS SDG: 45853

Lab Sample ID	Client Sample ID	Site ID	Matrix	Collected	Received
480-216056-1	45853-001	117-01	Water	12/27/23 09:34	12/29/23 10:30
480-216056-2	45853-002	117-02	Water	12/27/23 10:47	12/29/23 10:30
480-216056-3	45853-003	BD-1	Water	12/27/23 00:00	12/29/23 10:30
480-216056-4	45853-004	FB-1	Water	12/27/23 10:50	12/29/23 10:30
480-216056-5	45853-005	117-05	Water	12/27/23 11:34	12/29/23 10:30
480-216056-6	45853-006	109-03	Water	12/28/23 09:54	12/29/23 10:30
480-216056-7	45853-007	117-04	Water	12/28/23 10:38	12/29/23 10:30
480-216056-8	45853-008	117-06	Water	12/28/23 11:25	12/29/23 10:30

January 25, 2024

Mr. Larry Singh
Brookhaven National Laboratory
2 Center Street
Upton, New York 11973

RE: Data Validation Report – Eurofins Denver – 280-186400-1

Dear Mr. Singh:

A Stage 2B validation was performed on the volatile organic data for seven aqueous samples for Brookhaven National Labs, OU3 MR-P&T, which were reported in a single data package under Job No. 280-186400-1. The following samples were reported:

45868-001 (113-23)	45868-002 (113-24)	45868-003 (113-25)
45868-004 (113-26)	45868-005 (113-27)	45868-006 (106-66)
45868-007 (113-33)		

Analyses were performed in accordance with USEPA Method 8260C. The review was performed in accordance with the analytical method, and to the extent possible, the project *Quality Assurance Project Plan (QAPP) For 90-Day Hazardous Waste Accumulation Areas: Bldg. 526 HAZ-STOR™ Shed, Bldg. 830 HAZ-STOR™ Shed, Bldg. 905 Room 121 Caged Area*, August 2023. Professional judgment is applied as necessary and appropriate. Qualifiers consistent with those defined by National Functional Guidelines for Organic Data Review are applied as necessary and appropriate.

Qualifier definitions are provided in Attachment A. A copy of the chain of custody record is provided in Attachment B.

The data were evaluated based on the parameters summarized in the table below, where applicable:

- Data Completeness
- Chain of Custody and receiving conditions
- Holding times and preservation
- Analyte lists and reporting limits
- Requested methods
- Blanks (method, field, and trip)
- Surrogate recoveries
- LCS/LCSD recoveries
- MS/MSD recoveries
- Internal standards

- Field and laboratory duplicates
- GC/MS Instrument Performance Check
- Initial and Continuing Calibrations
- Target Compound Identification
- System Performance

Overall Evaluation of Data

Sample results are not qualified as a result of the validation effort.

Documentation

The client sample identifications (IDs) reported by the laboratory do not match the Sample Information documented on the chain of custody (COC). A cross reference table identifying the site ID was provided (see Attachment B).

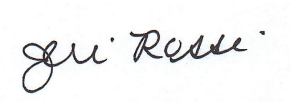
Holding Times, Preservation, Sample Integrity:

The chain of custody (COC) record indicates the samples were collected on January 4, 2024 and shipped on January 8, 2024. The validator presumes the samples were properly stored from time of collection to time of shipping. The samples were received by the laboratory on January 9, 2024. Samples were properly preserved and all analytical method required holding times were met.

The COC states 'Use Trip Blank from COC #45867'. The results of the trip blank (TB-1) were reported in SDG 280-186401-1. No target analytes were detected in the trip blank.

Please feel free to contact me at (908) 370-3431 or richjerirossi513@gmail.com if you have any questions regarding this data package review report or need further information.

Sincerely,



Jeri L Rossi, CEAC
Environmental Consulting Chemist

ATTACHMENT A

Qualifier Definitions

EPA Qualifier Definitions

U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

ATTACHMENT B

CHAIN OF CUSTODY RECORD

Page 1 of 1

BROOKHAVEN NATIONAL LABORATORY

P.O. #

Chain of Custody No. 45868

Requires EDD ☒

SAMPLING CHAIN OF CUSTODY

Analysis Requested By	Sampling Contractor	Analytical Laboratory
Name: V. Racaniello	Name: EPD Field Sampling Team	Name: Test America
Life: No: 21478 Ext. 5436	Contact: R. Lagattolla	Address: 4955 Yarrow Street
Acct. No: 22486/23394 Dept: ES	Phone: 631 344 7129	City: Arvada St: CO Zip: 80002
Email Reports To:	Email/Fax: rlagattolla@bnl.gov	Contact: Michelle Johnston
1 J. Milligan	Sampler: A.J. Scheff	Phone:
2 B Howe		Email/Fax:
Project Name: OU3 MR-P&T	Project Manager: V. Racaniello	Field Engineer: R. Lagattolla

Comments: Use Trip Blank from COC # 45867 SPDES TAT for EDD

Type			Sample Information					Additional Sample Information					Analysis Requested											
UID	Smp	Coll	Site ID/Bldg/Life #	Depth/RWP	Date	Time	Matrix	Name/Description	Cont. Vol./Units	Cont. Type	# of Cont.	Preservative	Alpha/Beta	Tritium	Gamma	Strontium	537 EPA 8260 Low Level	624	Nuclide-specific Alpha	PCBs	Metals			
001	E	G	113-23	0	1/4/24	1042	W	MRW-1	40 ML	SC	2	HCL					X							
002	E	G	113-24	0	1/4/24	0952	W	MRW-2	40 ML	SC	2	HCL					X							
003	E	G	113-25	0	1/4/24	1006	W	MRW-3	40 ML	SC	2	HCL					X							
004	E	G	113-26	0	1/4/24	1057	W	MRW-4	40 ML	SC	2	HCL					X							
005	E	G	113-27	0	1/4/24	1109	W	MRW-5	40 ML	SC	2	HCL					X							
006	E	G	106-66	0	1/4/24	1121	W	MRW-6	40 ML	SC	2	HCL					X							
007	E	G	113-33	0	1/4/24	0941	W	MRW-7	40 ML	SC	2	HCL					X							

1/4/24

280-186400 Chain of Custody

1 Relinquished By/Date/Time	2 Relinquished By/Date/Time	3 Relinquished By/Date/Time
Print AJ Scheff 1/8/24	Print	Print
Signature 1700	Signature	Signature
1 Received By/Date/Time	2 Received By/Date/Time	3 Received By/Date/Time
Print Matthew Little EEPDEN	Print	Print
Signature 01/09/24 1010	Signature	Signature

Contractor Lab Sample Disposal:
☐ Return To Client ☒ Disposal by Lab
☐ Archive For ____ Months

Data Package: ☐ Full ☒ Summary

Turn-Around Time Required:
☐ Rush (1 Day) ☐ 14 Days ☒ 30 Days
☐ 7 Days ☐ Other ( )

BNL F 3101F (rev. 6/13) Distribution WHITE (1) - Stays with Sample YELLOW (2) - Returned to Client with Report PINK (3) - Lab or Other GOLDENROD (4) - Field Copy - (Sampler)

T: 0.1 Of 1.2 ☒ APSA

1/11/2024 7:23 AM

Sample Summary

Client: Brookhaven National Labs
Job ID: 280-186400-1

Project/Site: BNL - OU3 MR-P&T SDG: 45868

Lab Sample ID	Client Sample ID	Site ID	Matrix	Collected	Received
280-186400-1	45868-001	113-23	Water	01/04/24 10:42	01/09/24 10:10
280-186400-2	45868-002	113-24	Water	01/04/24 09:52	01/09/24 10:10
280-186400-3	45868-003	113-25	Water	01/04/24 10:06	01/09/24 10:10
280-186400-4	45868-004	113-26	Water	01/04/24 10:57	01/09/24 10:10
280-186400-5	45868-005	113-27	Water	01/04/24 11:09	01/09/24 10:10
280-186400-6	45868-006	106-66	Water	01/04/24 11:21	01/09/24 10:10
280-186400-7	45868-007	113-33	Water	01/04/24 09:41	01/09/24 10:10

Attachment 1

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project	SITEWD - RAV
Sampling Contractor	EPD Field Sampling Team
Analytical Laboratory	General Engineering
Analytical Method	EPA 905.0/DOE RP501
Sample Delivery Group	46028
COC No./Sample IDs	46028 / 107-35, 107-42, 108-45, 108-57, 108-58, 108-59, 108-56, 108-55, 108-43, 108-44, BD-1, FB-1, 107-34, 098-104, 098-103
Date Sampled	2/26/2024, 2/27/2024, 3/4/2024
Parameter(s)	Radionuclides

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs	X			
Detection Limits (CRDL)	X			
Duplicates	X			
Matrix Spike (MS/MSD)	X			
MS/MSD Recoveries	X			
Field Blanks	X			
Equipment Blanks			X	
Method Blanks		X		samples: 46028-001(107-35) 46028-003(108-45) 46028-013 (107-34) in the Sitewd-RAV program for Sr-90 have been qualified "N2" Not usable based on the results that are not distinguishable from background. The reported concentration value is less than or equal to the sum of the MDC and the uncertainty
Chain-of-Custody Forms	X			
Field Sampling Logs			X	
Holding Times	X			
Nonconformance			X	
Other			X	

Reviewed by : _____ EI.80.QR.24 Date : _____
(Project Manager)

Larry D. Singh 04/17/2024

Site ID Verification Data

Sample ID	Site ID
46028-001	107-35
46028-002	107-42
46028-003	108-45
46028-004	108-57
46028-005	108-58
46028-006	108-59
46028-007	108-56
46028-008	108-55
46028-009	108-43
46028-010	108-44
46028-011	BD-1
46028-012	FB-1
46028-013	
46028-013	107-34
46028-013	
46028-013	
46028-014	098-104
46028-015	098-103

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - O3WSB
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	General Engineering
Analytical Method and/or Parameter :	EPA 8260D
Sample Delivery Group :	46311
COC No. / Sample IDs :	46311 / TB-1, 130-08, 127-07, 126-16, 130-11, 130-10, 130-09, 000-558, 000-559, 000-560, BD-1, FB-1, 119-10, 119-06, 119-12, 119-11, 127-04, 127-06, 121-42
Date Sampled :	5/20/2024, 5/21/2024, 5/22/2024, 5/23/2024, 5/24/2024

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :	X			
Duplicates :	X			
Matrix Spike (MS/MSD) :	X			
MS/MSD Recoveries :	X			
Trip Blanks :	X			
Field Blanks :	X			
Equipment Blanks :			X	
Method Blanks :		X		Naphthalene, 0.36 UG/L.
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh (Subject Matter Expert) EI.90.QR.24 Date : 07/17/2024

Reviewed by : _____ (Project Manager) Date : _____

Site ID Verification Data

Sample ID	Site ID
46311-001	TB-1
46311-002	130-08
46311-003	127-07
46311-004	126-16
46311-005	130-11
46311-006	130-10
46311-007	130-09
46311-008	000-558
46311-009	000-559
46311-010	000-560
46311-010	
46311-010	
46311-011	BD-1
46311-012	FB-1
46311-013	119-10
46311-014	119-06
46311-015	119-12
46311-016	119-11
46311-017	127-04
46311-018	127-06
46311-019	121-42

Attachment 1

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project	SITEWD - FFH
Sampling Contractor	EPD Field Sampling Team
Analytical Laboratory	General Engineering
Analytical Method	EPA 905.0/DOE RP501
Sample Delivery Group	46419
COC No./Sample IDs	46419 / 075-811, 075-809, BD-1, FB-1, 075-810
Date Sampled	7/1/2024, 7/2/2024
Parameter(s)	Radionuclides

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs	X			
Detection Limits (CRDL)	X			
Duplicates	X			
Matrix Spike (MS/MSD)	X			
MS/MSD Recoveries	X			
Field Blanks	X			
Equipment Blanks			X	
Method Blanks	X			
Chain-of-Custody Forms	X			
Field Sampling Logs			X	
Holding Times	X			
Nonconformance			X	
Other			X	

Reviewed by : _____
(Project Manager)

Larry D. Singh EI.80.QR.24

Date : _____

09/13/2024

Site ID Verification Data

Sample ID	Site ID
46419-001	
46419-001	
46419-001	075-811
46419-001	
46419-002	075-809
46419-003	BD-1
46419-004	FB-1
46419-005	075-810

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - NSEEDB
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	Test America Buffalo
Analytical Method and/or Parameter :	EPA 504.1
Sample Delivery Group :	46496
COC No. / Sample IDs :	46496 / TB-1, 000-565, 000-566, 000-552, 000-553, 000-555, 000-563, 000-554, 000-551, BD-1, FB-1, 000-564, 000-394, 000-138
Date Sampled :	7/22/2024, 7/23/2024, 7/24/2024

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :	X			
Duplicates :	X			
Matrix Spike (MS/MSD) :	X			
MS/MSD Recoveries :	X			
Trip Blanks :	X			
Field Blanks :	X			
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh
(Subject Matter Expert)

Reviewed by : _____
(Project Manager)

EI.90.QR.24

Date : 08/30/2024

Date : _____

Site ID Verification Data

Sample ID	Site ID
46496-001	TB-1
46496-002	000-565
46496-003	000-566
46496-004	000-552
46496-005	000-553
46496-006	000-555
46496-007	000-563
46496-008	000-554
46496-009	
46496-009	000-551
46496-009	
46496-010	BD-1
46496-011	FB-1
46496-012	000-564
46496-013	000-394
46496-014	000-138

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - CFH
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	General Engineering
Analytical Method and/or Parameter :	EPA 1633
Sample Delivery Group :	46615
COC No. / Sample IDs :	46615 / 103-10, 084-95, 073-01, 083-02
Date Sampled :	8/29/2024, 8/30/2024

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :	X			
Duplicates :			X	
Matrix Spike (MS/MSD) :			X	
MS/MSD Recoveries :			X	
Trip Blanks :			X	
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :			X	
Other :			X	

Reviewed by : Larry D. Singh EI.90.QR.24 Date : 10/15/2024
(Subject Matter Expert)

Reviewed by : _____ Date : _____
(Project Manager)

Site ID Verification Data

Sample ID	Site ID
46615-001	103-10
46615-002	084-95
46615-003	073-01
46615-004	083-02

August 13, 2024

Mr. Larry Singh
Brookhaven National Laboratory
2 Center Street
Upton, New York 11973

RE: Data Validation Report – Eurofins Denver – 280-194649-1

Dear Mr. Singh:

A Stage 2B validation was performed on the organic analytical data for four aqueous samples for Brookhaven National Labs - OU10-VP, which were reported in a single data package under Job No. 280-194649-1. The following samples were reported:

46710-01 (OU10-VP-020 75-80)	46710-02 (OU10-VP-020 65-70)
46710-03 (OU10-VP-020 55-60)	46710-04 (FB-3)

Analyses were performed in accordance with USEPA Method 8270D Selected Ion Monitoring (SIM), isotope dilution (1,4-dioxane only). The review was performed in accordance with the analytical method, and to the extent possible, the project *Quality Assurance Project Plan (QAPP) For 90-Day Hazardous Waste Accumulation Areas: Bldg. 526 HAZ-STOR™ Shed, Bldg. 830 HAZ-STOR™ Shed, Bldg. 905 Room 121 Caged Area*, August 2023. Professional judgment is applied as necessary and appropriate. Qualifiers consistent with those defined by National Functional Guidelines for Organic Data Review are applied as necessary and appropriate.

Qualifier and definitions are provided in Attachment A. A copy of the chain of custody record is provided in Attachment B.

The data were evaluated based on the parameters summarized in the table below, where applicable:

- Data Completeness
- Chain of Custody and receiving conditions
- Holding times and preservation
- Analyte lists and reporting limits
- Requested methods
- Blanks (method, field, and trip)
- Surrogate recoveries
- LCS/LCSD recoveries
- MS/MSD recoveries
- Internal standards
- Field and laboratory duplicates

- Instrument Performance Check
- Initial and Continuing Calibrations
- Target Compound Identification
- System Performance

Overall Evaluation of Data

- Sample results are not qualified as a result of the validation effort.

Documentation

The laboratory report indicates Eurofins Denver produced the report, but the supporting analytical data indicate analysis was performed by Eurofins Buffalo.

Holding Times, Preservation, Sample Integrity:

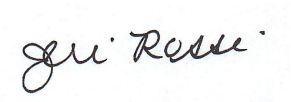
A copy of the applicable chain of custody (COC) record was included in the data package, documenting collection date of July 29, 2024. The samples were shipped on the same day and received by the laboratory on July 30, 2024. Samples were properly preserved, and all analytical method required holding times were met.

Semi-Volatile Organics (1,4-Dioxane only)

The semi-volatile organic results were determined to be usable as reported, based on the data review. No qualifiers were applied to these results based on review of the data provided.

Please feel free to contact me at (908) 370-3431 or richjerirossi513@gmail.com if you have any questions regarding this data package review report or need further information.

Sincerely,



Jeri L Rossi, CEAC
Environmental Consulting Chemist

ATTACHMENT A

Qualifier Definitions

EPA Qualifier Definitions

U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

ATTACHMENT B

CHAIN OF CUSTODY RECORD

Page 1 of 1

BROOKHAVEN NATIONAL LABORATORY

P.O. # _____

Chain of Custody No. 46710

Requires EDD ☒

SAMPLING CHAIN OF CUSTODY

Analysis Requested By	Sampling Contractor	Analytical Laboratory
Name: V. Racaniello	Name: D+B Engineers	Name: Test America Buffalo
Life No: 21478 Ext. 5436	Contact: D. Sassone	Address: 10 Hazelwood Drive
Acct. No: 22485-23168 Dept: GPG	Phone: 631-372-6498	City: Amherst St: NY Zip: 14228
Email Reports To:	Email/Fax: dsassone@dbeng.com	Contact: Michelle Johnston
1 V. Racaniello	Sampler: Daniel Sassone	Phone: 303-736-0110
2 J. milligan		Email/Fax: michelle.johnston@ET.Eurofins-US.com
Project Name: OU10-VP	Project Manager: V. Racaniello	Field Engineer: J. milligan

Comments:

Type UID	Smp	Coll	Site ID/Bldg/Life #	Depth/RWP	Date	Time	Matrix	Name/Description	Cont. Vol/Units	Cont. Type	# of Cont	Preservative	Alpha/Beta	Tritium	Gamma	Strontium	524.2	624	Nuclide-specific Alpha	PCBs	Metals	1-4 Dioxane 8270 SIM
01	EG		OU10-VP-020	75-80	7/29/24	0833	W	Depth 75'-80'	250mL	AG	2	—										X
02	EG		OU10-VP-020	65'-70'		0925	W	Depth 65'-70' for MS/MSD	↓	↓	6	↓										X
03	EG		OU10-VP-020	55-60		1030	W	Depth 55'-60'			2											X
04	EG		OU10-VP-020	—		1045	W	FB-3			2											X
								D.3 7/29/24														
				D5 7/29/24																		

280-194649 Chain of Custody

1 Relinquished By/Date/Time	2 Relinquished By/Date/Time	3 Relinquished By/Date/Time
Print Daniel Sassone 7/29/24 1110	Print S. Hill CE	Print
Signature	Signature	Signature
1 Received By/Date/Time	**2 Received By/Date/Time**	**3 Received By/Date/Time**
Print KS 7/30/24 1000	Print	Print
Signature	Signature	Signature

Contractor Lab Sample Disposal:
❑ Return To Client ☒ Disposal by Lab
❑ Archive For ____ Months

Data Package: ☒ Full ❑ Summary

Turn-Around Time Required:
❑ Rush (1 Day) ☒ 14 Days ❑ 30 Days
❑ 7 Days ❑ Other ( )

BNL F 3101F (rev. 6/13)

Distribution WHITE (1) - Stays with Sample YELLOW (2) - Returned to Client with Report PINK (3) - Lab or Other GOLDENROD (4) - Field Copy - (Sampler)

8/2/2024 7:31:04 AM

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - CLF
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	General Engineering
Analytical Method and/or Parameter :	EPA 1633, EPA 300.0, EPA 3005A/6010D, EPA 3005A/6020B, EPA 350.1, EPA 351.2, EPA 351.2/353.1, EPA 353.2, EPA 3535A/8270E SIM, EPA 7470A, EPA 8260D, EPA 9012B, SM 2320B, SM 2540C, SM 2540D
Sample Delivery Group :	46928
COC No. / Sample IDs :	46928 / 088-110, 087-26, 087-27, TB-1
Date Sampled :	11/13/2024

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :	X			
Duplicates :			X	
Matrix Spike (MS/MSD) :	X			
MS/MSD Recoveries :	X			
Trip Blanks :		X		Methylene chloride, 1.19 UG/L. Samples 46928-001(088-110) 46928-002(087-26) 46928-003 (087-27) in the Sitewd-CLF program for Methylene chloride has been qualified "U" due to blank contamination
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :		X		Methylene chloride, 0.89 UG/L. Antimony, 3.88 UG/L. Cobalt, -1.21 UG/L. Total Kjeldahl Nitrogen, 0.075 MG/L. Sample 46928-002(087-26) in the Sitewd-CLF program for TKN has been qualified "U" due to blank contamination
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh (Subject Matter Expert) EI.90.QR.24 Date : 12/18/2024

Reviewed by : _____
(Project Manager)

Date : _____

Site ID Verification Data

Sample ID	Site ID

46928-001	
46928-001	
46928-001	
46928-001	088-110
46928-001	
46928-001	
46928-001	
46928-001	
46928-001	
46928-001	
46928-002	087-26
46928-002	
46928-003	087-27
46928-003	
46928-003	
46928-003	
46928-003	
46928-003	
46928-004	TB-1

Triple Blank Verification Data

Sample ID	Compound	Prev Val	Prev Det Lim	New Val	New Det Lim	Lab Qual	New Qual
46928-001	Methylene chloride	1.10	0.50	1.10	1.10	JB	U
46928-002	Methylene chloride	1.01	0.50	1.01	1.01	JB	U
46928-003	Methylene chloride	1.09	0.50	1.09	1.09	JB	U
46928-004	Methylene chloride						

Method Blank Verification Data

Sample ID	Compound	Prev Val	Prev Det Lim	New Val	New Det Lim	Lab Qual	New Qual
46928-001	Methylene chloride	1.10	0.50	1.10	1.10	JB	U
46928-002	Methylene chloride	1.01	0.50	1.01	1.01	JB	U
46928-002	Total Kjeldahl Nitrogen	0.1070	0.0330	0.1070	0.1070		U
46928-003	Zinc-65	-2.02	6.80	-2.02	6.80	U	UJ(-)-B
46928-003	Methylene chloride	1.09	0.50	1.09	1.09	JB	U

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - LIPA
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	Test America-Colorado
Analytical Method and/or Parameter :	8260C
Sample Delivery Group :	47012
COC No. / Sample IDs :	47012 / 000-449
Date Sampled :	12/13/2024

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :	X			
Duplicates :			X	
Matrix Spike (MS/MSD) :			X	
MS/MSD Recoveries :			X	
Trip Blanks :			X	
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :			X	
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh
(Subject Matter Expert)

EI.90.QR.24

Date : 01/03/2025

Reviewed by : _____
(Project Manager)

Date : _____

Site ID Verification Data

Sample ID	Site ID
47012-001	000-449

APPENDIX H

GROUNDWATER MODELING-ASSESSMENT OF OUIII MIDDLE ROAD/SOUTH BOUNDARY PERFORMANCE OF EXISTING REMEDIAL SYSTEM AND RECOMMENDATIONS FOR ENHANCEMENTS TO EXPEDITE CLEANUP EFFORTS. (ARCADIS 2025)

Vincent J. Racaniello, P.G.
Environmental Project Manager
Brookhaven National Laboratory
PO Box 5000 Building 462
Upton, NY 11973

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290 Broadhollow Road
Suite 307E
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Date: January 23, 2025
Our Ref: 30249999
Subject: Middle Road / South Boundary Modeling
Brookhaven National Laboratory

Dear Mr. Racaniello,

Arcadis of New York, Inc is providing this letter report to document work scope activities completed under BSA PO BNL-0000450130 (Groundwater Modeling).

Introduction

The Middle Road / South Boundary (MR / SB) modeling effort was conducted to evaluate the performance of the existing MR / SB remedial systems and make recommendations for enhancements to the remedial well network to expedite aquifer cleanup efforts.

Previously conducted work in support of the MR / SB evaluation and optimization effort included:

- Conceptual Site Model Update, data gap analysis and recommendations for contaminant plume mitigation.
- Data evaluation and interpretation. Compile and interpret updated geological information from the MR/ SB plume areas (i.e., well construction logs, water quality data, geological logs, gamma logs and hydraulic conductivity data [slug tests]).
- Regional Groundwater Flow Model (Flow Model) updates. Specifically, revisions to the hydraulic conductivity assignments in the vicinity of the MR / SB systems.
- Extraction/development of a submodel for the MR / SB plume area.

Methodology

The MR / SB plume is in the southeastern portion of Brookhaven National Laboratory. The monitoring wells, plume contours and lines of section associated with the area are shown on **Figure 1**. Modified geologic cross sections, showing the model layering scheme in the regional model (black lines and labels) and submodel (red lines and labels) along cross sections B-B', E-E', F-F' and G-G' are shown on **Figures 2, 3, 4, and 5**, respectively.

The evaluation of the MR / SB remedial systems began with the development and application of a submodel. An area encompassing the MR / SB plume was extracted from the regional groundwater flow model, and the layering scheme of the submodel modified to enhance the model's vertical discretization. Arcadis assessed the

performance of the MR / SB systems by first simulating the operation of the current remedial system (i.e., simulating the pumping and recharge associated with the existing system), and evaluating model predicted capture zones. A review of the capture zones associated with the MR / SB systems revealed inconsistencies with the conceptual site model (CSM). Specifically, the submodel predicted rapid downward movement of groundwater (and by extension suggested the downward migration of the groundwater plume) in areas where clay was not present, near the MR line of remedial wells along the Middle Road and a more localized area to the north along Princeton Ave, as shown on **Figure 6** (hydraulic conductivity zones of 45 ft/day or 250 ft/day)

Following discussion of this inconsistency with BNL management, the submodel was modified and its performance reevaluated. After determining that significant modification of the submodel would be needed to achieve consistency with the CSM, groundwater flow and particle tracking simulations were conducted using the regional flow model. This further assessment at the regional-scale determined that the regional model also predicted downward movement of groundwater, which was caused by vertical gradients resulting from hydraulic conductivity assignments and the potentiometric surface (as a result of differences in areal recharge) in the regional groundwater model. As was the case for the submodel, the performance of the regional model was inconsistent with the CSM, and it was determined that solute transport modeling to assess plume cleanup time would be inappropriate at this time.

However, application of the submodel in a limited capacity to address the scope of this effort was considered and determined to be appropriate. Specifically,

- The submodel was used to assess capture of the MR and SB systems, and
- The submodel was used to assess the relative improvement in remedial system performance for plume cleanup.

Capture Assessment

For this evaluation, the modified submodel was used to evaluate the impact of three new remedial wells (two at MR and one at SB).

- At the Middle Road plume area, the remedial system consists of RW-2, RW-3 and RW-7, and was updated with the addition of MR-1 and MR-2. The new wells were simulated to pump 100 gallons per minute (gpm), each, which is less than the current pumping rates of the existing remedial wells.
- At the South Boundary plume area, the remedial system consists of EW-17 and was updated with the addition of SB-1. The new well was simulated to pump 100 gallons per minute (gpm), which is less than the current pumping rate for EW-17.

It was understood that because the model is predicting significant downward groundwater flow near the Middle Road, as a result the model will underestimate the extent of capture. However, the impact of potential remedial system enhancements can be generally evaluated by comparing the model predicted capture zones resulting from the existing remedial systems to those resulting from the updated remedial systems.

Time for Plume Cleanup

Similarly, despite the model's inconsistency with the CSM, pathline analysis was conducted to evaluate relative improvements in plume cleanup time.

The results of these evaluations are discussed below.

Results

Hydraulic capture was evaluated by comparing model predicted capture of the existing remedial systems to the revised systems. **Figures 7 through 10** show the model predicted capture in submodel layers 4 through 7, respectively, for the existing systems (left side of figure) and the updated remedial systems (right side of figure). Individual hydraulic capture zones associated with each remedial well are shown using color fills:

- RW-2: red fill
- RW-3: yellow fill
- RW-7: light orange fill
- MR-1: blue fill
- MR-2: green fill
- EW-17: brown fill
- SB-1: purple fill

Hydraulic Capture at Middle Road

The impact of the two new remedial wells (MR-1 and MR-2) was assessed by comparing the capture zones resulting from the existing systems operation (i.e., RW-2, RW-3 and RW-7) to the capture zones produced by the updated remedial system (i.e., RW-2, RW-3, RW-7, MR-1 and MR-2). Each of the new wells was simulated to pump 100 gpm, less than the pumping rates of the existing remedial well network**. Figures 7-10** provided side-by-side comparisons of the model predicted capture resulting from the existing (left panel) and updated (right panel) remedial systems in model layers 4-7, respectively, and suggest the following:

- The capture zone associated with RW-3 (yellow fill) is primarily east of the MR plume, indicating that RW-3 is not currently contributing to cleanup of the MR plume.
- The capture zone associated with RW-2 (red fill) is of limited extent and is east of the MR plume, indicating that RW-2 is not currently contributing to cleanup of the MR plume.
- New remedial wells MR-1 and MR-2 are located such that they divide the higher concentration portion of the plume (i.e., VOC = 100 ppb) in thirds. The addition of these wells to the remedial system will reduce plume cleanup times by about one-third (see further discussion below regarding travel time).
- MR-1, MR-2, and RW-7 are ideally located along the core of the MR plume. In this position these wells will expedite cleanup of the higher concentration portion of the MR plume and provide full containment of the MR plume.

Hydraulic Capture at South Boundary

The impact of the new remedial well (SB-1) was assessed by comparing the capture zone resulting from the existing system operation (i.e., EW-17) to the capture zones produced by the updated remedial system (i.e., EW-17 and SB-1). The new well was simulated to pump 100 gpm. **Figures 7 through 10** provide side-by-side comparisons of the model predicted capture resulting from the existing (left panel) and updated (right panel) remedial system in model layers 4 through 7, respectively, and suggest the following:

- New well SB-1is located at the approximate midpoint of the higher concentration portion of the plume. The addition of this well to the remedial system will reduce plume cleanup times by about one-third (see further discussion below regarding travel time).
- New well SB-1 is ideally located to along the core of the plume. In this position it will expedite cleanup of the higher concentration portion of the SB plume and in combination with EW-17 will provide full containment of the SB plume.

Travel Time at Middle Road and South Boundary

Table 1 summarizes the travel time estimates (i.e., the rate of groundwater movement) for the existing and updated MR and SB remedial systems. These travel times do not provide an estimate for the time required for plume cleanup, but instead enable a relative comparison of travel times between the existing and updated remedial systems. The estimates were developed using the average advective particle velocity in low conductivity aquifer material (i.e., Magothy aquifer or deeper portions of the Upton Unit within the Upper Glacial aquifer). This rate of travel in the low conductivity aquifer material was then extrapolated across the length of the plume as follows:

- For each scenario, the distance from the upgradient plume extent to the nearest remediation well was tabulated.
- Dividing the “distance to the well” by the advective velocity yields an estimated advective travel time.

This travel time is the estimated time it would take for groundwater to travel from the upgradient portion of the plume to an extraction well; this is the time to complete one aquifer pore volume flush.

Actual plume cleanup will require multiple pore flushes. The number of pore flushes required for plume cleanup is dependent on the concentrations and aerial extent of aquifer impacts (i.e., how large are the high concentration portions of the plume). With each pore flush, the concentration of contaminants in the aquifer is reduced. While we can’t use the advective transport velocity to determine how may pore flushes will be needed to cleanup the plume, we can use the travel time estimate to compare the performance of the existing and updated remedial systems.

As shown on **Table 1**, the addition of 2 remedial wells to the MR remedial system reduces the advective travel time from 6 years to 3.8 years, a reduction of about 37%. For the SB remedial system, the addition of a remedial well reduces the advective travel time from 3.3 to 2.1 years, a reduction of about 37%.

Conclusions And Recommendations

Based on the modeling work discussed above, Arcadis offers the following conclusions and recommendations:

1. This assessment effort yielded information that could be used to optimize the existing remedial system. Specifically, MR’s RW-3 can be removed from services as it is not needed for capture of the existing plume.
2. The addition of two remedial wells to the MR system and one remedial well to the SB system will reduce plume cleanup time by bifurcating the plumes and thereby reducing plume travel time to an extraction point.

3. In addition, because the locations selected for the proposed remedial wells was based on recent VPBs, the new remedial wells will be ideally located to extract the high-concentration portions of the plumes, making the updated remedial systems more effective at mass removal than the current remedial systems.
4. Relative to the existing system, the cleanup time for the MR and SB plumes will be reduced about 37%.
5. To overcome the limitations of the advective transport assessment and further quantify plume cleanup time (through solute transport modeling), additional verification and modification, if necessary, of the (regional) model will be required.
6. However, continued monitoring of the performance of the remedial well systems (i.e., reductions in plume concentrations), can support an assessment of plume cleanup times.

Sincerely,
Arcadis of New York, Inc.

William Wittek
Principal Environmental Engineer

Robert Porsche
Principal Hydrogeologist

Email: rob.porsche@arcadis.com
Direct Line: 631 391 5233
Mobile: 516 805 5081

CC. Brian Barth, BNL
Lauren Eastes, Arcadis
Art Zahradnik, Arcadis
Jim Fox, Arcadis
File

Enclosures:

Table 1. Pathline Analysis with Travel Time Summary
Figure 1: Area of Middle Road and South Boundary Plumes
Figure 2: Cross-Section B-B' (with model layering superimposed)
Figure 3: Cross-Section E-E' (with model layering superimposed)
Figure 4: Cross-Section F-F' (with model layering superimposed)
Figure 5: Cross-Section G-G' (with model layering superimposed)
Figure 6: Modeled Extent of Magothy Clay
Figure 7: Existing vs Proposed Remedial Well Capture Zones – Model Layer 4
Figure 8: Existing vs Proposed Remedial Well Capture Zones – Model Layer 5
Figure 9: Existing vs Proposed Remedial Well Capture Zones – Model Layer 6
Figure 10: Existing vs Proposed Remedial Well Capture Zones – Model Layer 7

Tables

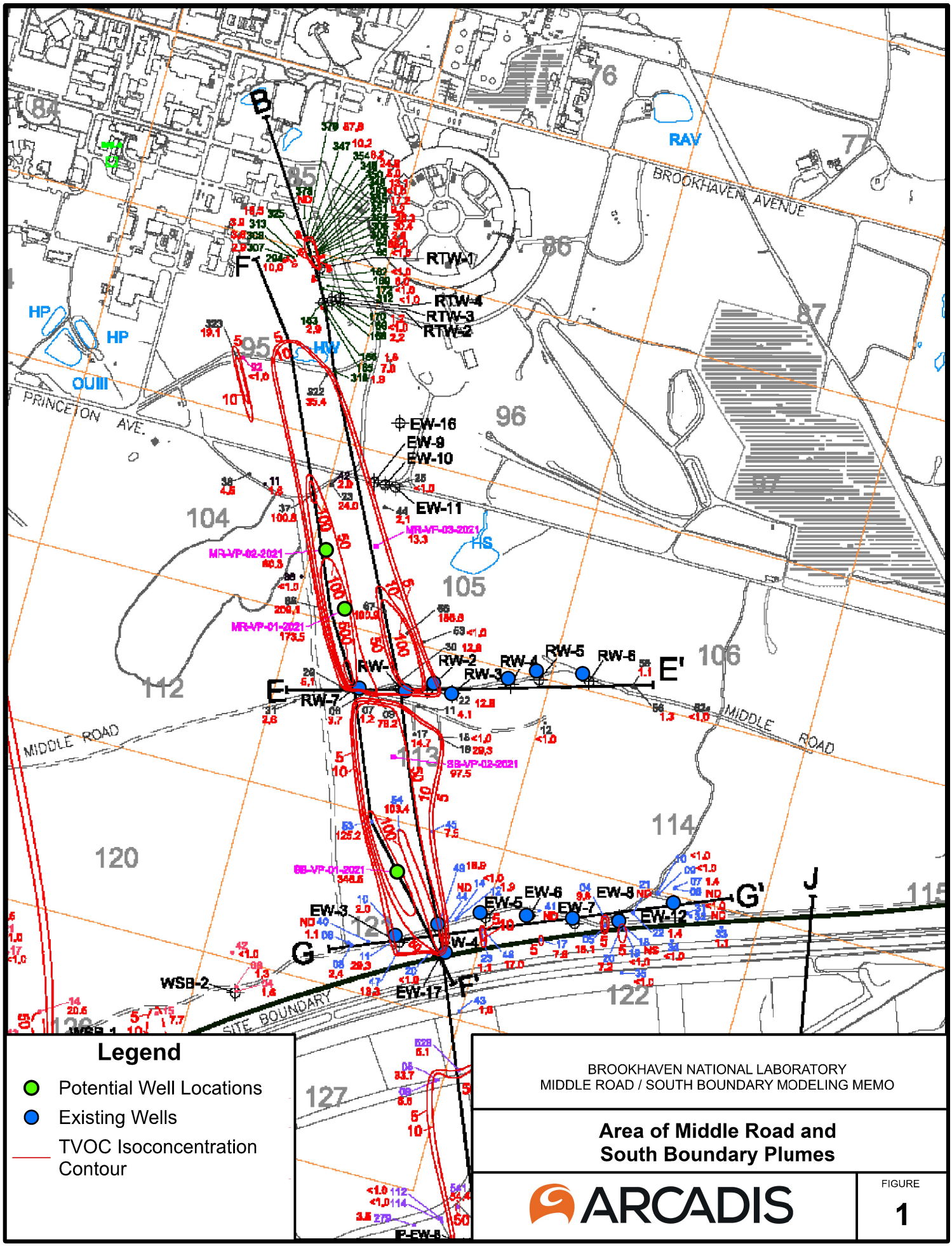
Table 1
Pathline Analysis with Travel Time Summary
Middle Road / South Boundary Modeling
Brookhaven National Laboratory
Upton, NY

Scenario	Average Advective Particle Velocity in Low Conductivity Material (feet per year) [1]	Approximate Furthest Distance to Nearest Well (feet)	Estimated Advective Travel Time (years)
Existing System – Middle Road	*398*	*2400*	*6*
2 Additional Wells – Middle Road	366	1400	3.8
Existing System – South Boundary	*320*	*1400*	*3.3*
1 Additional Well – South Boundary	428	660	2.1

Notes:

1. The slower average advective velocity of the groundwater for the added wells is expected. Each new well is pumping at 100 GPM in the model, less than the current operating rates of existing wells.

Figures



Legend

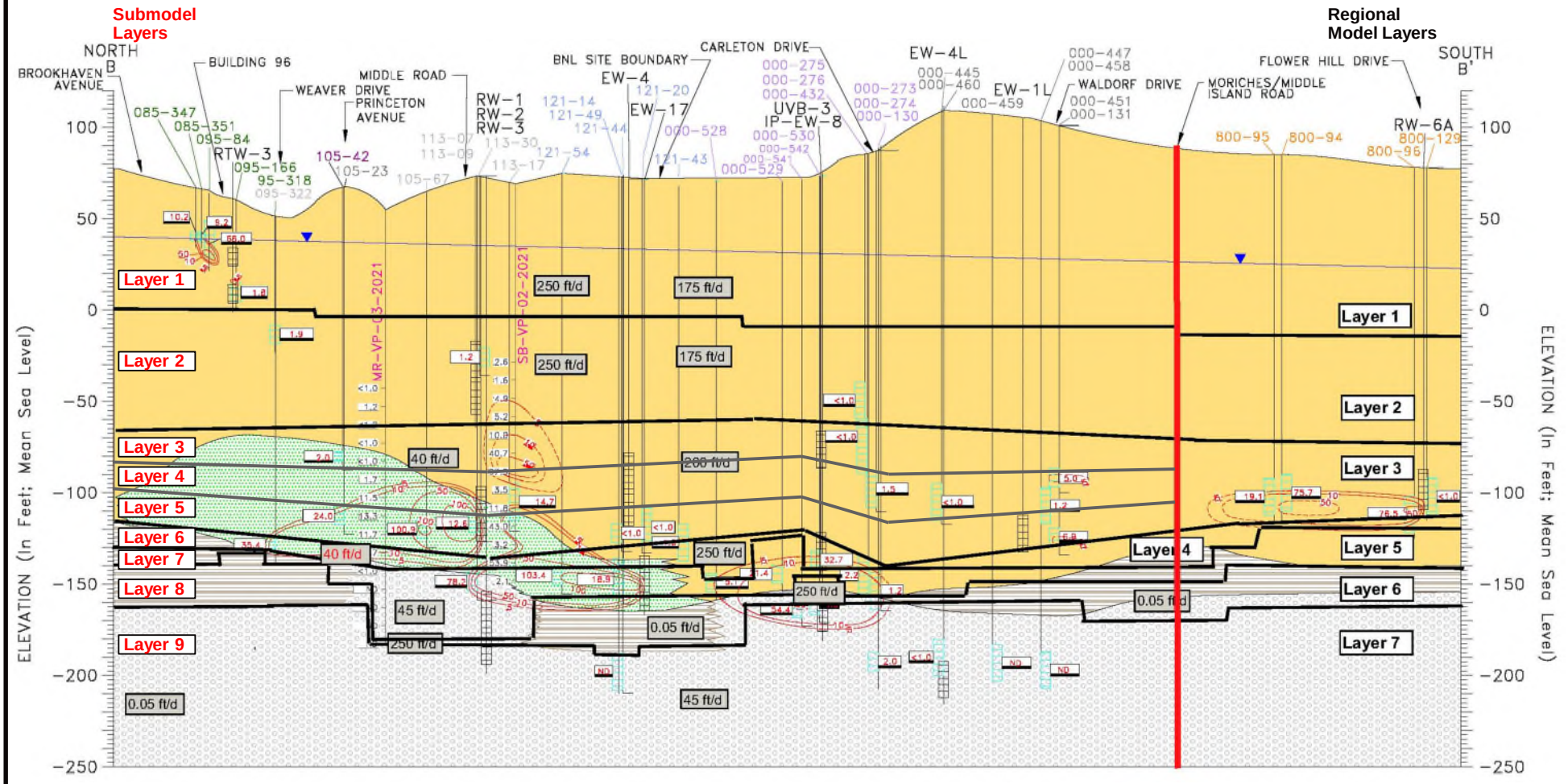
- Potential Well Locations
- Existing Wells
- TVOC Isoconcentration Contour

BROOKHAVEN NATIONAL LABORATORY
MIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

Area of Middle Road and South Boundary Plumes

ARCADIS

FIGURE
1



LEGEND

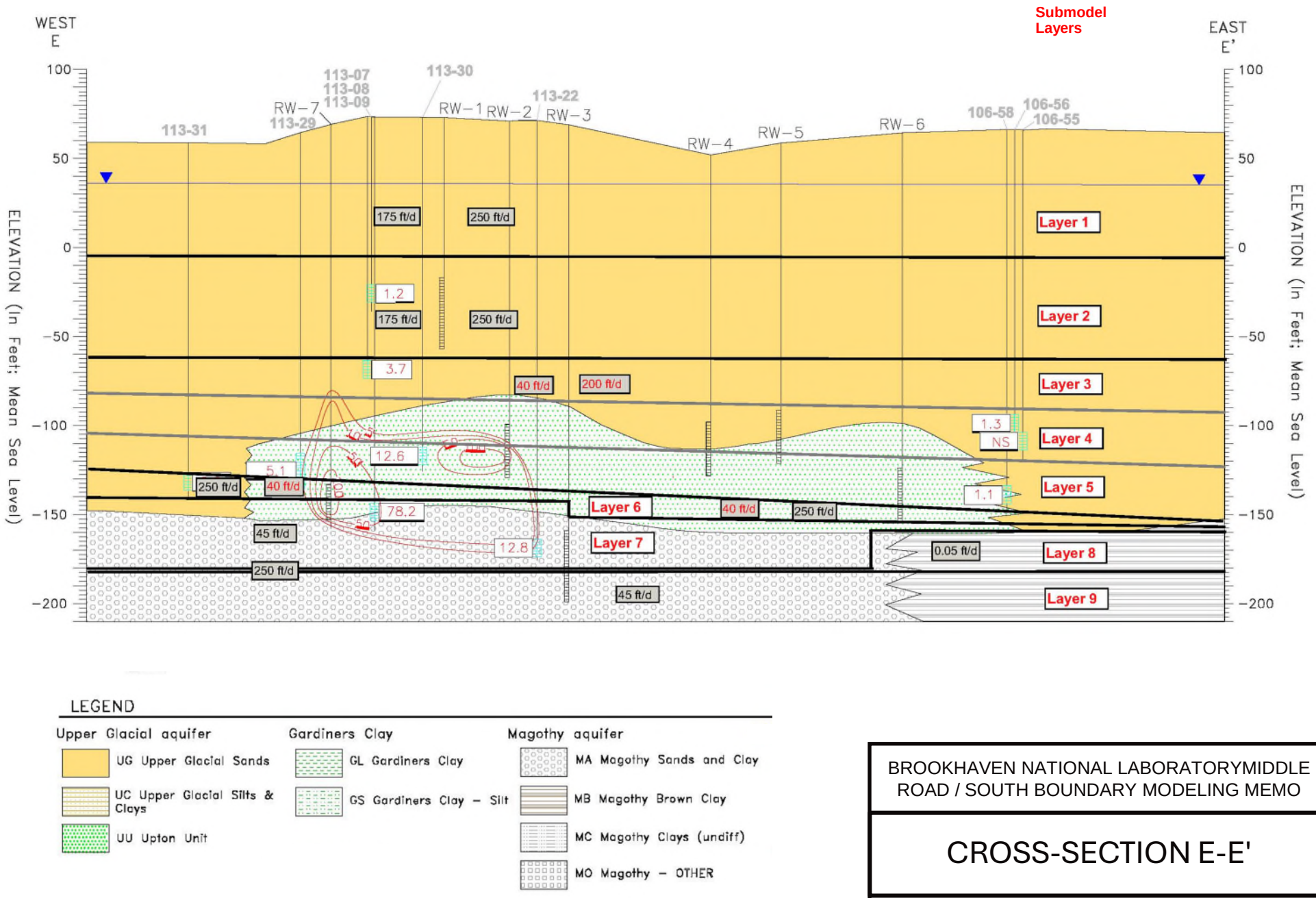
Upper Glacial aquifer	Gardiners Clay	Magothy aquifer
UG Upper Glacial Sands	GL Gardiners Clay	MA Magothy Sands and Clay
UC Upper Glacial Silts & Clays	GS Gardiners Clay – Silt	MB Magothy Brown Clay
UU Upton Unit		MC Magothy Clays (undiff)
		MO Magothy – OTHER

BROOKHAVEN NATIONAL LABORATORYMIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

CROSS-SECTION B-B'

ARCADIS

FIGURE 2

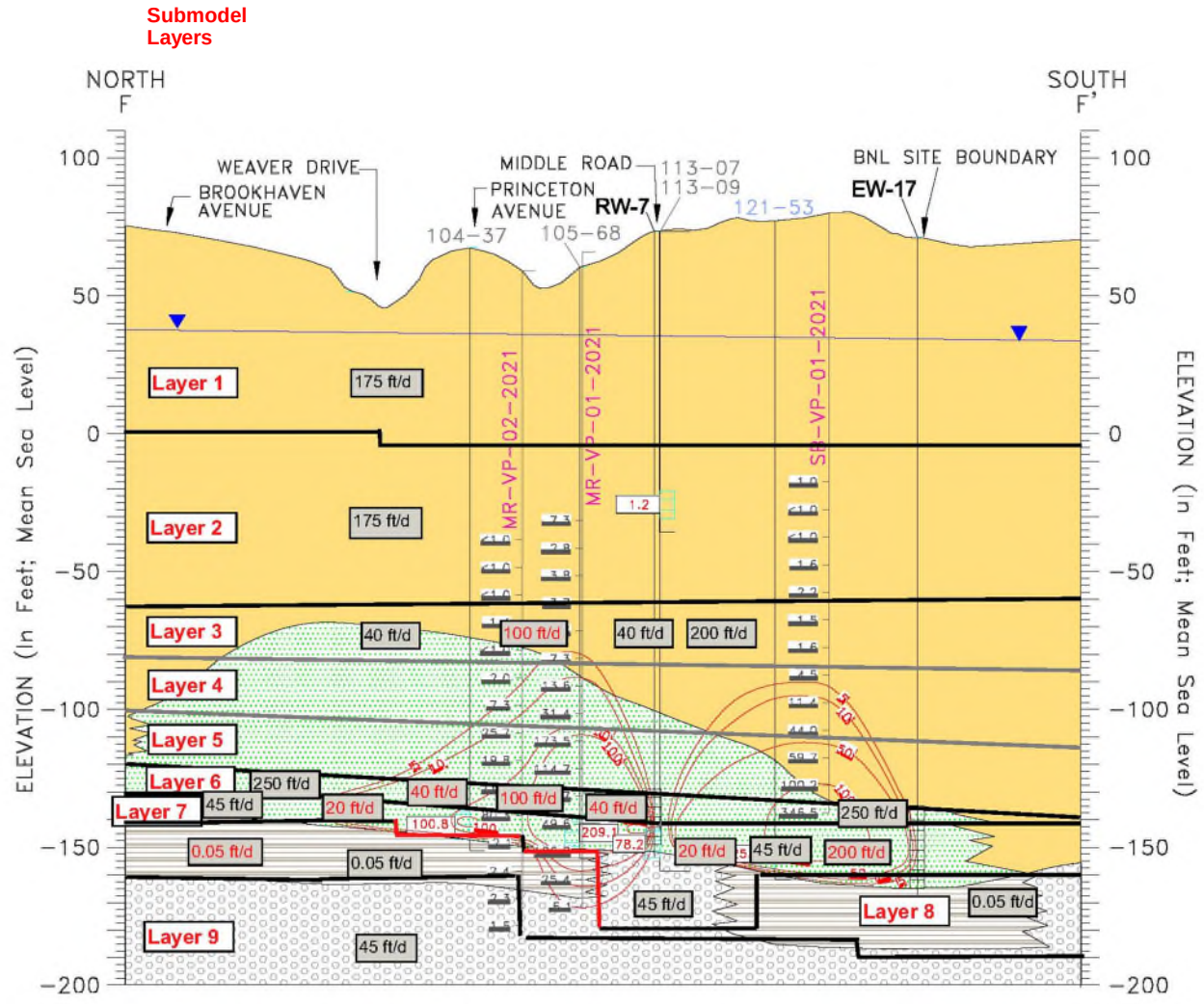


BROOKHAVEN NATIONAL LABORATORYMIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

CROSS-SECTION E-E'

ARCADIS

FIGURE 3



LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

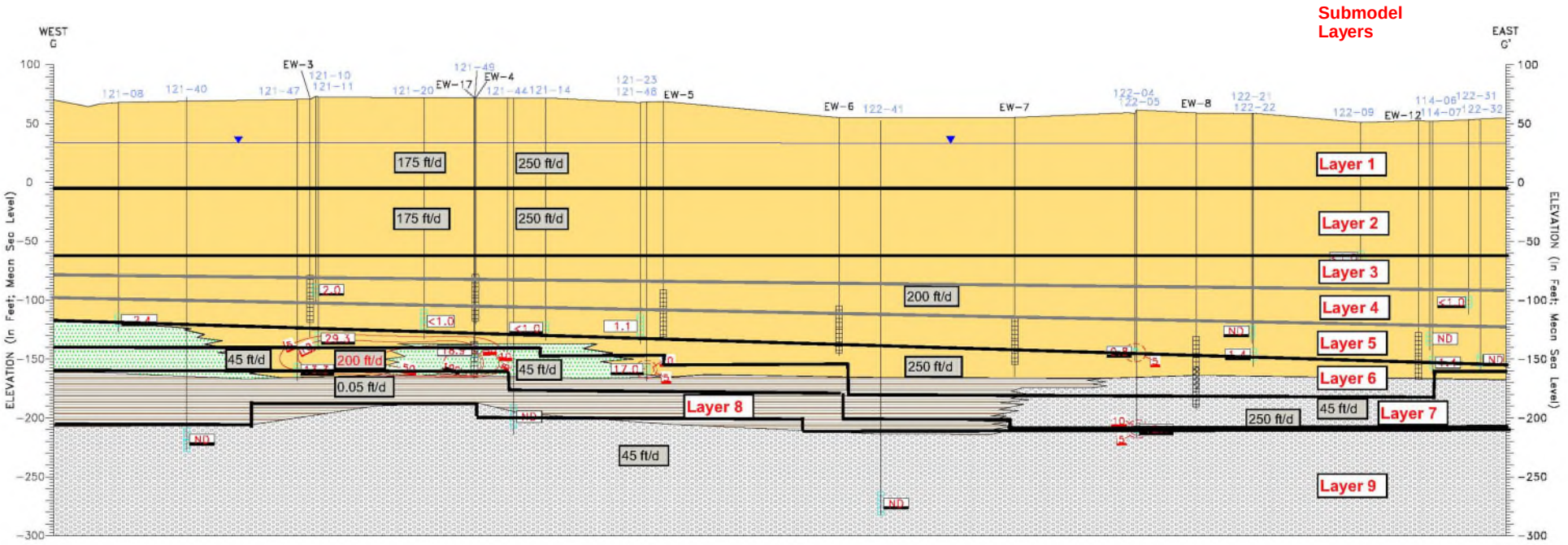
Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

BROOKHAVEN NATIONAL LABORATORYMIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

CROSS-SECTION F-F'

ARCADIS

FIGURE 4



LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

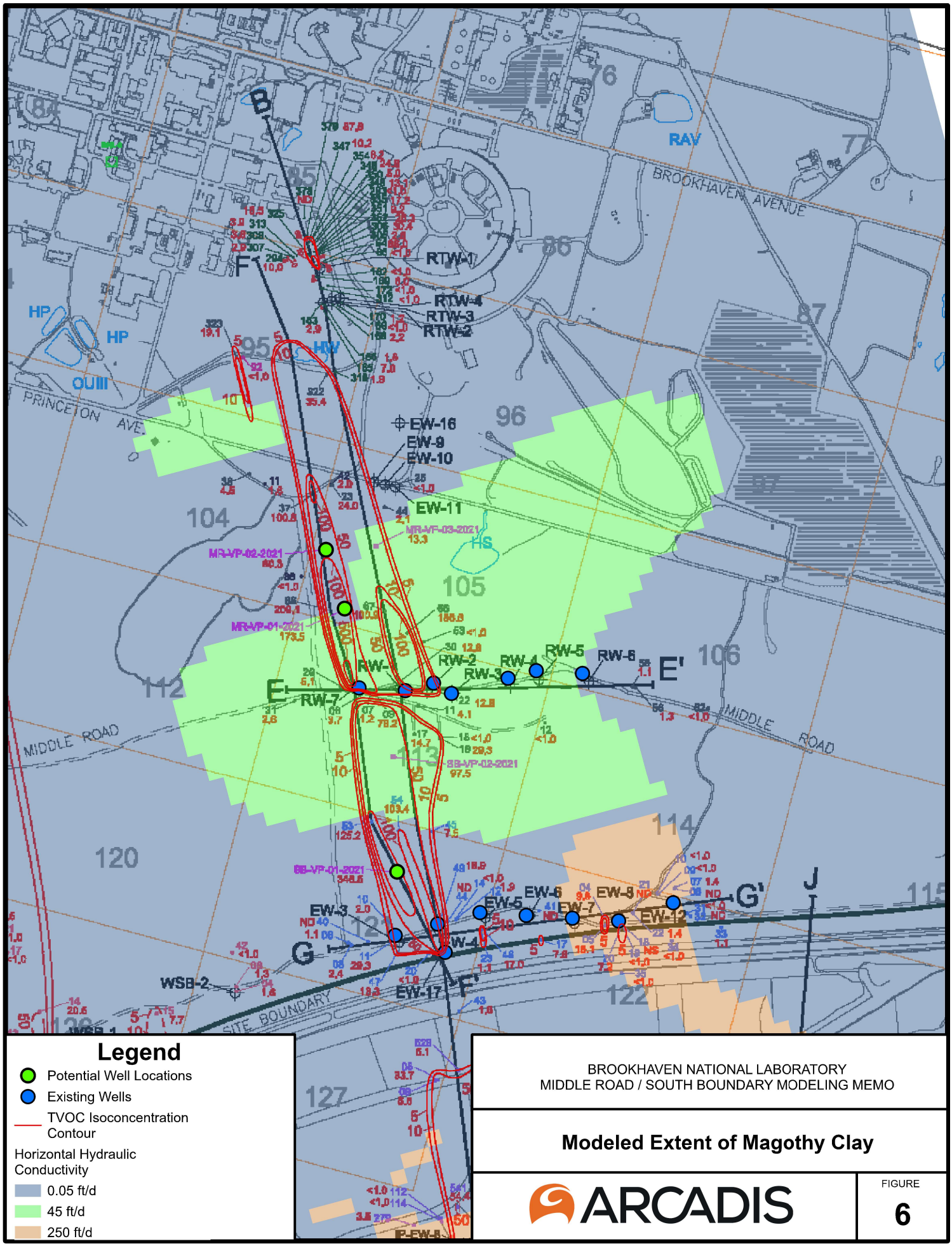
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

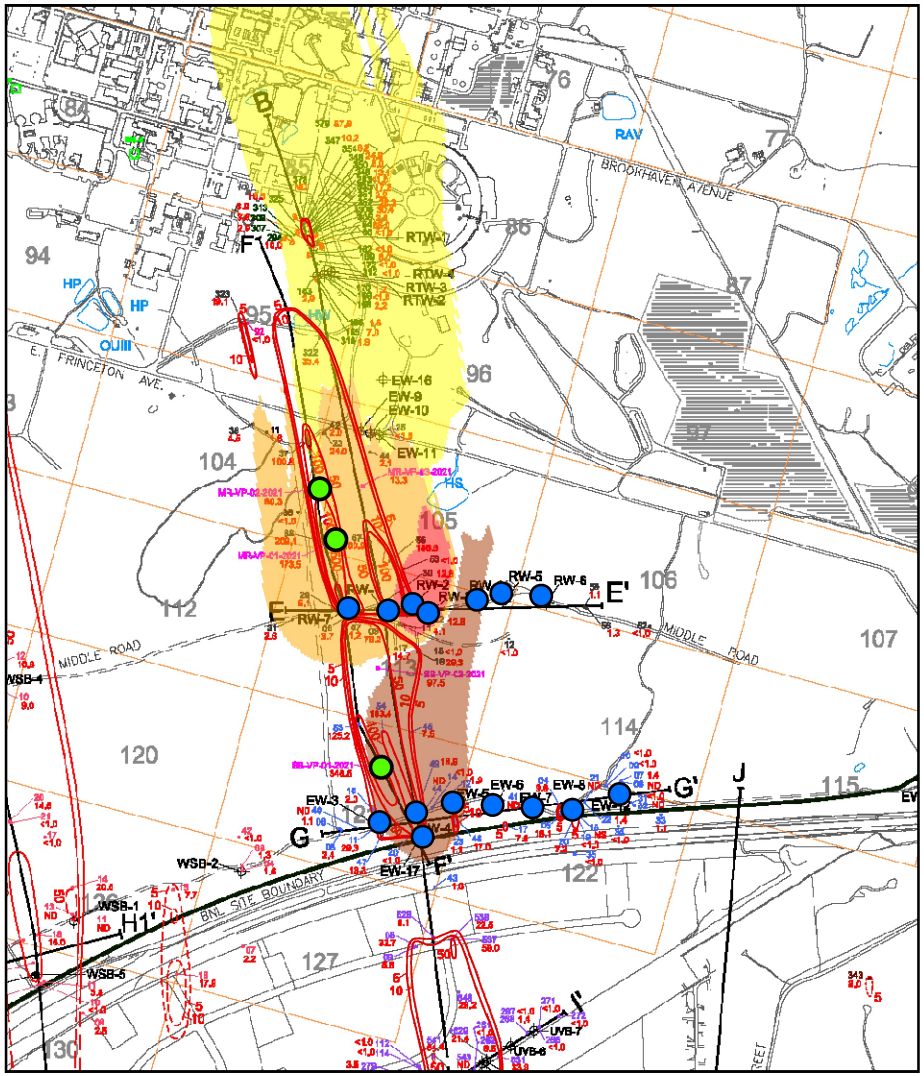
BROOKHAVEN NATIONAL LABORATORYMIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

CROSS-SECTION G-G'

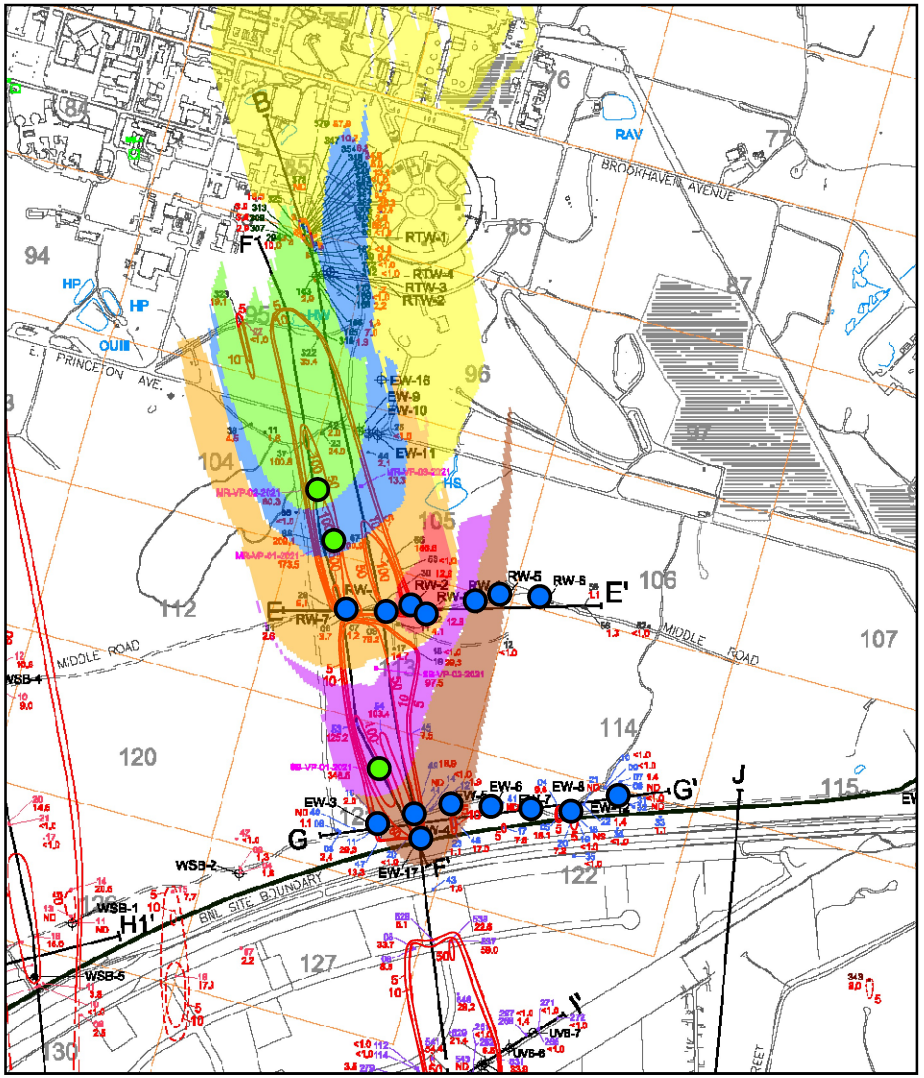
ARCADIS

FIGURE 5


B
F
E
E'
G
G'
J
F'
RTW-1
RTW-4
RTW-3
RTW-2
EW-16
EW-9
EW-10
EW-11
RW-1
RW-2
RW-3
RW-4
RW-5
RW-6
RW-7
EW-3
EW-4
EW-5
EW-6
EW-7
EW-8
EW-12
EW-17
WSB-2
MR-VP-02-2021
MR-VP-03-2021
MR-VP-01-2021
SB-VP-02-2021
SB-VP-01-2021
HP
HW
HS
OUIII
RAV
BROOKHAVEN AVENUE
PRINCETON AVE
MIDDLE ROAD
SITE BOUNDARY
Legend
Potential Well Locations
Existing Wells
TVOC Isoconcentration Contour
Horizontal Hydraulic Conductivity
0.05 ft/d
45 ft/d
250 ft/d
BROOKHAVEN NATIONAL LABORATORY
MIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO
Modeled Extent of Magothy Clay
ARCADIS
FIGURE
6



Existing System



Proposed Remedial Wells

- Potential Well Locations
- Existing Wells
- TVOC Isoconcentration Contour

Well Capture Zones

- MR-01
- MR-02
- SB-01
- RW-2
- RW-3
- RW-7
- EW-17

0 200 400

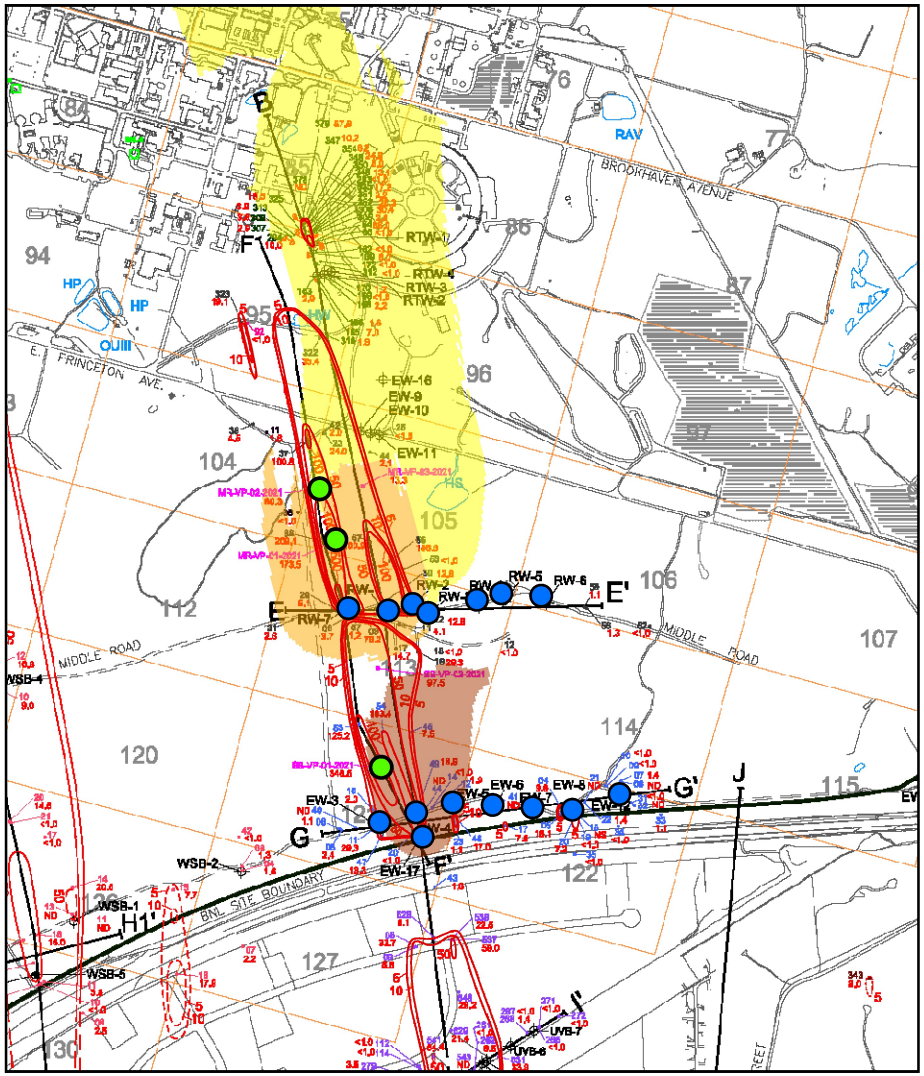
SCALE IN FEET

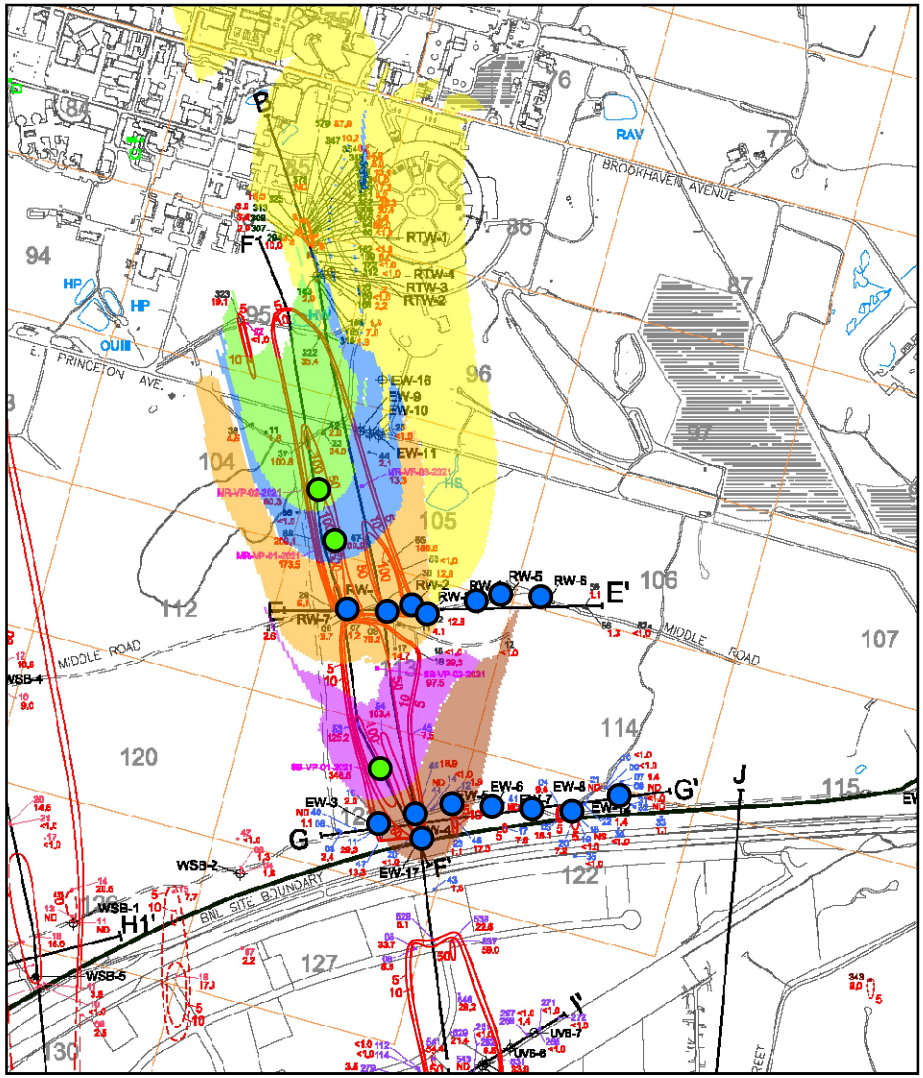
BROOKHAVEN NATIONAL LABORATORY
MIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

Existing vs Proposed Remedial Well Capture Zones – Model Layer 4

ARCADIS

FIGURE 7





Existing System

Proposed Remedial Wells

- Potential Well Locations
- Existing Wells
- TVOC Isoconcentration Contour

Well Capture Zones

- MR-01
- MR-02
- SB-01
- RW-7
- RW-3
- EW-17

0 200 400

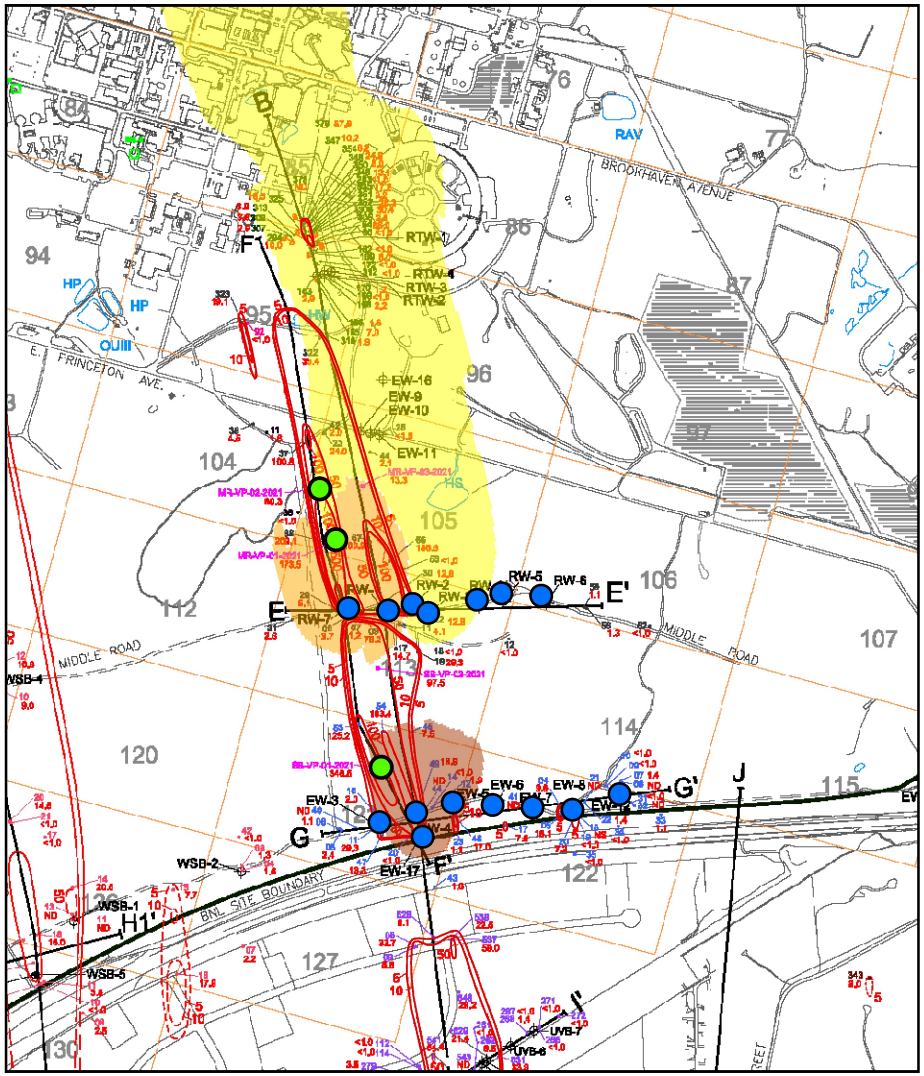
SCALE IN FEET

BROOKHAVEN NATIONAL LABORATORY
MIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

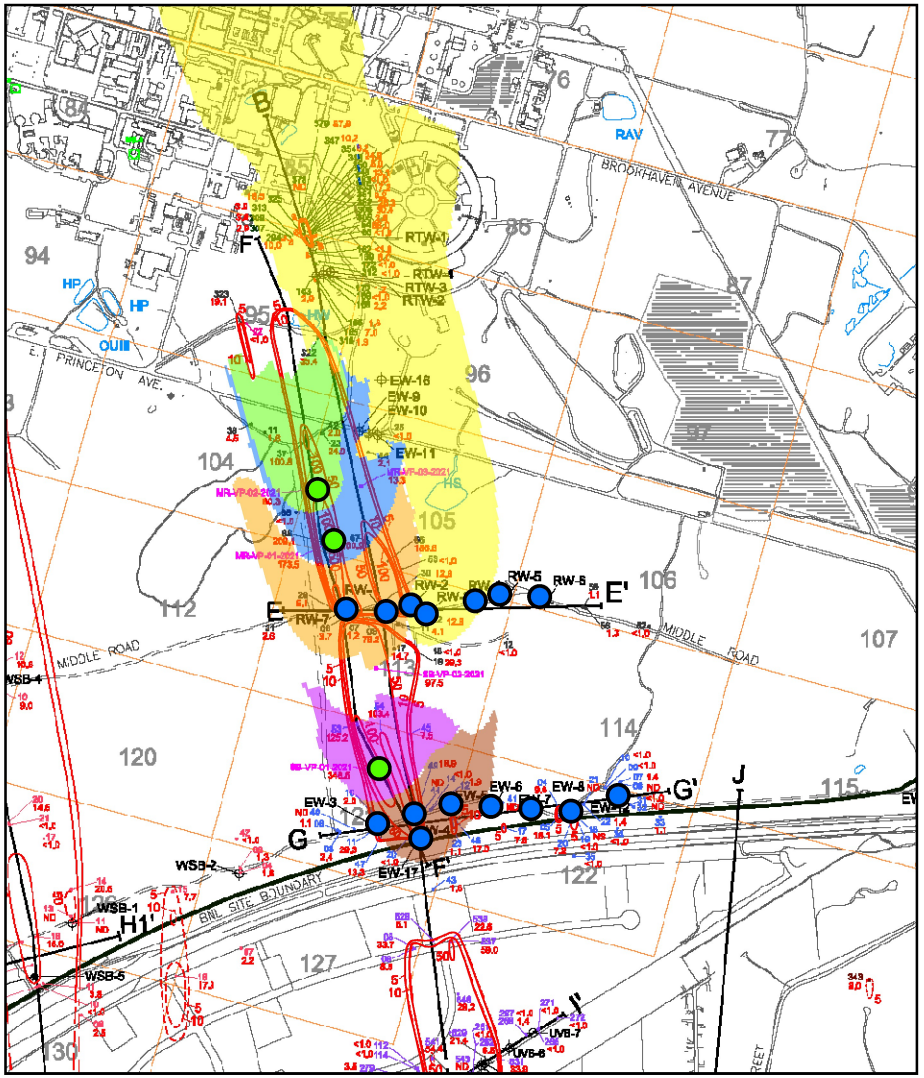
Existing vs Proposed Remedial Well Capture Zones – Model Layer 5

ARCADIS

FIGURE 8



Existing System



Proposed Remedial Wells

- Potential Well Locations
- Existing Wells
- TVOC Isoconcentration Contour

Well Capture Zones

- MR-01
- MR-02
- SB-01
- RW-7
- RW-3
- EW-17

0 200 400

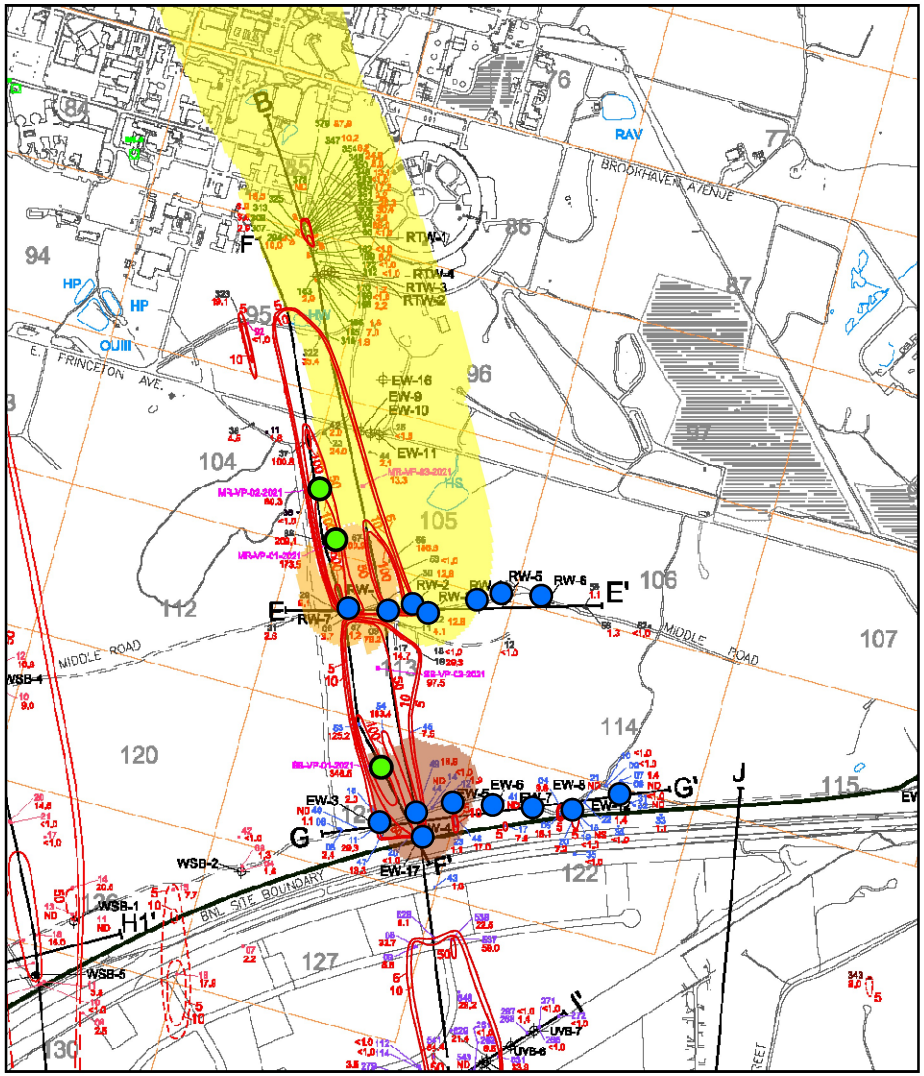
SCALE IN FEET

BROOKHAVEN NATIONAL LABORATORY
MIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

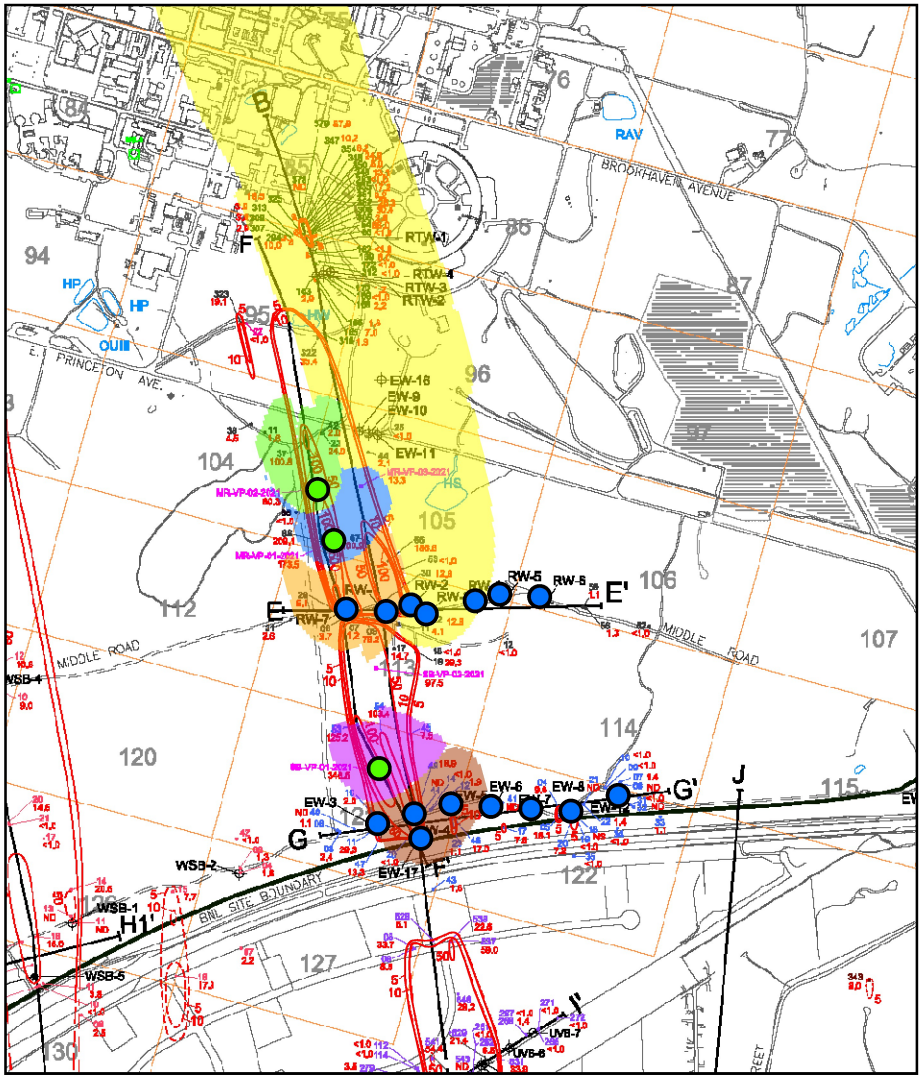
Existing vs Proposed Remedial Well Capture Zones – Model Layer 6

ARCADIS

FIGURE 9



Existing System



Proposed Remedial Wells

- Potential Well Locations
- Existing Wells
- TVOC Isoconcentration Contour

Well Capture Zones

- MR-01
- MR-02
- SB-01
- RW-7
- RW-3
- EW-17

0 200 400

SCALE IN FEET

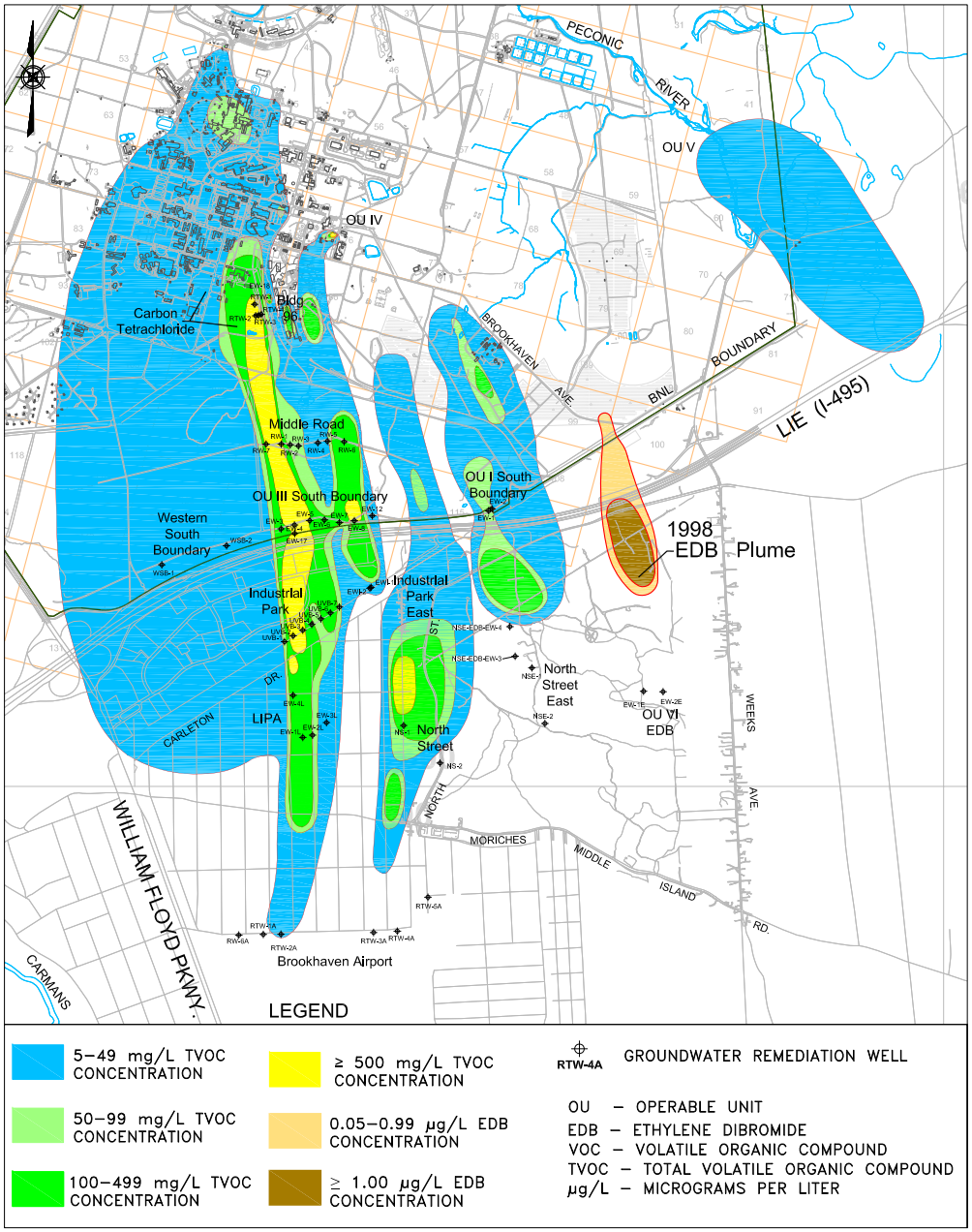
BROOKHAVEN NATIONAL LABORATORY
MIDDLE ROAD / SOUTH BOUNDARY MODELING MEMO

Existing vs Proposed Remedial Well Capture Zones – Model Layer 7

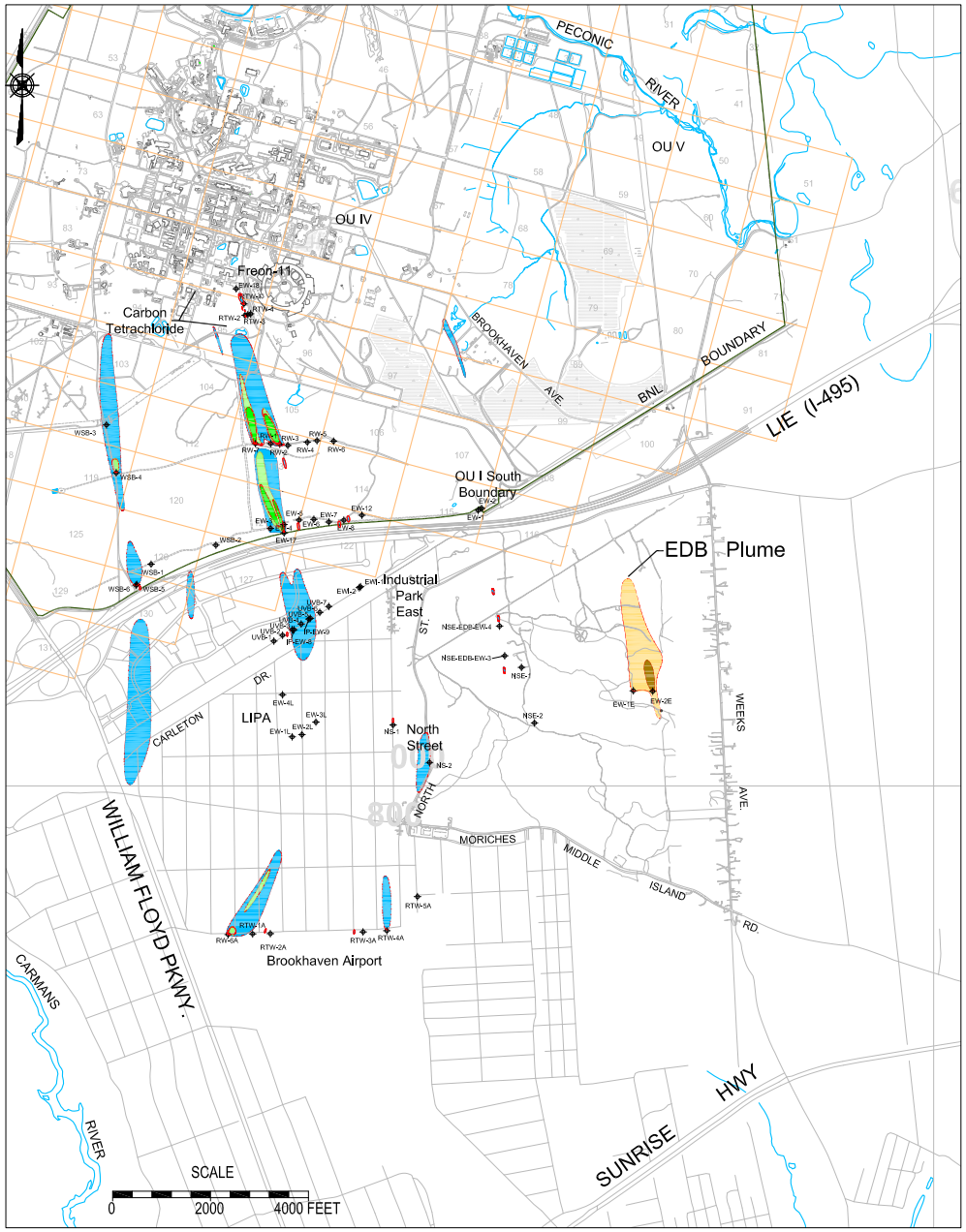
ARCADIS

FIGURE 10

1997 VOC PLUME DISTRIBUTION



2024 VOC PLUME DISTRIBUTION



LEGEND

- 5–49 mg/L TVOC CONCENTRATION
- 50–99 mg/L TVOC CONCENTRATION
- 100–499 mg/L TVOC CONCENTRATION
- ≥ 500 mg/L TVOC CONCENTRATION
- 0.05–0.99 µg/L EDB CONCENTRATION
- ≥ 1.00 µg/L EDB CONCENTRATION
- RTW-4A GROUNDWATER REMEDIATION WELL

OU – OPERABLE UNIT
EDB – ETHYLENE DIBROMIDE
VOC – VOLATILE ORGANIC COMPOUND
TVOC – TOTAL VOLATILE ORGANIC COMPOUND
µg/L – MICROGRAMS PER LITER

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TITLE:

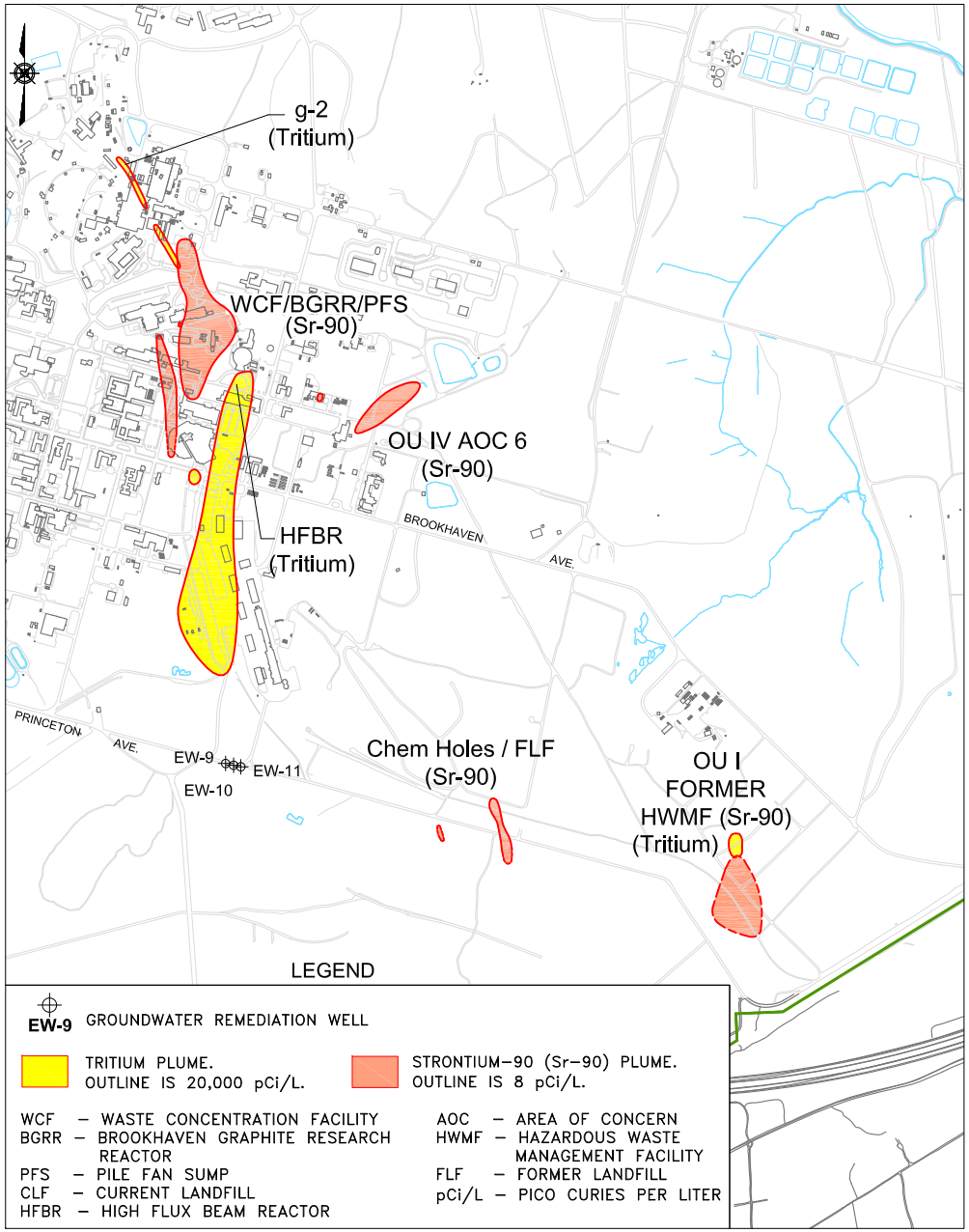
PRIMARY BNL VOC PLUMES COMPARISON 1997 – 2024

2024 BNL GROUNDWATER STATUS REPORT

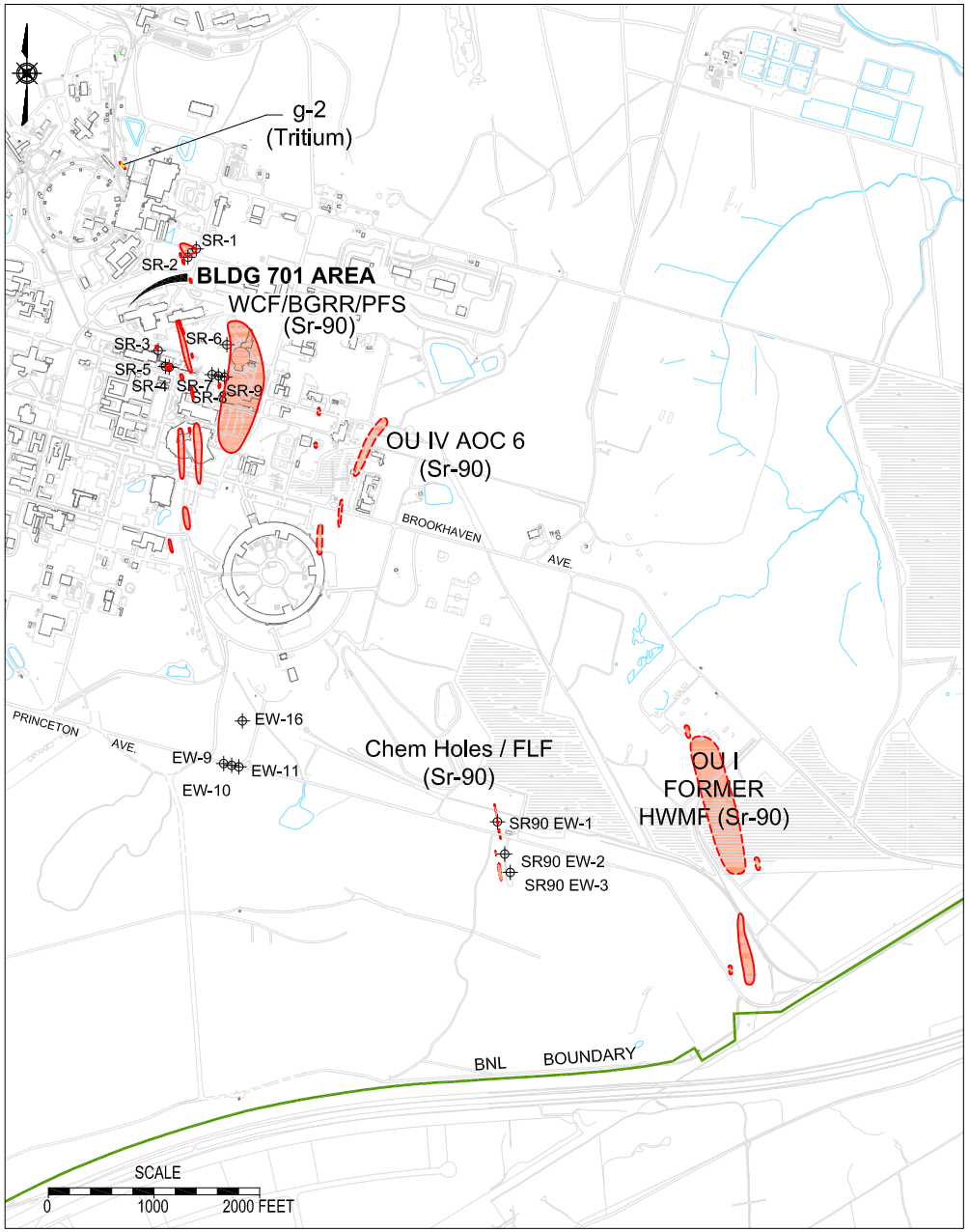
DWN:	VT: HZ.:	DATE:	PROJECT NO.:
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CHKD:	APPD:	REV.:	NOTES:
BB	BB	–	–

FIGURE NO.: E–1

2002 RAD PLUME DISTRIBUTION



2024 RAD PLUME DISTRIBUTION



LEGEND

EW-9 GROUNDWATER REMEDIATION WELL

TRITIUM PLUME.
OUTLINE IS 20,000 pCi/L.

STRONTIUM-90 (Sr-90) PLUME.
OUTLINE IS 8 pCi/L.

WCF – WASTE CONCENTRATION FACILITY
BGRR – BROOKHAVEN GRAPHITE RESEARCH REACTOR
PFS – PILE FAN SUMP
CLF – CURRENT LANDFILL
HFBR – HIGH FLUX BEAM REACTOR
AOC – AREA OF CONCERN
HWMF – HAZARDOUS WASTE MANAGEMENT FACILITY
FLF – FORMER LANDFILL
pCi/L – PICO CURIES PER LITER

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TITLE:

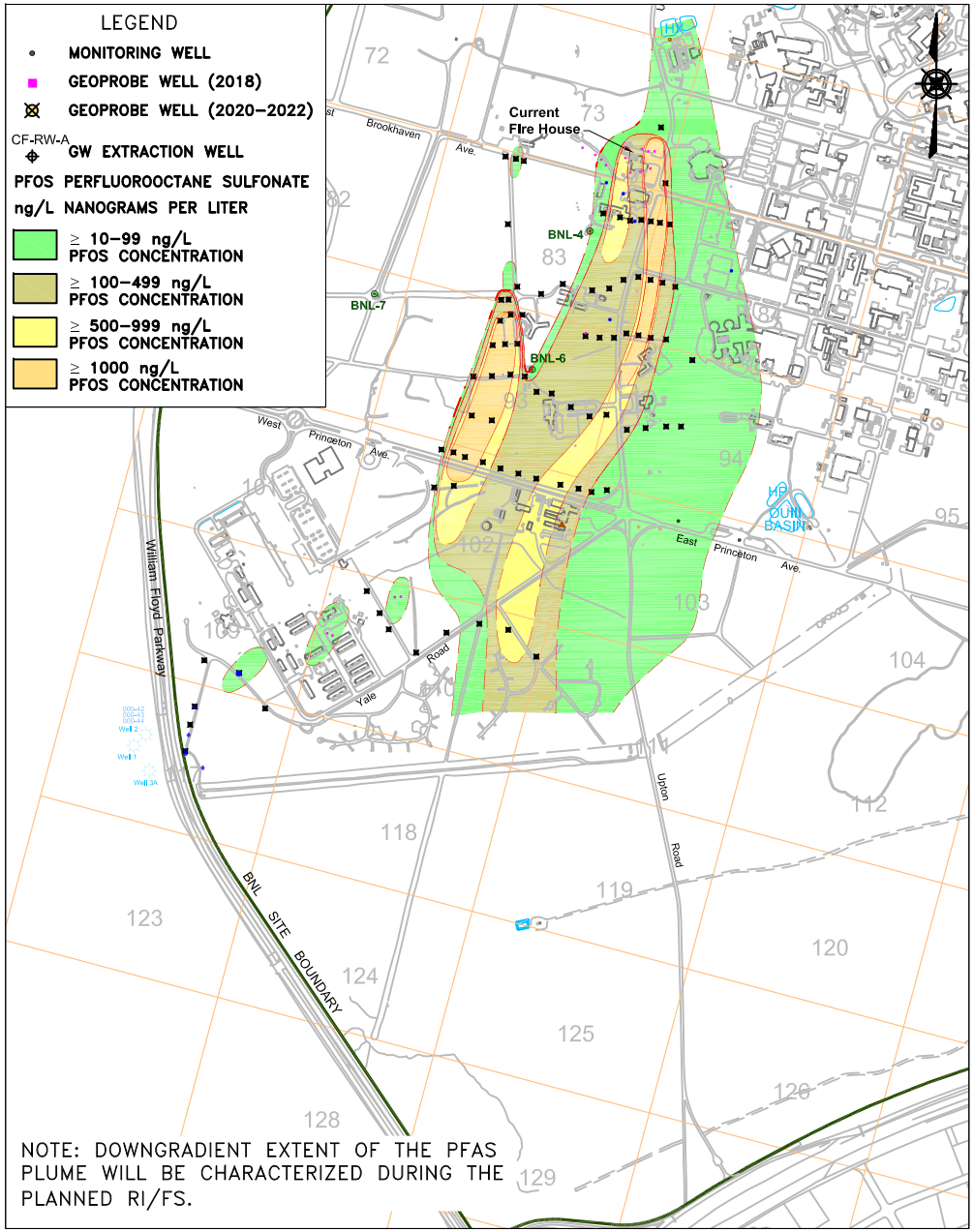
PRIMARY BNL RADIONUCLIDE PLUMES COMPARISON 2002 – 2024

2024 BNL GROUNDWATER STATUS REPORT

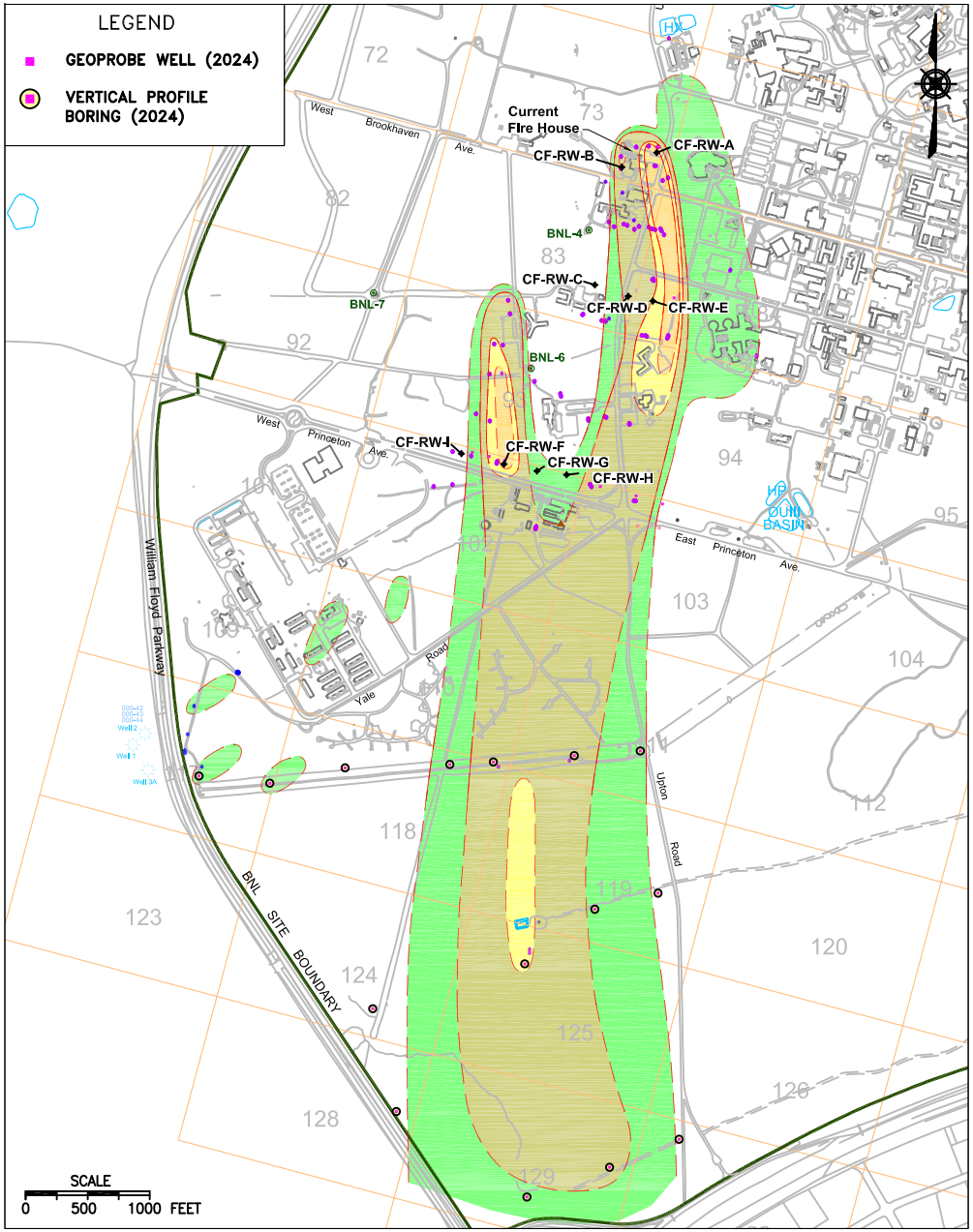
DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/18/25	–
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BB	BB	–	–

FIGURE NO.: E-2

2020–2021 PFOS PLUME DISTRIBUTION



2024 PFOS PLUME DISTRIBUTION



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TITLE:

CURRENT FIREHOUSE AND BUILDING 170 PFOS PLUME COMPARISON 2020 – 2024

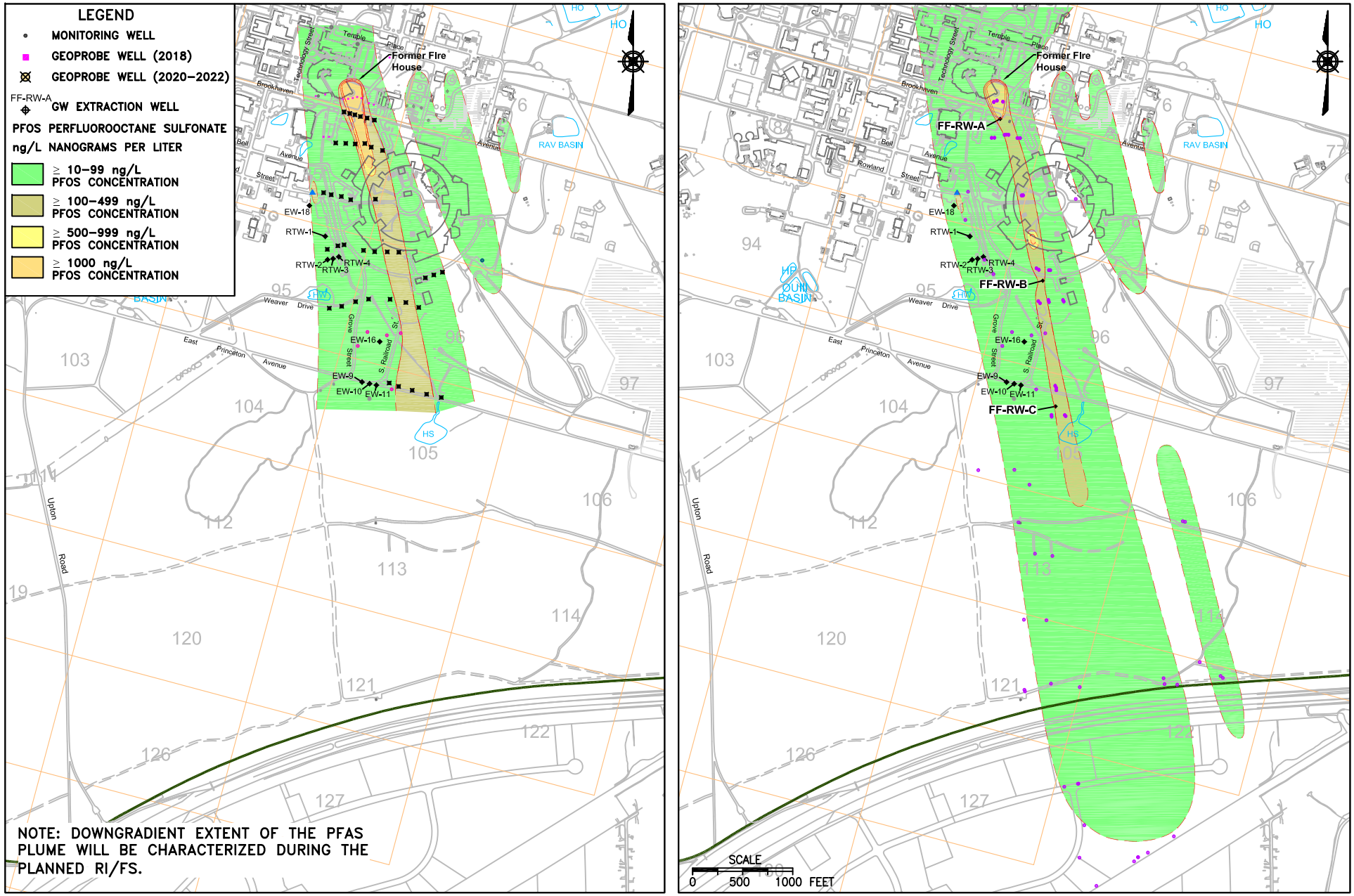
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/18/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: E–3

2020 PFOS PLUME DISTRIBUTION

2024 PFOS PLUME DISTRIBUTION



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:

FORMER FIREHOUSE PFOS PLUME COMPARISON 2020 – 2024

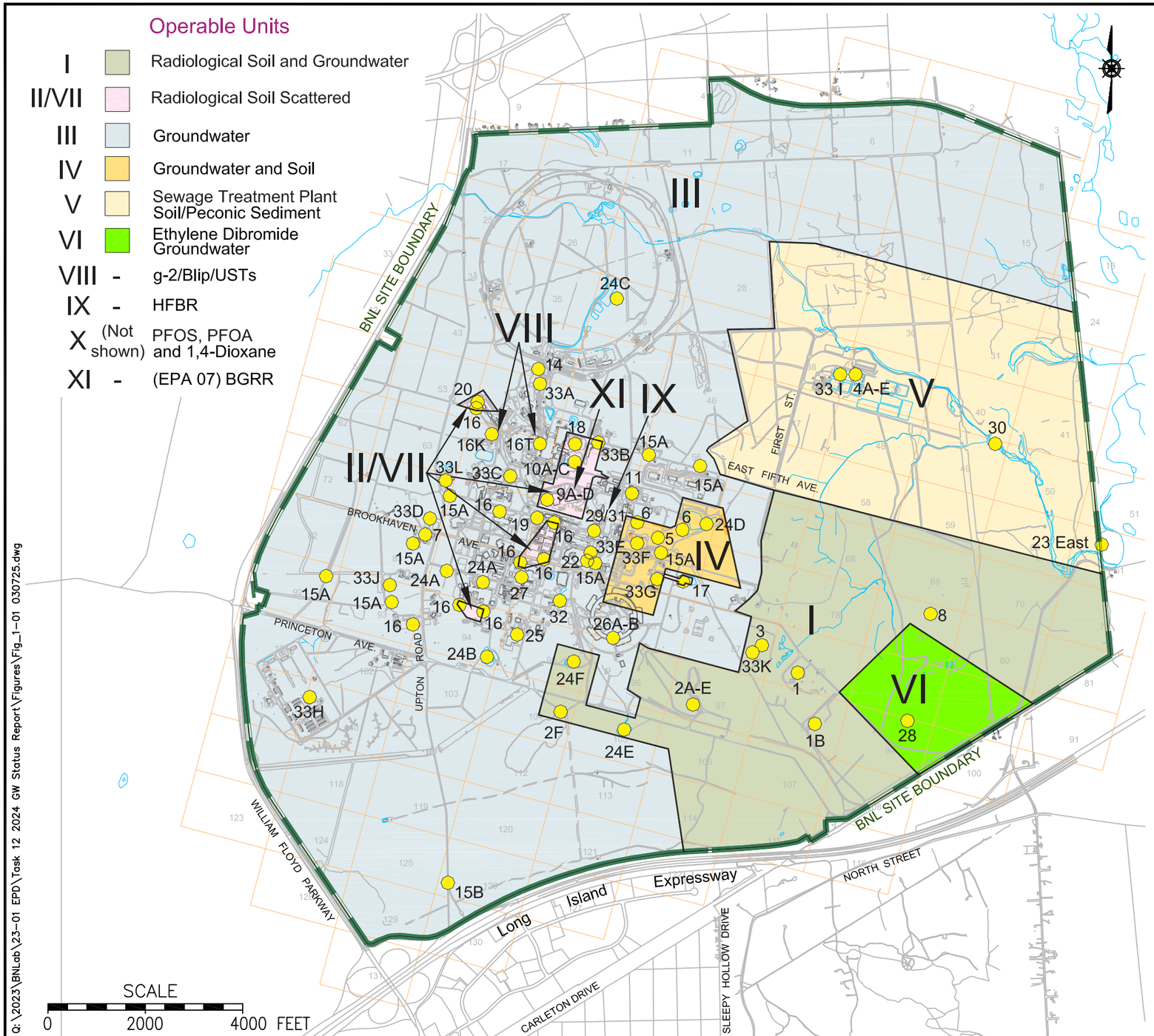
2024 BNL GROUNDWATER STATUS REPORT

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AJZ	–	04/18/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: E–4

Operable Units

I		Radiological Soil and Groundwater
II/VII		Radiological Soil Scattered
III		Groundwater
IV		Groundwater and Soil
V		Sewage Treatment Plant Soil/Peconic Sediment
VI		Ethylene Dibromide Groundwater
VIII	-	g-2/Blip/USTs
IX	-	HFBR
X	(Not shown)	PFOS, PFOA and 1,4-Dioxane
XI	-	(EPA 07) BGRR



Operable Units and Areas of Concern

Areas of Concern

1	Hazardous Waste Management Facility
1B	Groundwater
2A-E	Former/Interim Landfills, Slit Trench, and Chemical/Animal/Glass Holes
2F	Ash Pit
3	Current Landfill
4A-E	Sewage Treatment Plant (A - Sludge Drying Beds; B - Sand Filter Beds; C - Imhoff Tanks; D - Hold-Up Ponds; E - Satellite Disposal Area)
5	Central Steam Facility
6	Building 650 Sump and Sump Outfall Area
7	Paint Shop
8	Upland Recharge/Meadow Marsh
9A-D	Brookhaven Graphite Research Reactor (A - BGRR Canal; B - Underground Ductwork; C - Spill Sites; D- Pile Fan Sump)
10A-C	(A - Tanks D1, D2, D3; B – Underground Pipelines; C- Six A/B USTs)
11	Building 830 Pipe Leak
12	Underground Storage Tanks (not shown)
13	Cesspools and Septic Tanks (not shown)
14	Bubble Chamber Spill Area
15A	Potable/Supply Wells
15B	Monitoring Well 130-02
16A-S	Aerial Radioactive Monitoring System Results
16T	g-2 Source Area and Tritium Groundwater Plume
17	Area Adjacent to Former Low-Mass Criticality Facility
18	AGS Storage Yards
19	TCE Spill Area
20	Particle Beam Dump, North End of Linear Accelerator
21	Leaking Sewer Pipes (not shown)
22	Old Firehouse
23 East	Eastern Tritium Plume
24A	Process Supply Wells 104, 105
24B	Recharge Basin HP
24C	Recharge Basin HN
24D	Recharge Basin HO
24E	Recharge Basin HS
24F	Weaver Drive Basin HW
25	Heavy Machine Shop (Building 479)
26A-B	Warehouse Area (A - Building 208; B - Former Scrapyard/Drum Storage Area South of Building 96)
27	Building 464 Mercury Contaminated Soil
28	EDB Plume
29	HFBR Spent Fuel Pool and Tritium Plume
30	Peconic River
31	HFBR
32	Building 452 Freon-11
33A-L	PFOS and PFOA Groundwater and Soil Contamination
34	1,4- Dioxane Groundwater Contamination (Not Shown)

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TITLE:

OPERABLE UNITS AND AREAS OF CONCERN

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/07/25	–
CHKD:	APPD:	REV.:	NOTES:
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FIGURE NO.:			
1–1			

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ENVIRONMENTAL PROTECTION DIVISION

2024 BNL GROUNDWATER STATUS REPORT

05/14/25

FIGURE: 1-2

MONITORING WELL LOCATIONS

LEGEND

CERCLA MONITORING PROJECTS

- OU III (North Street)
- OU III (South Boundary)
- OU III (WF Wellfield Sentinel)
- OU III (Middle Road)
- OU III (BGRR / WCF Sr-90)
- OU III AOC 29 (HFBR)
- OU III (Industrial Park)
- OU III (Building 96)
- OU III (Western South Boundary)
- OU III (Magothy)
- OU III (LIPA)
- OU III (Airport)
- OU III (North Street East-EDB)
- OU IV (AOC 6 Sr-90)
- OU I (South Boundary)
- OU VI EDB
- Site Background
- Current Landfill
- Chemical / Animal Holes Sr-90
- OU X (Current Firehouse/Bldg. 170 & Former Firehouse)

FACILITY MONITORING PROJECTS (ES)

- AGS Research Areas
- BLIP Facility
- RHIC Facility
- STP and Peconic River
- Major Petroleum Facility
- Motor Pool Area
- New Waste Management Facility
- National Synchrotron Light Source II

- BNL Site Boundary
- Surface Water
- Solar Farm Panels

NOTE: Wells monitored under multiple programs are duplicated on the figure for each program under which they are monitored. Latest revision 03/26/25

SCALE

0 1000 2000 FEET

* Enlarged views are not to scale

PECONIC RIVER

SCHULTZ ROAD

LONG ISLAND EXPRESSWAY

NORTH STREET

WEEKS AVENUE

ASTOR DRIVE

STRATLER DRIVE

WALDORF DRIVE

FLOWER HILL DRIVE

MORICHES MIDDLE ISLAND ROAD

WILLIAM FLOYD PARKWAY

CARLETON DRIVE

GLEN DRIVE

FREESTATE DRIVE

CARNATION DRIVE

WELLWOOD DRIVE

AVONDALE DRIVE

LOCKWOOD DRIVE

ROWLINSON DRIVE

PURITAN DRIVE

STARLIGHT DRIVE

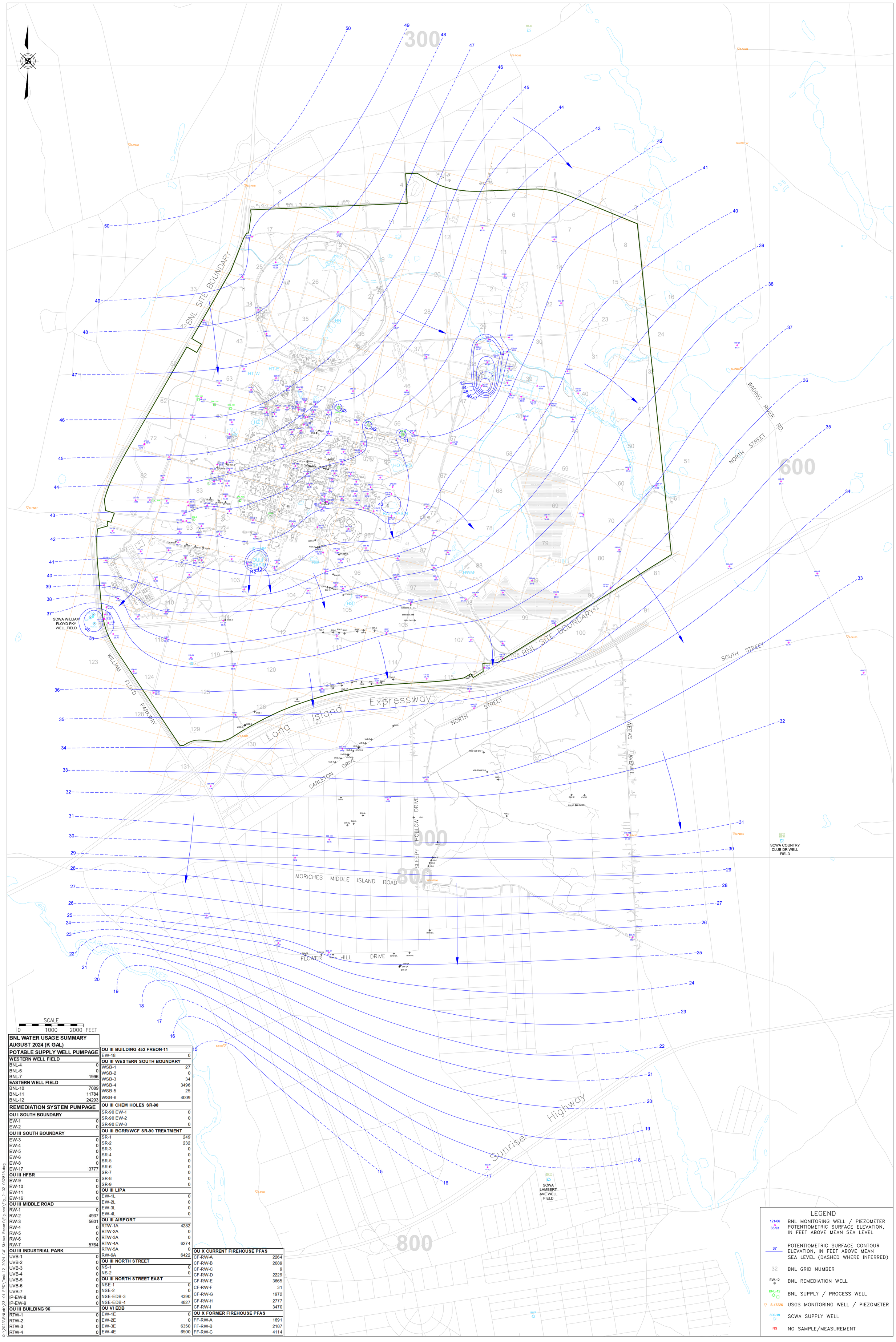
BOXWOOD DRIVE

BIRCH HOLLOW DRIVE

SLEEPY HOLLOW DRIVE

CARMANS RIVER

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SCALE
0 1000 2000 FEET

BNL WATER USAGE SUMMARY AUGUST 2024 (K GAL)	
POTABLE SUPPLY WELL PUMPAGE	
WESTERN WELL FIELD	
BNL-4	0
BNL-6	0
BNL-7	1996
EASTERN WELL FIELD	
BNL-10	7089
BNL-11	11784
BNL-12	24293
REMEDIATION SYSTEM PUMPAGE	
OU I SOUTH BOUNDARY	
EW-1	0
EW-2	0
OU III SOUTH BOUNDARY	
EW-3	0
EW-4	0
EW-5	0
EW-6	0
EW-8	0
EW-17	3777
OU III HFBR	
EW-9	0
EW-10	0
EW-11	0
EW-16	0
OU III MIDDLE ROAD	
RW-1	0
RW-2	4937
RW-3	5601
RW-4	0
RW-5	0
RW-6	0
RW-7	5764
OU III INDUSTRIAL PARK	
UVB-1	0
UVB-2	0
UVB-3	0
UVB-4	0
UVB-5	0
UVB-6	0
UVB-7	0
IP-EW-8	0
IP-EW-9	0
OU III BUILDING 96	
RTW-1	0
RTW-2	0
RTW-3	0
RTW-4	0

OU III BUILDING 452 FREON-11	
EW-18	0
OU III WESTERN SOUTH BOUNDARY	
WSB-1	27
WSB-2	0
WSB-3	34
WSB-4	3496
WSB-5	25
WSB-6	4009
OU III CHEM HOLES SR-90	
SR-90 EW-1	0
SR-90 EW-2	0
SR-90 EW-3	0
OU III BGRR/WCF SR-90 TREATMENT	
SR-1	249
SR-2	232
SR-3	0
SR-4	0
SR-5	0
SR-6	0
SR-7	0
SR-8	0
SR-9	0
OU III LIPA	
EW-1L	0
EW-2L	0
EW-3L	0
EW-4L	0
OU III AIRPORT	
RTW-1A	4282
RTW-2A	0
RTW-3A	0
RTW-4A	6274
RTW-5A	0
RW-6A	6422
OU III NORTH STREET	
NS-1	0
NS-2	0
OU III NORTH STREET EAST	
NSE-1	0
NSE-2	0
NSE-EDB-3	4390
NSE-EDB-4	4827
OU VI EDB	
EW-1E	0
EW-2E	0
EW-3E	6350
EW-4E	6500

OU X CURRENT FIREHOUSE PFAS	
CF-RW-A	2264
CF-RW-B	2089
CF-RW-C	9
CF-RW-D	2229
CF-RW-E	3665
CF-RW-F	31
CF-RW-G	1972
CF-RW-H	2777
CF-RW-I	3470
OU X FORMER FIREHOUSE PFAS	
FF-RW-A	1691
FF-RW-B	2187
FF-RW-C	4114

LEGEND

- 121-06 / 35.93 — BNL MONITORING WELL / PIEZOMETER POTENTIOMETRIC SURFACE ELEVATION, IN FEET ABOVE MEAN SEA LEVEL
- 37 — POTENTIOMETRIC SURFACE CONTOUR ELEVATION, IN FEET ABOVE MEAN SEA LEVEL (DASHED WHERE INFERRED)
- 32 — BNL GRID NUMBER
- EW-12 — BNL REMEDIATION WELL
- BNL-12 — BNL SUPPLY / PROCESS WELL
- S-47226 — USGS MONITORING WELL / PIEZOMETER
- 800-19 — SCWA SUPPLY WELL
- NS — NO SAMPLE/MEASUREMENT

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TITLE:
WATER-TABLE CONTOURS OF THE SHALLOW GLACIAL ZONE AUGUST 12 – AUGUST 20, 2024
2024 BNL GROUNDWATER STATUS REPORT

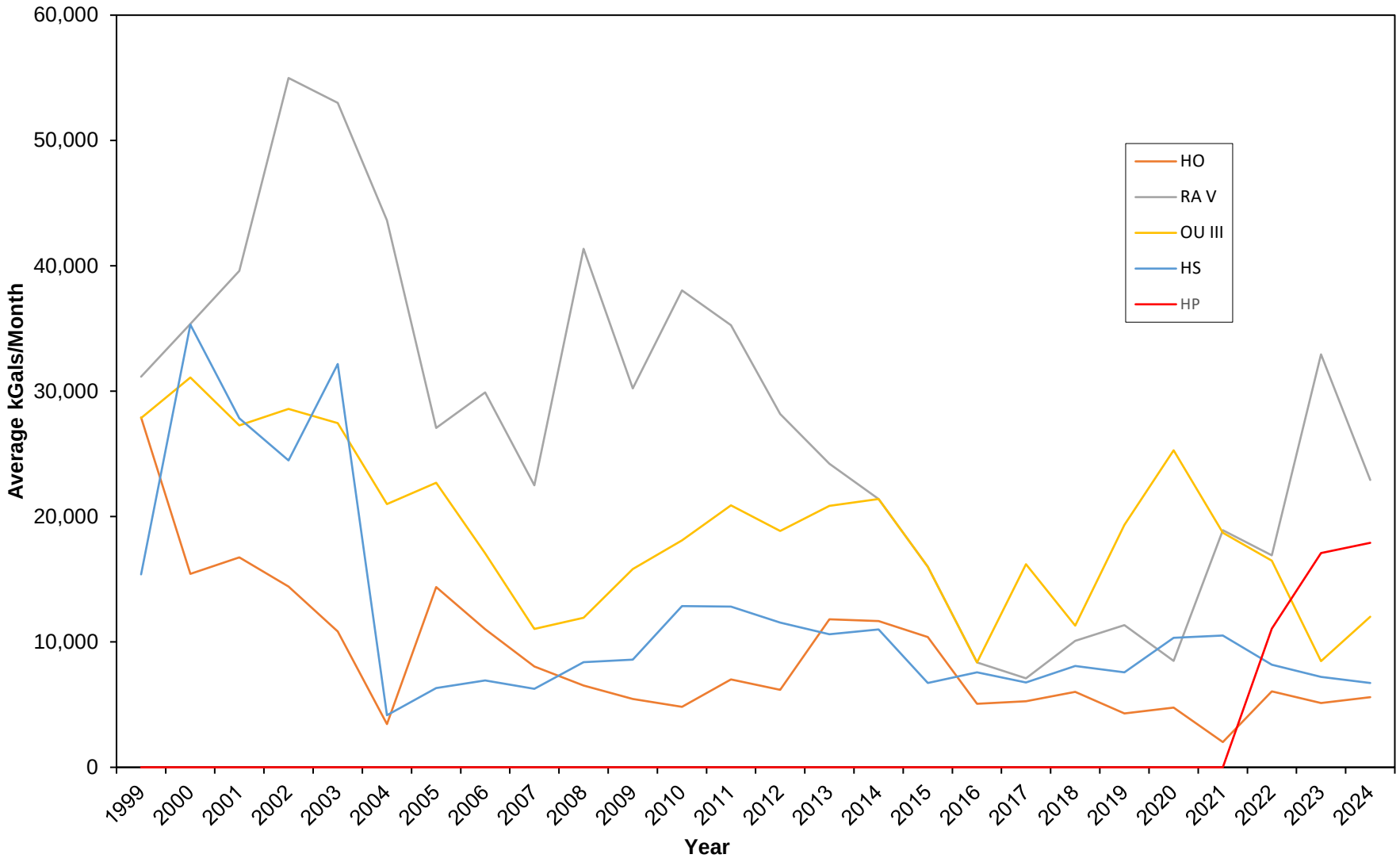
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AJZ	–	09/17/24	–
CHKD:	APPD:	REV.:	NOTES:
DEP	WRD	03/28/25	–

FIGURE NO.: 2-2

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Figure 2-5
Select Recharge Basin Flow Trends

2024 BNL Groundwater Status Report



BGRR
WCF
Sr-90

OU IV
AOC 6

Bldg 452
Freon-11

Current
Firehouse
and Bldg 170
(PFAS)

Former
Firehouse
(PFAS)

Carbon
Tetrachloride

Bldg
96
HFBR
Tritium

Chem
Holes
Sr-90

Waste
Management
Area - AOC 1

Middle Road

OU I South
Boundary

OU III South Boundary

Industrial
Park
East

Western South
Boundary

North
Street
East EDB

Industrial Park

North
Street
East

OU VI
EDB

LIPA

North
Street

Brookhaven Airport

OU V

SCALE
0 1000 2000 FEET

LEGEND

- 32 — BNL GRID NUMBER
- EW-12 — BNL REMEDIATION WELL
- BNL-12 — BNL SUPPLY / PROCESS WELL
- OPERATING REMEDIATION SYSTEMS
- REMEDIATION SYSTEM PLACED IN SHUTDOWN MODE
- DECOMMISSIONED REMEDIATION SYSTEM

REMEDIATION WELL STATUS

- RTW-4A — ON-FULL TIME
- SR-9 — PULSED PUMPING
- RTW-5A — STAND BY-OFF

- 2024 TVOC PLUME UNLESS SPECIFIED. CONCENTRATION AS INDICATED. (DASHED WHERE INFERRED)
- 2024 TRITIUM PLUME. OUTLINE IS 20,000 pCi/L.
- 2024 STRONTIUM 90 PLUME. OUTLINE IS 8 pCi/L.
- 2024 OU VI EDB PLUME. OUTLINE IS 0.05 µg/L.
- EXTENT OF PFOS PLUME OUTLINES BASED UPON 2024 MONITORING RESULTS. OUTLINE IS 10 ng/L.

05/13/25

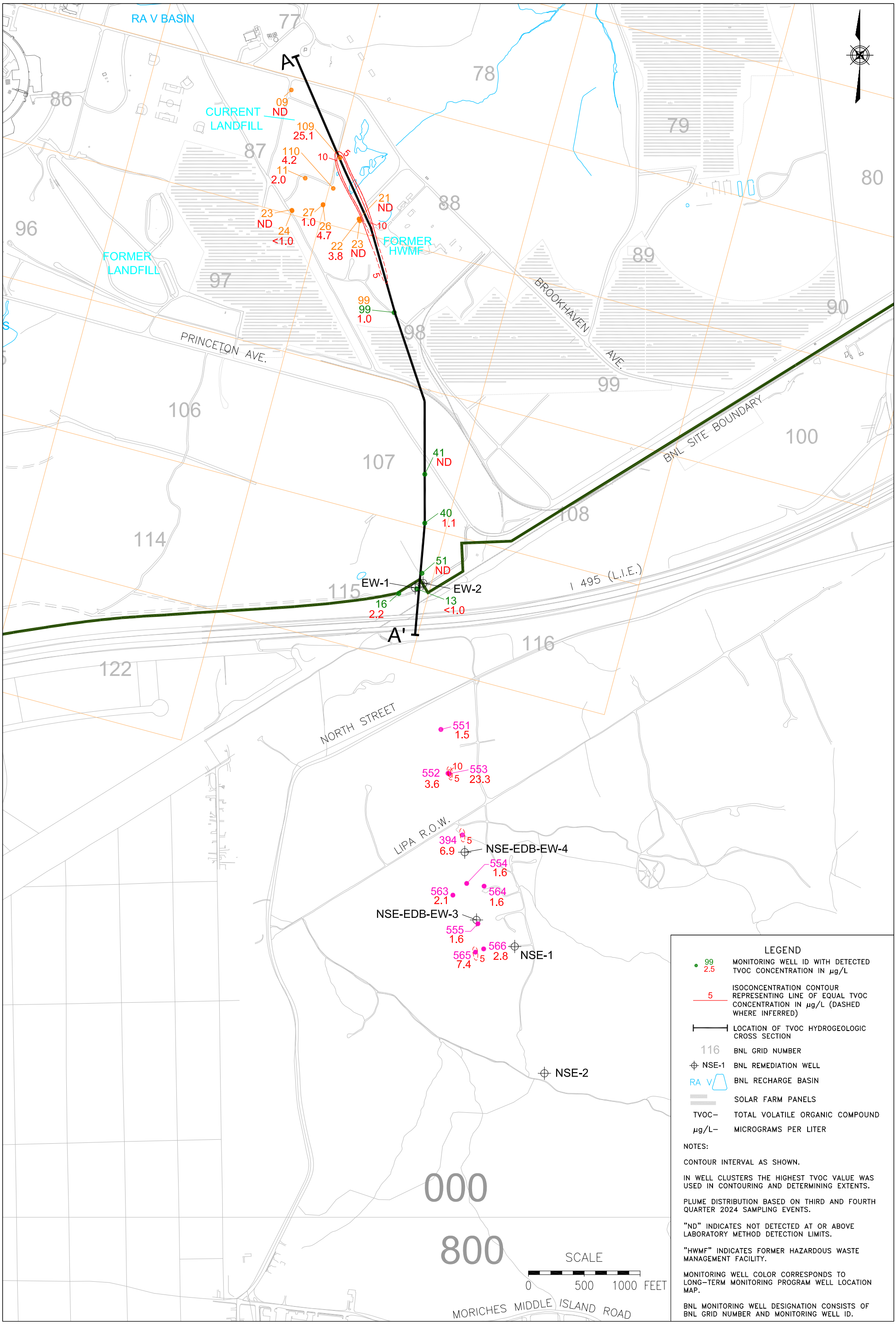
FIGURE: 3.0 -1
GROUNDWATER REMEDIATION SYSTEMS

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2024 BNL GROUNDWATER STATUS REPORT

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LEGEND

- 99 2.5 — MONITORING WELL ID WITH DETECTED TVOC CONCENTRATION IN µg/L
- 5 — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL TVOC CONCENTRATION IN µg/L (DASHED WHERE INFERRED)
- LOCATION OF TVOC HYDROGEOLOGIC CROSS SECTION
- 116 — BNL GRID NUMBER
- NSE-1 — BNL REMEDIATION WELL
- RA V — BNL RECHARGE BASIN
- SOLAR FARM PANELS
- TVOC– TOTAL VOLATILE ORGANIC COMPOUND
- µg/L– MICROGRAMS PER LITER

NOTES:

CONTOUR INTERVAL AS SHOWN.

IN WELL CLUSTERS THE HIGHEST TVOC VALUE WAS USED IN CONTOURING AND DETERMINING EXTENTS.

PLUME DISTRIBUTION BASED ON THIRD AND FOURTH QUARTER 2024 SAMPLING EVENTS.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

"HWMF" INDICATES FORMER HAZARDOUS WASTE MANAGEMENT FACILITY.

MONITORING WELL COLOR CORRESPONDS TO LONG–TERM MONITORING PROGRAM WELL LOCATION MAP.

BNL MONITORING WELL DESIGNATION CONSISTS OF BNL GRID NUMBER AND MONITORING WELL ID.

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TITLE:

OU I SOUTH BOUNDARY/ NORTH STREET EAST TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

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AJZ	–	03/10/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	05/13/25	–

FIGURE NO.: 3.1–1

LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

098–99 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

7.54 TVOC Concentration (µg/L)

— 5 — TVOC Contour (µg/L) (Dashed Where Inferred)

TVOC– Total Volatile Organic Compound

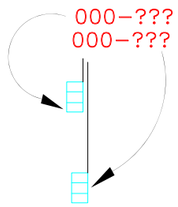
µg/L– Micrograms Per Liter

Water Table As Of Aug 12 – Aug 20, 2024

Monitoring Well Screen

Extraction Well Screen

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep



NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS AND THE 2002 PREDESIGN CHARACTERIZATION.

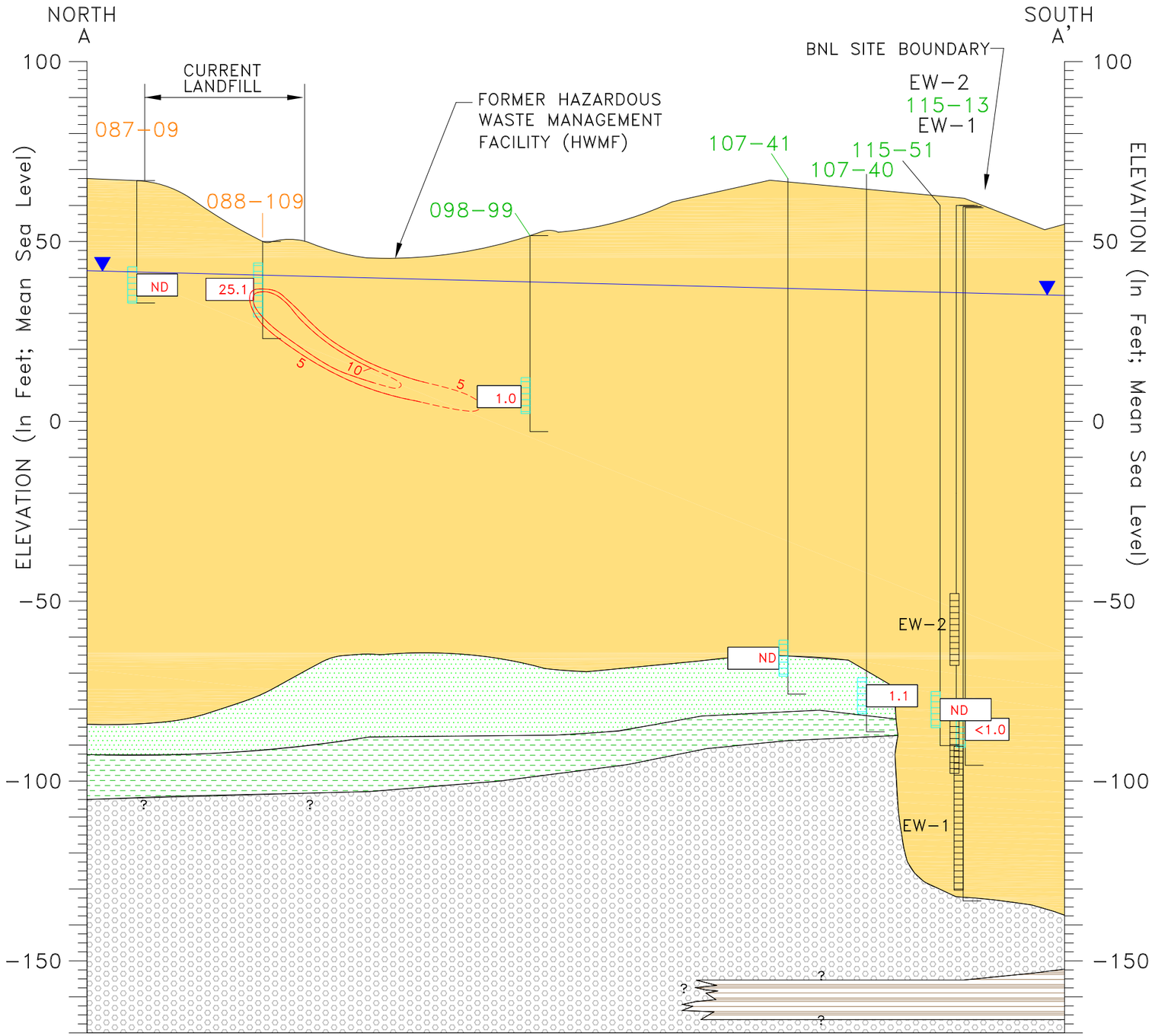
2) PLUME DISTRIBUTION BASED ON FOURTH QUARTER 2024 SOUTH BOUNDARY / NORTH STREET EAST SAMPLING EVENT.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG–TERM MONITORING PROGRAM WELL LOCATION MAP.

HORIZONTAL SCALE

0 500 1000 FEET



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU I SOUTH BOUNDARY
TVOC HYDROGEOLOGIC CROSS SECTION (A–A')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	03/10/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/18/25	–

FIGURE NO.: 3.1–2

CURRENT LANDFILL

FORMER HWMF

99

41

40

51

EW–1

EW–2

NSE–1

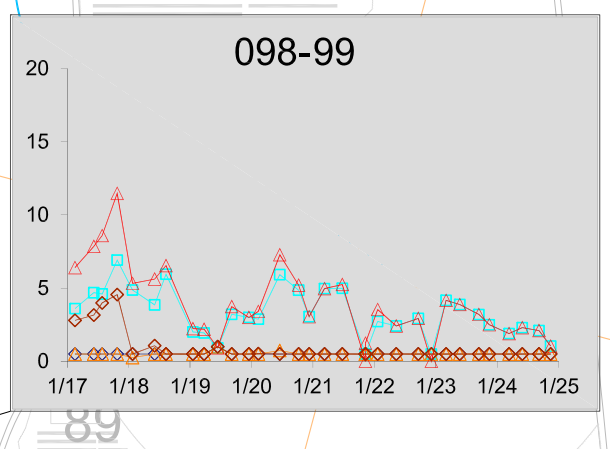
NSE–2

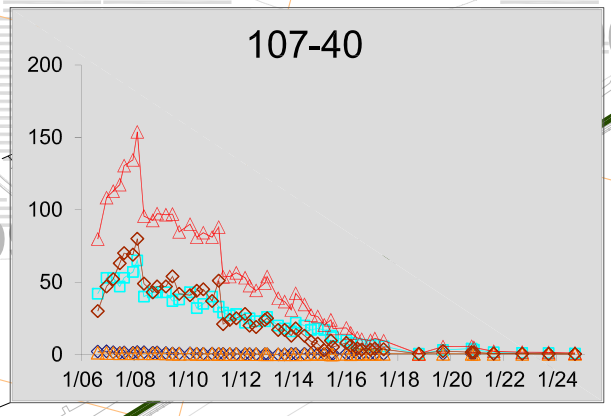
BROOKHAVEN AVE.

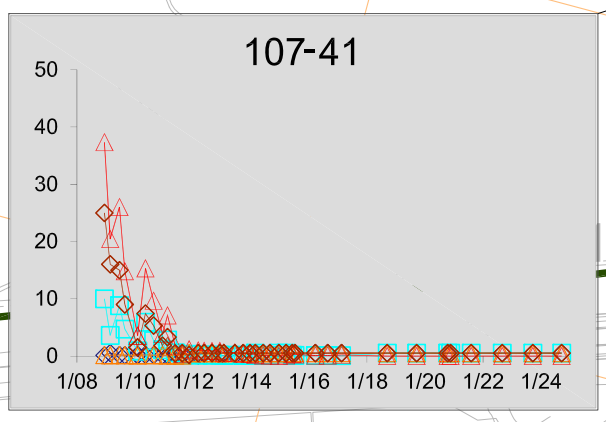
I 495 (L.I.E.)

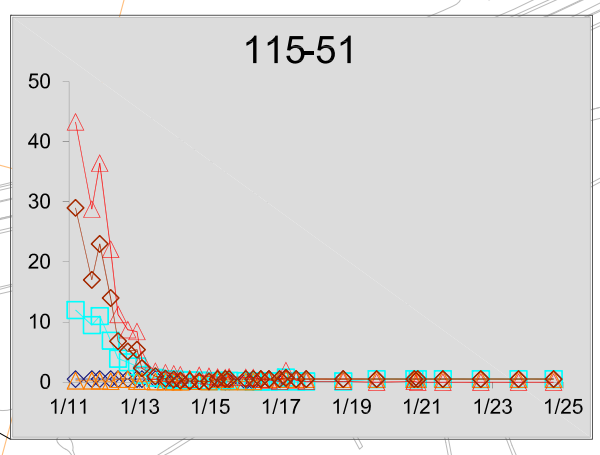
NORTH STREET

77 78 87 88 89 97 98 106 107 108 115 116 122 000









LEGEND

- 40 MONITORING WELL ID
- TEMPORARY WELL
- EXTENT OF TVOC PLUME BASED ON 5 µg/L ISOCONTOUR (DASHED WHERE INFERRED)
- 107 BNL GRID NUMBER
- EW–1 BNL REMEDIATION WELL
- RA V BNL RECHARGE BASIN
- SOLAR FARM PANELS
- TVOC– TOTAL VOLATILE ORGANIC COMPOUND

µg/L– MICROGRAMS PER LITER

- TVOC
- 1,1,1–TRICHLOROETHANE
- 1,1–DICHLOROETHANE
- 1,1–DICHLOROETHYLENE
- CHLOROETHANE
- ETHYLENE DIBROMIDE

CONCENTRATION (IN µg/L)

DATE (MONTH/YEAR)

SCALE

0 500 1000 FEET

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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

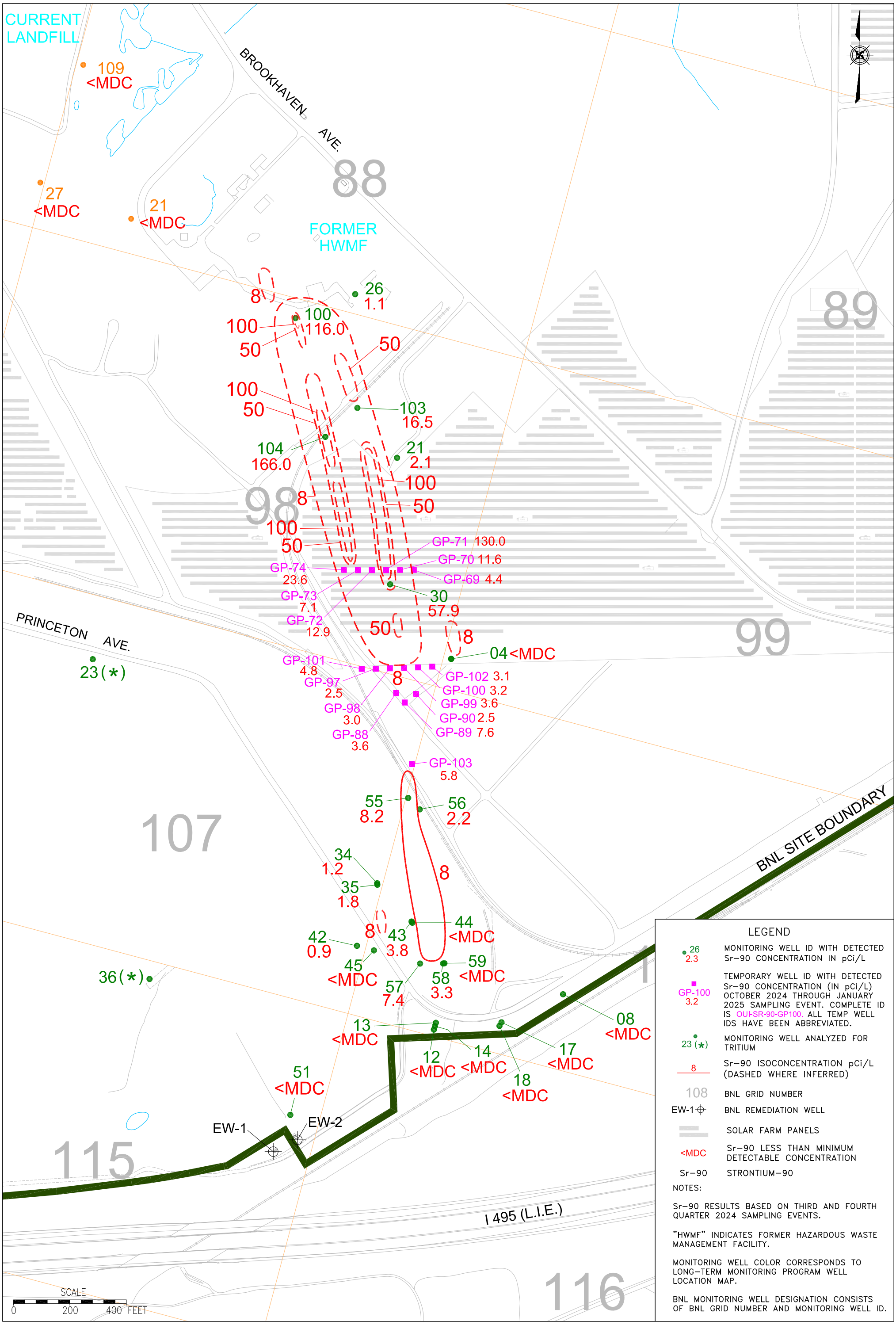
TITLE:

OU I /CURRENT LANDFILL/ SOUTH BOUNDARY/ NORTH STREET EAST HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/10/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	–	–

FIGURE NO.: 3.1–3



LEGEND

26 2.3	MONITORING WELL ID WITH DETECTED Sr–90 CONCENTRATION IN pCi/L
GP-100 3.2	TEMPORARY WELL ID WITH DETECTED Sr–90 CONCENTRATION (IN pCi/L) OCTOBER 2024 THROUGH JANUARY 2025 SAMPLING EVENT. COMPLETE ID IS OUI-SR-90-GP100. ALL TEMP WELL IDS HAVE BEEN ABBREVIATED.
23 (*)	MONITORING WELL ANALYZED FOR TRITIUM
8	Sr–90 ISOCONCENTRATION pCi/L (DASHED WHERE INFERRED)
108	BNL GRID NUMBER
EW-1	BNL REMEDIATION WELL
	SOLAR FARM PANELS
<MDC	Sr–90 LESS THAN MINIMUM DETECTABLE CONCENTRATION
Sr–90	STRONTIUM–90

NOTES:

Sr–90 RESULTS BASED ON THIRD AND FOURTH QUARTER 2024 SAMPLING EVENTS.

"HWMF" INDICATES FORMER HAZARDOUS WASTE MANAGEMENT FACILITY.

MONITORING WELL COLOR CORRESPONDS TO LONG–TERM MONITORING PROGRAM WELL LOCATION MAP.

BNL MONITORING WELL DESIGNATION CONSISTS OF BNL GRID NUMBER AND MONITORING WELL ID.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU I SOUTH BOUNDARY Sr–90 PLUME DISTRIBUTION

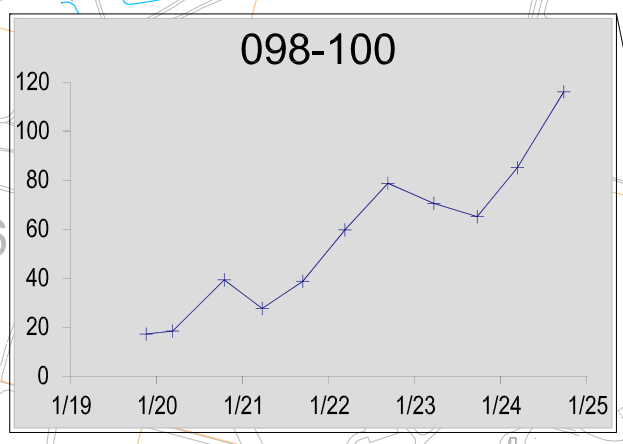
2024 BNL GROUNDWATER STATUS REPORT

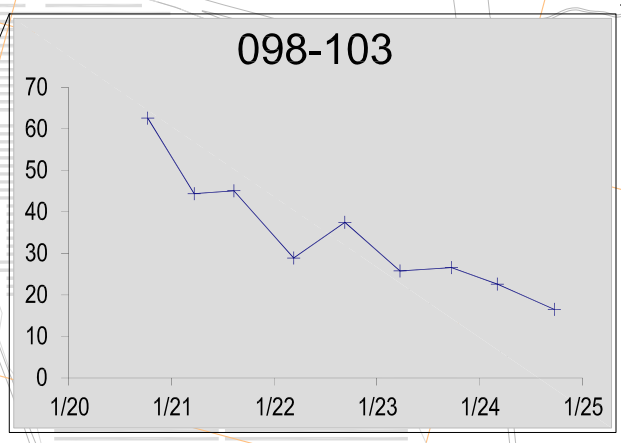
DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/12/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	–	–

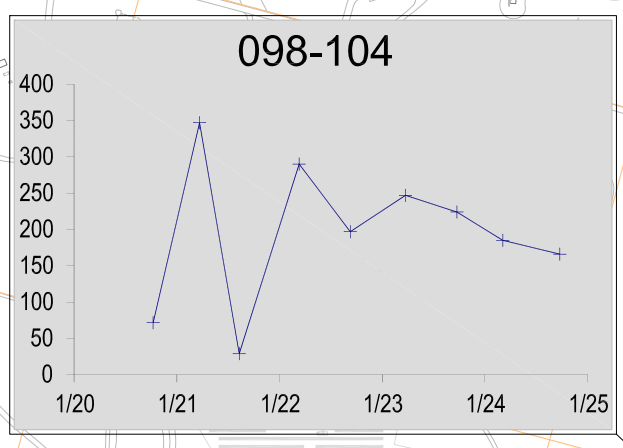
FIGURE NO.: 3.1–4

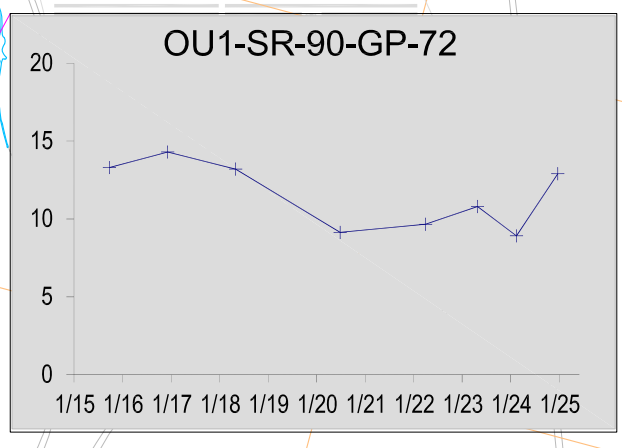
OU I SOUTH BOUNDARY HISTORICAL Sr-90 TRENDS

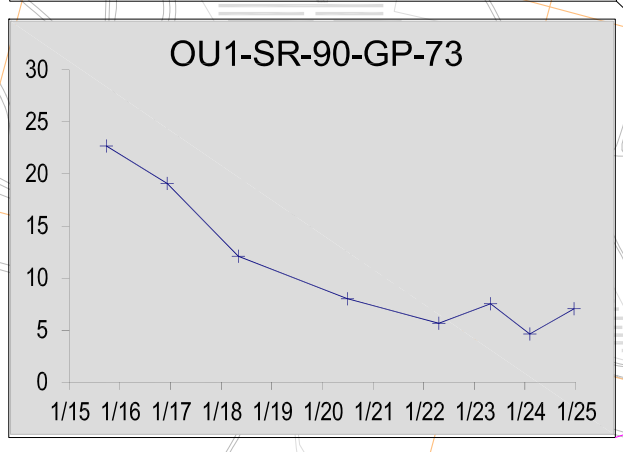
2024 BNL GROUNDWATER STATUS REPORT

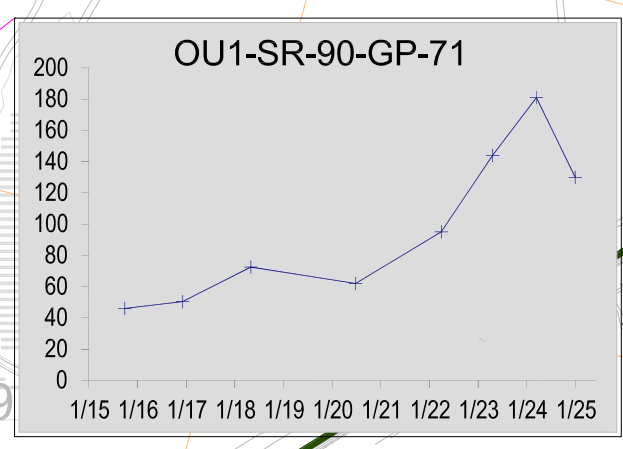


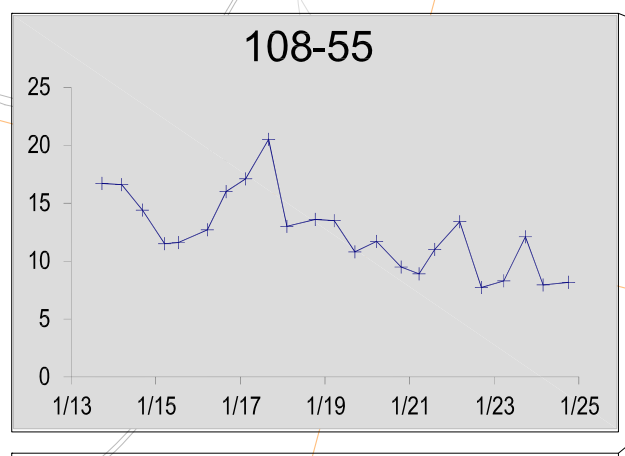


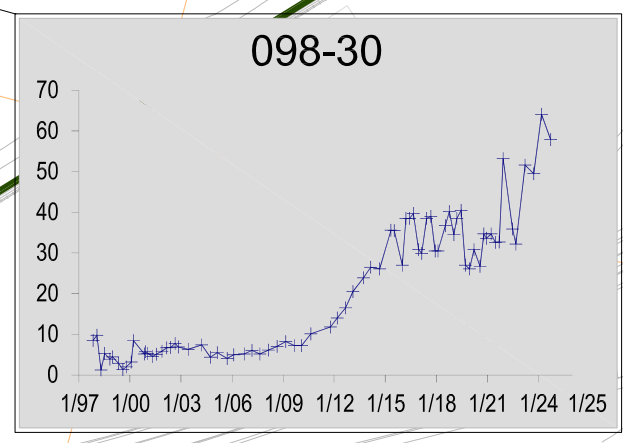


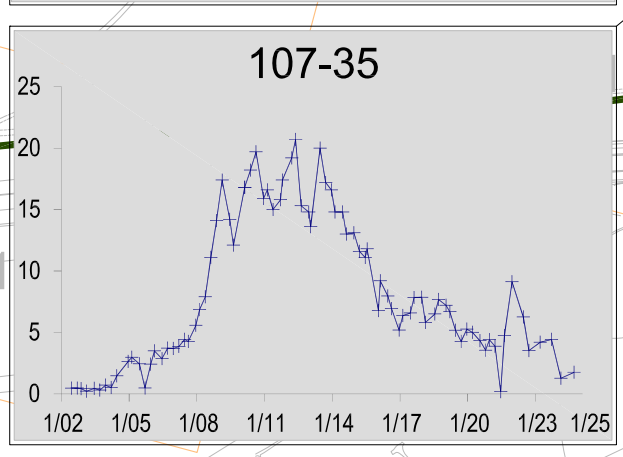


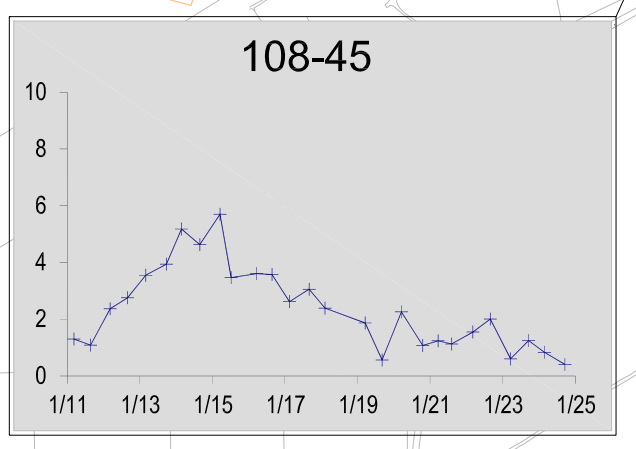


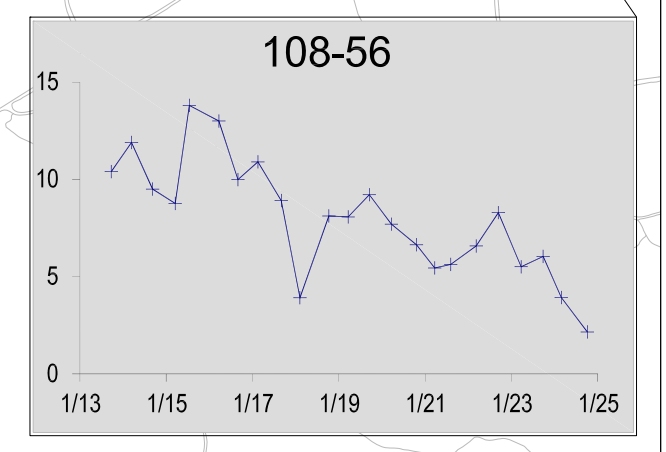












FORMER HWMF

100 103 104 GP-72 GP-73 GP-71 30

55 56 35 45

EW-1 EW-2

BROOKHAVEN AVE.

BNL SITE BOUNDARY

I 495 (L.I.E.)

NORTH STREET

66 59 68 76 78 88 98 99 107 108 115 116

SCALE 0 500 1000 FEET

LEGEND

- 45 — MONITORING WELL ID
- 108 — BNL GRID NUMBER
- EW-1 — EXTRACTION WELL LOCATION
- RA V — BNL RECHARGE BASIN
- SOLAR FARM PANELS
- Sr-90 (pCi/L)
- EXTENT OF Sr-90 PLUME BASED ON 8 pCi/L (DASHED WHERE INFERRED)
- Sr-90 — STRONTIUM-90

CONCENTRATION (IN pCi/L) — DATE (MONTH/YEAR)

NOTES:

"HWMF" INDICATES FORMER HAZARDOUS WASTE MANAGEMENT FACILITY.

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE: OU I SOUTH BOUNDARY HISTORICAL Sr-90 TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/12/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	–	–

FIGURE NO.: 3.1-5

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Figure 3.1-6
OU I South Boundary Groundwater Remediation System
Historic Total Volatile Organic Compound Trends in Extraction Wells

2024 BNL Groundwater Status Report

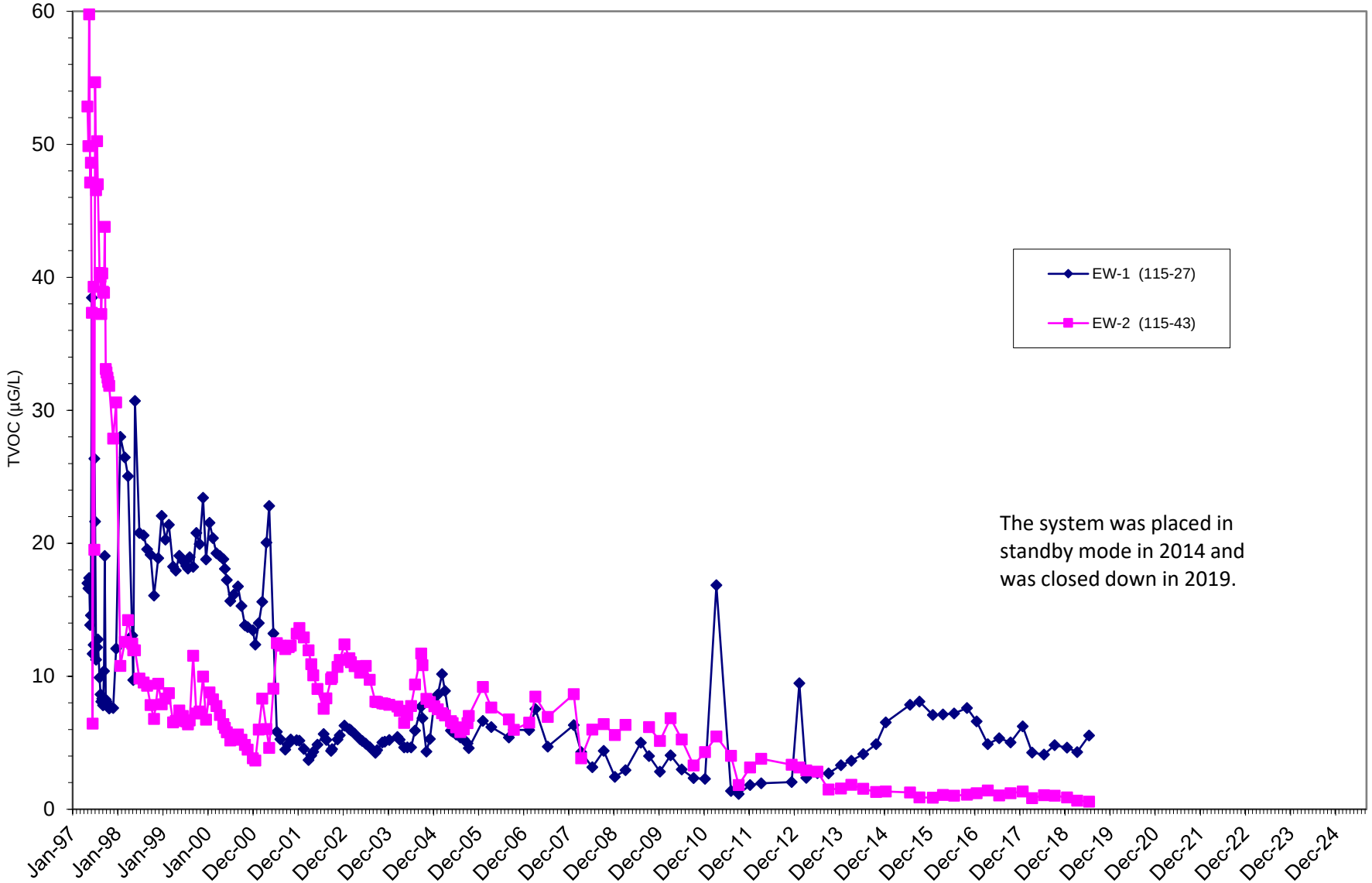
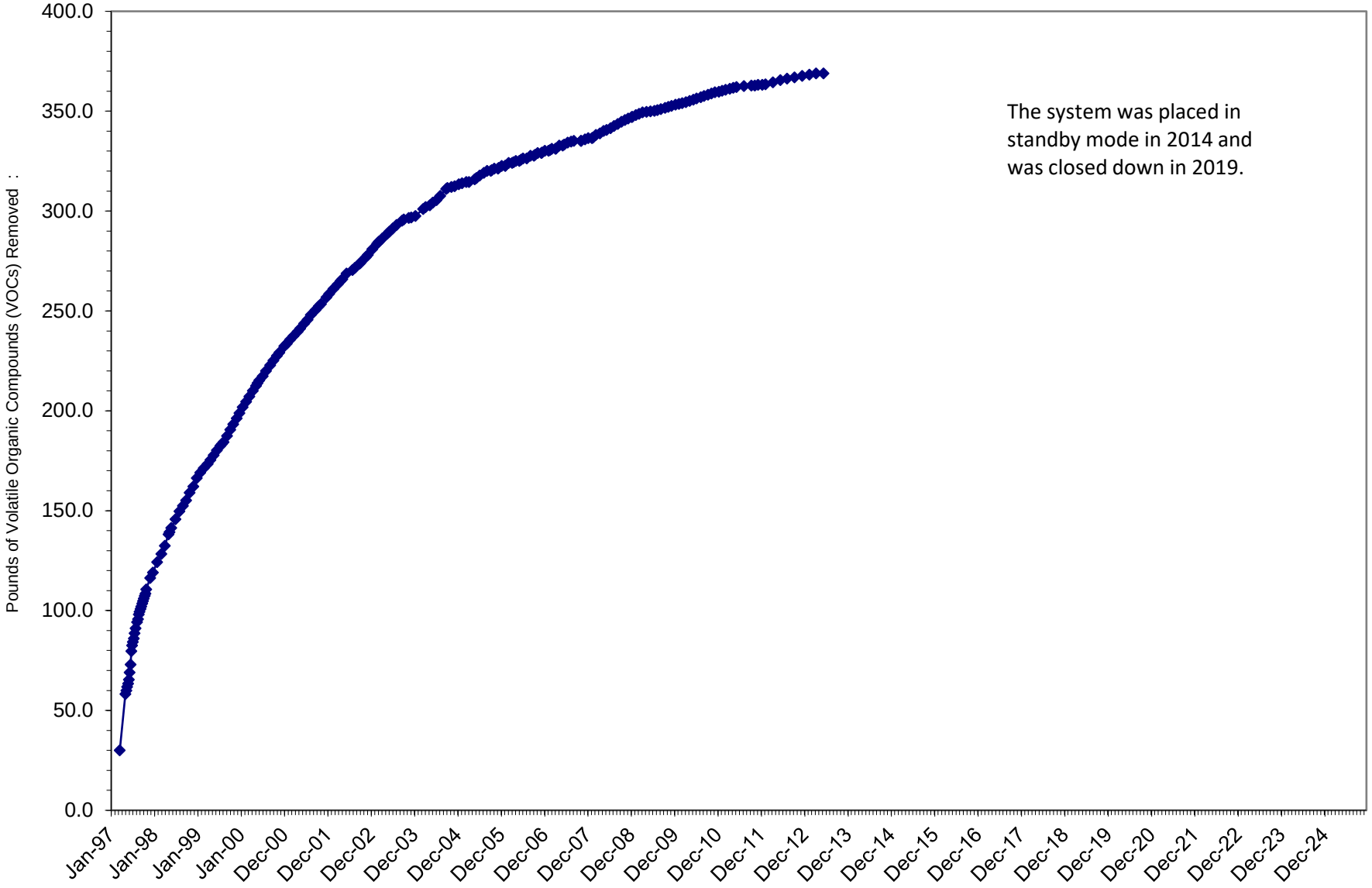


Figure 3.1-7
OU I South Boundary Groundwater Remediation System
Cumulative VOC Mass Removed



1997

2002

2007

2024

CURRENT LANDFILL
CAPPED NOVEMBER 1995

PRINCETON AVE.

BROOKHAVEN AVE.

BNL SITE BOUNDARY

OU I SOUTH BOUNDARY
TREATMENT SYSTEM

EW-1

EW-2

I 495 (L.I.E.)

NORTH STREET

SLEEPY HOLLOW DR.

NSE-1

NSE-2

LEGEND

- MONITORING WELL
- KEY TEMPORARY WELL
- EW-2 GW REMEDIATION WELL
- 5 – 49 µg/L TVOC CONCENTRATION
- 50 – 99 µg/L TVOC CONCENTRATION
- 100 – 499 µg/L TVOC CONCENTRATION
- SOLAR FARM PANELS

TVOC – TOTAL VOLATILE ORGANIC COMPOUND
µg/L – MICROGRAMS PER LITER

SCALE
0 500 1000 FEET

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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

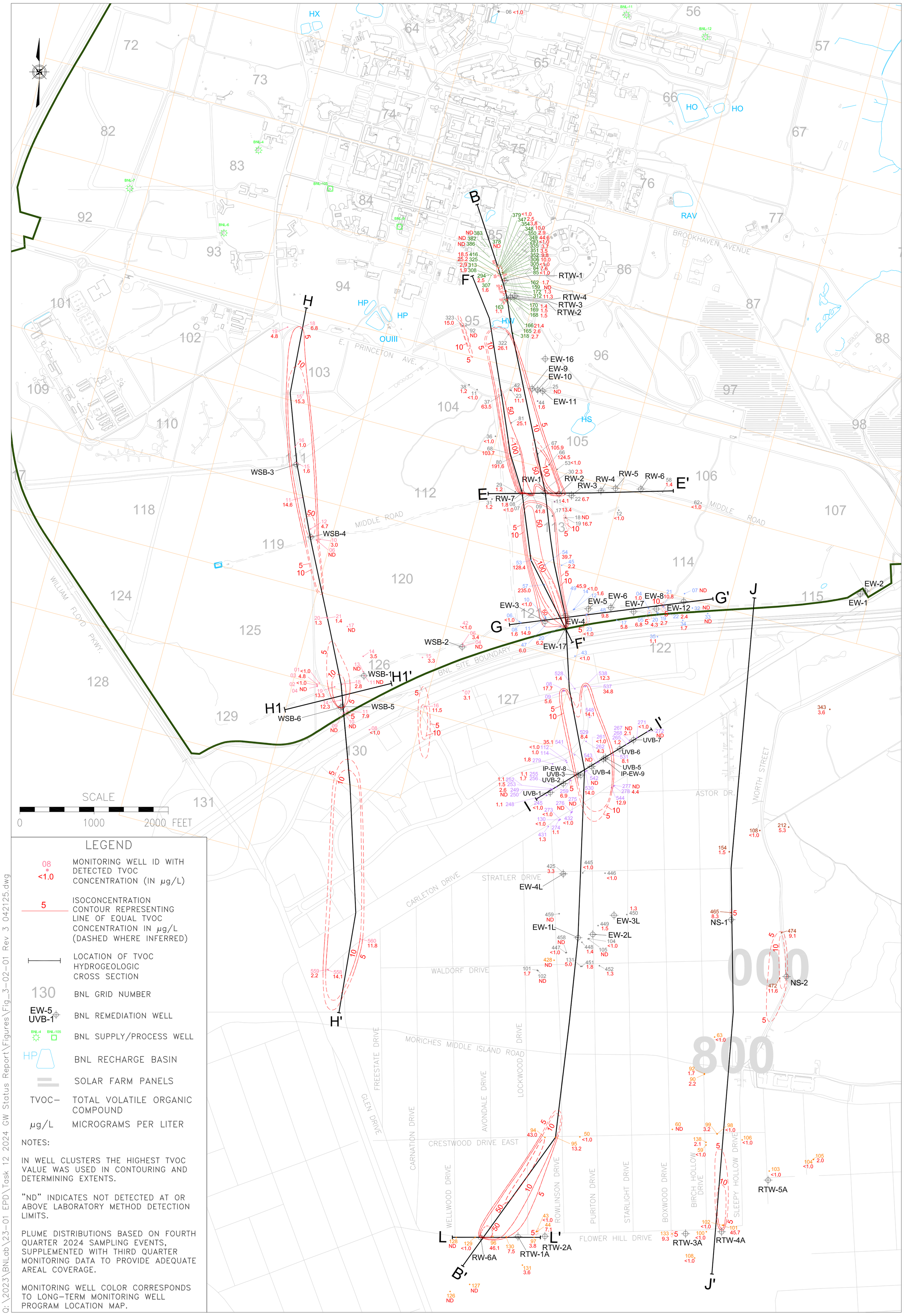
TITLE:

OU I SOUTH BOUNDARY/NORTH STREET EAST
TVOC PLUME COMPARISON
1997 – 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT. HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	05/13/25	–

FIGURE NO.: 3.1–8



LEGEND

- 08 / <1.0 — MONITORING WELL ID WITH DETECTED TVOC CONCENTRATION (IN µg/L)
- 5 — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL TVOC CONCENTRATION IN µg/L (DASHED WHERE INFERRED)
- LOCATION OF TVOC HYDROGEOLOGIC CROSS SECTION
- 130 — BNL GRID NUMBER
- EW-5 / UVB-1 — BNL REMEDIATION WELL
- BNL-4, BNL-105 — BNL SUPPLY/PROCESS WELL
- HP — BNL RECHARGE BASIN
- SOLAR FARM PANELS
- TVOC— TOTAL VOLATILE ORGANIC COMPOUND
- µg/L MICROGRAMS PER LITER

NOTES:

IN WELL CLUSTERS THE HIGHEST TVOC VALUE WAS USED IN CONTOURING AND DETERMINING EXTENTS.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER 2024 SAMPLING EVENTS, SUPPLEMENTED WITH THIRD QUARTER MONITORING DATA TO PROVIDE ADEQUATE AREAL COVERAGE.

MONITORING WELL COLOR CORRESPONDS TO LONG-TERM MONITORING WELL PROGRAM LOCATION MAP.

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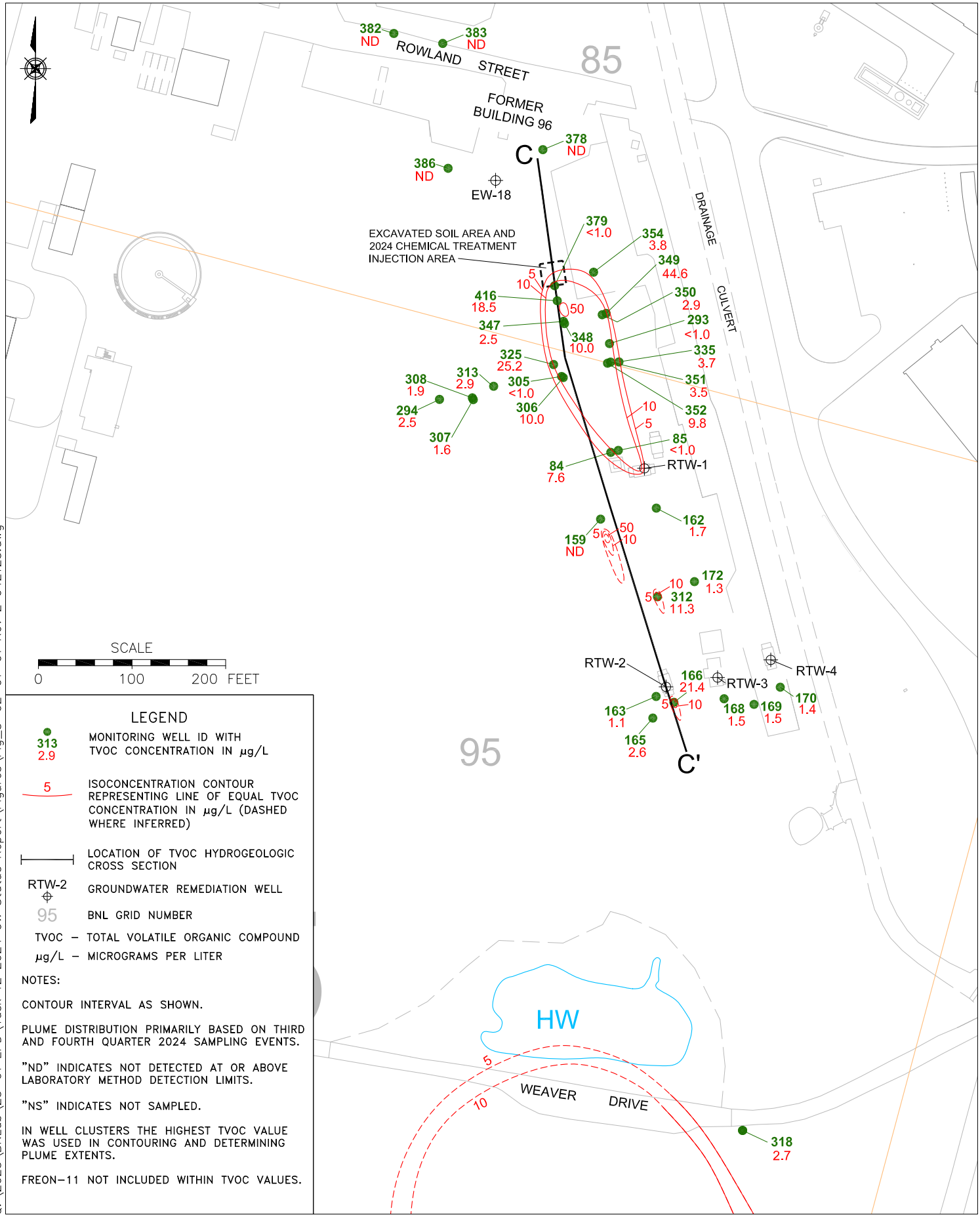
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III/ OU IV/ NORTH STREET TVOC PLUME DISTRIBUTIONS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/07/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/21/25	
FIGURE NO.:		3.2-1	



LEGEND

313 / 2.9 — MONITORING WELL ID WITH TVOC CONCENTRATION IN µg/L

5 — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL TVOC CONCENTRATION IN µg/L (DASHED WHERE INFERRED)

LOCATION OF TVOC HYDROGEOLOGIC CROSS SECTION

RTW-2 — GROUNDWATER REMEDIATION WELL

95 — BNL GRID NUMBER

TVOC – TOTAL VOLATILE ORGANIC COMPOUND

µg/L – MICROGRAMS PER LITER

NOTES:

CONTOUR INTERVAL AS SHOWN.

PLUME DISTRIBUTION PRIMARILY BASED ON THIRD AND FOURTH QUARTER 2024 SAMPLING EVENTS.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

"NS" INDICATES NOT SAMPLED.

IN WELL CLUSTERS THE HIGHEST TVOC VALUE WAS USED IN CONTOURING AND DETERMINING PLUME EXTENTS.

FREON-11 NOT INCLUDED WITHIN TVOC VALUES.

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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

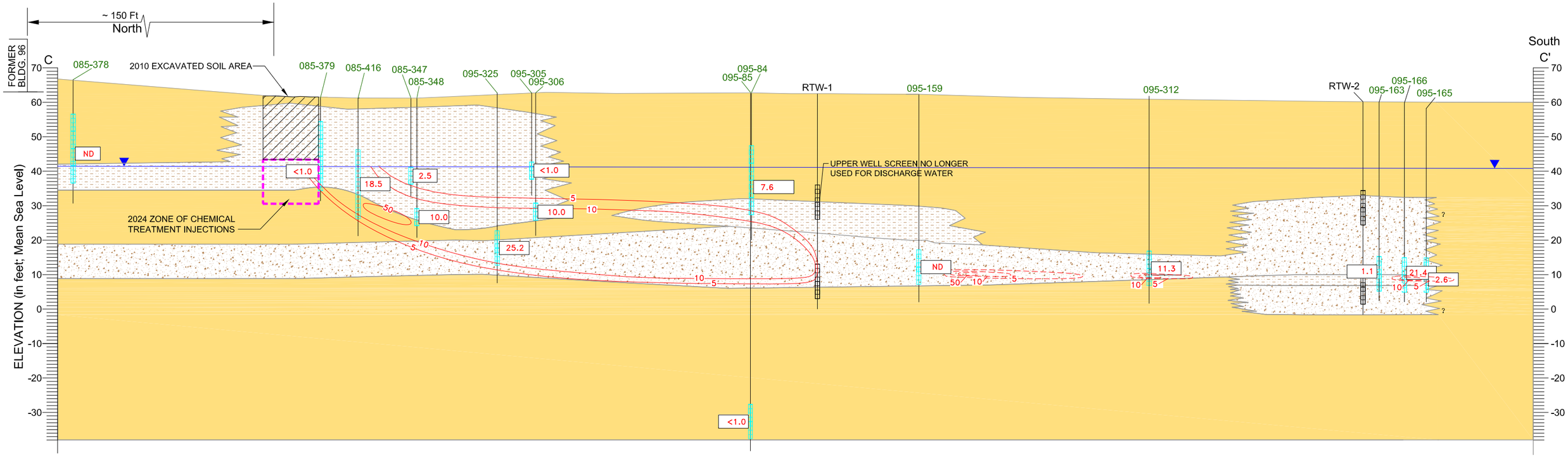
TITLE:

OU III BUILDING 96 AREA TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/06/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/21/25	–

FIGURE NO.: 3.2.1-1



LEGEND

Upper Glacial aquifer

- Fine to coarse sand, trace to little silt and/or fine to medium gravel.
- Very fine sand and/or silt, with silt and sand lenses interbedded.
- Coarse to very coarse sand, with or without gravel or gravel with sand.

095-85 — BNL Monitoring Well ID

10.2 — TVOC Concentration (µg/L)

NS — Not Sampled

50 — TVOC Contour (µg/L) (Dashed Where Inferred)

RTW–1 — Recirculation Well

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

TVOC – Total Volatile Organic Compound

µg/L – Micrograms Per Liter

PCE – Tetrachloroethylene

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep

095–84
095–85

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON GEOLOGIC DATA FROM 1999, SUPPLEMENTED WITH LITHOLOGIC DATA COLLECTED JUNE AND NOV. 2004.

2) PLUME DISTRIBUTION BASED ON FOURTH QUARTER 2024 BLDG 96 SAMPLING EVENTS.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG–TERM MONITORING PROGRAM WELL LOCATION MAP.

HORIZONTAL SCALE
0 30 60
FEET

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

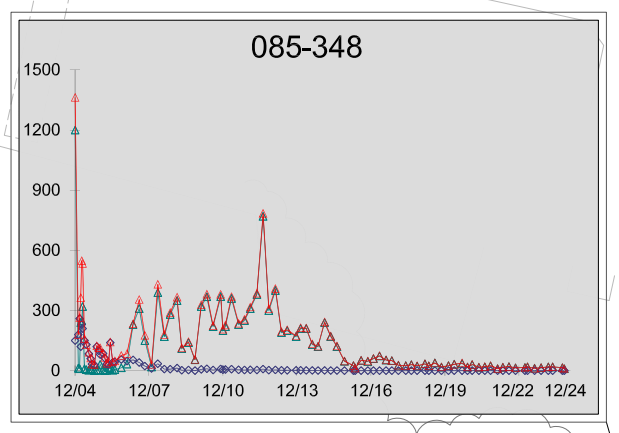
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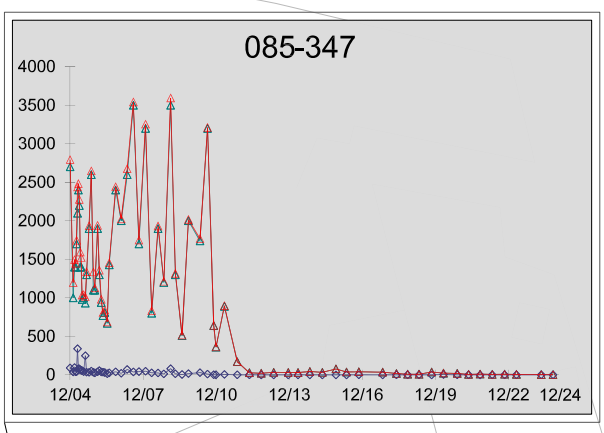
OU III BUILDING 96 AREA
TVOC HYDROGEOLOGIC CROSS SECTION (C–C')

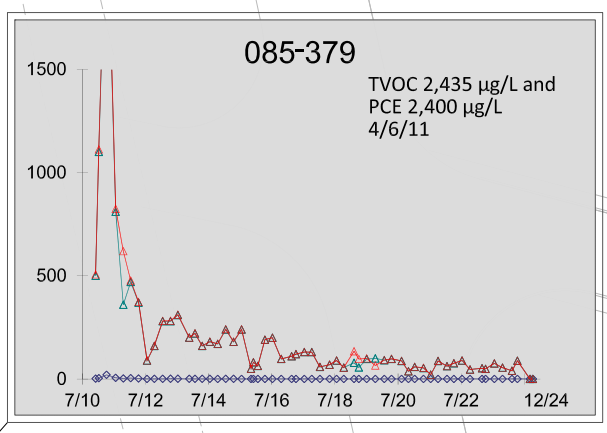
2024 BNL GROUNDWATER STATUS REPORT

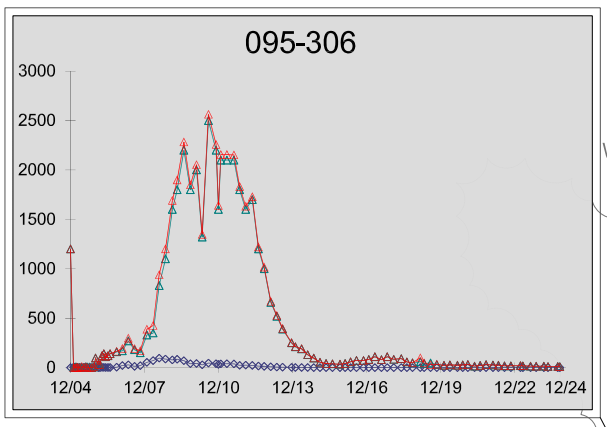
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CHKD:	APPD:	REV.:	NOTES:
BB	BB	05/13/25	–
FIGURE NO.:	3.2.1–2		

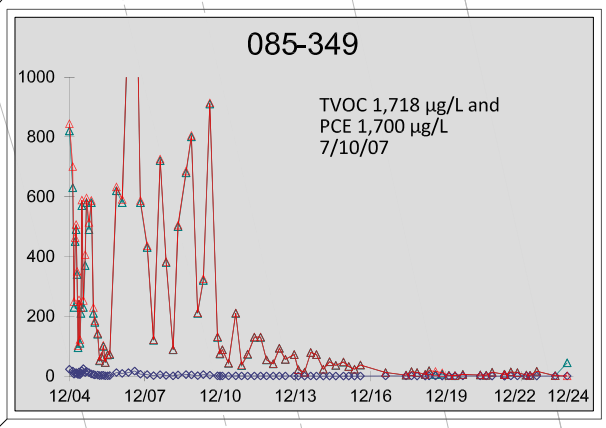
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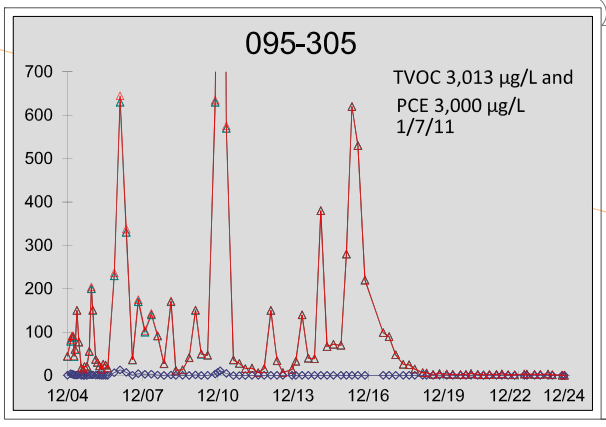


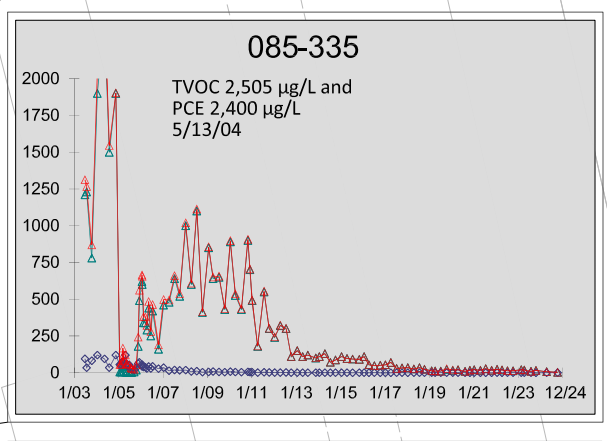


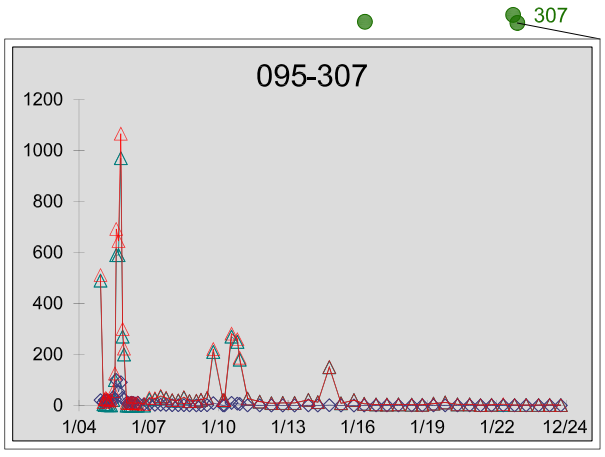


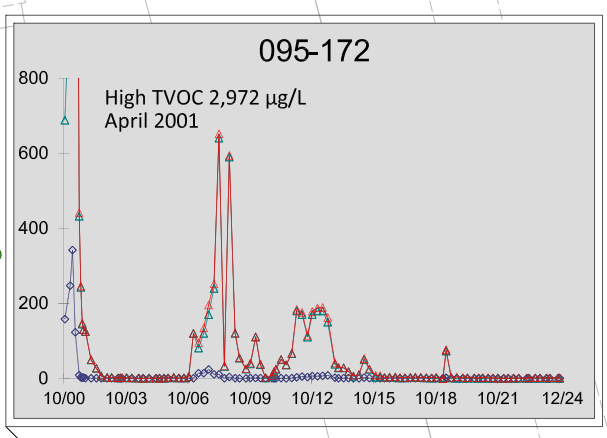


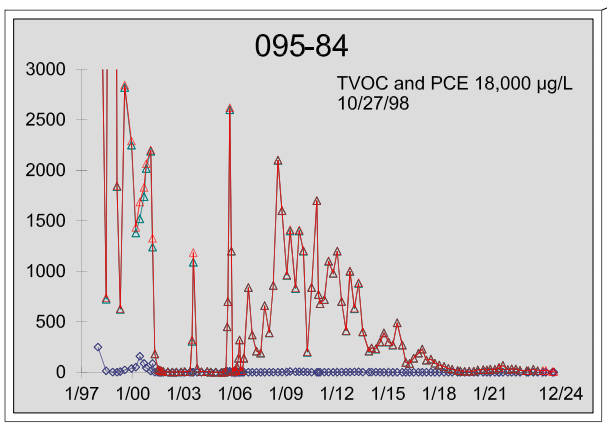


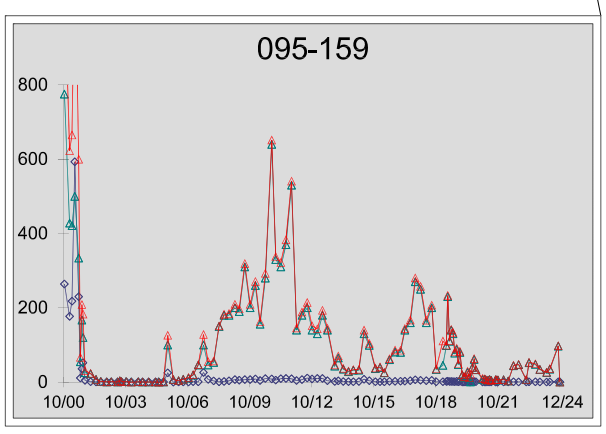












LEGEND

- 84 — MONITORING WELL ID
- 50 — EXTENT OF TVOC PLUME BASED ON 50 µg/L (DASHED WHERE INFERRED)
- 95 — BNL GRID NUMBER
- TVOC – TOTAL VOLATILE ORGANIC COMPOUND
- µg/L – MICROGRAMS PER LITER
- TVOC
- TETRACHLOROETHYLENE (PCE)
- 1,1,1–TRICHLOROETHANE

CONCENTRATION (IN µg/L)
DATE (MONTH/YEAR)

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BUILDING 96 AREA HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VS: HS.:	DATE:	PROJECT NO.:
AJZ	–	03/07/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/21/25	–

FIGURE NO.: 3.2.1–3

Figure 3.2.1-4
OU III Building 96 Area
Extraction Well TVOC Concentrations

2024 BNL Groundwater Status Report

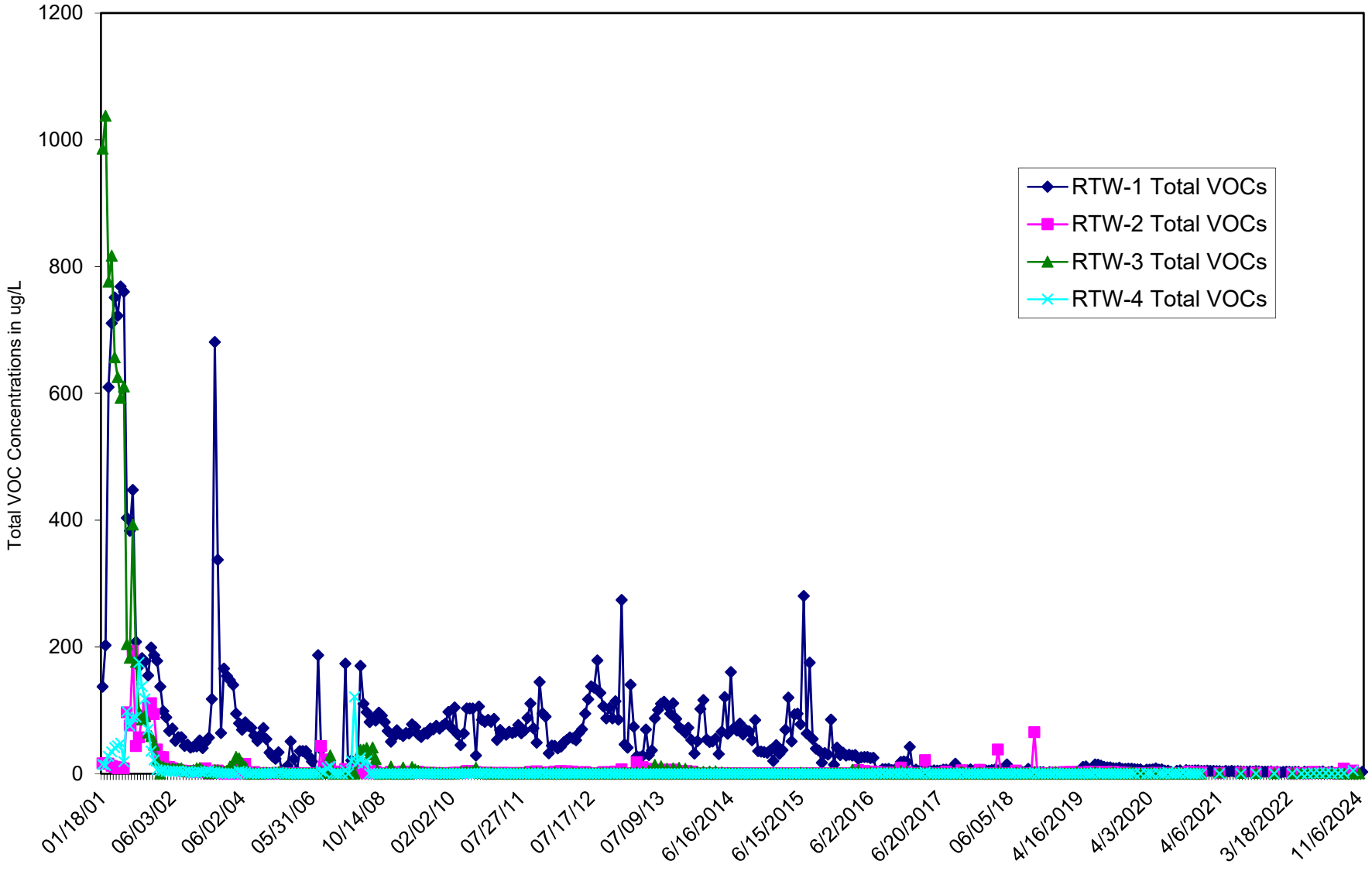
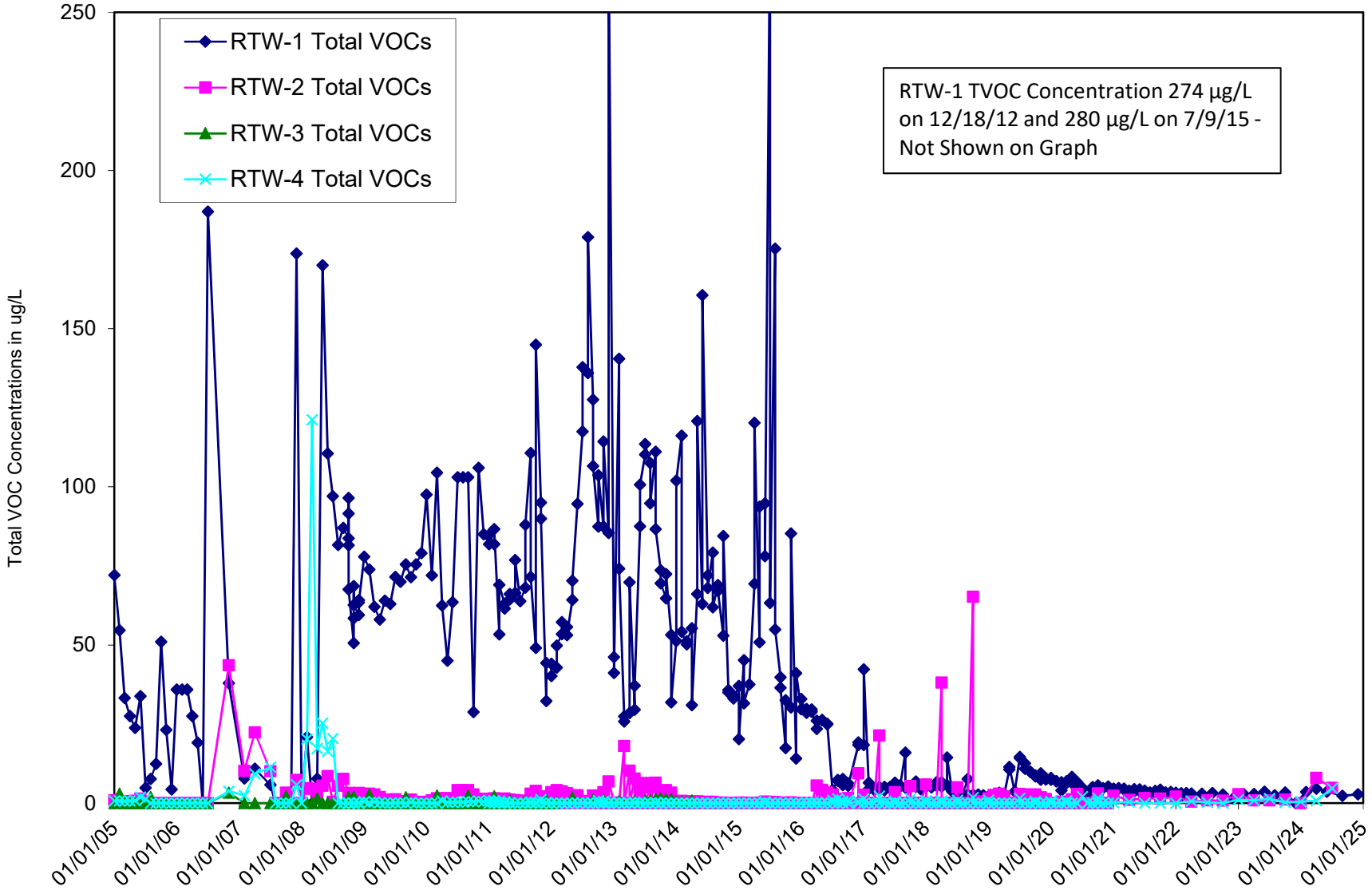
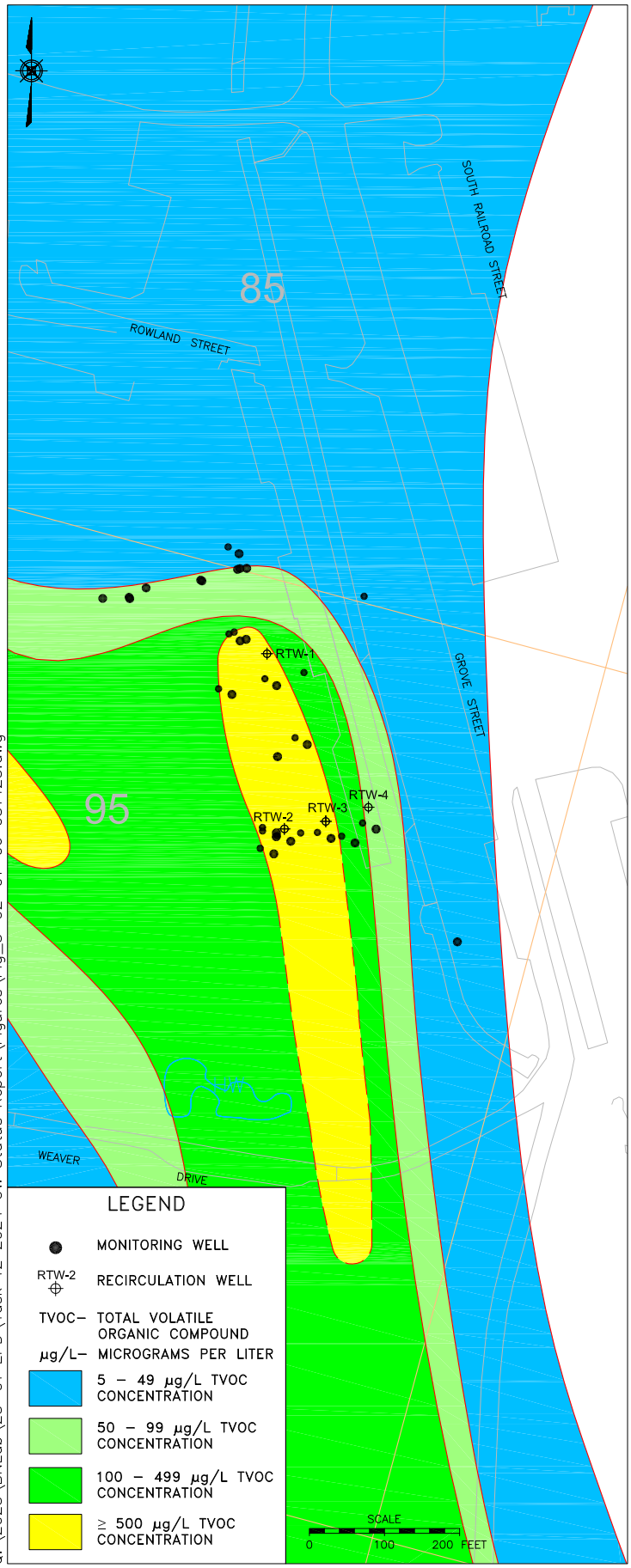


Figure 3.2.1-5
OU III Building 96 Area
Extraction Well TVOC Concentrations From January 1, 2005

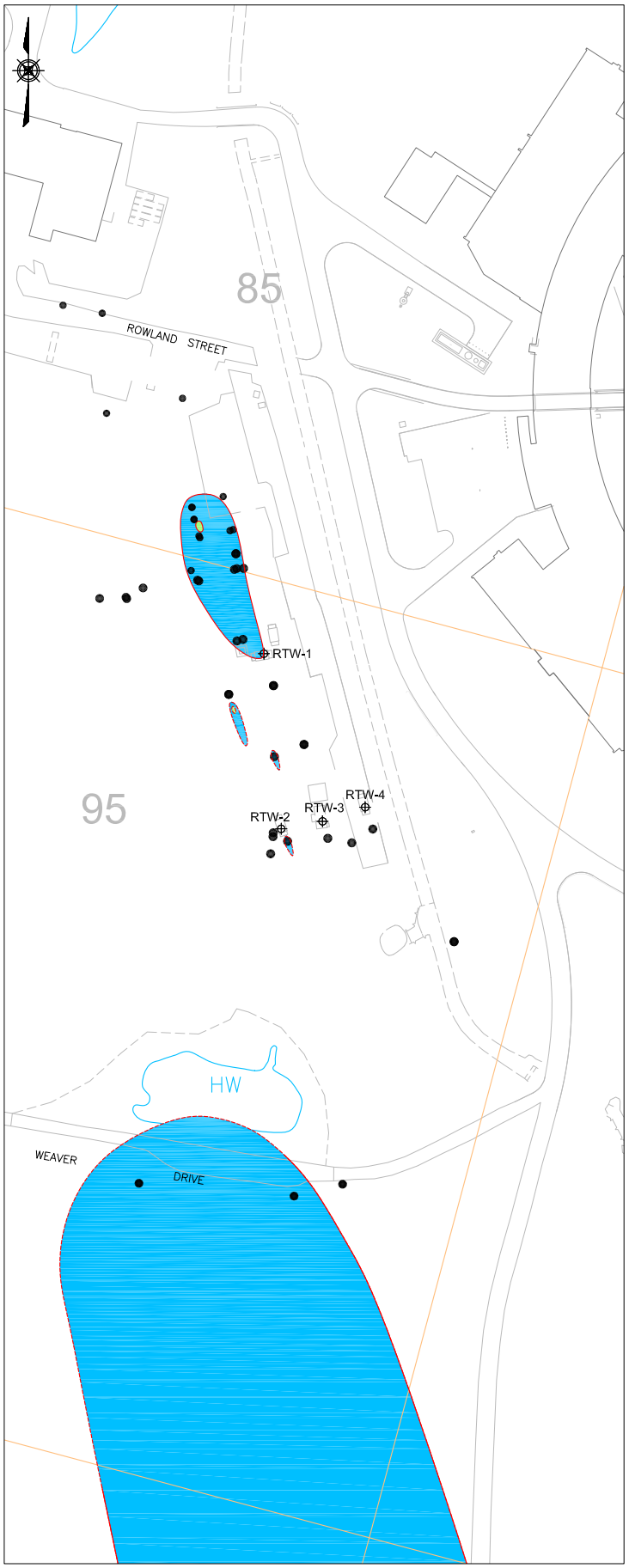
2024 BNL Groundwater Status Report



2000 TVOC PLUME DISTRICTION



2024 TVOC PLUME DISTRICTION



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BUILDING 96 AREA TVOC PLUME COMPARISON 2000–2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/10/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	05/14/25	–

FIGURE NO.: 3.2.1–6

NORTH
B

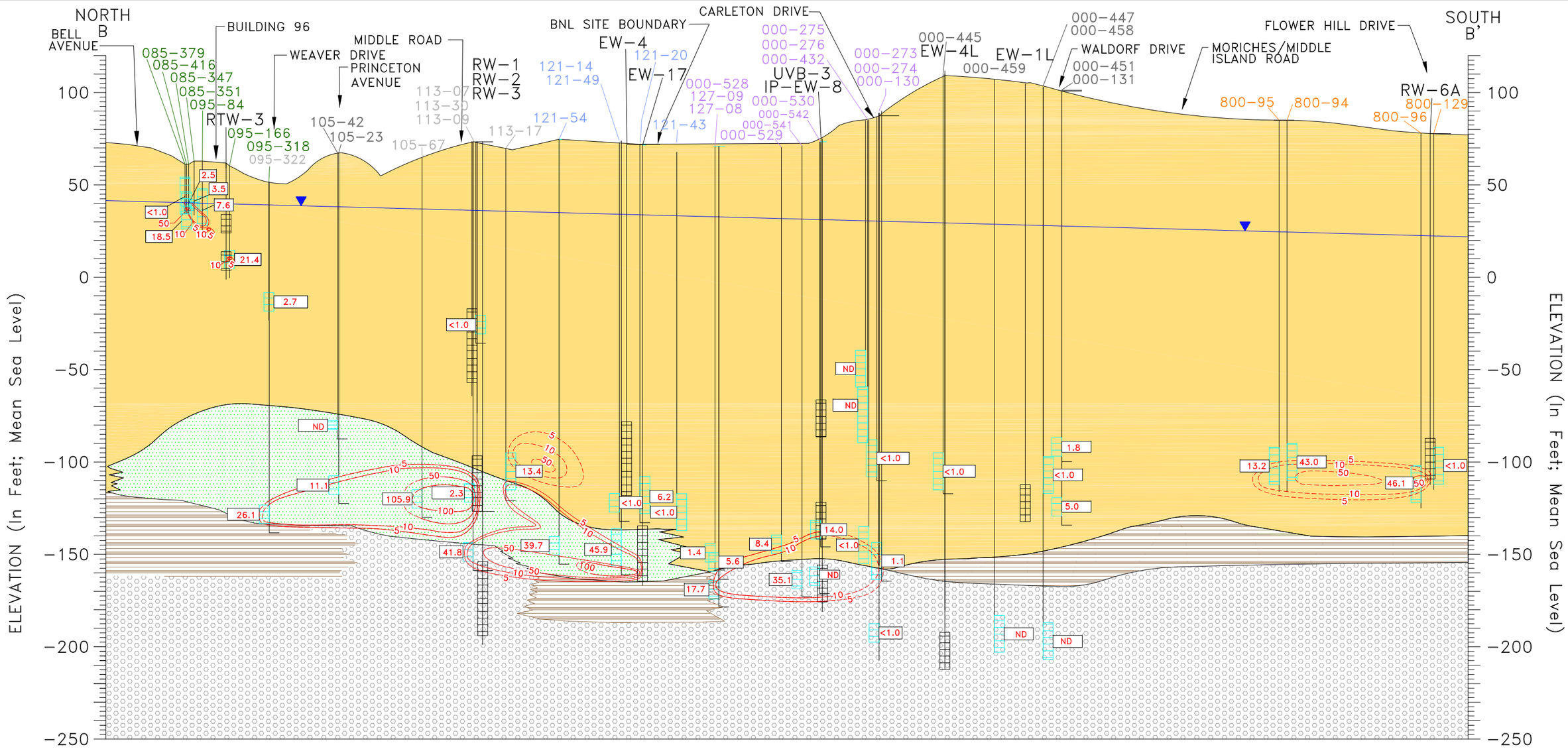
SOUTH
B'

BELL AVENUE
BUILDING 96
WEAVER DRIVE
PRINCETON AVENUE
MIDDLE ROAD
BNL SITE BOUNDARY
CARLETON DRIVE
WALDORF DRIVE
MORICHES/MIDDLE ISLAND ROAD
FLOWER HILL DRIVE

085-379
085-416
085-347
085-351
095-84
RTW-3
095-166
095-318
095-322
105-42
105-23
105-67
RW-1
RW-2
RW-3
113-07
113-30
113-09
113-17
121-14
121-49
121-54
EW-4
121-20
EW-17
121-43
000-528
127-09
127-08
000-275
000-276
000-432
UVB-3
IP-EW-8
000-530
000-542
000-541
000-529
000-273
000-274
000-130
000-445
EW-4L
000-459
EW-1L
000-447
000-458
000-451
000-131
800-95
800-94
RW-6A
800-129
800-96

ELEVATION (In Feet; Mean Sea Level)

100
50
0
−50
−100
−150
−200
−250



LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

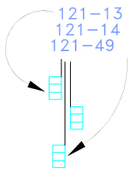
Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

HORIZONTAL SCALE
0 500 1000 FEET

000–114 BNL Well ID
1.84 TVOC Concentration (µg/L)
ND Not detected at or above laboratory method detection limits
NS Not Sampled
50 TVOC Contour (µg/L) (Dashed Where Inferred)
Monitoring Well Screen
Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024
TVOC – Total Volatile Organic Compound
µg/L – Micrograms Per Liter

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep



NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS, 2001 PREDESIGN CHARACTERIZATION, AND WELL 105–22 SAMPLING EVENT APRIL 2005.

2) PLUME DISTRIBUTION IS BASED ON FOURTH QUARTER 2024 OU III SAMPLING EVENT. THIS DATA IS SUPPLEMENTED WITH SAMPLING EVENTS FOR BGRR, BUILDING 96, INDUSTRIAL PARK, MIDDLE ROAD, AND OFFSITE CHARACTERIZATION DATA.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG–TERM MONITORING WELL LOCATION MAP.

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

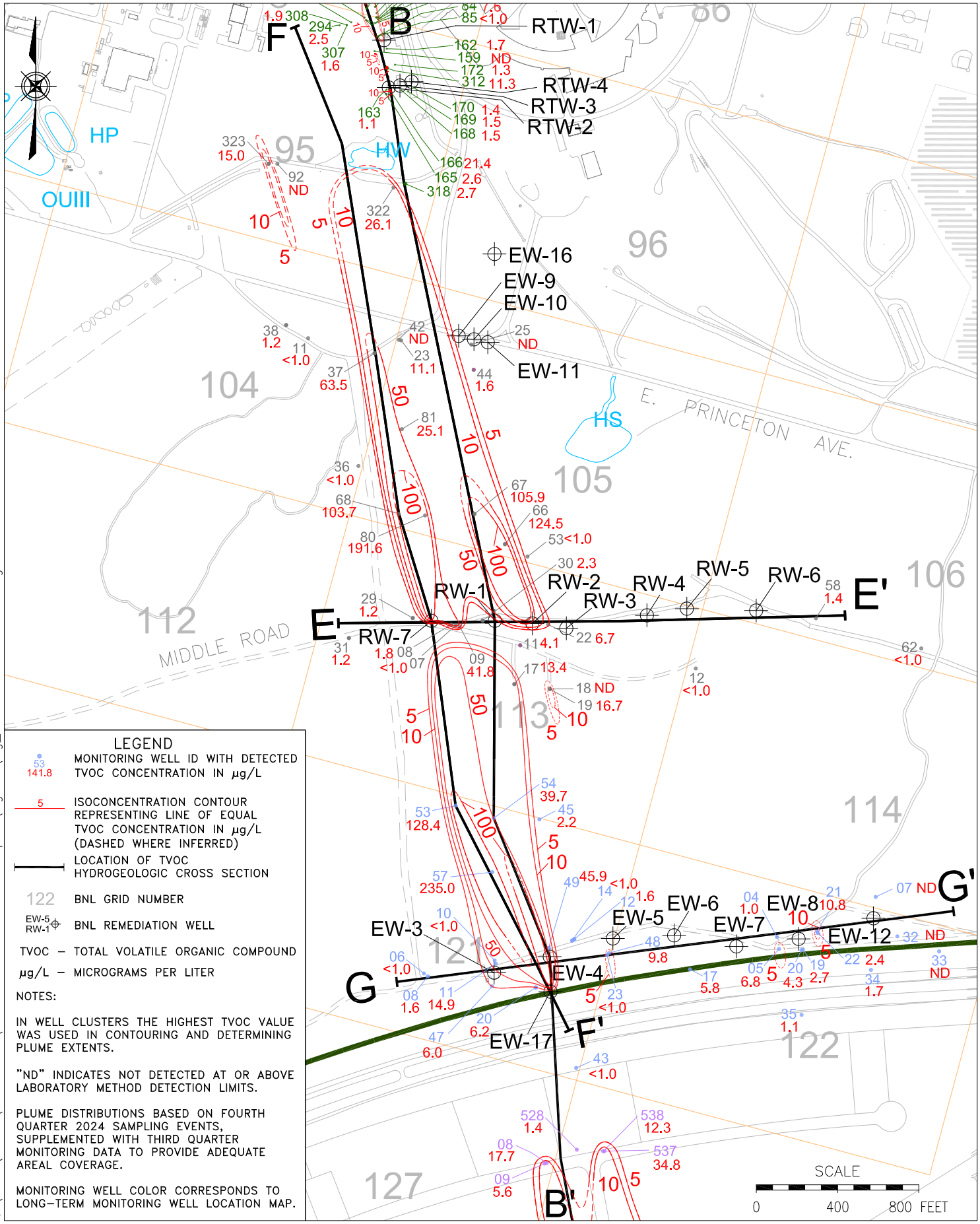
TITLE:

OU III
TVOC HYDROGEOLOGIC CROSS SECTION (B–B')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	03/06/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/21/25	–

FIGURE NO.: 3.2–2

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III MIDDLE ROAD AREA, TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	04/17/25	–

FIGURE NO.: 3.2.2-1

WEST
E

EAST
E'

ELEVATION (In Feet; Mean Sea Level)

100
50
0
−50
−100
−150
−200

113-31
113-07
113-08
113-09
113-29
RW−7
113-30
RW−1
RW−2
113-22
RW−3
RW−4
RW−5
RW−6
106-58

<1.0
1.8
1.2
1.2
10
5
50
100
2.3
10
5
50
100
1.8
6.7
9.8
1.4

LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay − Silt

Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy − OTHER

HORIZONTAL SCALE
0 100 200 FEET

RW−1 Extraction Well
113−06 BNL Well ID
ND Indicates not detected at or above laboratory method detection limits
NS not sampled
1.84 TVOC Concentration (µg/L)
5 TVOC Contour (µg/L) (Dashed Where Inferred)

Water Table As Of Aug 12 − Aug 20, 2024
Monitoring Well Screen
Extraction Well Screen

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep

113−06
113−07
113−08

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS.

2) PLUME DISTRIBUTION BASED ON FOURTH QUARTER 2024 OU III SAMPLING EVENTS.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG−TERM MONITORING PROGRAM WELL LOCATION MAP.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

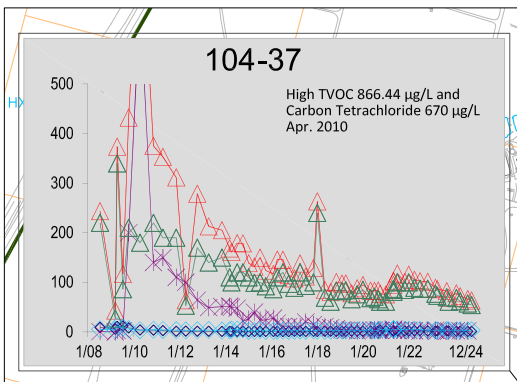
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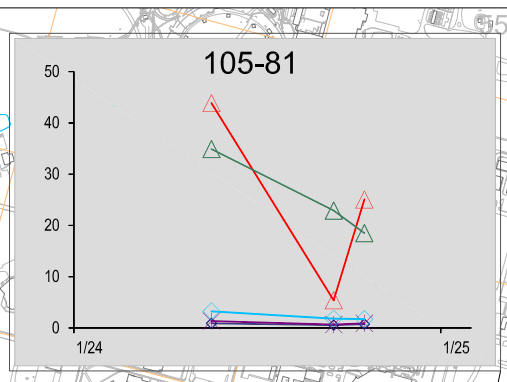
OU III MIDDLE ROAD AREA
TVOC HYDROGEOLOGIC CROSS SECTION (E−E')

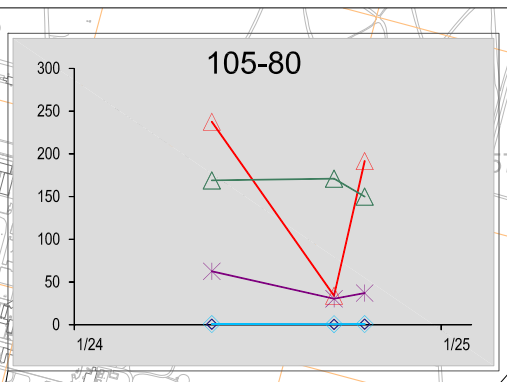
2024 BNL GROUNDWATER STATUS REPORT

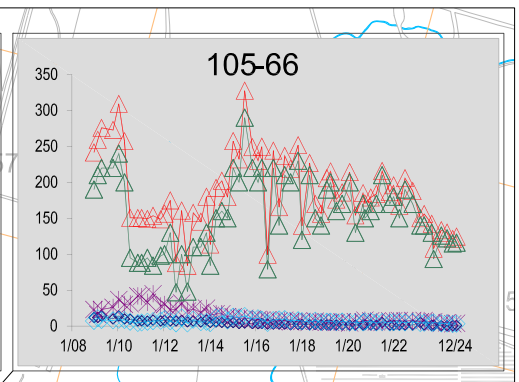
DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	5:1	03/11/25	−
CHKD:	APPD:	REV.:	NOTES:
JM	BB	03/27/25	−

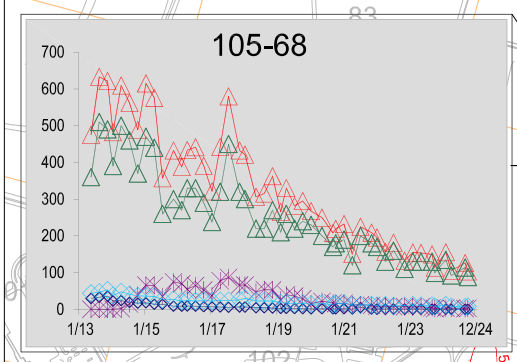
FIGURE NO.: 3.2.2−2

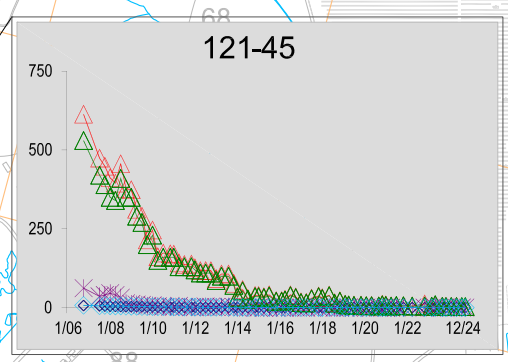


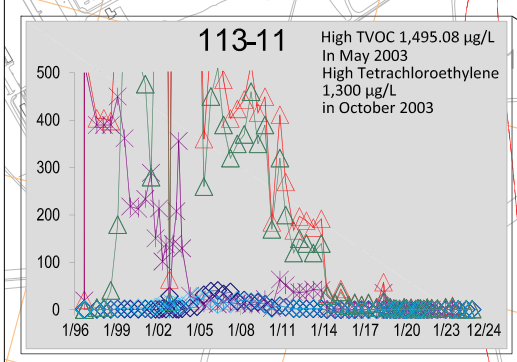


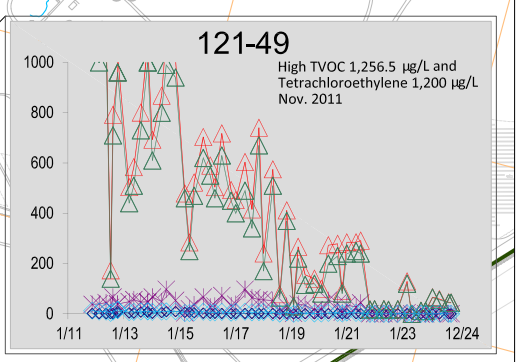


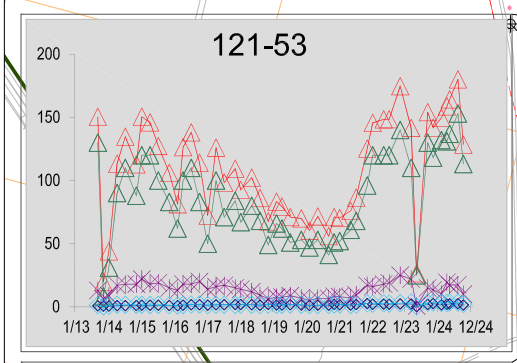


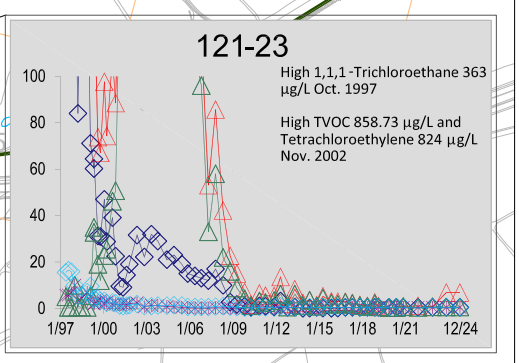


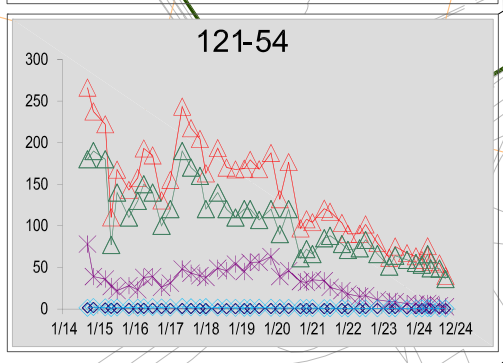


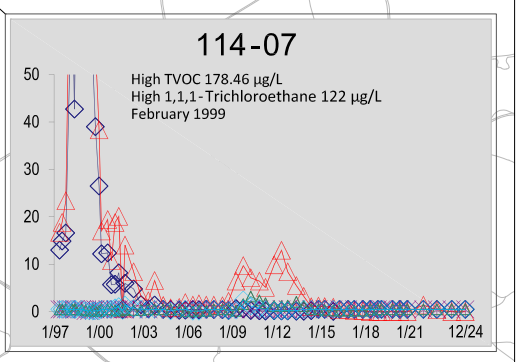


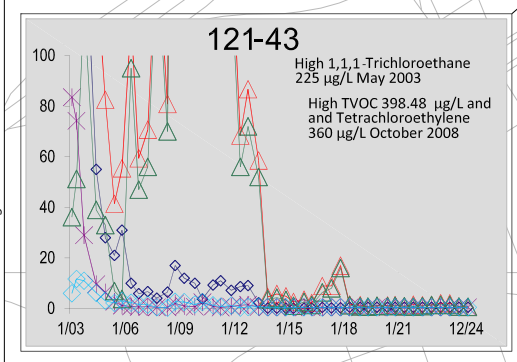


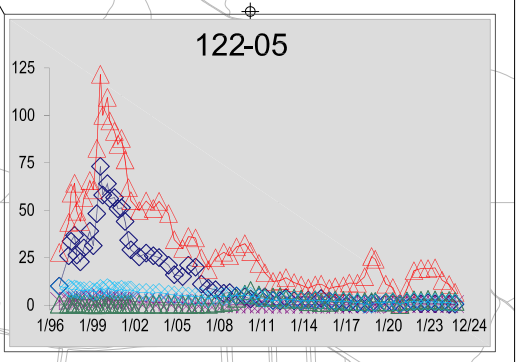


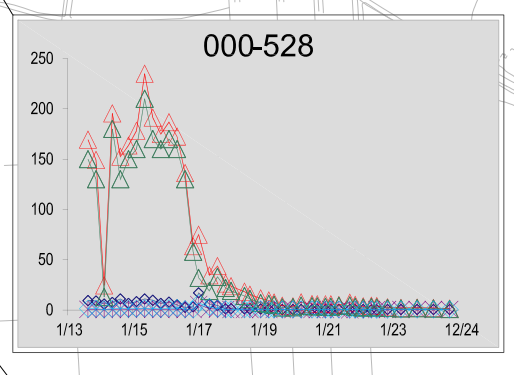


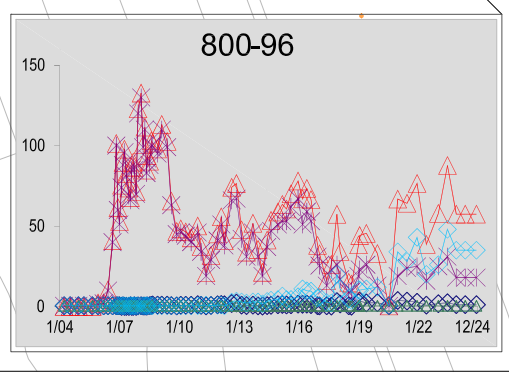


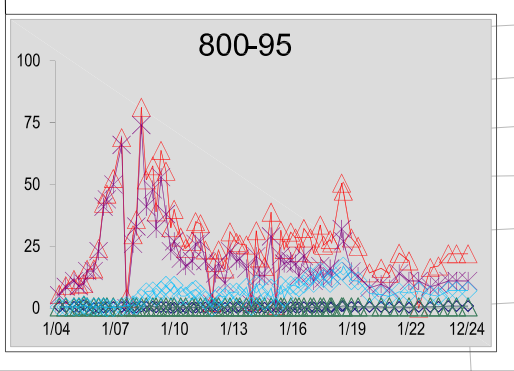


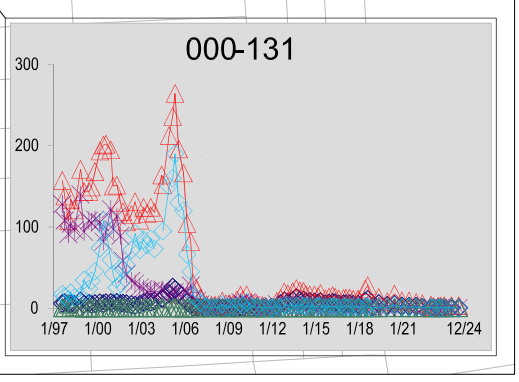












BROOKHAVEN AVENUE
RA V BASIN
OU III BASIN
E. PRINCETON AVE.
MIDDLE ROAD
CARLETON DRIVE
MORICHES MIDDLE ISLAND ROAD
FLOWER HILL DRIVE
495 (L.I.E.)
EW-18
RTW-1
RTW-2
RTW-3
RTW-4
EW-16
EW-9
EW-10
EW-11
RW-7
RW-2
RW-1
RW-3
RW-4
RW-5
RW-6
EW-4
EW-5
EW-6
EW-7
EW-8
EW-12
EW-3
EW-17
WSB-4
WSB-2
WSB-1
WSB-5
WSB-6
UVB-7
UVB-6
UVB-5
UVB-4
UVB-3
UVB-2
UVB-1
IP-EW-9
IP-EW-8
EW-4L
EW-3L
EW-1L
EW-2L
NS-1
NS-2
NSE-2
RTW-5A
RW-6A
RTW-1A
RTW-2A
RTW-3A
RTW-4A

LEGEND

- 06 — MONITORING WELL ID
- 5 — EXTENT OF TVOC PLUME BASED ON 5 µg/L ISOCONTOUR
- 105 — BNL GRID NUMBER
- EW-5 — BNL REMEDIATION WELL
- RA V — BNL RECHARGE BASIN
- SOLAR FARM PANELS
- TVOC — TOTAL VOLATILE ORGANIC COMPOUND
- µg/L — MICROGRAM PER LITER
- TVOC
- 1,1,1—TRICHLOROETHANE
- CARBON TETRACHLORIDE
- TETRACHLOROETHYLENE
- TRICHLOROETHYLENE

CONCENTRATION (IN µg/L)
DATE (MONTH/YEAR)

SCALE 0 750 1500 FEET

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III AND OU IV PLUME(S) HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	04/21/25	–

FIGURE NO.: 3.2.2-3

NORTH
F

SOUTH
F'

WEAVER DRIVE
BROOKHAVEN AVENUE
PRINCETON AVENUE
MIDDLE ROAD
BNL SITE BOUNDARY
104–37
105–81
105–80
105–68
RW-7
113–07
113–09
121–57
121–53
EW-17
<1.0
191.6
25.1
63.5
103.7
41.8
235.0
128.4
5
10
50
100

ELEVATION (In Feet; Mean Sea Level)
100
50
0
–50
–100
–150
–200

LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

121–53 BNL Well ID

1.84 TVOC Concentration (µg/L)

ND Not detected at or above laboratory method detection limits

NS Not Sampled

—50— TVOC Contour (µg/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

TVOC – Total Volatile Organic Compound

µg/L – Micrograms Per Liter

HORIZONTAL SCALE
0 500 1000 FEET

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS, 2001 PREDESIGN CHARACTERIZATION, AND WELL 105–22 SAMPLING EVENT APRIL 2005.

2) PLUME DISTRIBUTION IS BASED ON FOURTH QUARTER 2024 OU III SAMPLING EVENT.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG–TERM MONITORING WELL LOCATION MAP.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III MIDDLE ROAD AREA
TVOC HYDROGEOLOGIC CROSS SECTION (F–F')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	5:1	03/06/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	–	–

FIGURE NO.: 3.2.2–4

Figure 3.2.2-5
OU III Middle Road Groundwater Remediation System
Cumulative VOC Mass Removed

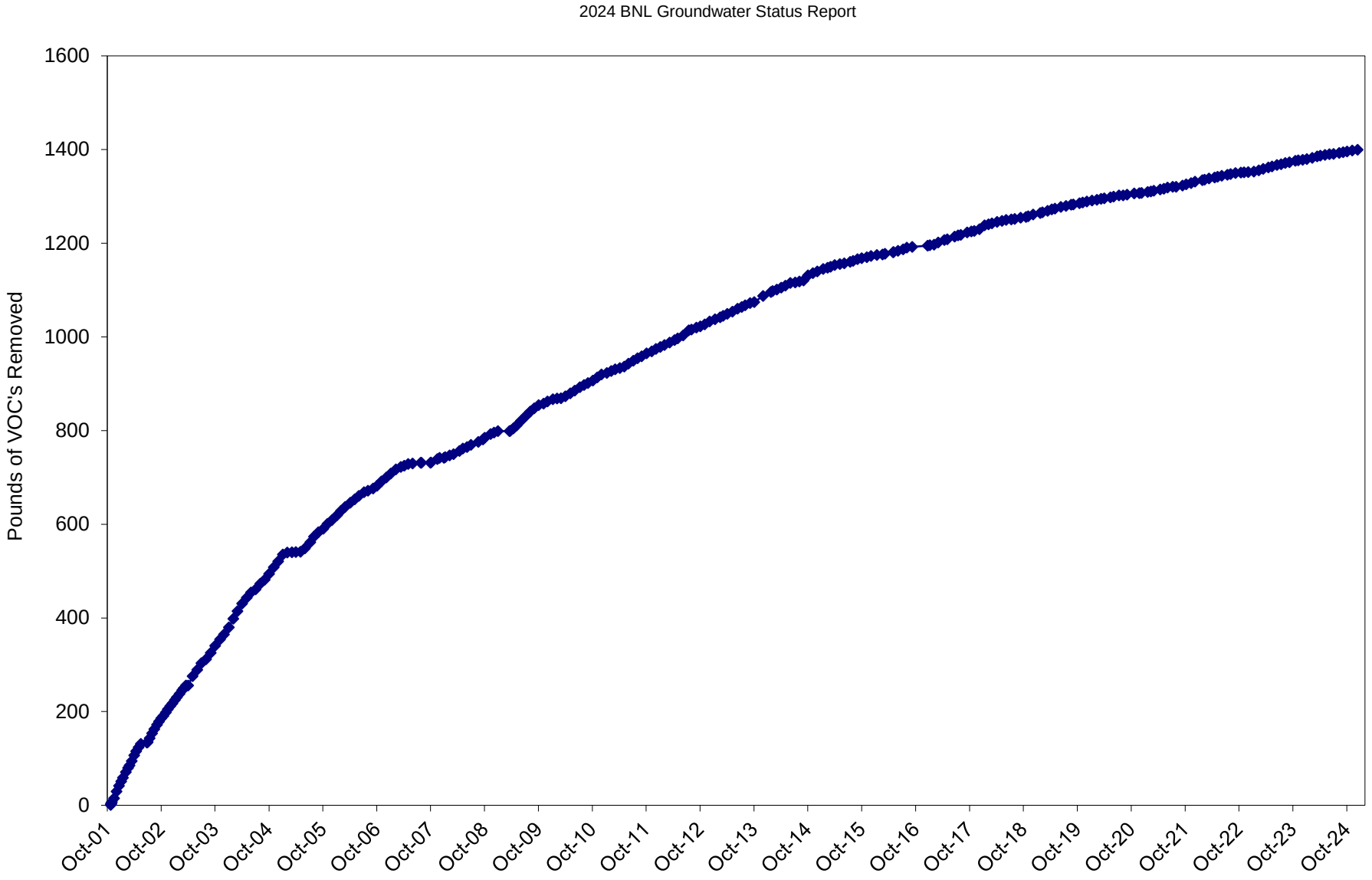
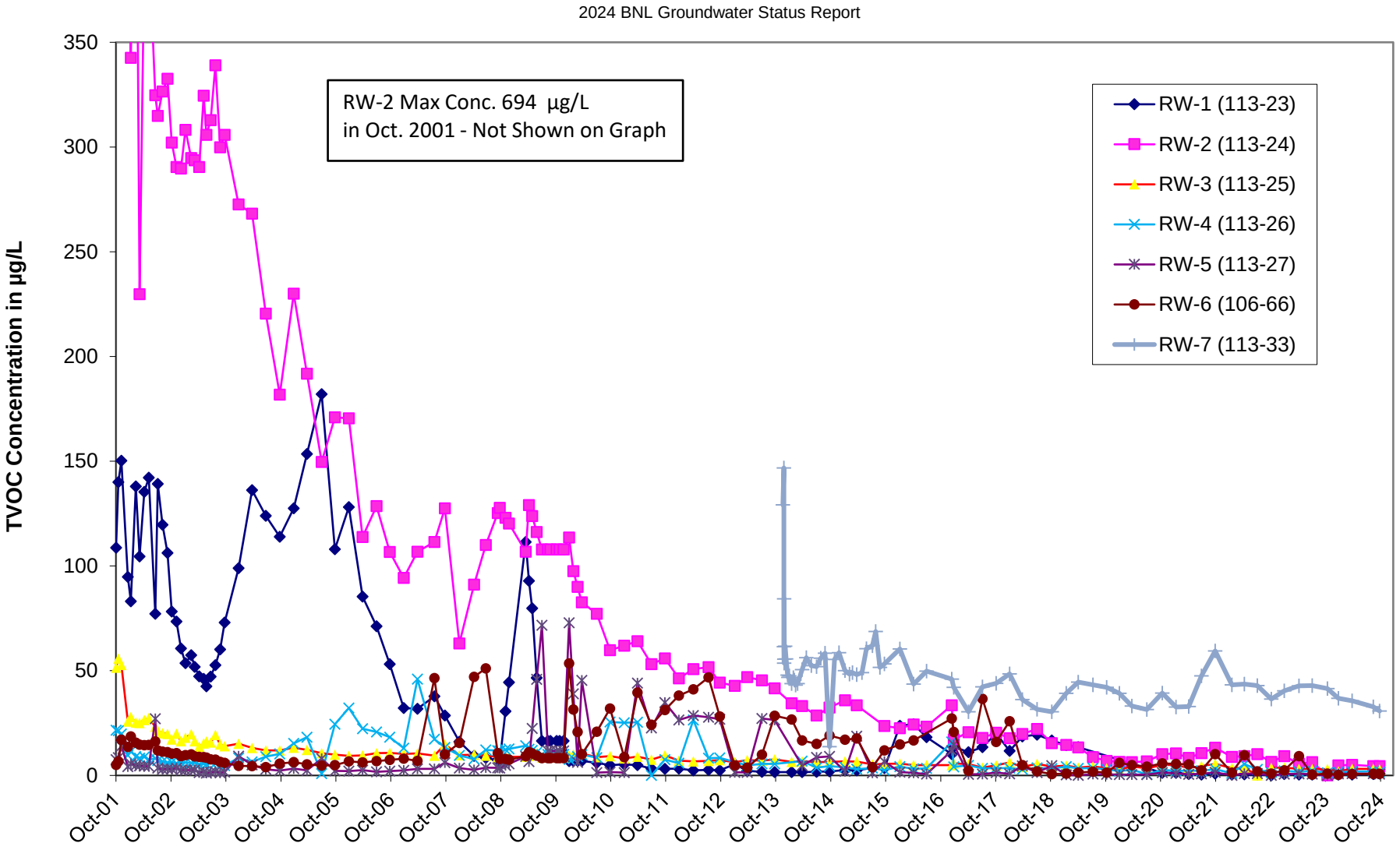
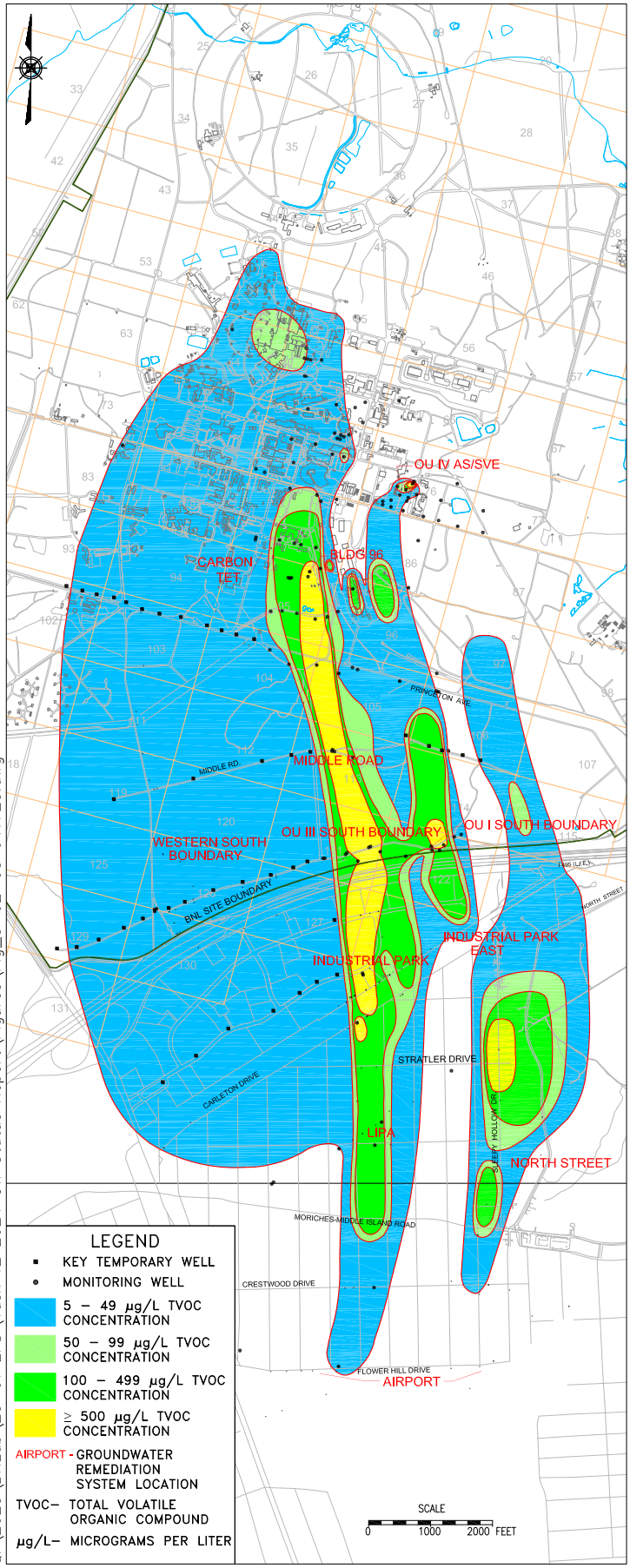


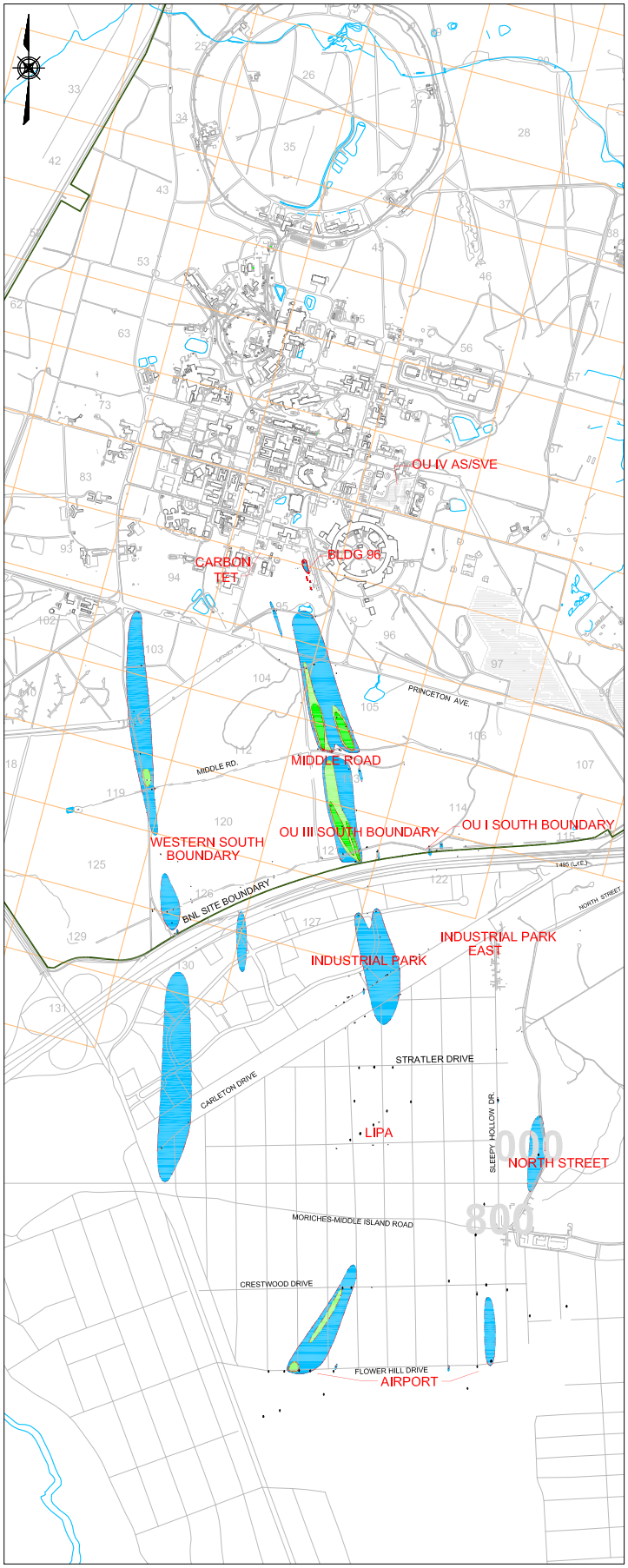
Figure 3.2.2-6
OU III Middle Road Groundwater Remediation System
Total Volatile Organic Compounds in Recovery Wells



1997 TVOC PLUME DISTRICTION



2024 TVOC PLUME DISTRICTION



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

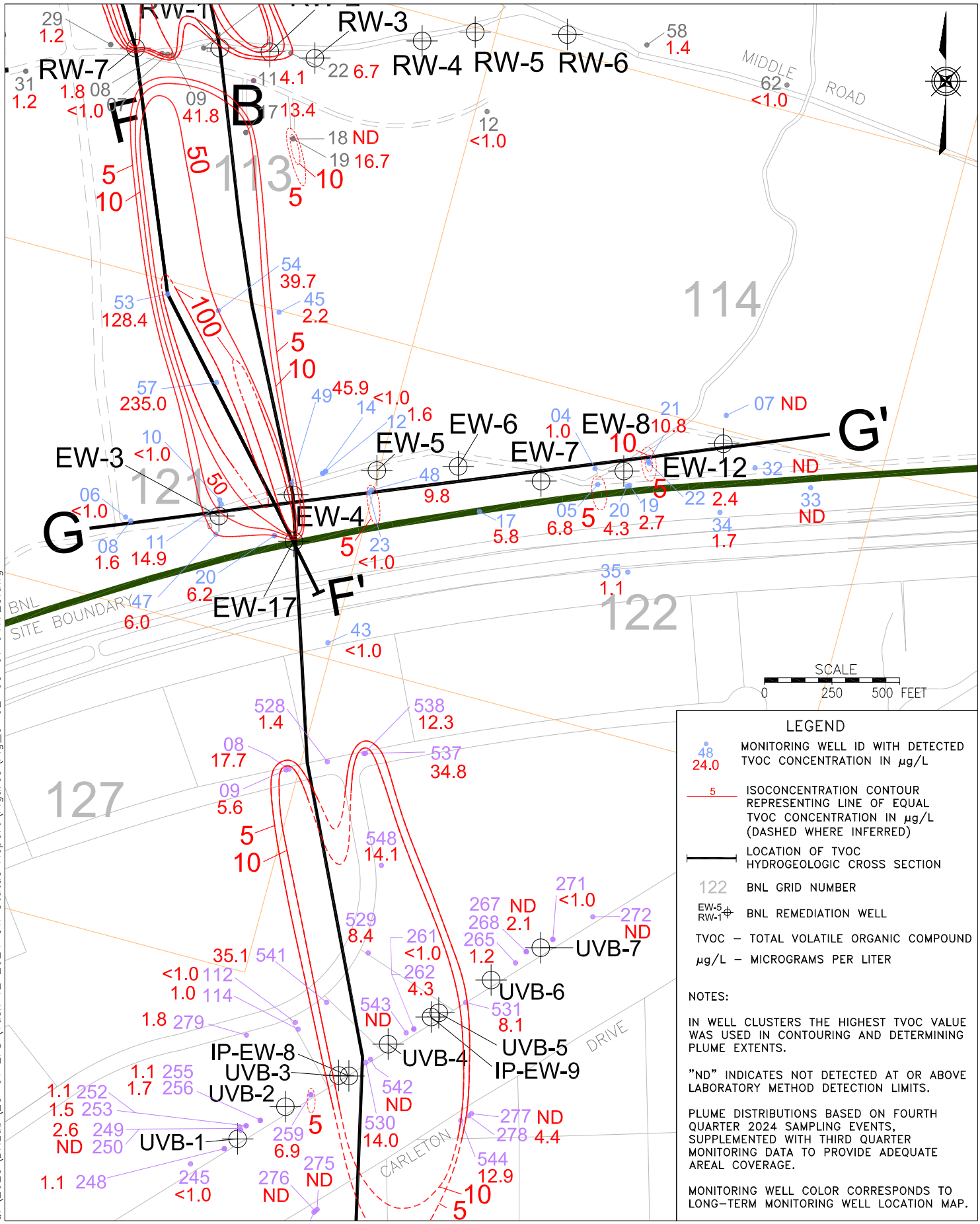
TITLE:

OU III / OU IV / NORTH STREET TVOC PLUME COMPARISON 1997 – 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/10/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/17/25	–

FIGURE NO.: 3.2–3



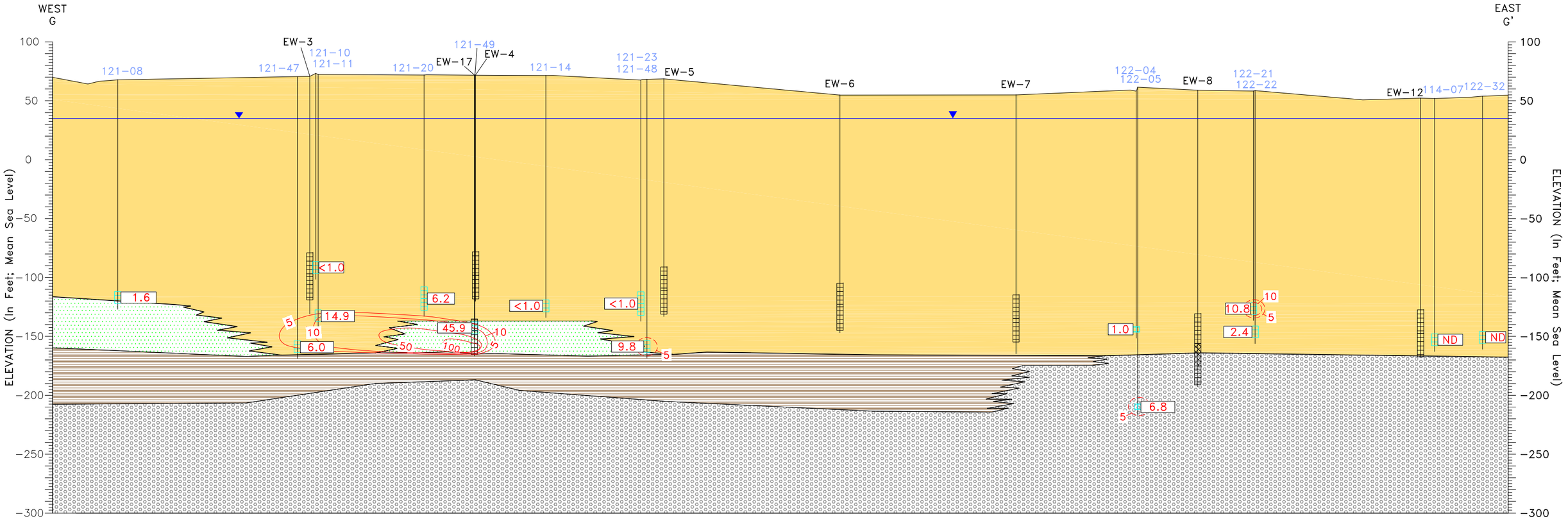
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
OU III AND OU IV SOUTH BOUNDARY/ INDUSTRIAL PARK AREAS, TVOC PLUME DISTRIBUTION
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	04/17/25	–

FIGURE NO.: 3.2.3-1



LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

121−07 — BNL Well ID

21.62 — TVOC Concentration (µg/L)

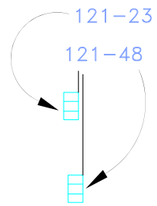
—50— TVOC Contour (µg/L) (Dashed Where Inferred)

ND — Indicates not detected at or above laboratory method detection limits

Monitoring Well Screen

Extraction Well Screen

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep



Water Table As Of Aug 12 – Aug 20, 2024

TVOC – Total Volatile Organic Compound

µg/L – Micrograms Per Liter

HORIZONTAL SCALE
0 50 100 FEET

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS.

2) PLUME DISTRIBUTION IS BASED ON FOURTH QUARTER 2024, SUPPLEMENTED BY THIRD QUARTER OU III SAMPLING EVENTS.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG−TERM MONITORING PROGRAM COLOR CODE.

Q:\2023\BNLab\23−01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3−02−03−02 031125.dwg

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III SOUTH BOUNDARY AREA
TVOC HYDROGEOLOGIC CROSS SECTION (G−G')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	2:1	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	–	–

FIGURE NO.: 3.2.3−2

Figure 3.2.3-3
OU III South Boundary Groundwater Remediation System
Total Volatile Organic Compounds in Extraction Wells

2024 BNL Groundwater Status Report

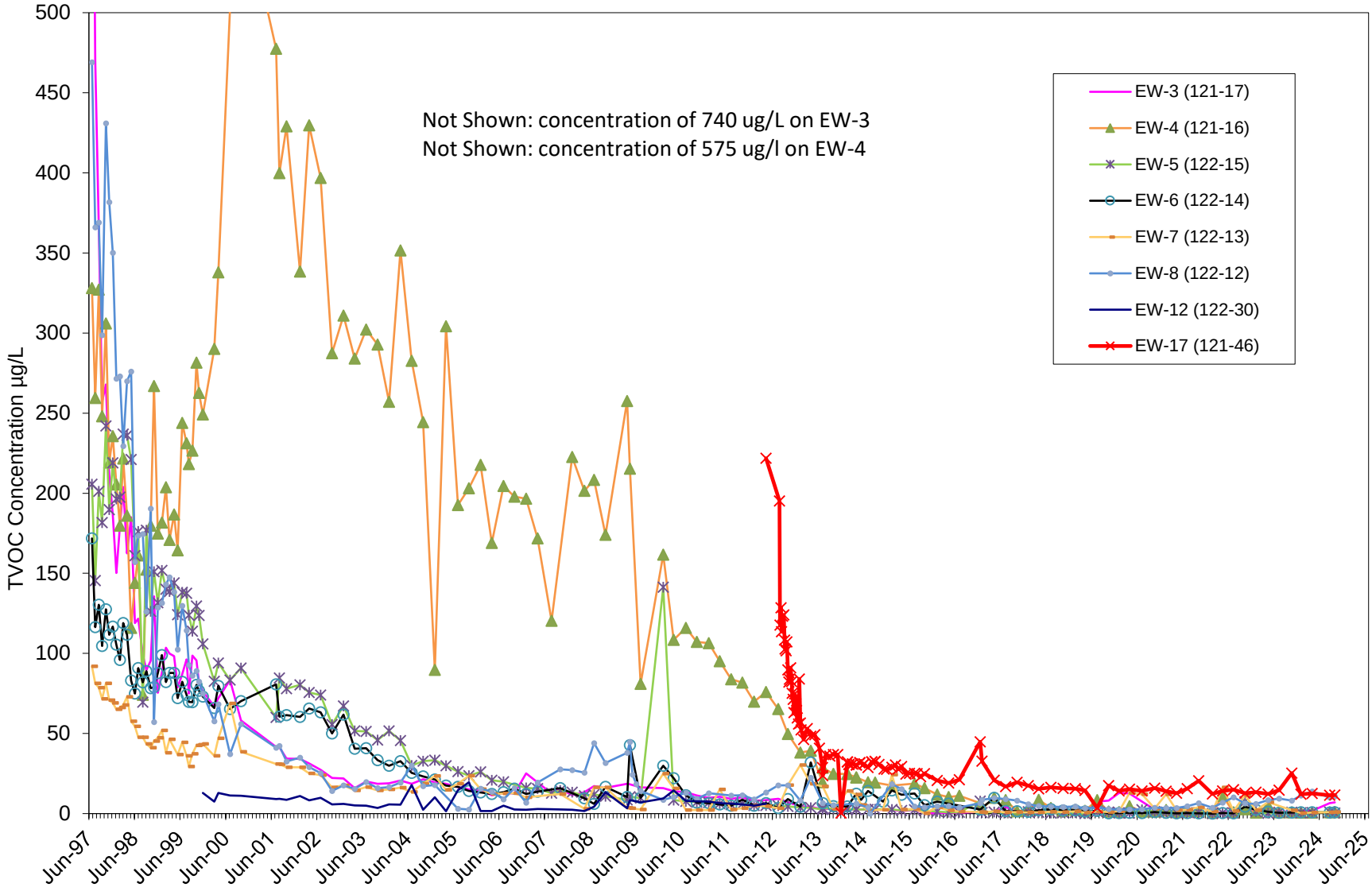


Figure 3.2.3-4
OU III South Boundary Groundwater Remediation System
Total Volatile Organic Compounds in Extraction Wells
2010 through 2024

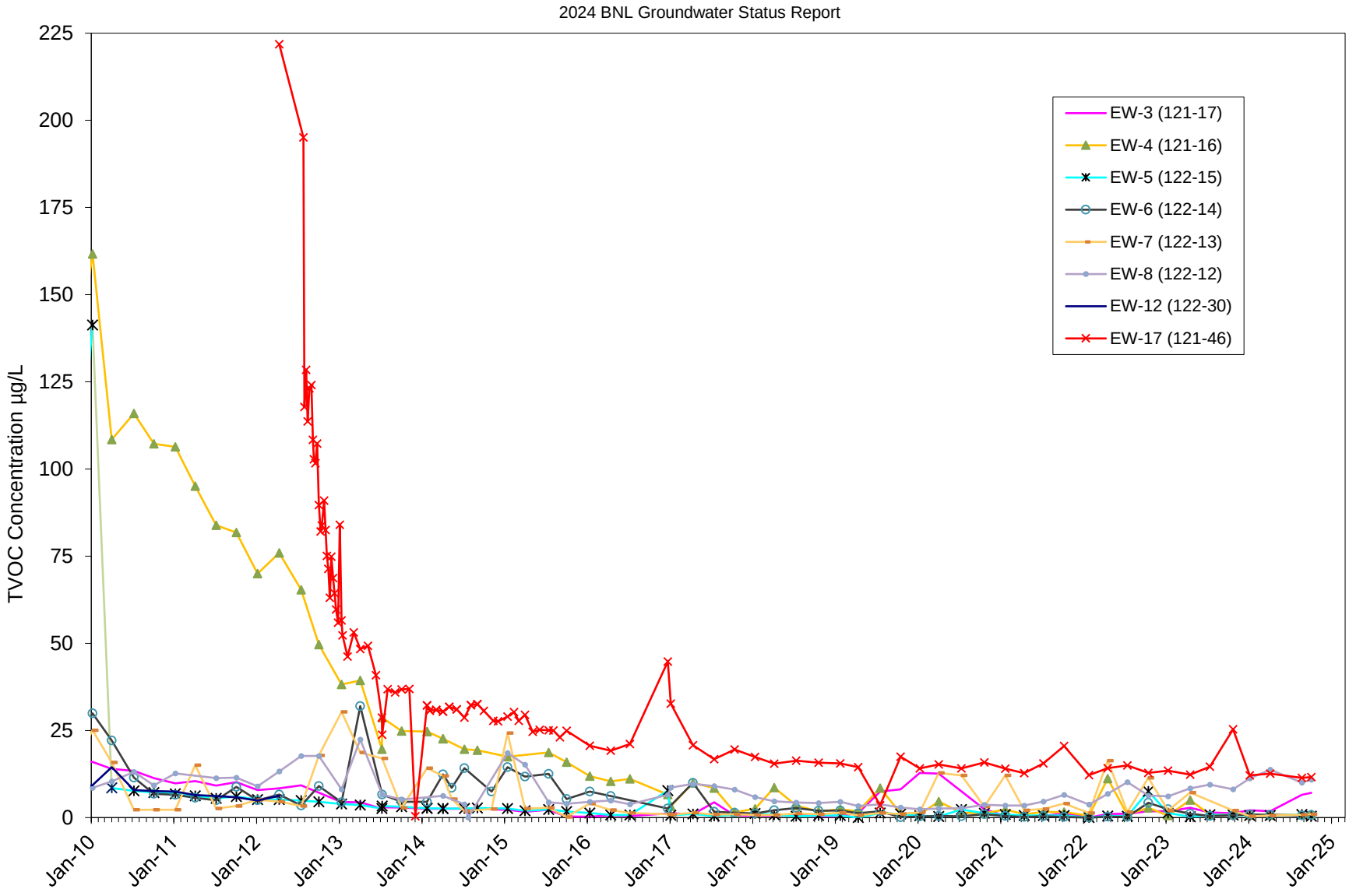
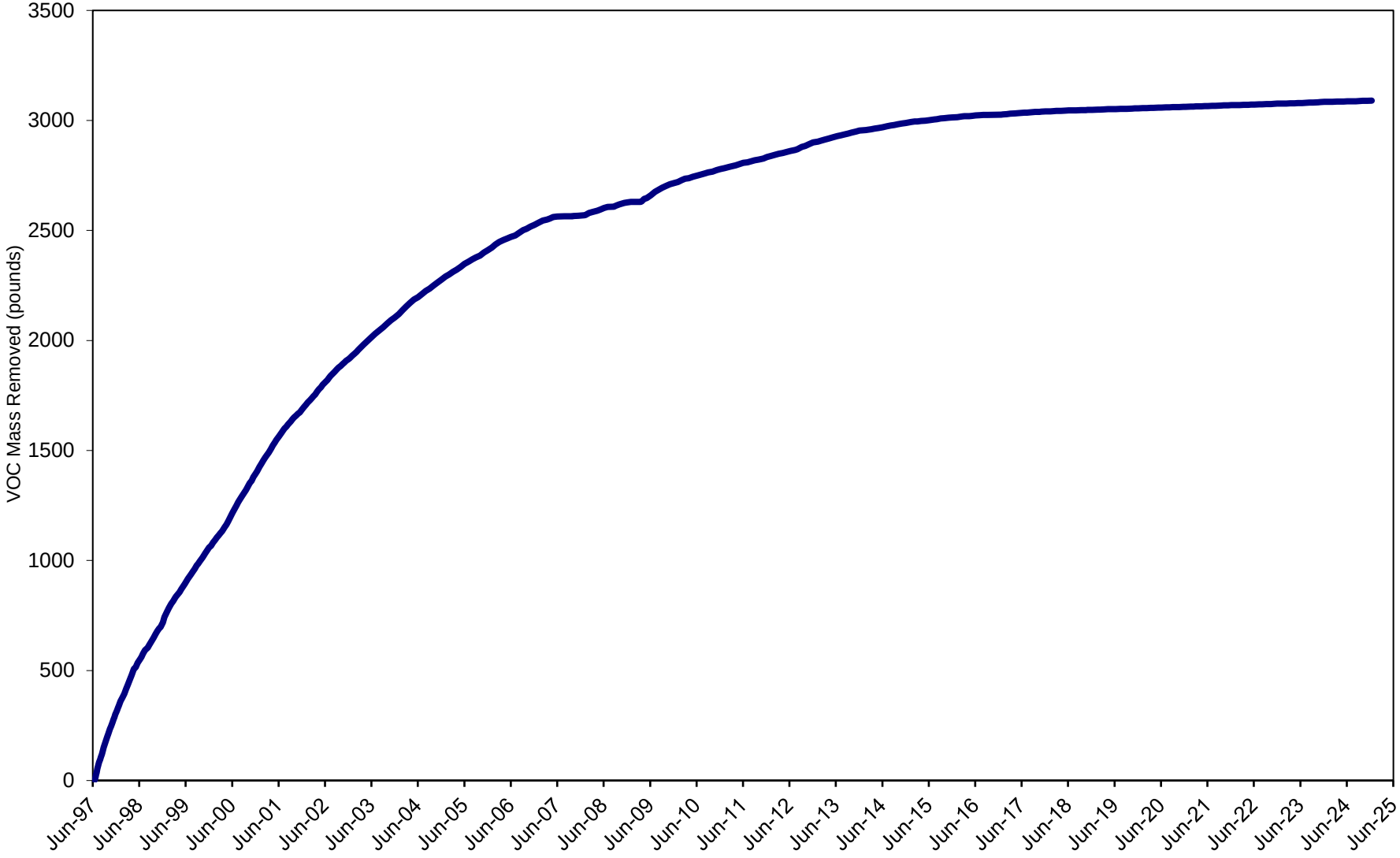
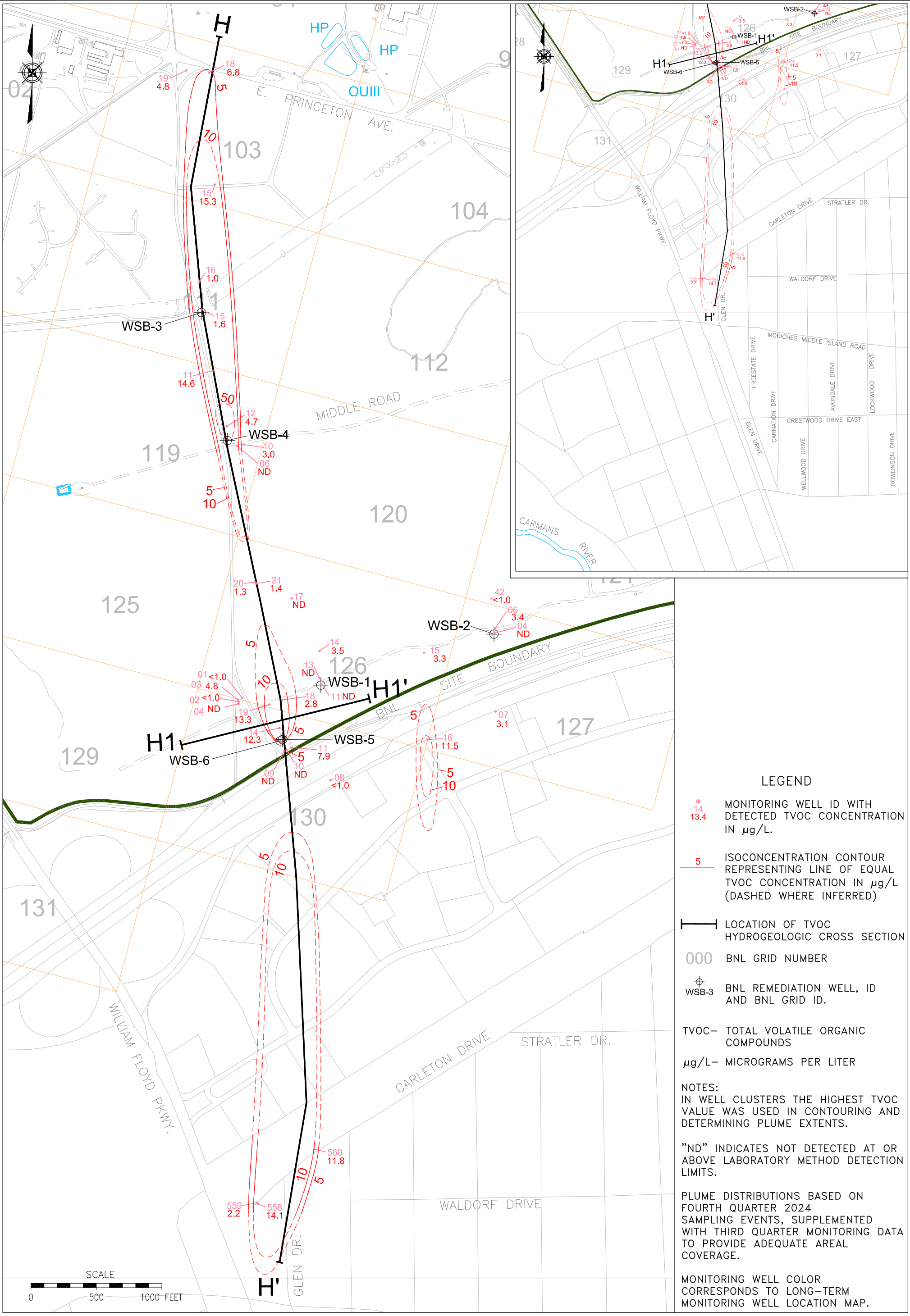


Figure 3.2.3-5
OU III South Boundary Groundwater Remediation System
Cumulative VOC Mass Removed

2024 BNL Groundwater Status Report





LEGEND

- 14 / 13.4 — MONITORING WELL ID WITH DETECTED TVOC CONCENTRATION IN µg/L.
- 5 — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL TVOC CONCENTRATION IN µg/L (DASHED WHERE INFERRED)
- LOCATION OF TVOC HYDROGEOLOGIC CROSS SECTION
- 000 — BNL GRID NUMBER
- WSB-3 — BNL REMEDIATION WELL, ID AND BNL GRID ID.

TVOC– TOTAL VOLATILE ORGANIC COMPOUNDS

µg/L– MICROGRAMS PER LITER

NOTES:
IN WELL CLUSTERS THE HIGHEST TVOC VALUE WAS USED IN CONTOURING AND DETERMINING PLUME EXTENTS.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER 2024 SAMPLING EVENTS, SUPPLEMENTED WITH THIRD QUARTER MONITORING DATA TO PROVIDE ADEQUATE AREAL COVERAGE.

MONITORING WELL COLOR CORRESPONDS TO LONG–TERM MONITORING WELL LOCATION MAP.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

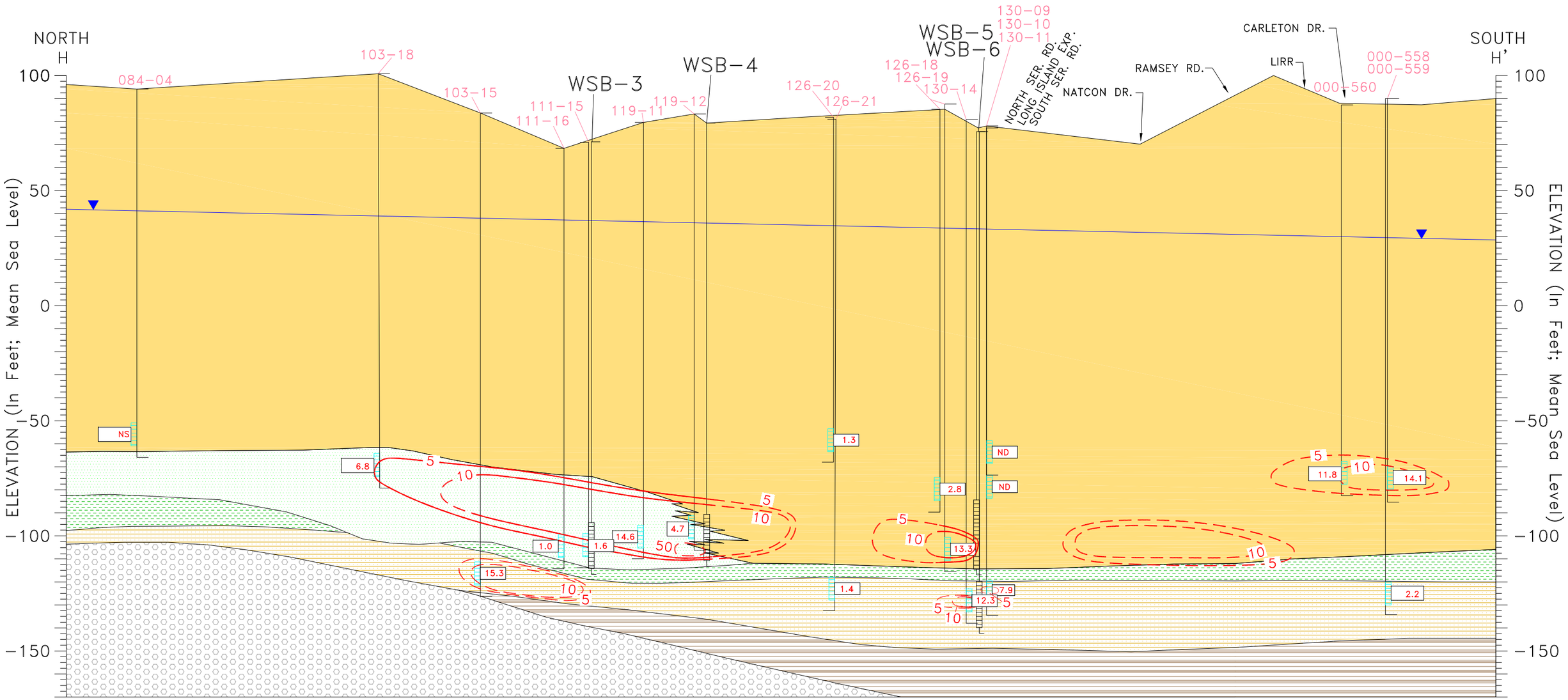
TITLE:

OU III WESTERN SOUTH BOUNDARY TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.4–1



LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

126−20 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

7.54 TVOC Concentration (µg/L)

— 5 — TVOC Contour (µg/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

TVOC– Total Volatile Organic Compound

µg/L– Micrograms Per Liter

HORIZONTAL SCALE

0 500 1000 FEET

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, CHARACTERIZATION REPORTS.

2) PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER 2024 SAMPLING EVENTS, AND VERTICAL PROFILE DATA.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG−TERM MONITORING PROGRAM WELL LOCATION MAP.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

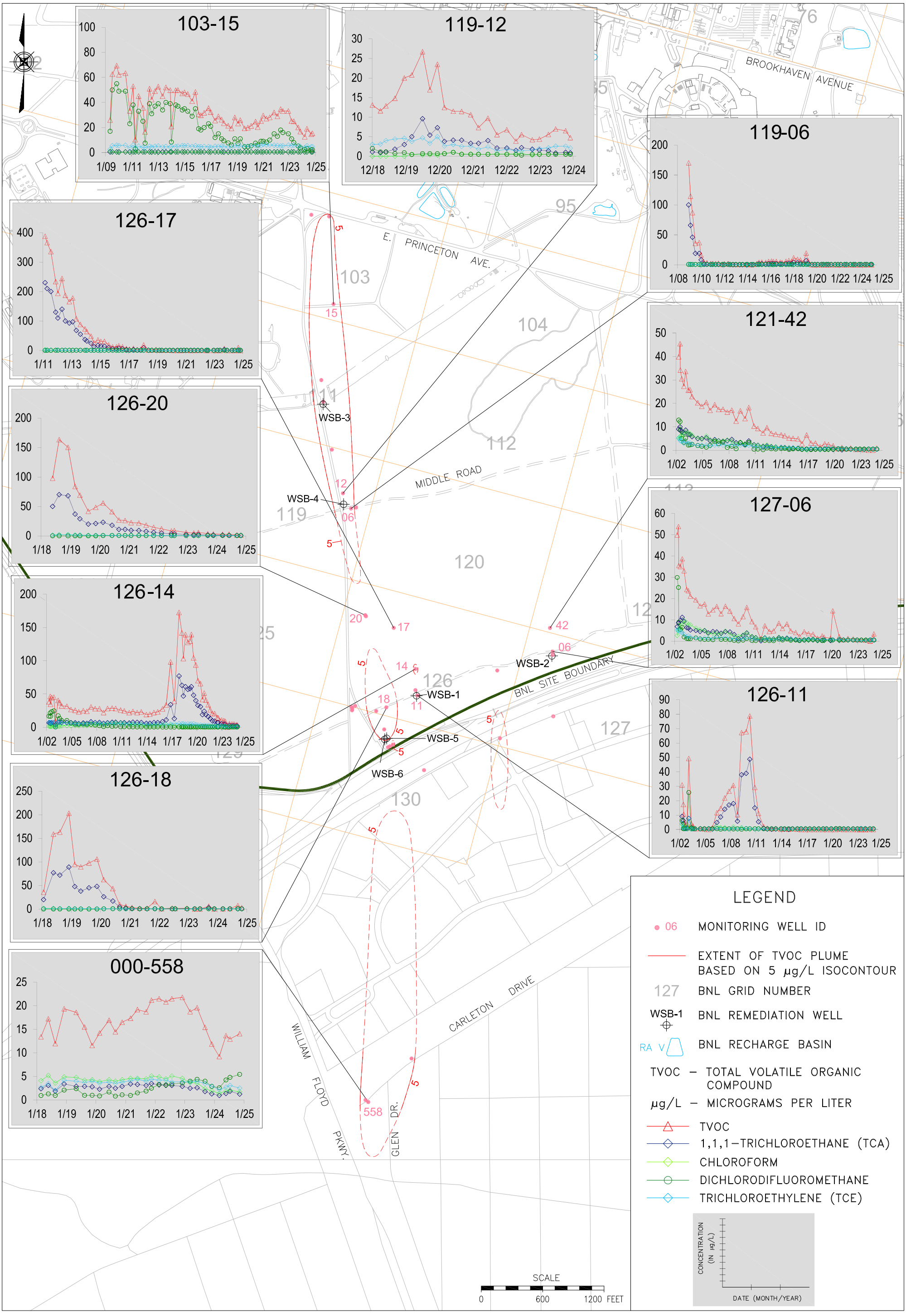
TITLE:

OU III WESTERN SOUTH BOUNDARY TVOC HYDROGEOLOGIC CROSS SECTION (H−H')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.4−2



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III WESTERN SOUTH BOUNDARY HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.4-3

Figure 3.2.4-4
OU III Western South Boundary Groundwater Remediation System
Historic Extraction Well Total Volatile Organic Compound Concentrations

2024 BNL Groundwater Status Report

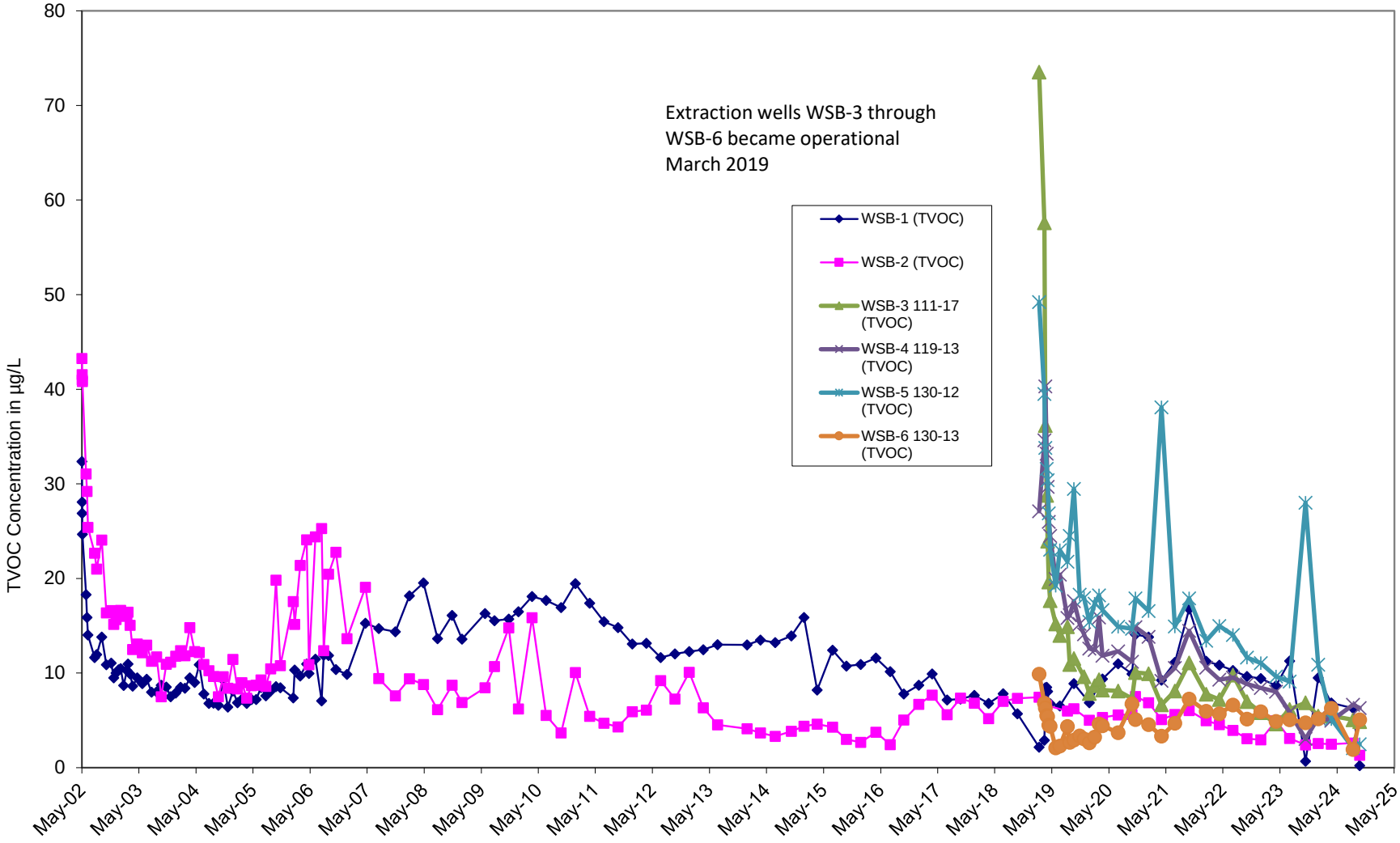
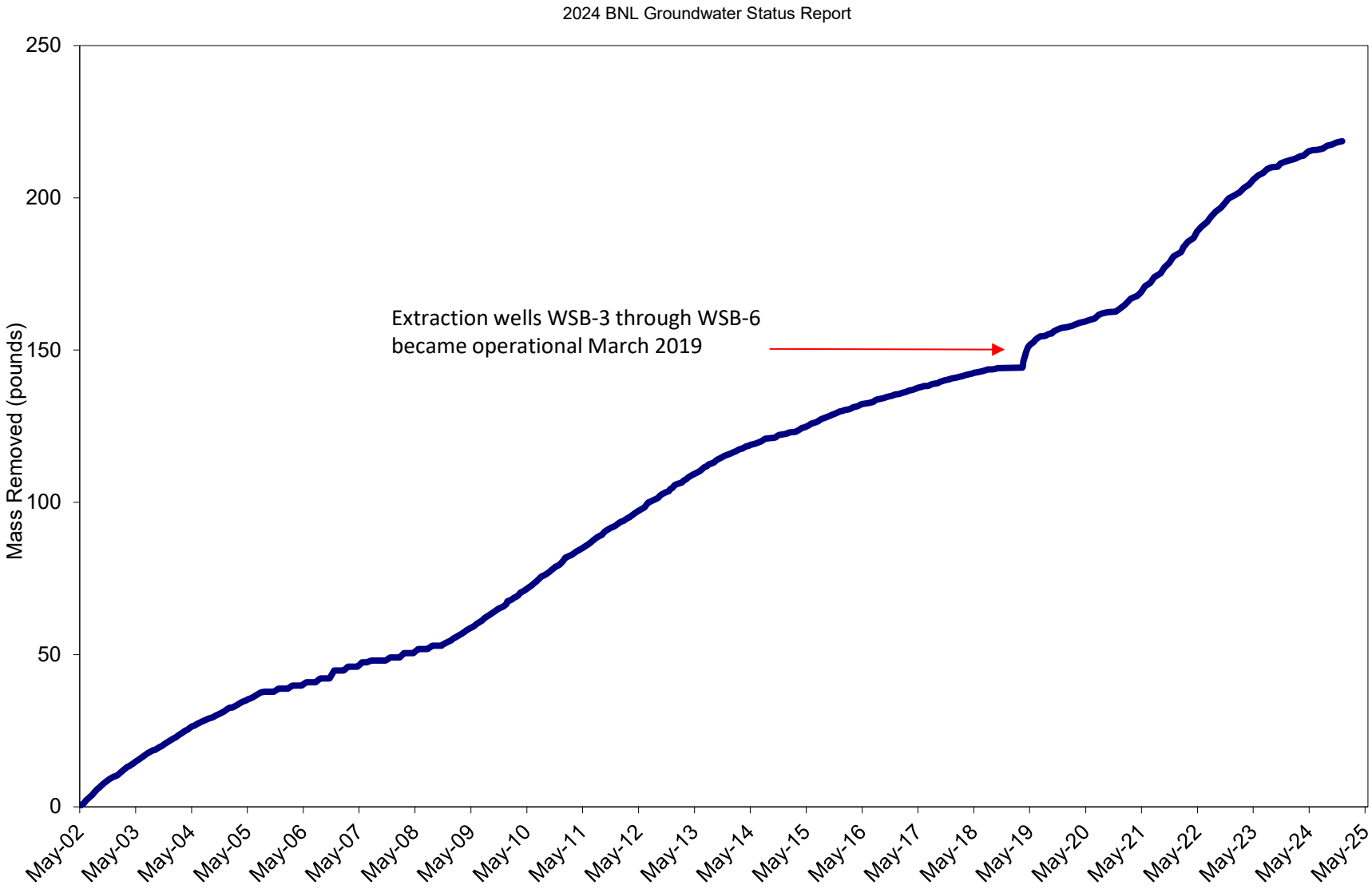


Figure 3.2.4-5
OU III Western South Boundary Groundwater Remediation System
Cumulative VOC Mass Removed



LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

- 126-01 BNL Well ID
- ND Indicates not detected at or above laboratory method detection limits
- 7.54 TVOC Concentration (µg/L)
- 5 TVOC Contour (µg/L) (Dashed Where Inferred)
- Monitoring Well Screen
- Extraction Well Screen

▼ Water Table As Of Aug 12 – Aug 20, 2024

TVOC– Total Volatile Organic Compound

µg/L– Micrograms Per Liter

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, CHARACTERIZATION REPORTS.

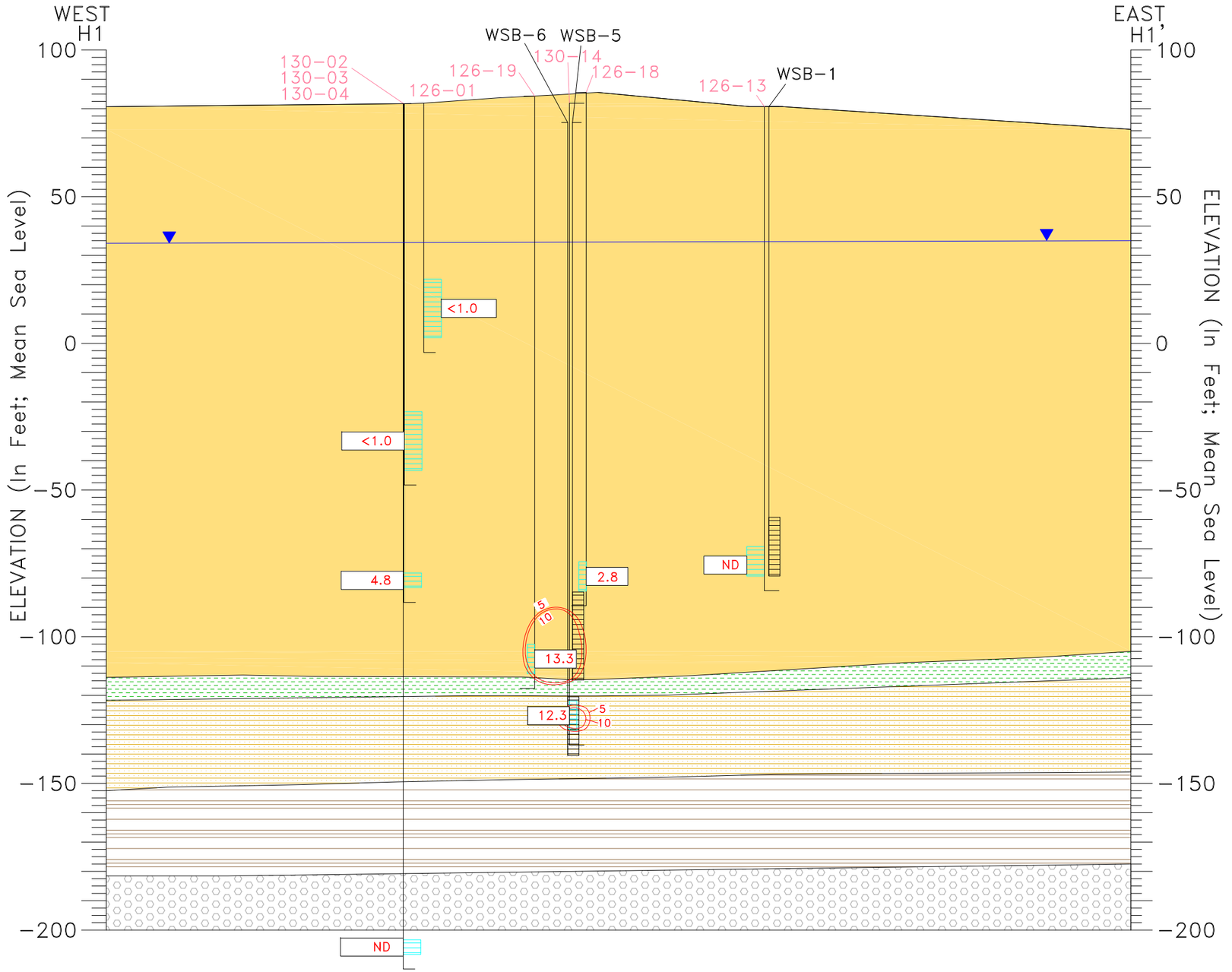
2) PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER 2024 SAMPLING EVENTS, SUPPLEMENTED WITH THIRD QUARTER MONITORING DATA TO PROVIDE ADEQUATE AREAL COVERAGE.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM WELL LOCATION MAP.

HORIZONTAL SCALE

0 500 FEET



Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

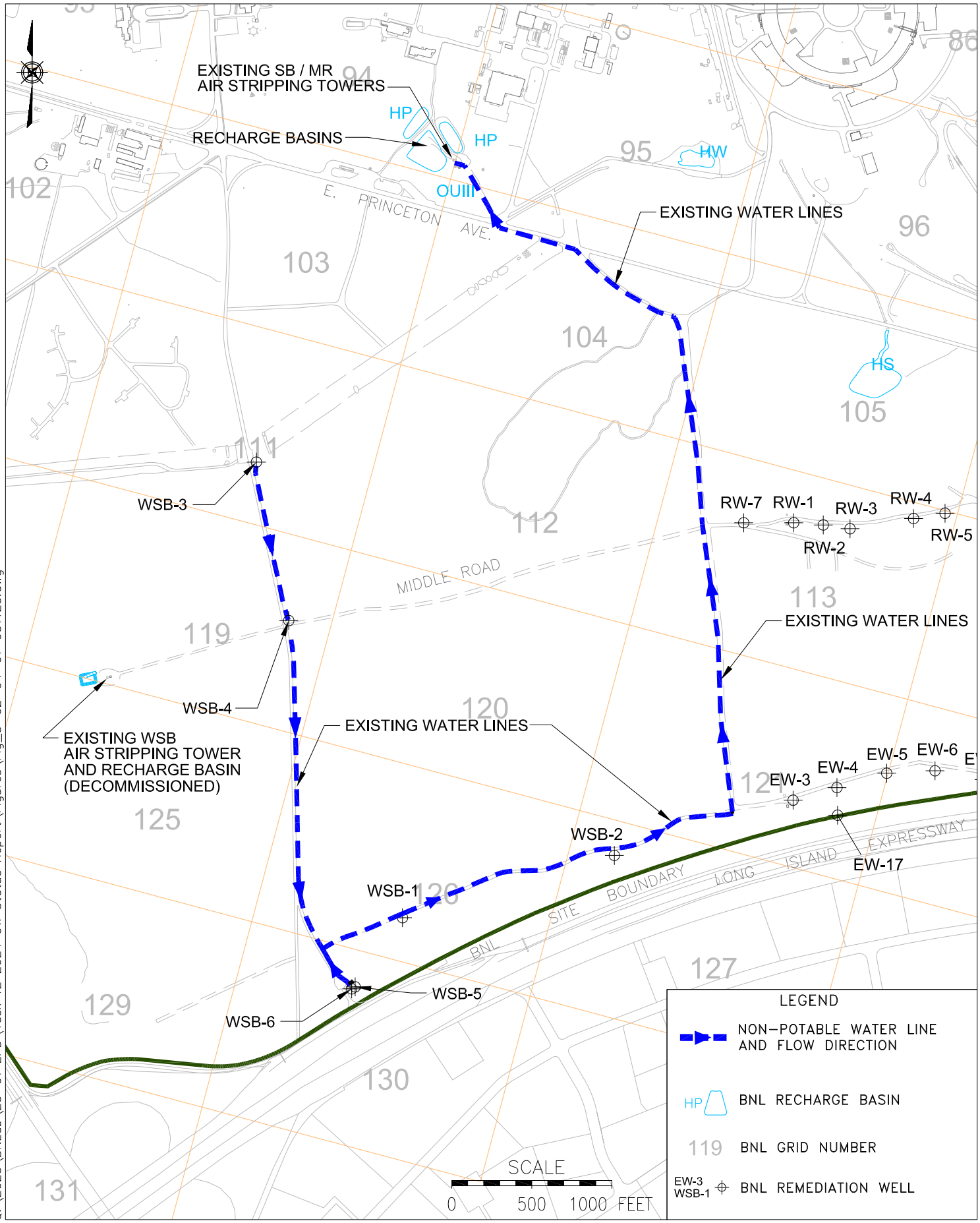
OU III WESTERN SOUTH BOUNDARY TVOC HYDROGEOLOGIC CROSS SECTION (H1–H1')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
WRD	WRD	–	–

FIGURE NO.: 3.2.4-6

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

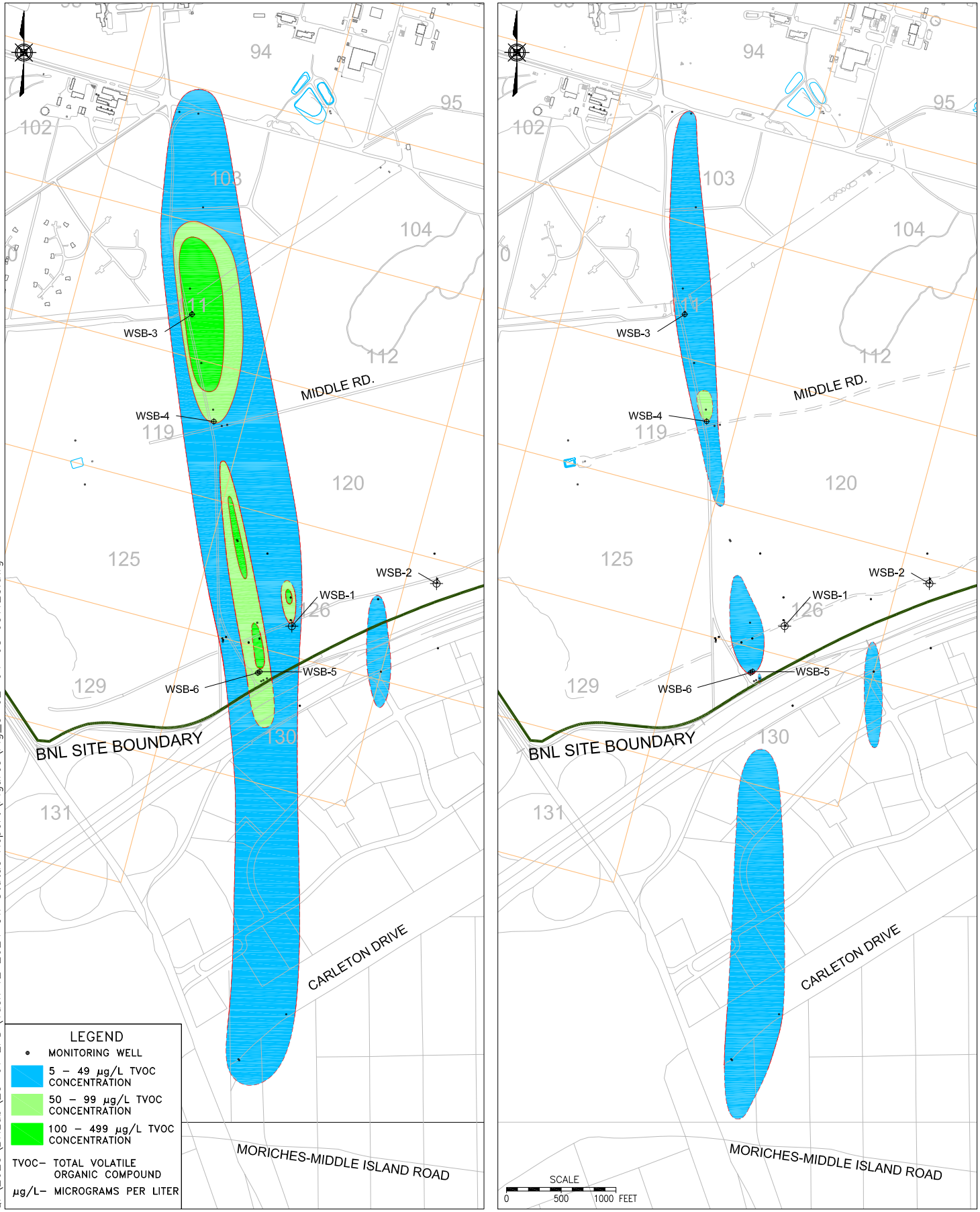
TITLE:
OU III WESTERN SOUTH BOUNDARY EXTRACTION WELLS AND PIPING LAYOUT
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.4-7

2018 WSB TVOC PLUME DISTRIBUTION

2024 WSB TVOC PLUME DISTRIBUTION



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

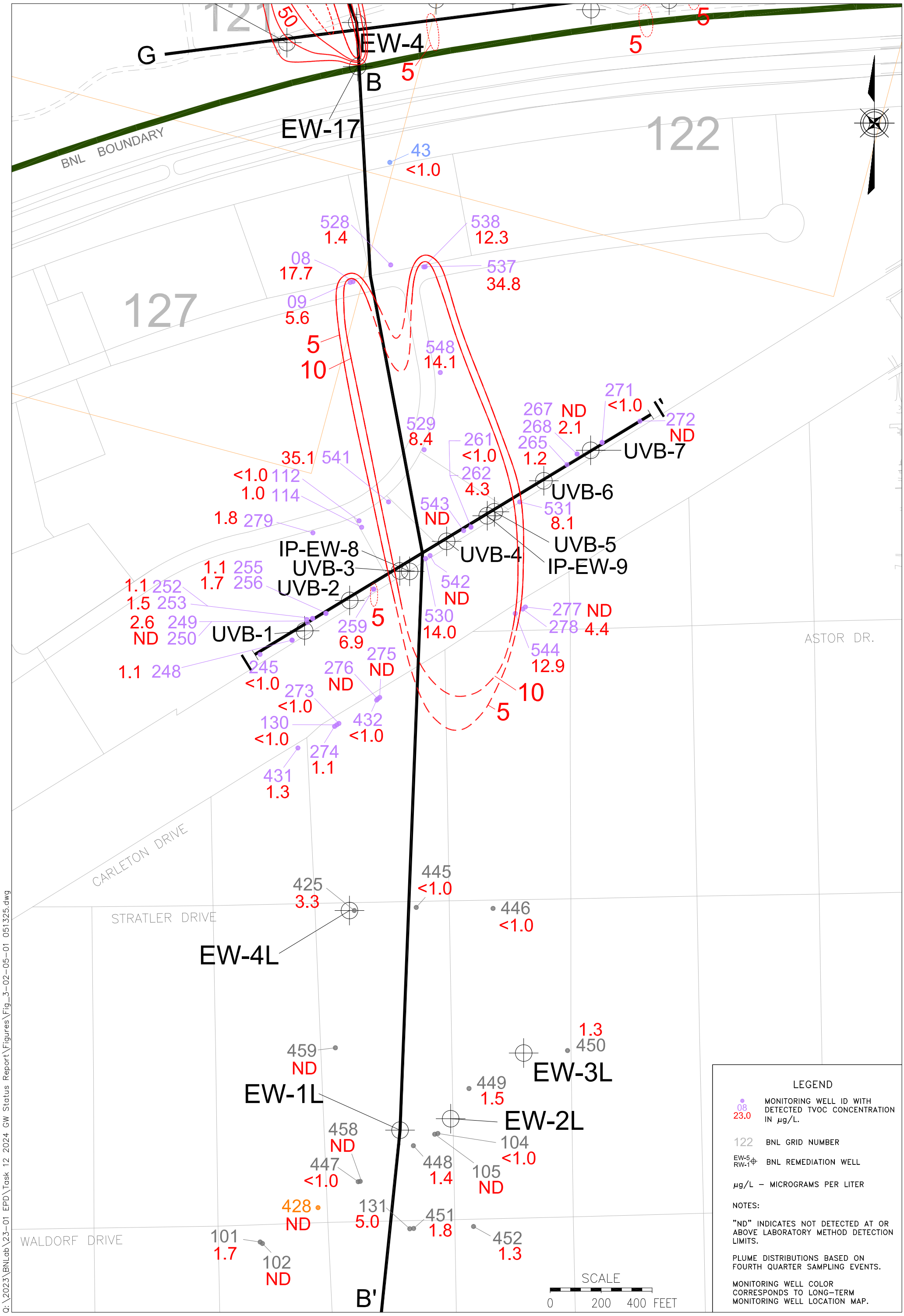
TITLE:

OU III WESTERN SOUTH BOUNDARY TVOC PLUME COMPARISON 2018 – 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.4-8



LEGEND

08 / 23.0 — MONITORING WELL ID WITH DETECTED TVOC CONCENTRATION IN µg/L.

122 — BNL GRID NUMBER

EW-5 / RW-1 — BNL REMEDIATION WELL

µg/L – MICROGRAMS PER LITER

NOTES:

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER SAMPLING EVENTS.

MONITORING WELL COLOR CORRESPONDS TO LONG-TERM MONITORING WELL LOCATION MAP.

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

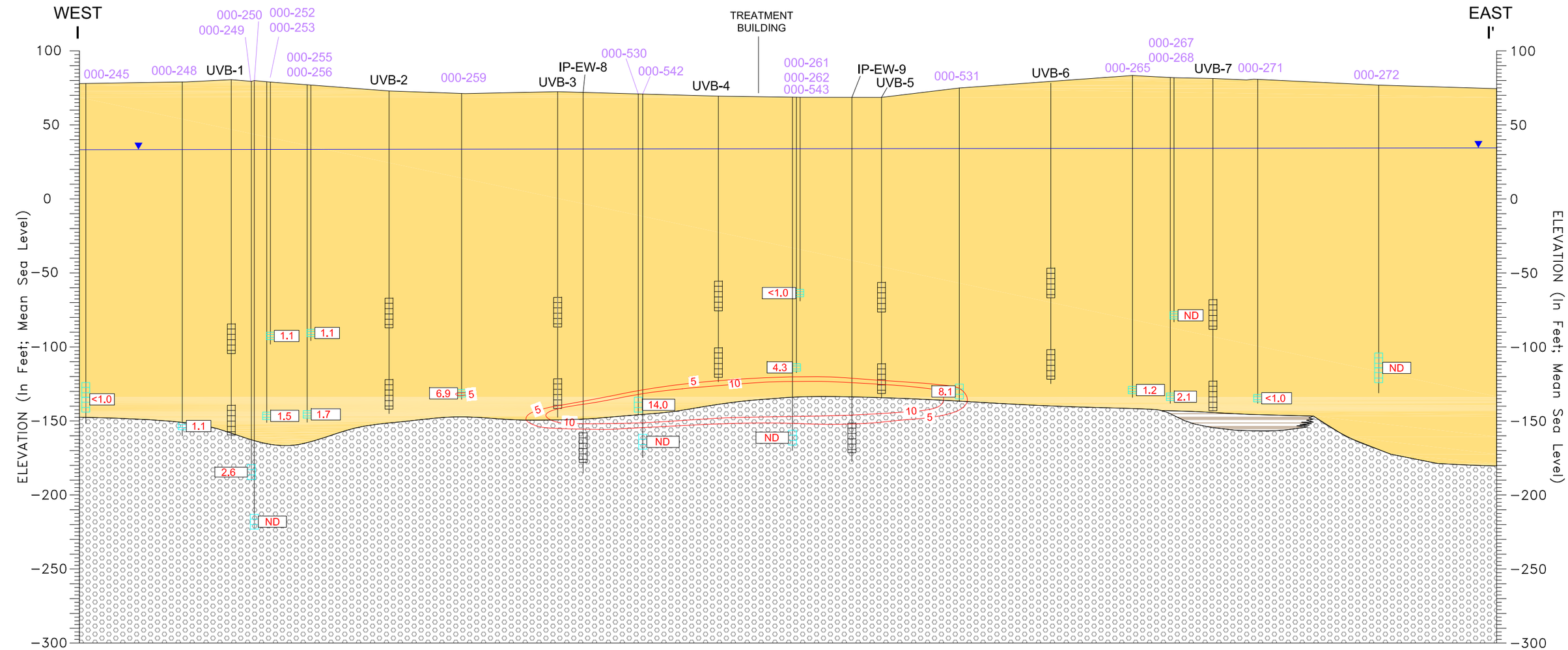
OU III INDUSTRIAL PARK AREA, TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	05/13/25	–

FIGURE NO.: 3.2.5-1

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LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

000-530 BNL Well ID

1.14 TVOC Concentration (µg/L)

10 TVOC Contour (µg/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep

000-261
000-262
000-543

Water Table As Of Aug 12 – Aug 20, 2024

TVOC – Total Volatile Organic Compound

µg/L – Micrograms Per Liter

HORIZONTAL SCALE
0 50 100 FEET

NOTES:
1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS.

2) PLUME DISTRIBUTION IS BASED ON FOURTH QUARTER 2024 OU III SAMPLING EVENT.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM COLOR CODE.

Q:\2023\BNLab\23-01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3-02-05-02 031125.dwg

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III INDUSTRIAL PARK AND INDUSTRIAL PARK EAST TVOC HYDROGEOLOGIC CROSS SECTION (I–I')

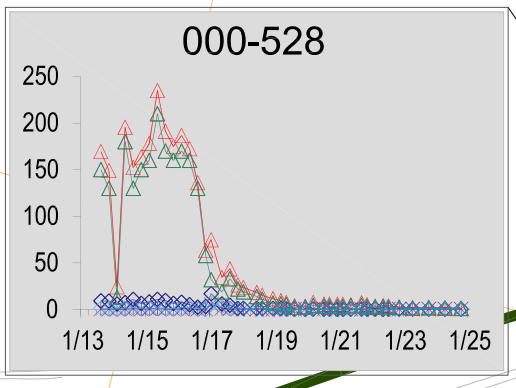
2024 BNL GROUNDWATER STATUS REPORT

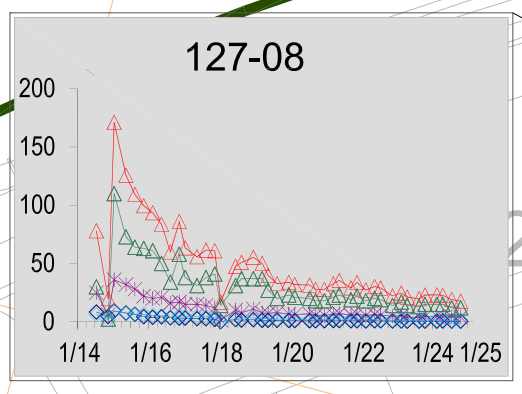
DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	2:1	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

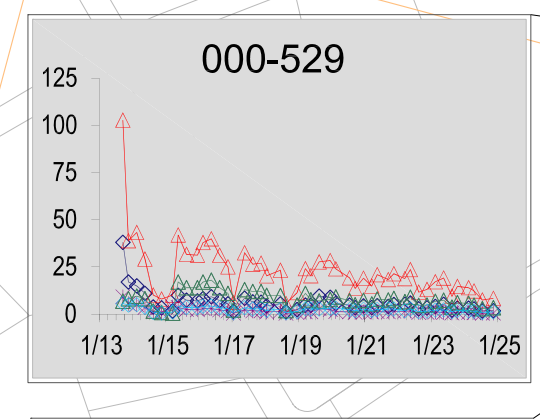
FIGURE NO.: 3.2.5-2

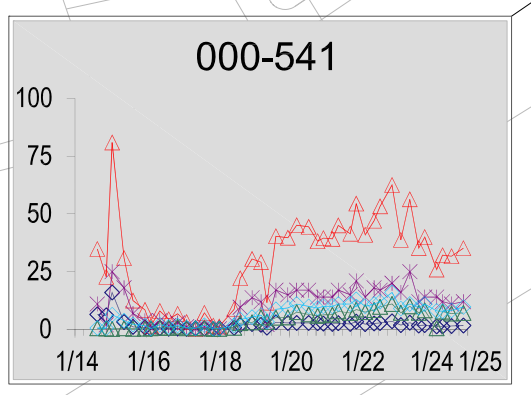
OU III INDUSTRIAL PARK HISTORICAL VOC TRENDS

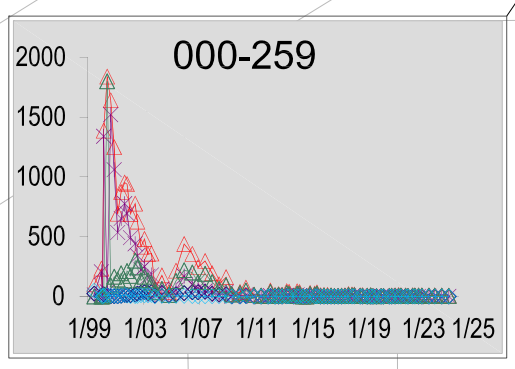
2024 BNL GROUNDWATER STATUS REPORT

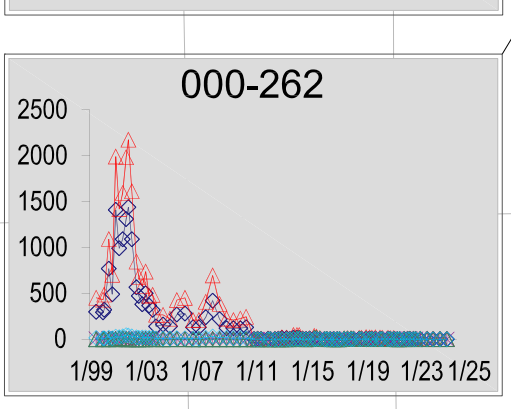


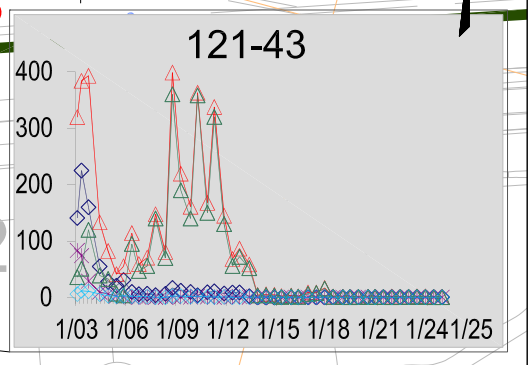


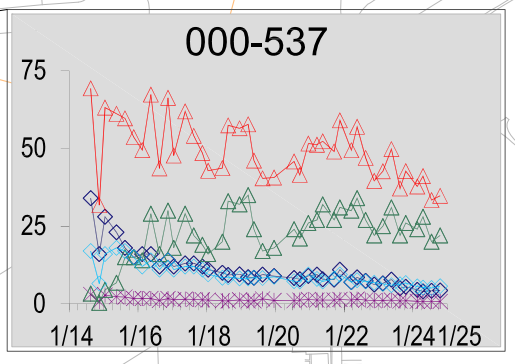


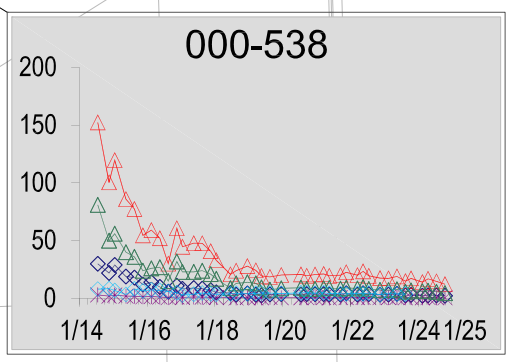


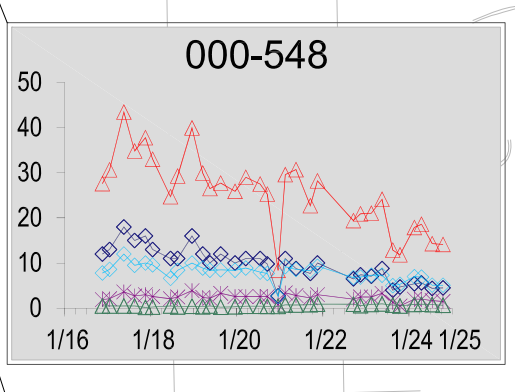


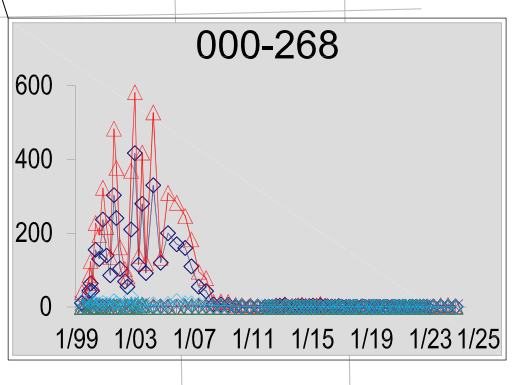












EW-3 EW-4 EW-5 EW-6 EW-7 EW-8 EW-12 EW-17

UVB-1 UVB-2 UVB-3 UVB-4 UVB-5 UVB-6 UVB-7 IP-EW-8 IP-EW-9

121 122 127 000

08 43 259 262 268 528 529 537 538 541 548

5

PRECISION DRIVE

RAMSAY DRIVE

CARLETON DRIVE

LONG ISLAND RAILROAD

MORICHES MIDDLE ISLAND ROAD

SCALE

0 300 600 FEET

LEGEND

- 268 — MONITORING WELL ID
- EXTENT OF TVOC PLUME BASED ON 5 µg/L ISOCONTOUR
- 000 — BNL GRID NUMBER
- UVB-5 — BNL REMEDIATION WELL
- BNL RECHARGE BASIN

TVOC – TOTAL VOLATILE ORGANIC COMPOUND

µg/L – MICROGRAMS PER LITER

- TVOC
- 1,1,1–TRICHLOROETHANE (TCA)
- CARBON TETRACHLORIDE
- TETRACHLOROETHYLENE (PCE)
- TRICHLOROETHYLENE (TCE)

CONCENTRATION (IN µg/L)

DATE (MONTH/YEAR)

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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

TITLE: OU III INDUSTRIAL PARK HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	04/17/25	–

FIGURE NO.: 3.2.5-3

Figure 3.2.5-4
OU III Industrial Park Groundwater Remediation System
TVOC Influent Concentration

2024 BNL Groundwater Status Report

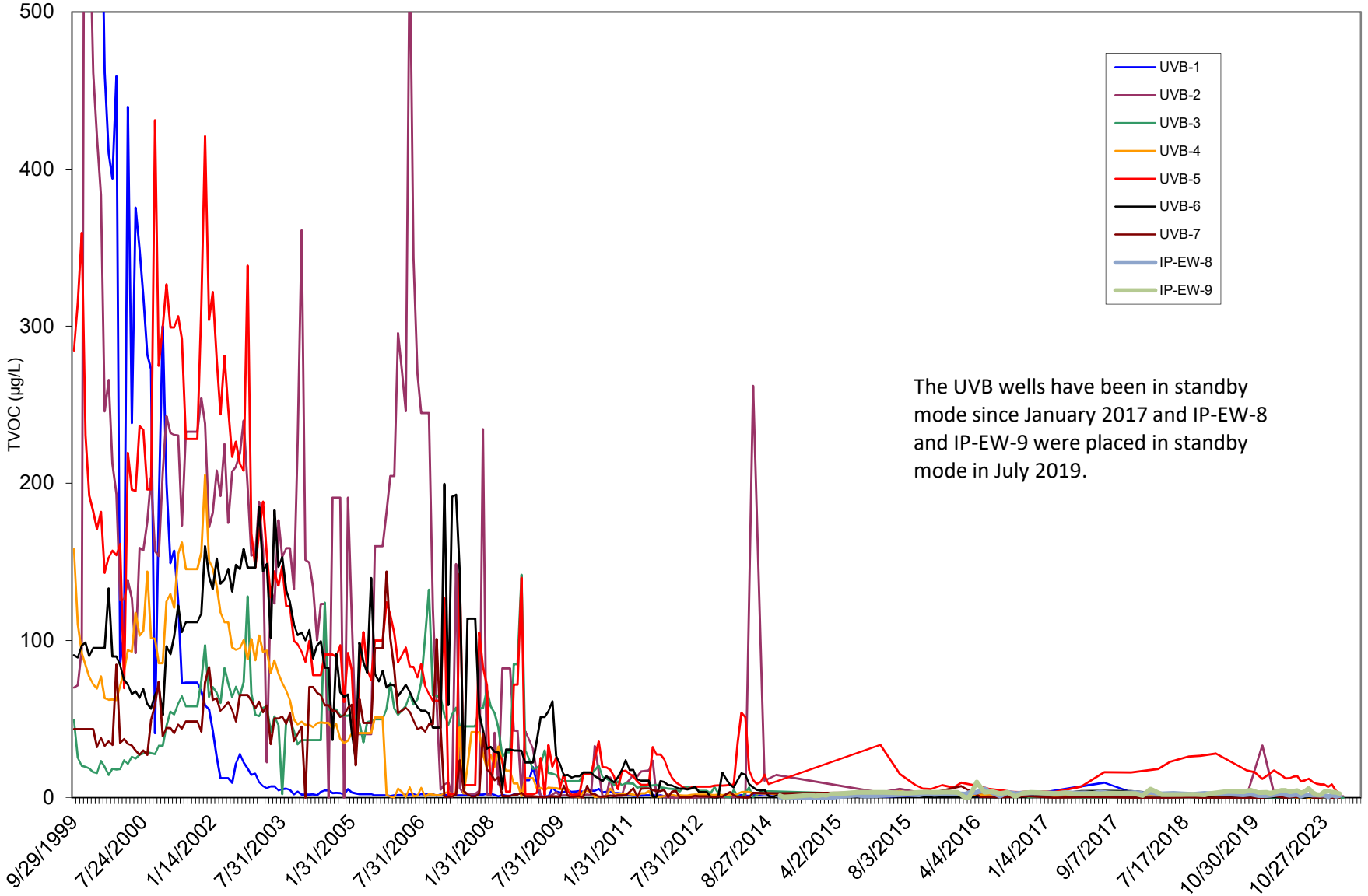


Figure 3.2.5-5
OU III Industrial Park Groundwater Remediation System
TVOC Effluent Concentration

2024 BNL Groundwater Status Report

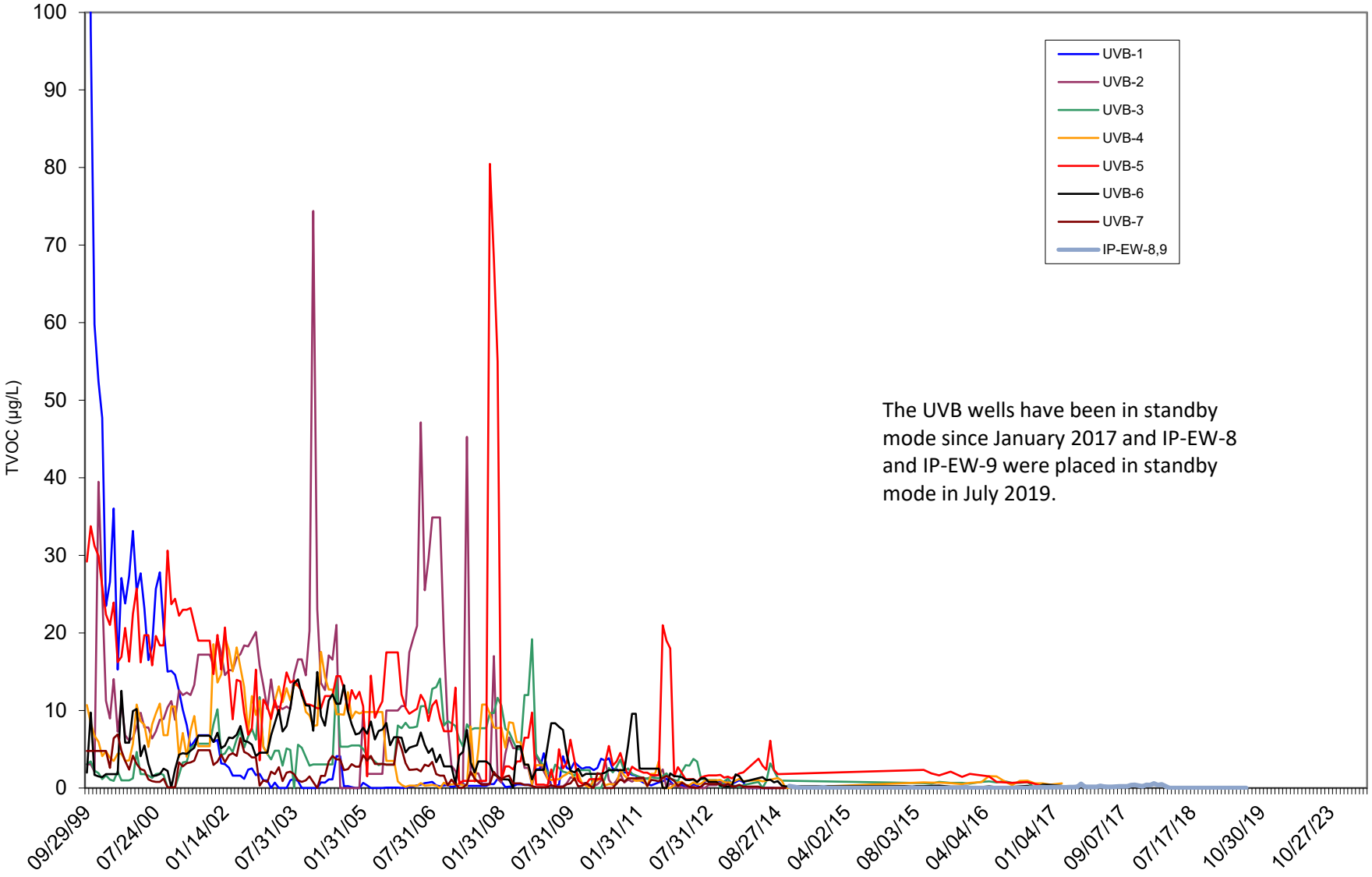
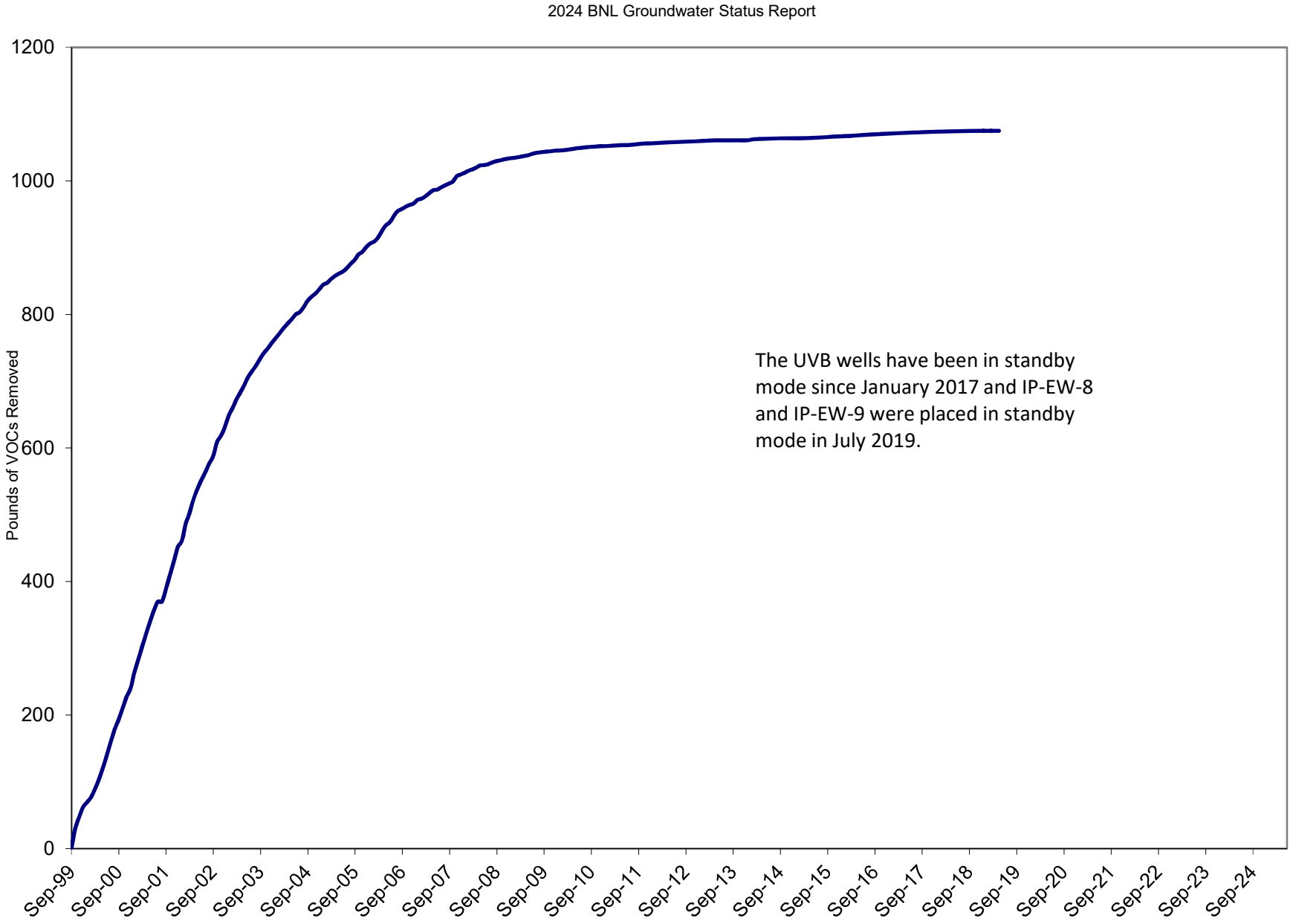


Figure 3.2.5-6
OU III Industrial Park Groundwater Remediation System
Cumulative VOC Mass Removed

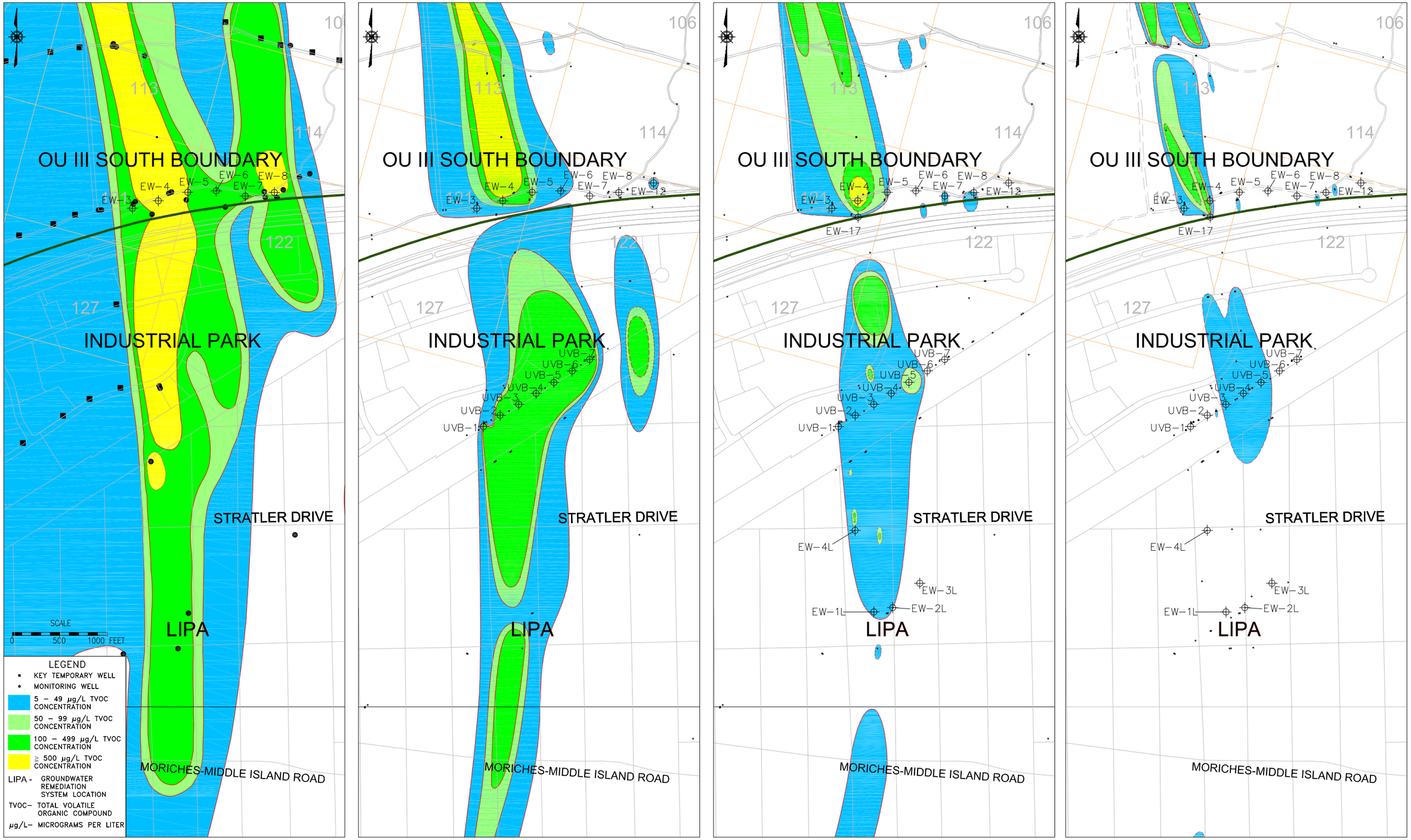


1997 TVOC PLUME DISTRICTION

2005 TVOC PLUME DISTRICTION

2013 TVOC PLUME DISTRICTION

2024 TVOC PLUME DISTRICTION



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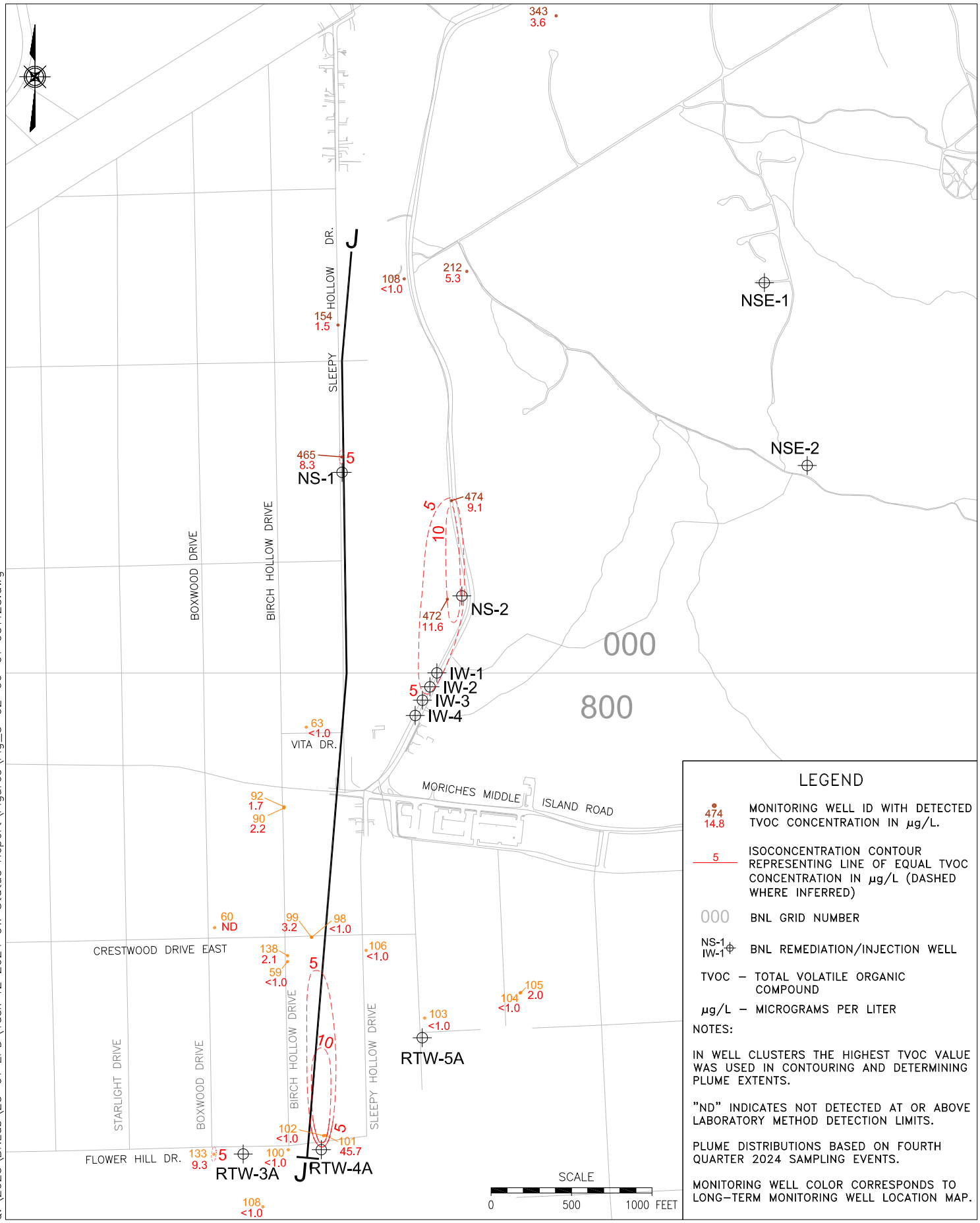
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III INDUSTRIAL PARK TVOC PLUME COMPARISON 1997, 2005, 2013, 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	04/17/25	–
FIGURE NO.:		3.2.5-7	



LEGEND

474 / 14.8 — MONITORING WELL ID WITH DETECTED TVOC CONCENTRATION IN µg/L.

5 — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL TVOC CONCENTRATION IN µg/L (DASHED WHERE INFERRED)

000 — BNL GRID NUMBER

NS-1 / IW-1 — BNL REMEDIATION/INJECTION WELL

TVOC – TOTAL VOLATILE ORGANIC COMPOUND

µg/L – MICROGRAMS PER LITER

NOTES:

IN WELL CLUSTERS THE HIGHEST TVOC VALUE WAS USED IN CONTOURING AND DETERMINING PLUME EXTENTS.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER 2024 SAMPLING EVENTS.

MONITORING WELL COLOR CORRESPONDS TO LONG-TERM MONITORING WELL LOCATION MAP.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

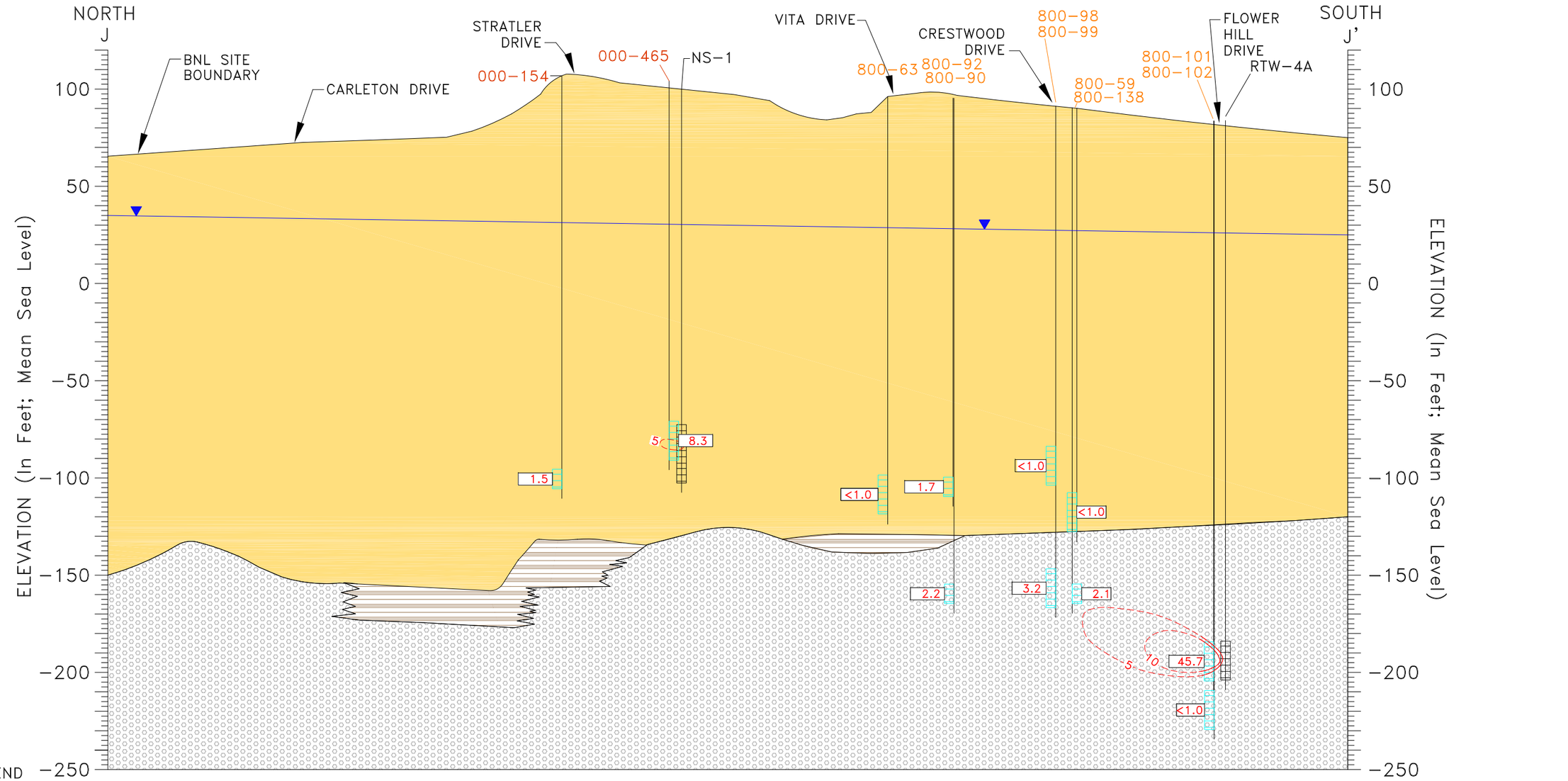
TITLE:

NORTH STREET TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.6-1



LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

TVOC – Total Volatile Organic Compound

µg/L – Micrograms Per Liter

800-63 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

65.2 TVOC Concentration (µg/L)

5 TVOC Contour (µg/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep

000-463
000-464

HORIZONTAL SCALE
0 500 1000 FEET

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS.

2) PLUME DISTRIBUTION BASED ON FOURTH QUARTER 2024 FORMER LANDFILL (FLF) AND OUI/IV SAMPLING EVENTS.

3) CONTOUR INTERVAL IS AS SHOWN.

5) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM WELL LOCATION MAP.

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

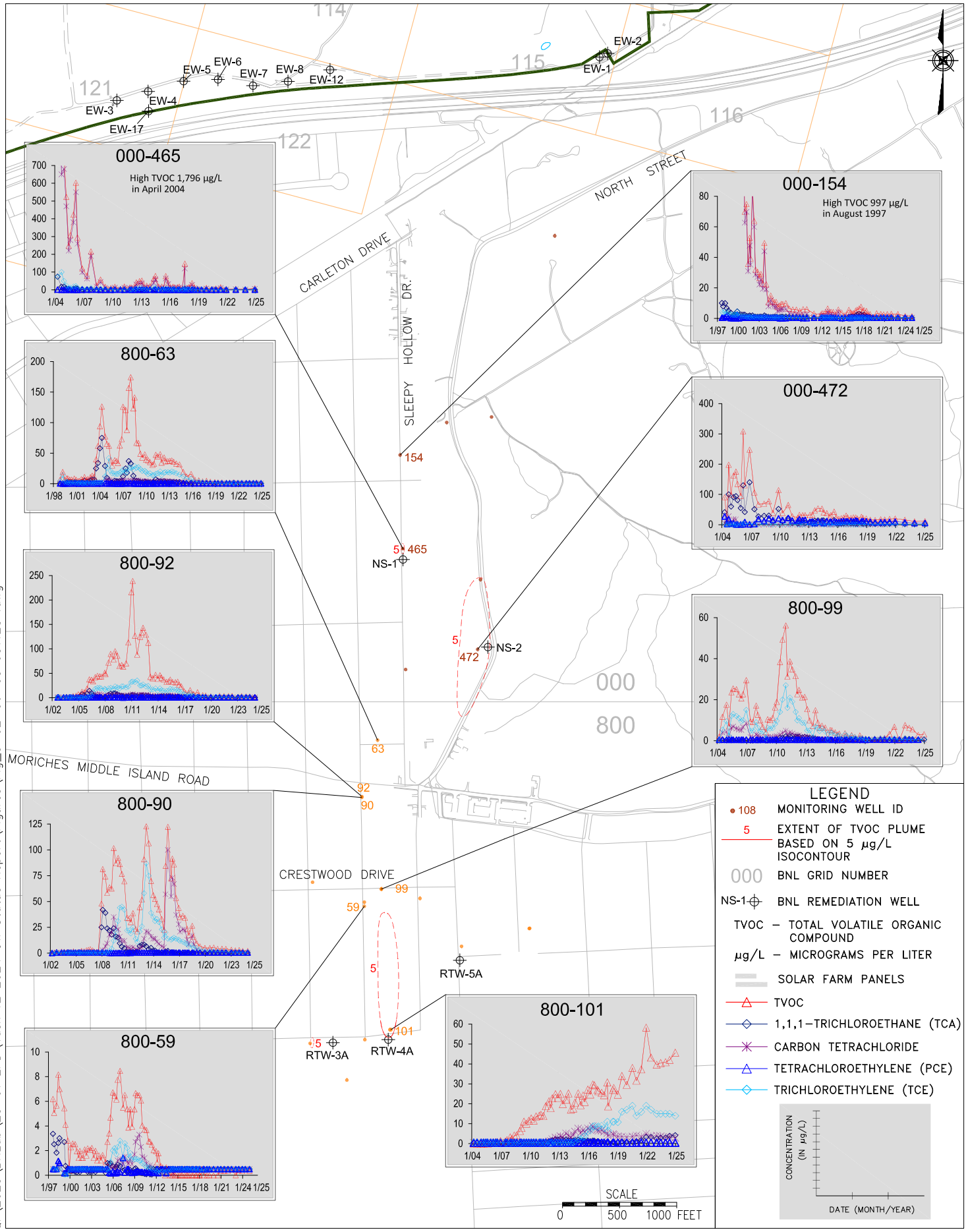
NORTH STREET
TVOC HYDROGEOLOGIC CROSS SECTION (J–J')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	15:1	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.6-2

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

NORTH STREET HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.6–3

Figure 3.2.6-4
OU III North Street Groundwater Remediation System
Extraction Well TVOC Concentrations

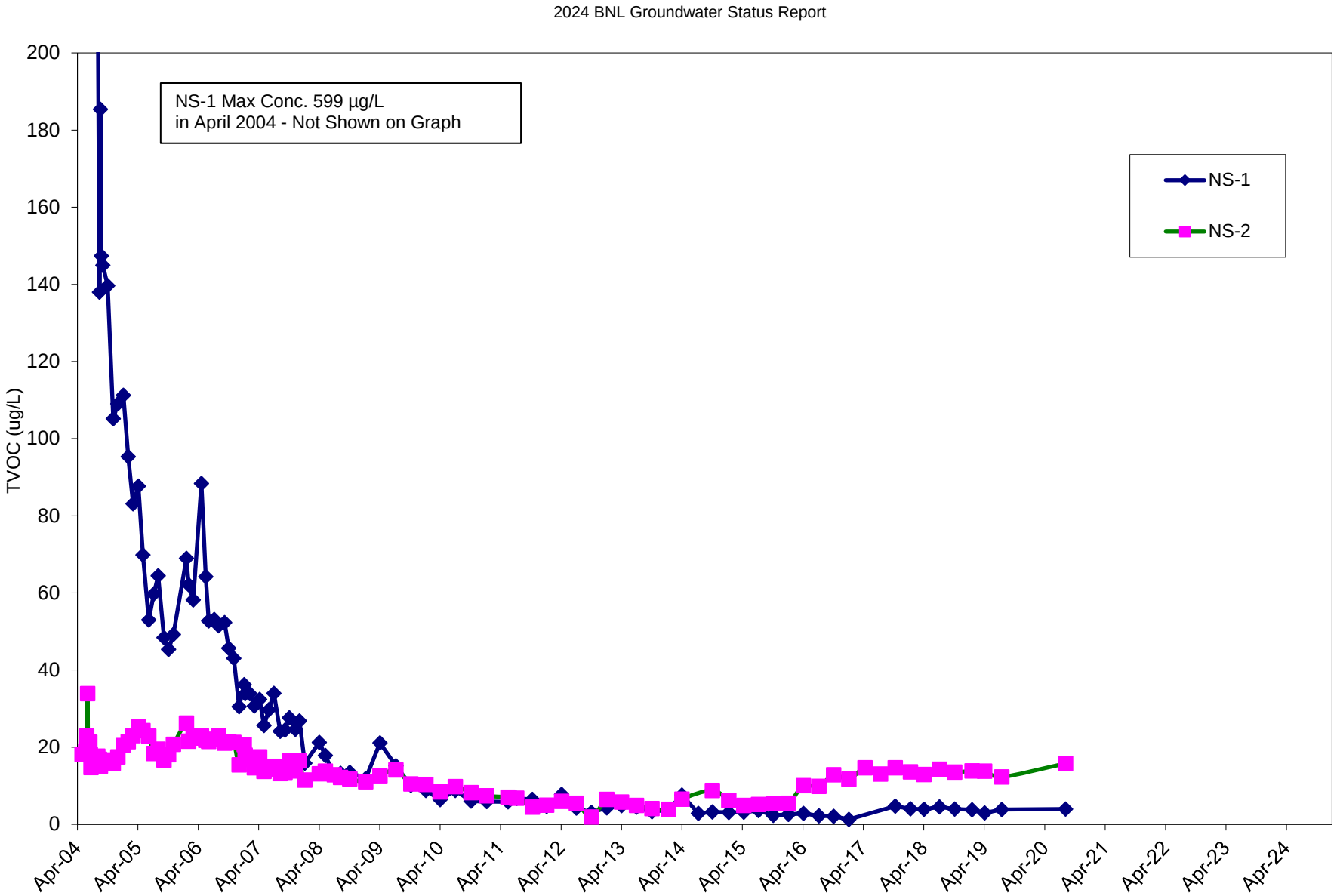
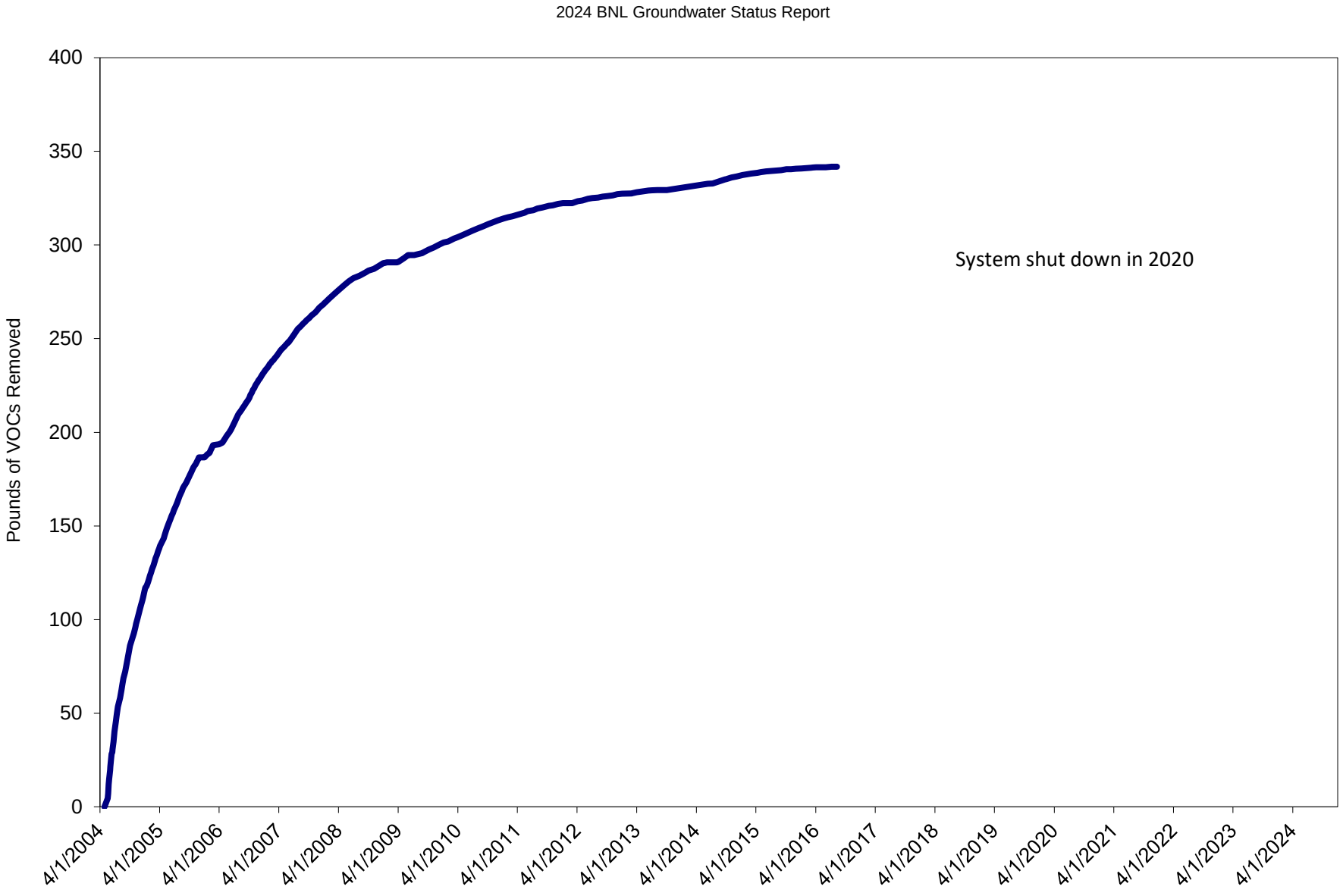
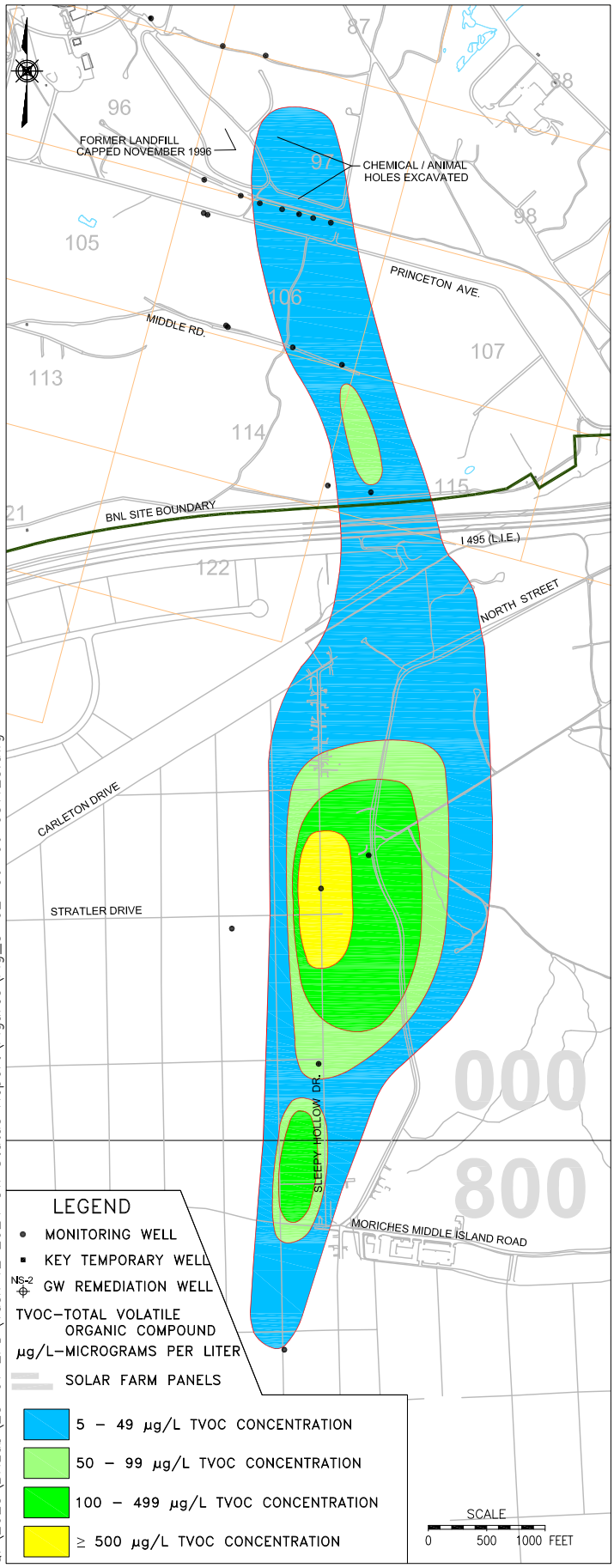


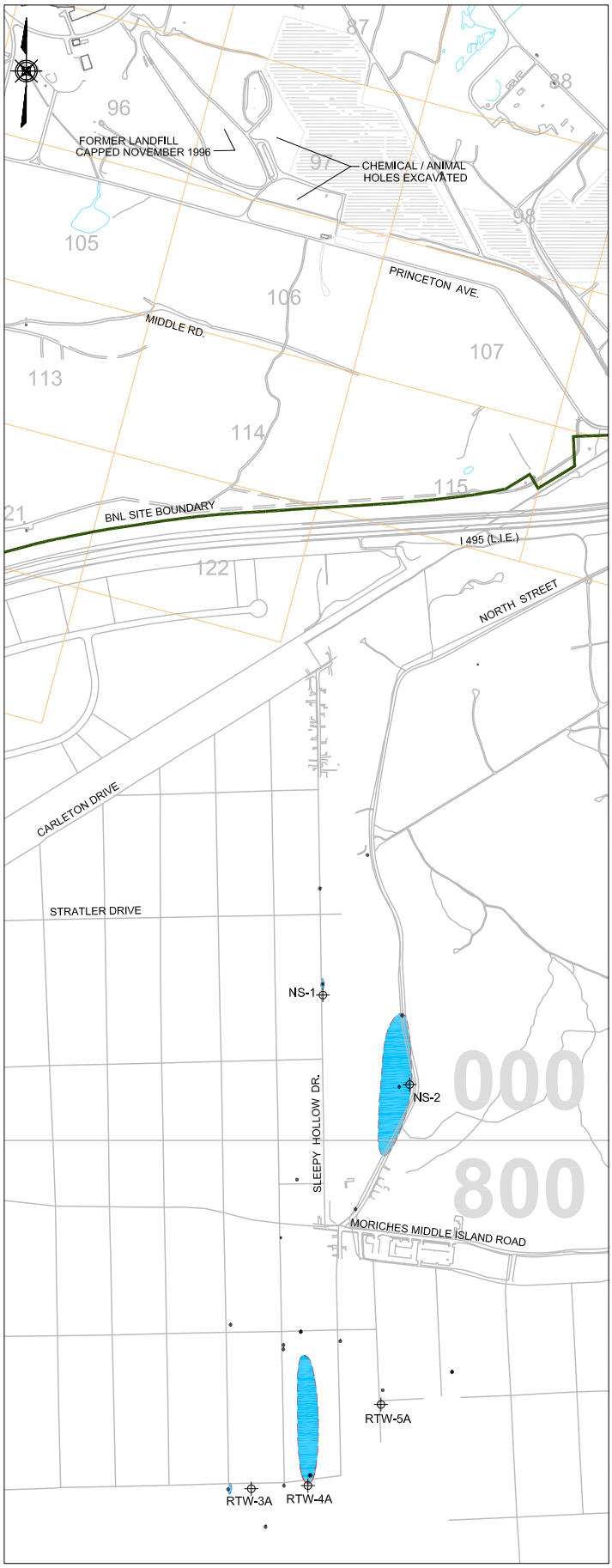
Figure 3.2.6-5
OU III North Street Groundwater Remediation System
Cumulative VOC Mass Removed



1997 TVOC PLUME DISTRICTION

2024 TVOC PLUME DISTRICTION





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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

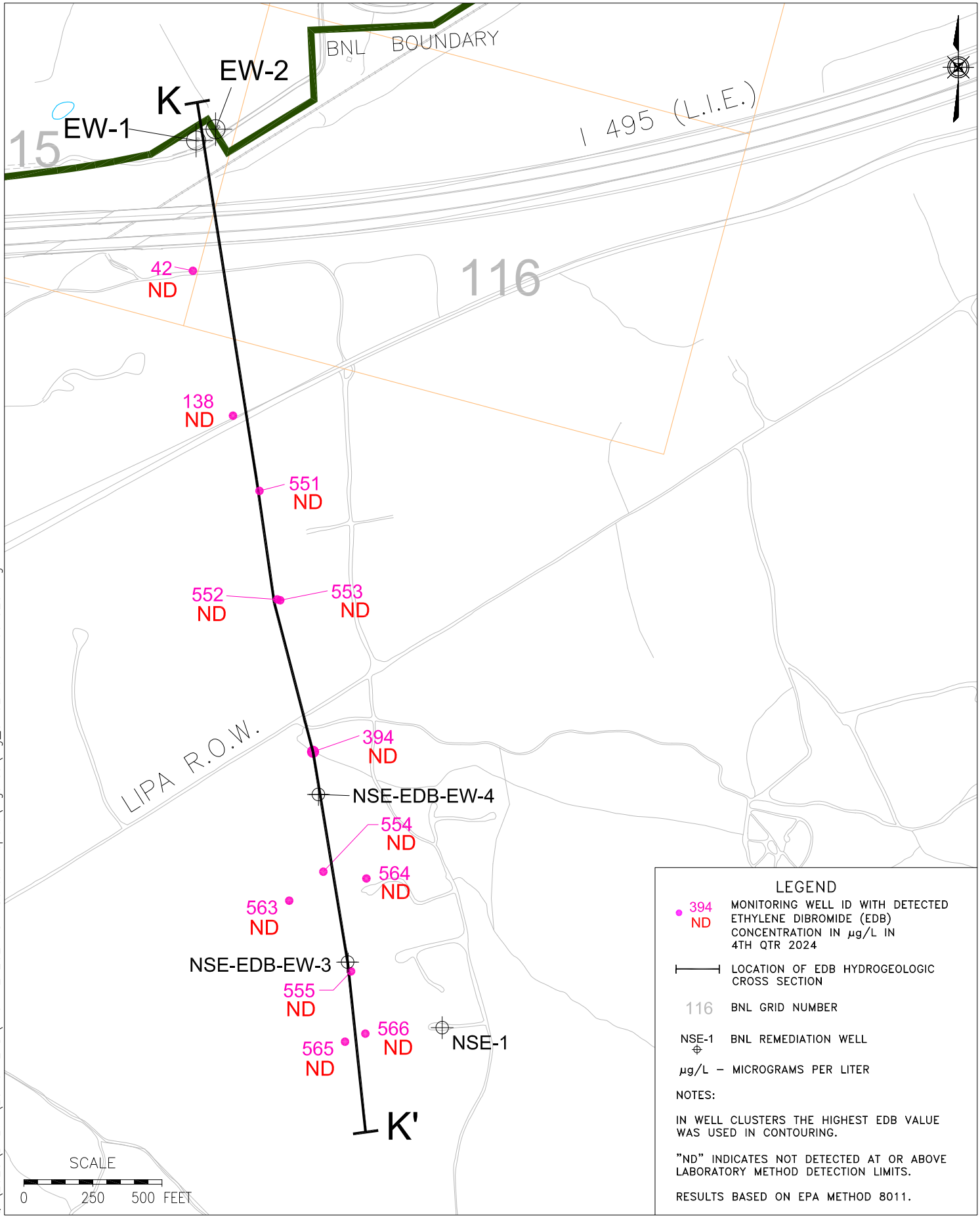
TITLE:

NORTH STREET
TVOC PLUME COMPARISON
1997 – 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/11/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.6-6



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III NORTH STREET EAST EDB PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.7-1

LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

000–394 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

NS Indicates not sampled

.06 Ethylene dibromide (EDB) Concentration (µg/L)

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep

000–???
000–???

µg/L – Micrograms Per Liter

Water Table As Of Aug 12 – Aug 20, 2024

Monitoring Well Screen

Extraction Well Screen

NOTES:

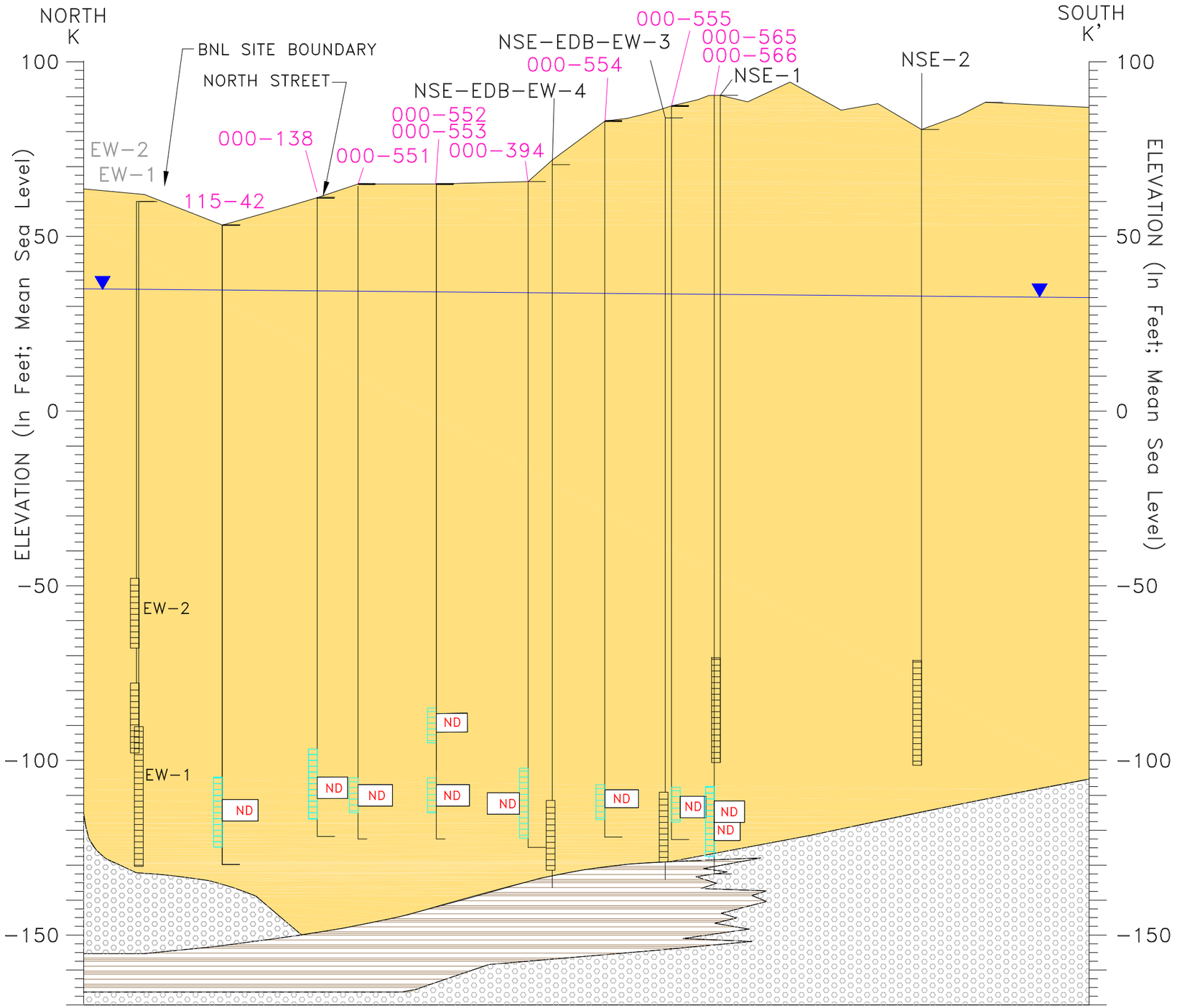
1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS.

2) EDB EXTENT IS BASED ON THIRD AND FORTH QUARTER 2024 OU VI SAMPLING EVENT.

3) RESULTS BASED ON EPA METHOD 8011.

4) CONTOUR INTERVAL IS AS SHOWN.

HORIZONTAL SCALE
0 500 1000 FEET



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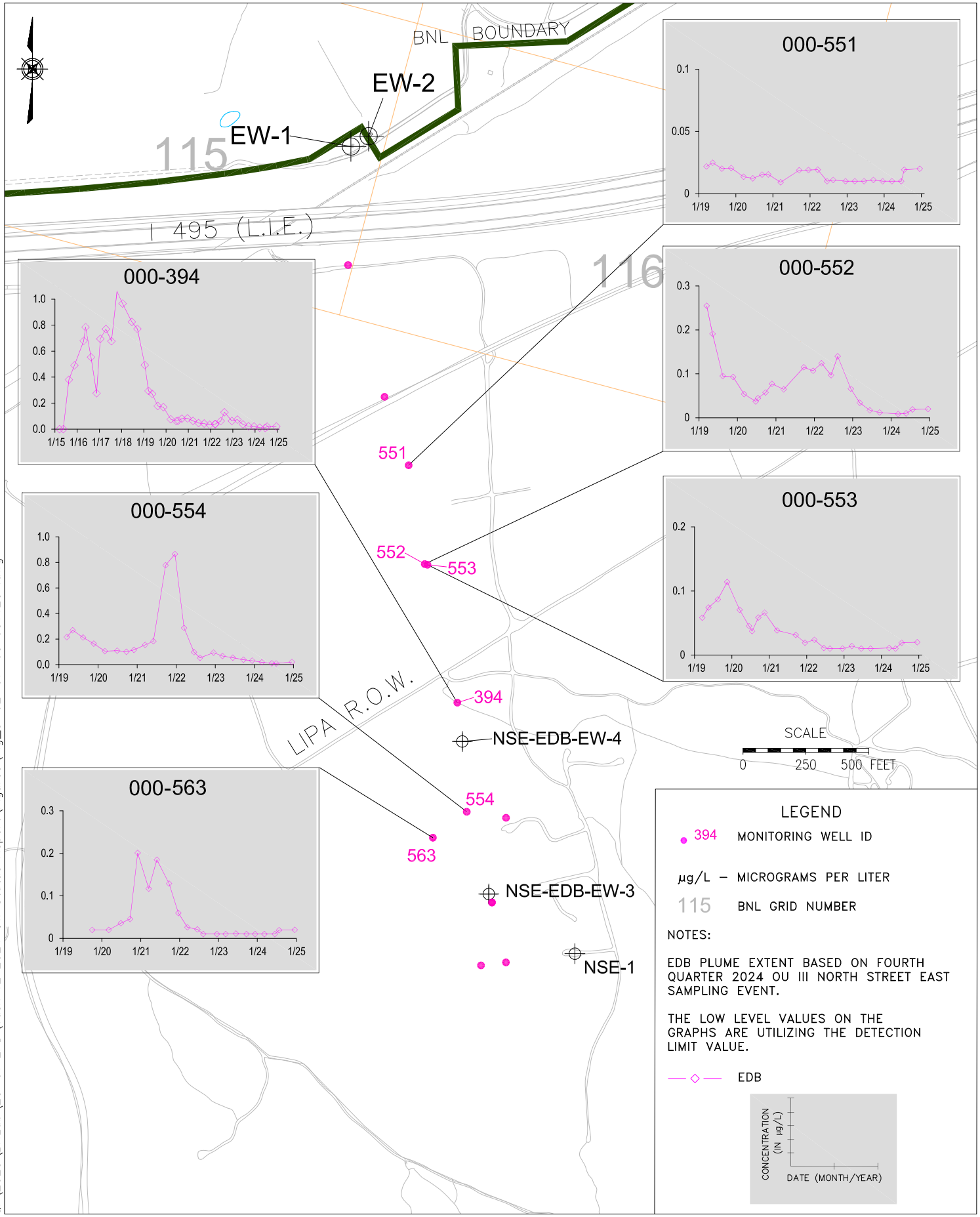
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III NORTH STREET EAST
EDB HYDROGEOLOGIC CROSS SECTION (K–K')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.7–2



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III NORTH STREET EAST HISTORICAL EDB TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	05/14/25	–

FIGURE NO.: 3.2.7-3

Figure 3.2.7-4
OU III North Street East Groundwater Remediation System
Extraction Well TVOC Concentrations

2024 BNL Groundwater Status Report

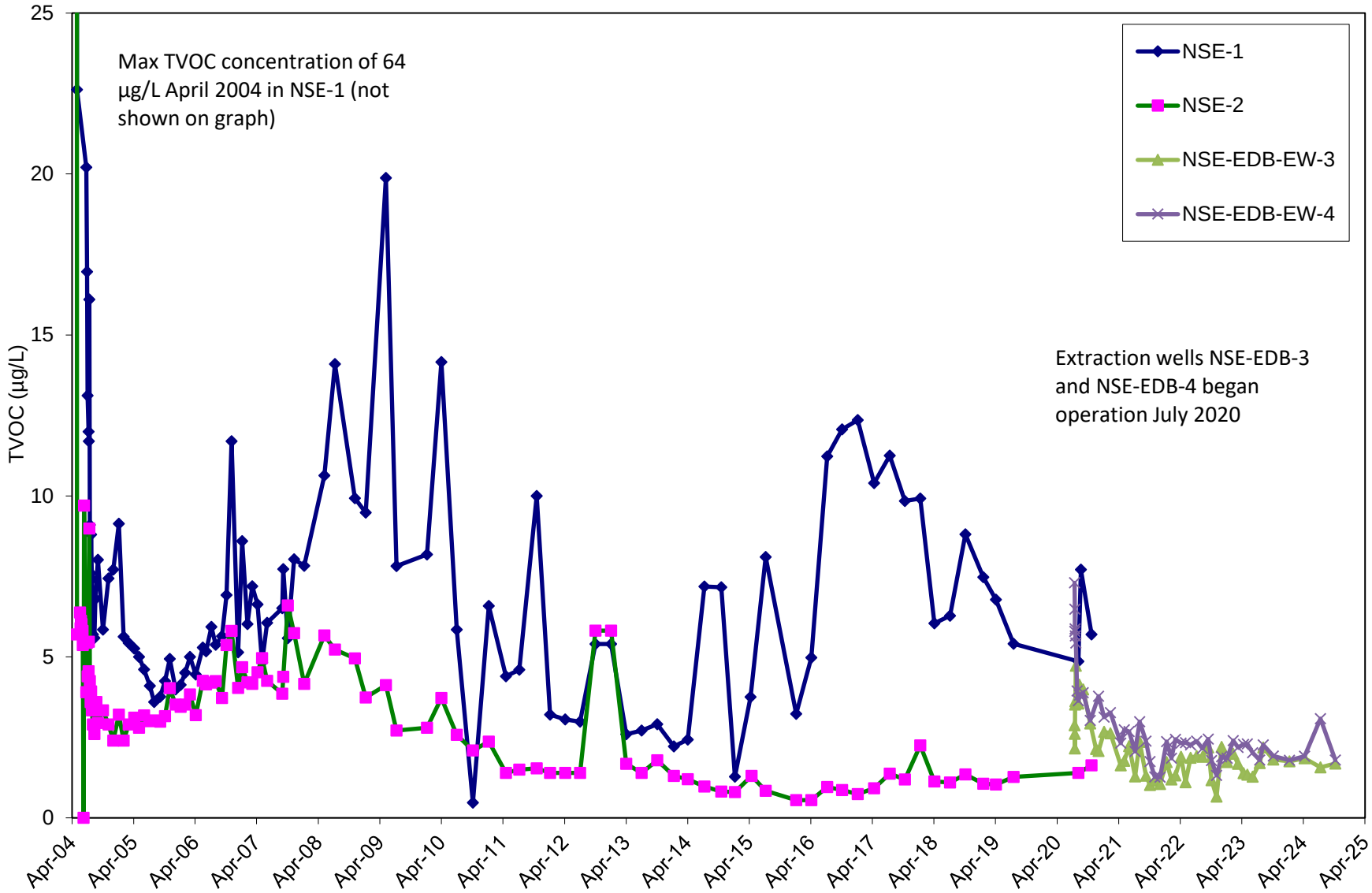


Figure 3.2.7-5
OU III North Street East Groundwater Remediation System
Extraction Well EDB Concentrations

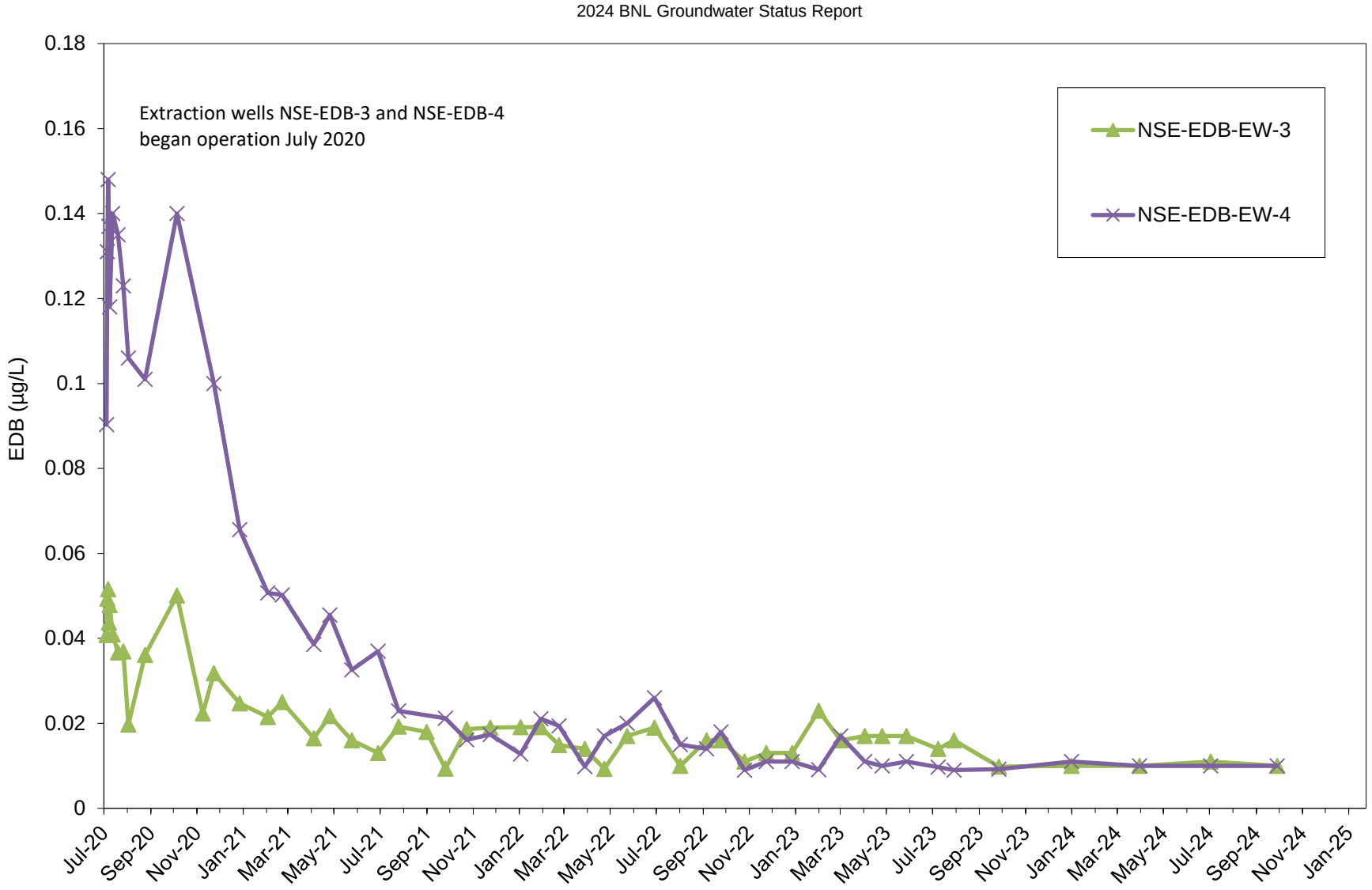
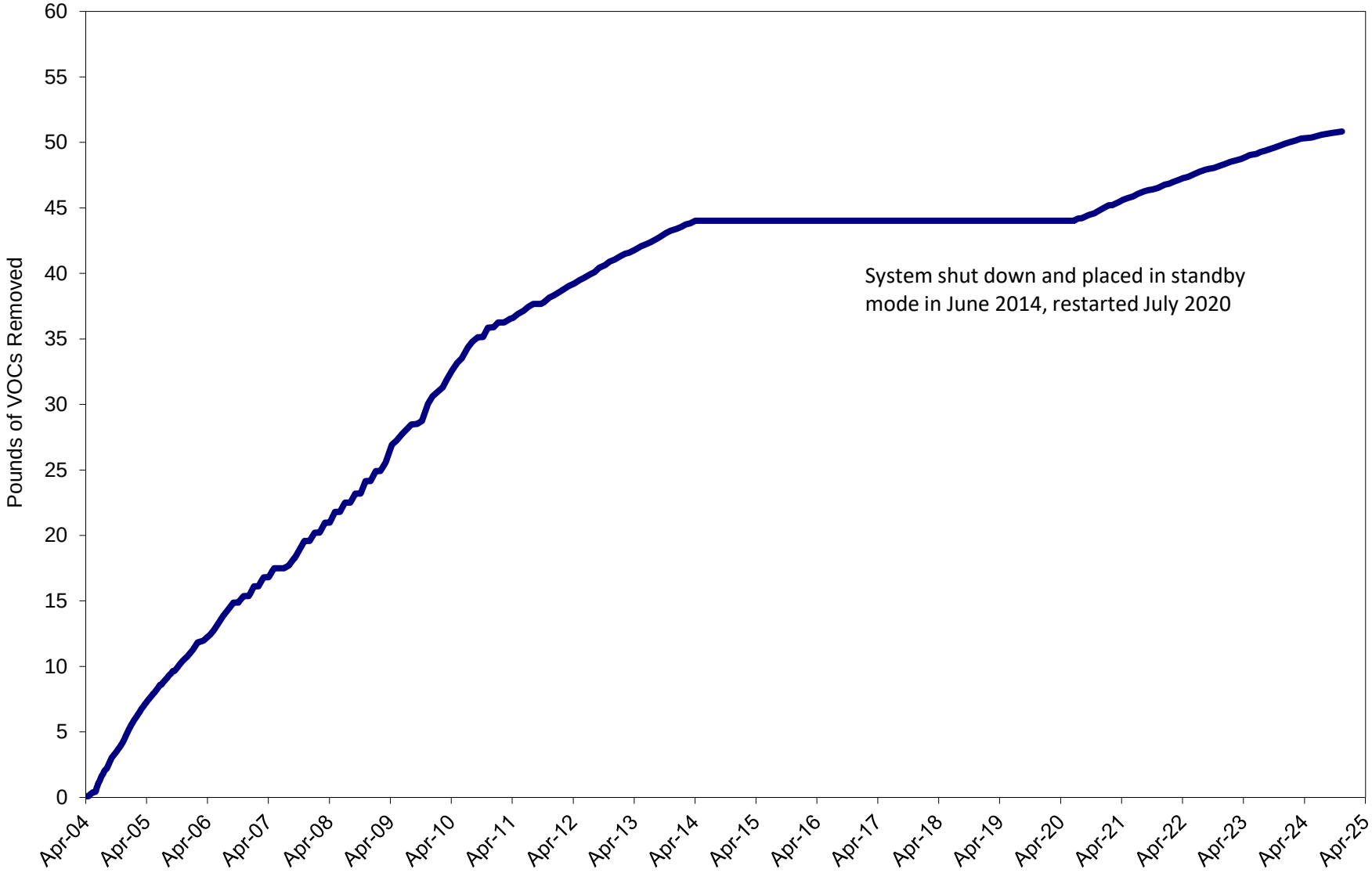
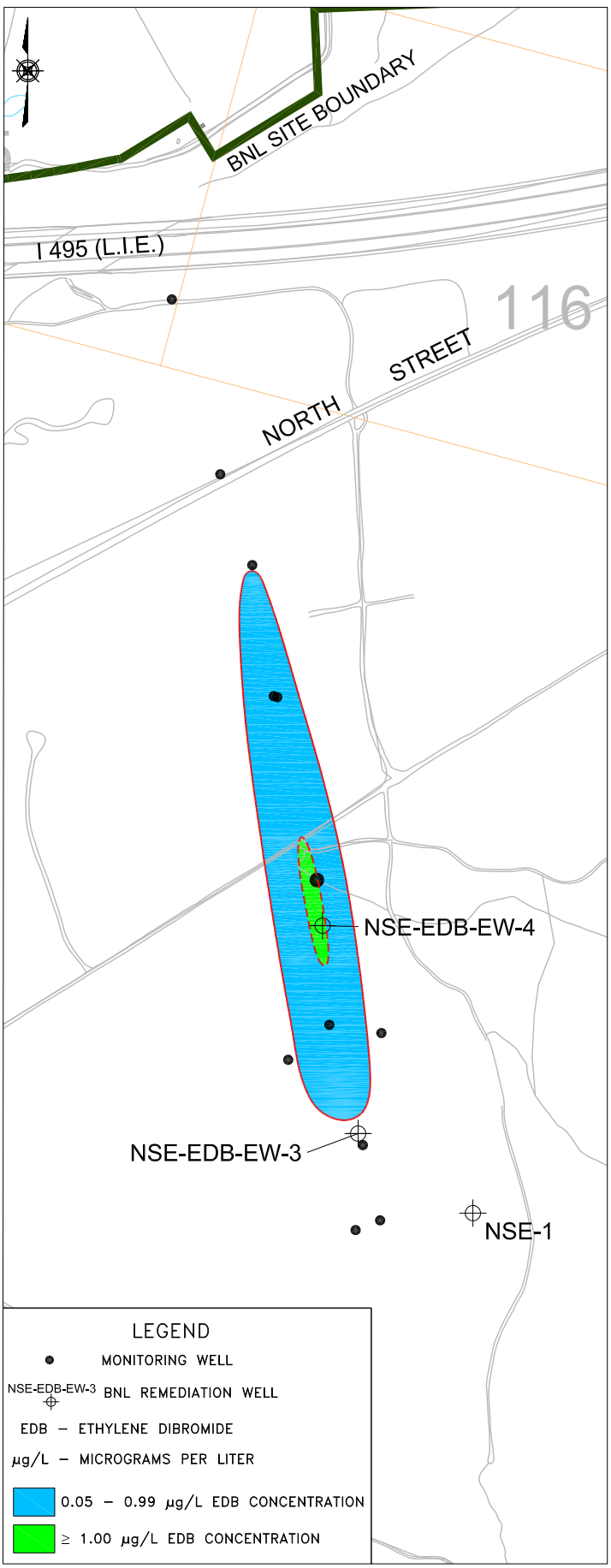
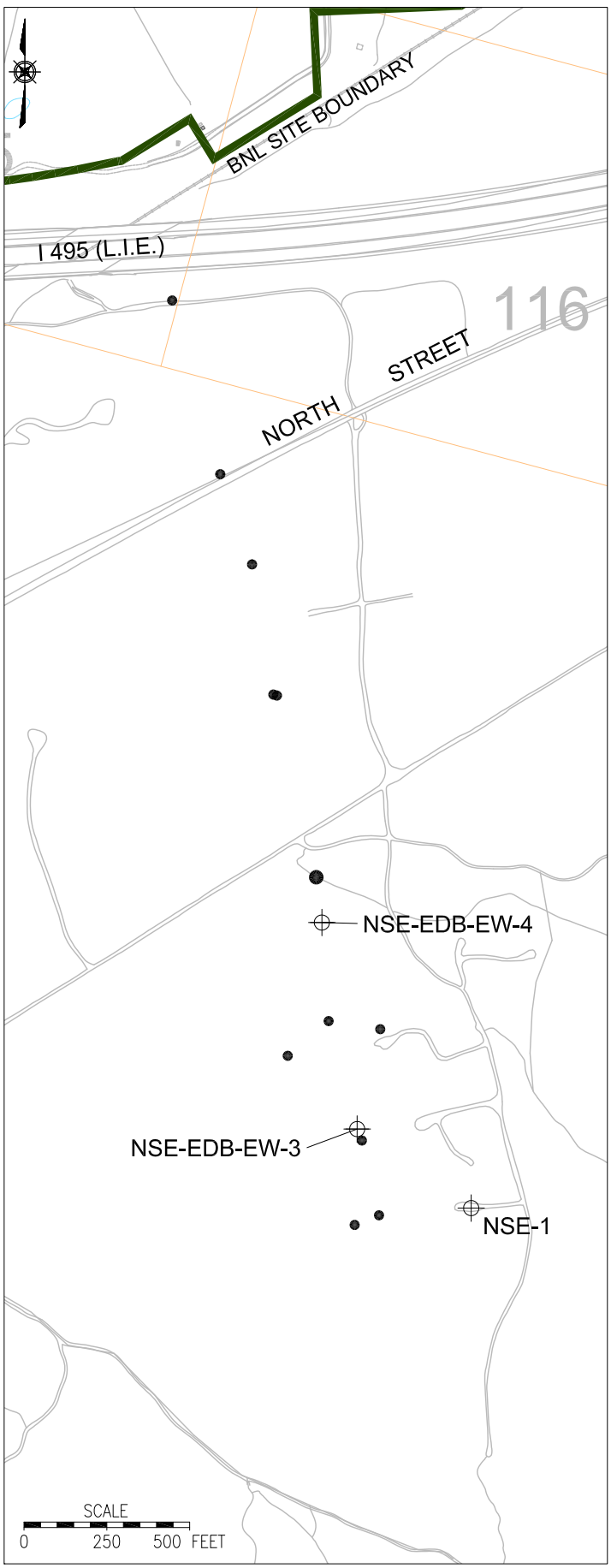


Figure 3.2.7-6
OU III North Street East Groundwater Remediation System
Cumulative VOC Mass Removed

2024 BNL Groundwater Status Report







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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

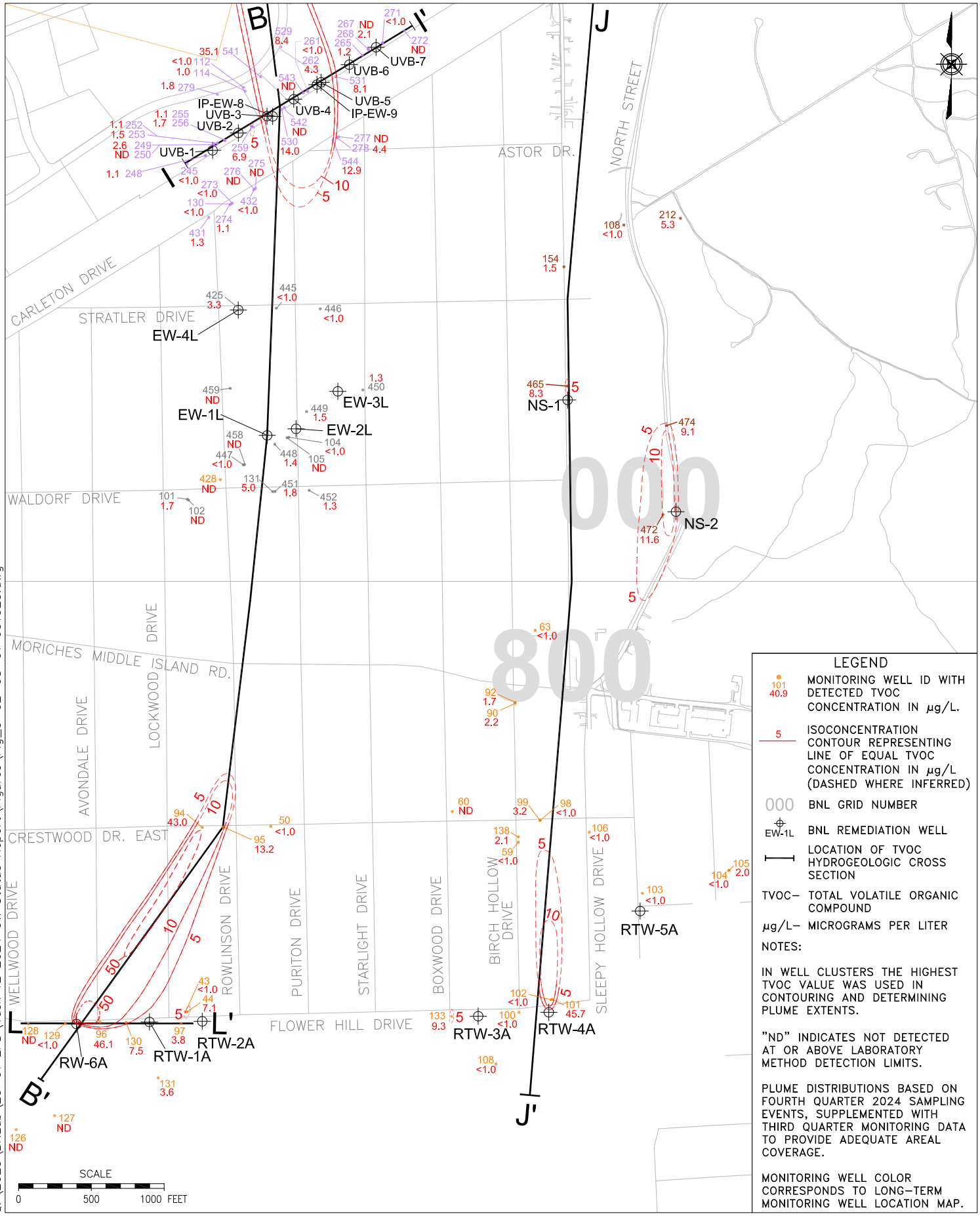
TITLE:

OU III NORTH STREET EAST
EDB PLUME COMPARISON
2019 – 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.7-7



LEGEND

- 101 / 40.9 — MONITORING WELL ID WITH DETECTED TVOC CONCENTRATION IN µg/L.
- 5 — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL TVOC CONCENTRATION IN µg/L (DASHED WHERE INFERRED)
- 000 — BNL GRID NUMBER
- EW-1L — BNL REMEDIATION WELL
- LOCATION OF TVOC HYDROGEOLOGIC CROSS SECTION
- TVOC– TOTAL VOLATILE ORGANIC COMPOUND
- µg/L– MICROGRAMS PER LITER

NOTES:

IN WELL CLUSTERS THE HIGHEST TVOC VALUE WAS USED IN CONTOURING AND DETERMINING PLUME EXTENTS.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

PLUME DISTRIBUTIONS BASED ON FOURTH QUARTER 2024 SAMPLING EVENTS, SUPPLEMENTED WITH THIRD QUARTER MONITORING DATA TO PROVIDE ADEQUATE AREAL COVERAGE.

MONITORING WELL COLOR CORRESPONDS TO LONG-TERM MONITORING WELL LOCATION MAP.

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ENVIRONMENTAL PROTECTION DIVISION

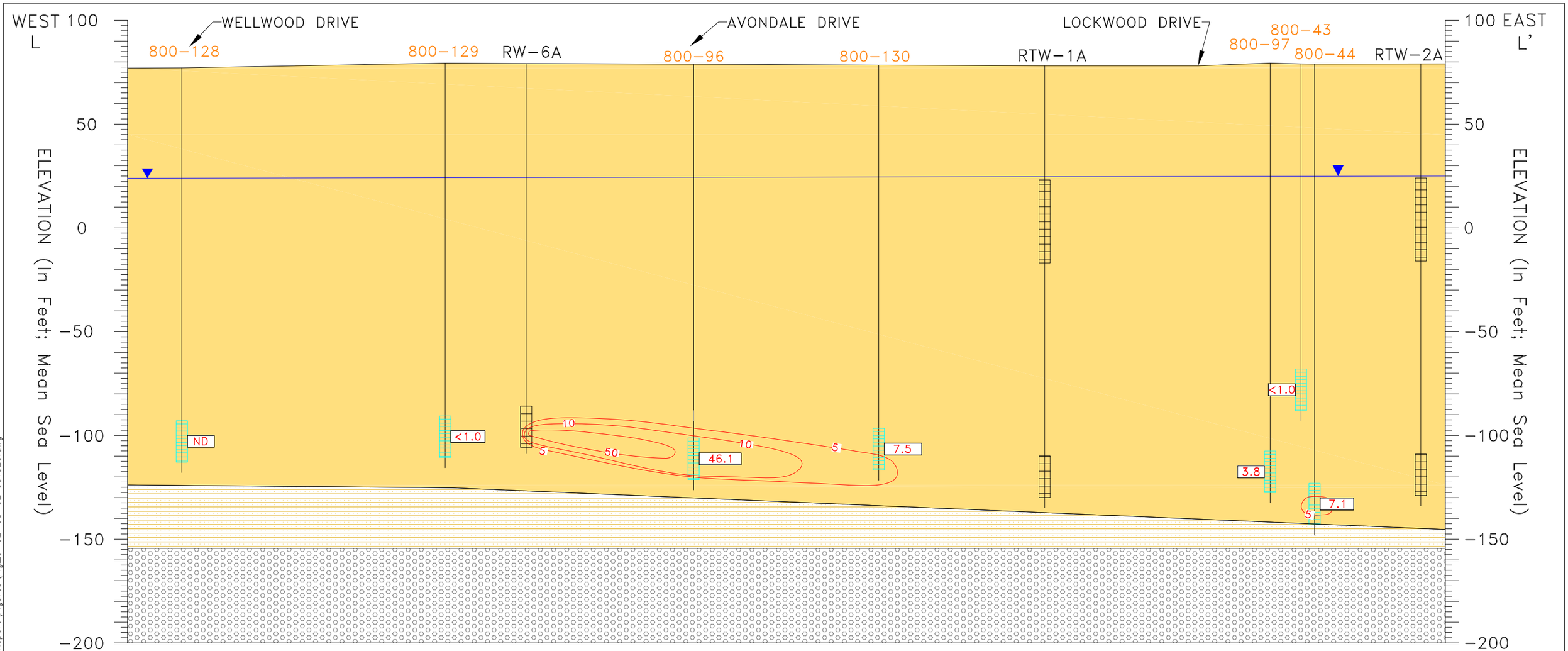
TITLE:

OU III LIPA/AIRPORT TVOC PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.8-1



LEGEND

Upper Glacial aquifer

UG Upper Glacial Sands

UC Upper Glacial Silts & Clays

Magothy aquifer

MA Magothy Sands and Clay

800-44 BNL Well ID

32.93 TVOC Concentration (µg/L)

50 TVOC Contour (µg/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

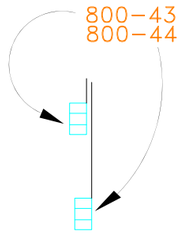
TVOC – Total Volatile Organic Compound

µg/L – Micrograms Per Liter

HORIZONTAL SCALE

0 50 100 FEET

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep



NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS 2006 AND 2007).

2) PLUME DISTRIBUTION IS BASED ON FOURTH QUARTER 2024 OU III SAMPLING EVENT.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM COLOR CODE.

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III AIRPORT WEST
TVOC HYDROGEOLOGIC CROSS SECTION (L–L')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	2:1	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.8-2

Q:\2023\BNLab\23-01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3-02-08-02 031325.dwg

Figure 3.2.8-3
OU III LIPA Groundwater Remediation System
Extraction Well TVOC Concentrations

2024 BNL Groundwater Status Report

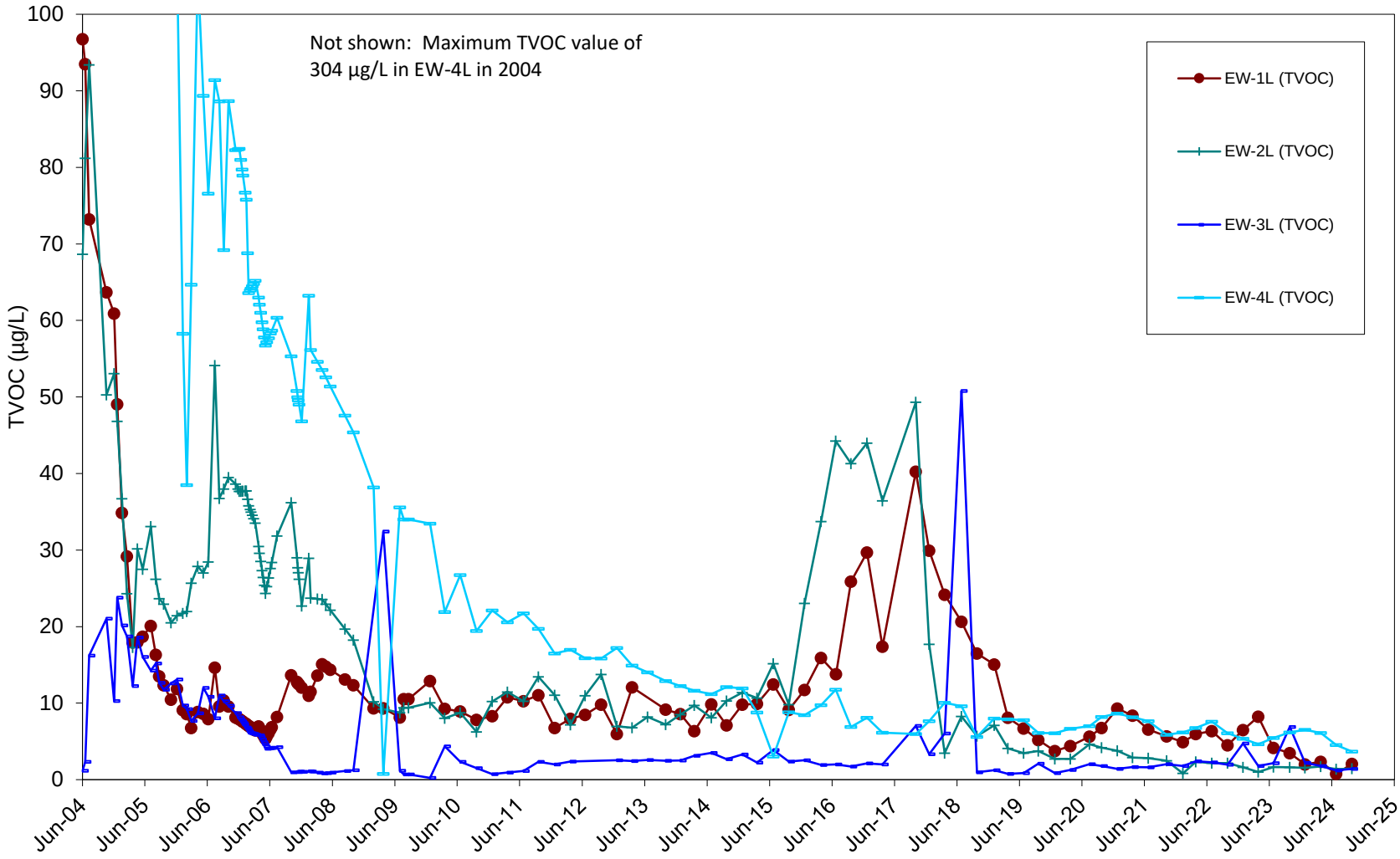


Figure 3.2.8-4
OU III Airport Groundwater Remediation System
Extraction Well TVOC Concentrations

2024 BNL Groundwater Status Report

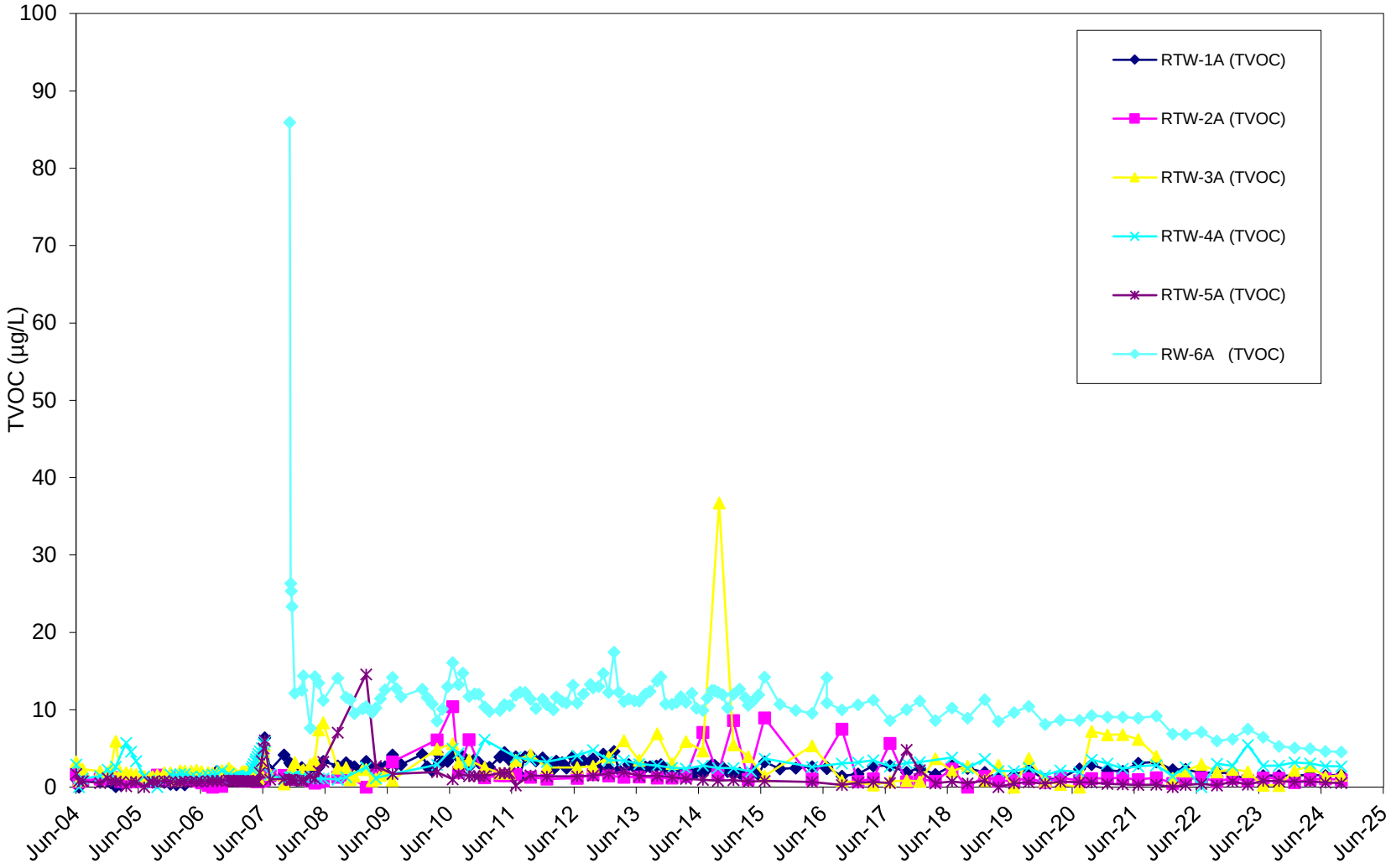
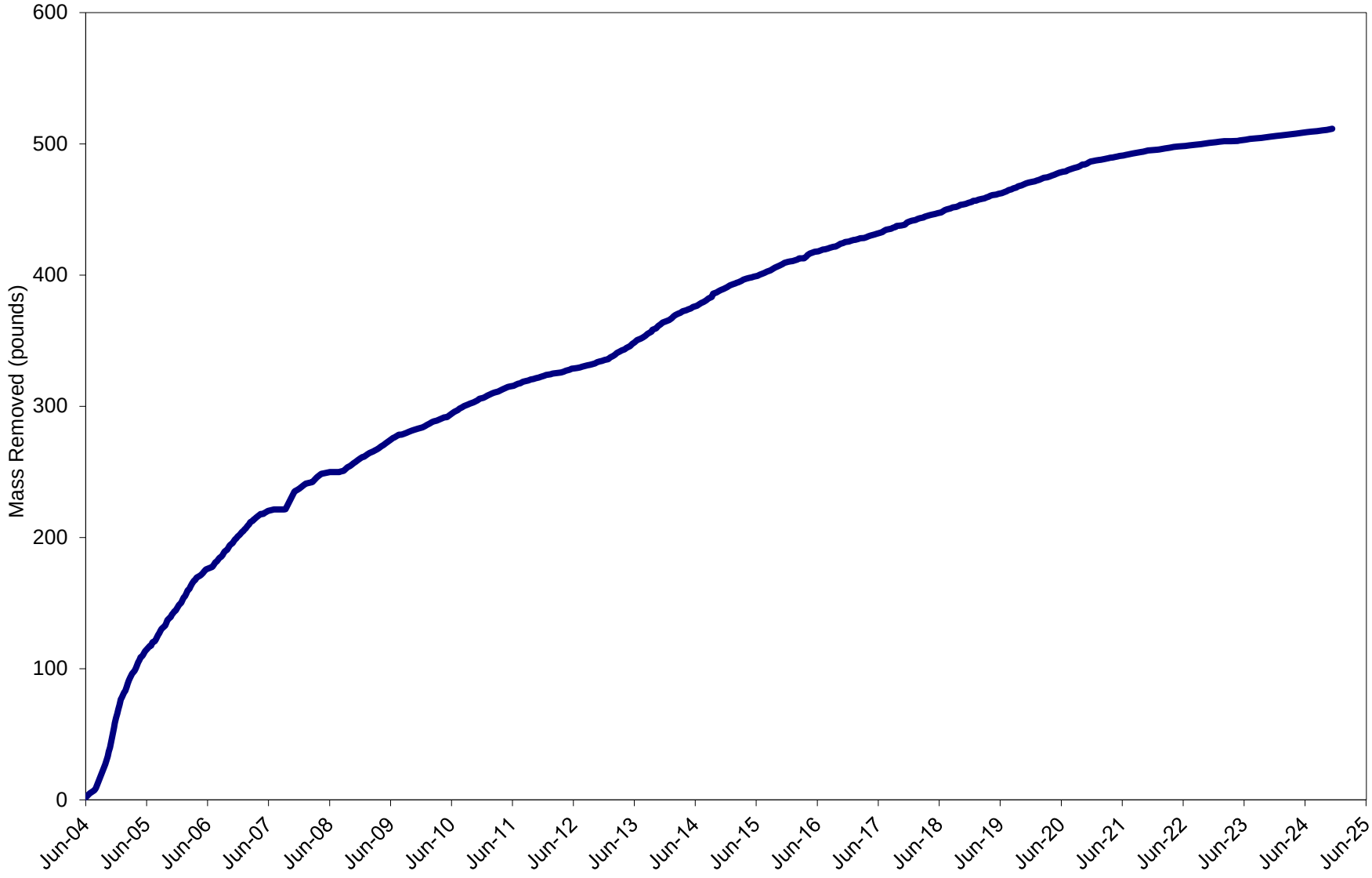
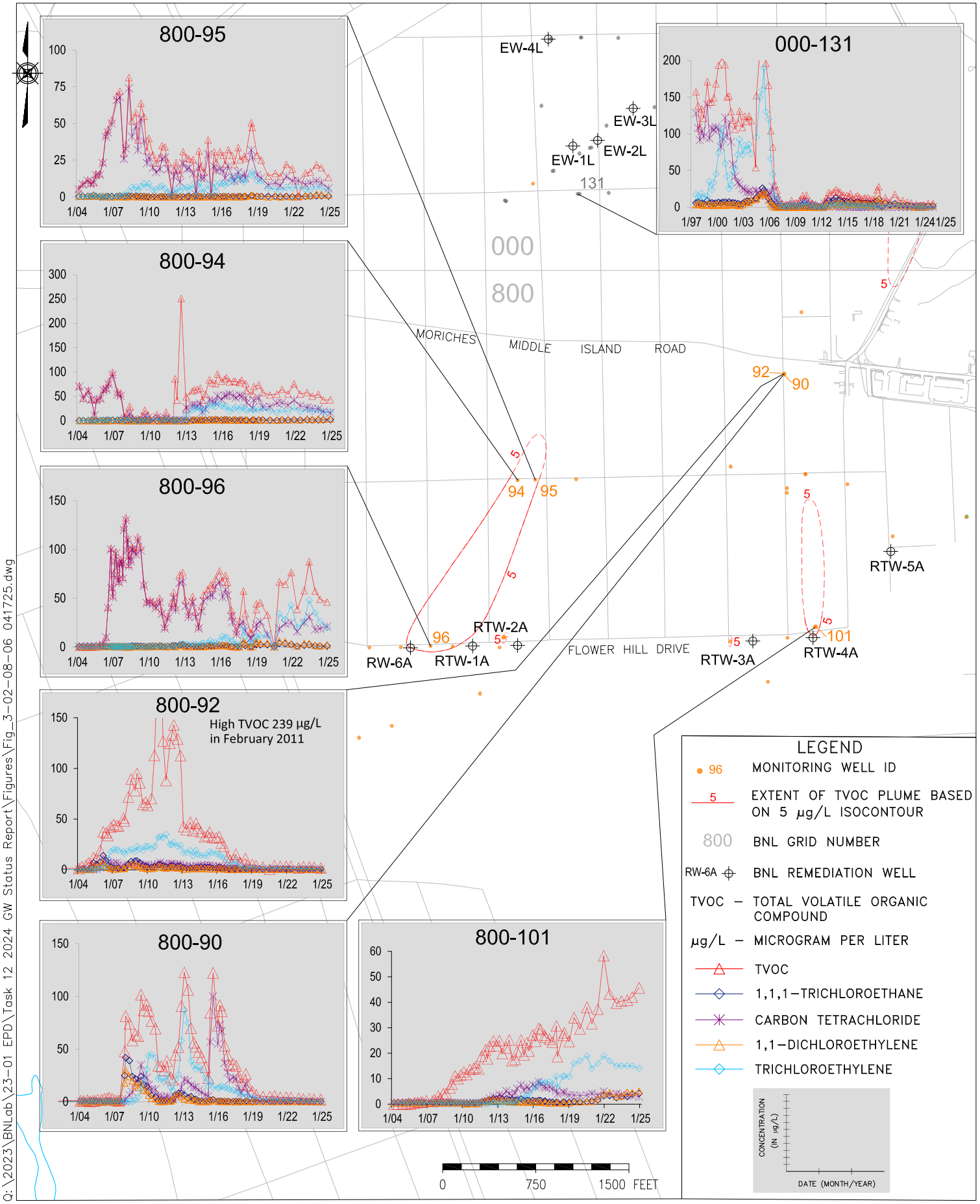


Figure 3.2.8-5
OU III LIPA/Airport Groundwater Remediation System
Cumulative VOC Mass Removed

2024 BNL Groundwater Status Report





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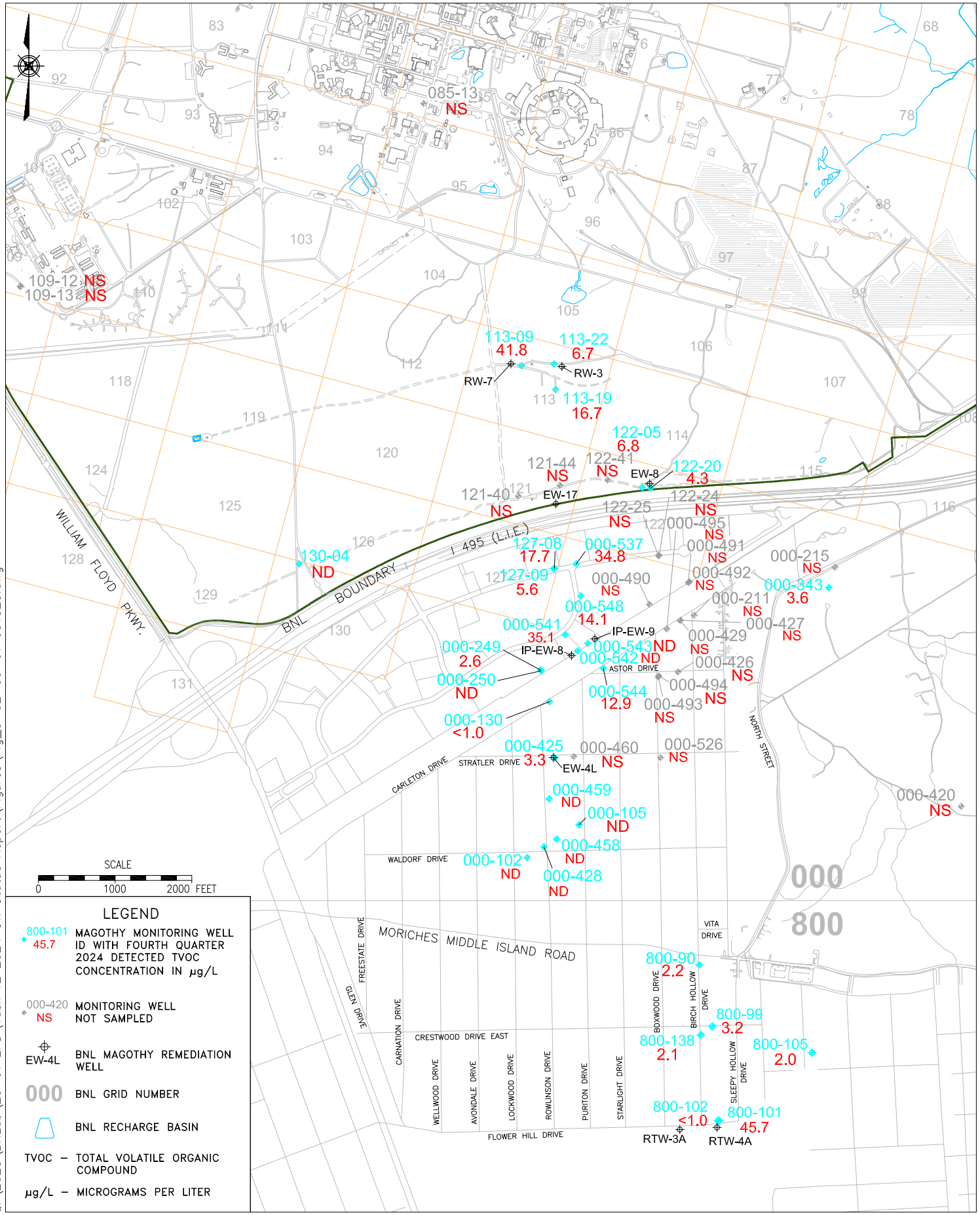
TITLE:

OU III LIPA/AIRPORT HISTORICAL VOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	04/17/25	–

FIGURE NO.: 3.2.8–6



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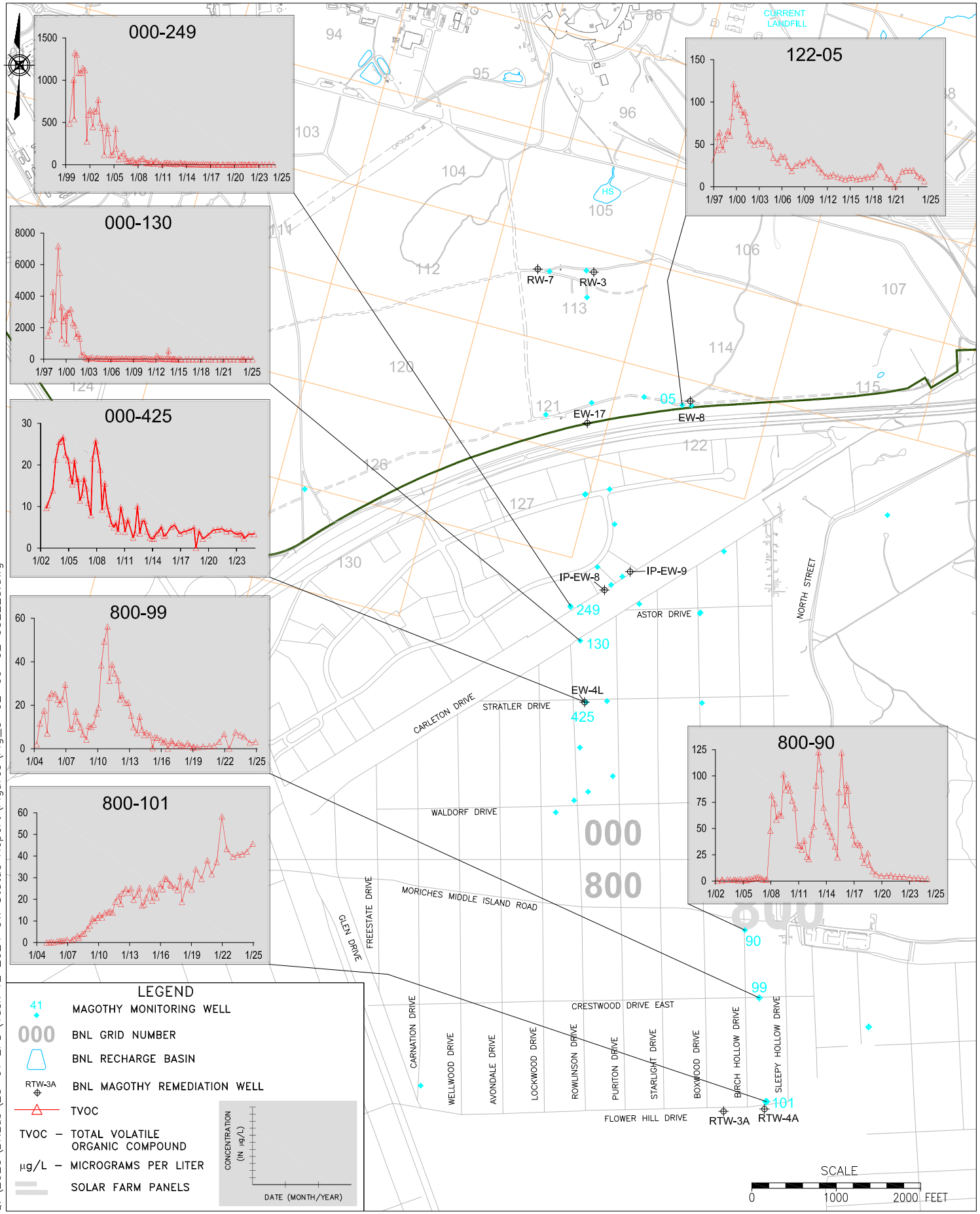
TITLE:

MAGOTHY WELL LOCATIONS AND TVOC RESULTS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.9-1



Q:\2023\BNLab\23-01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3-02-09-02 052225.dwg

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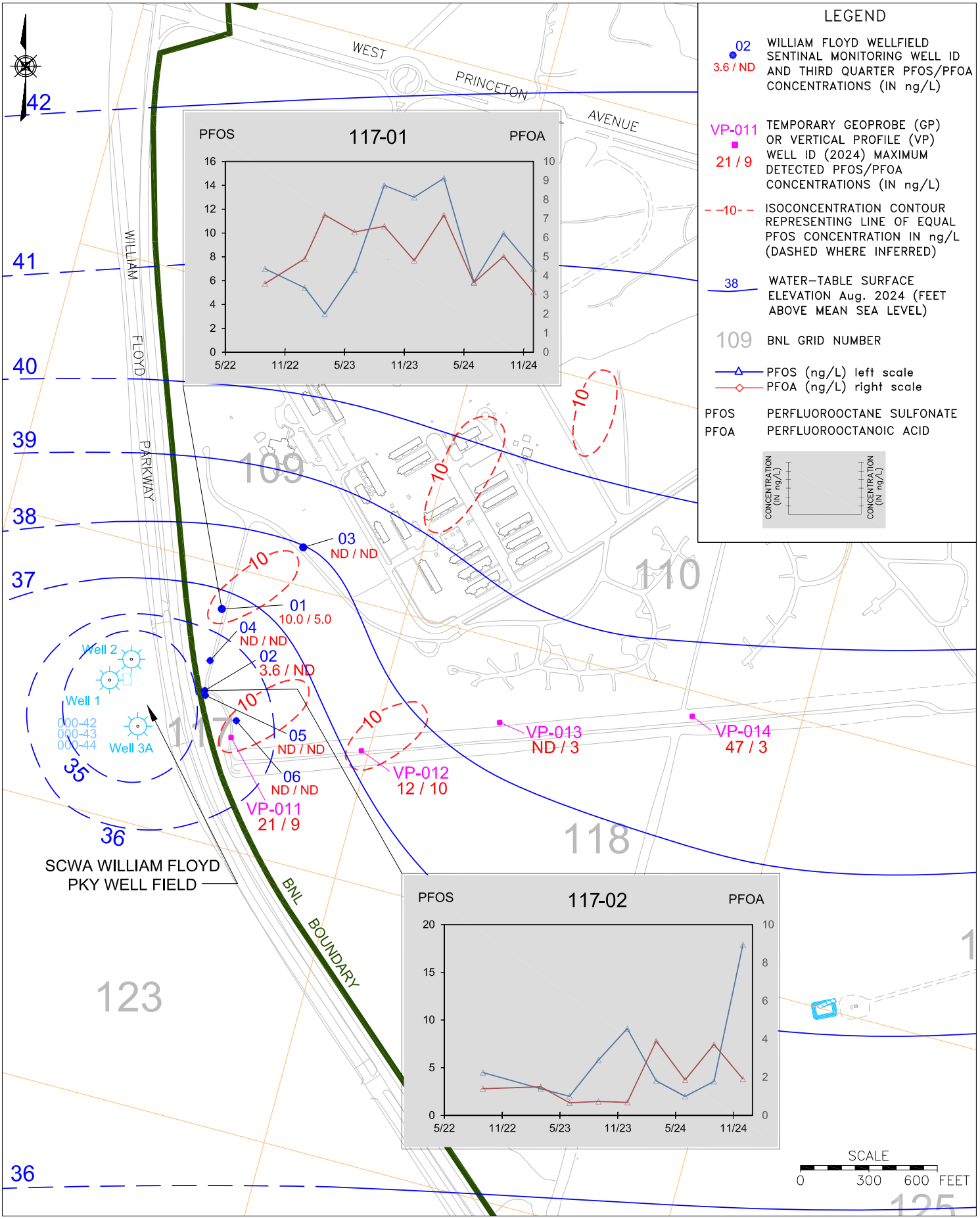
TITLE:

MAGOTHY HISTORICAL TVOC TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	05/22/25	–

FIGURE NO.: 3.2.9–2



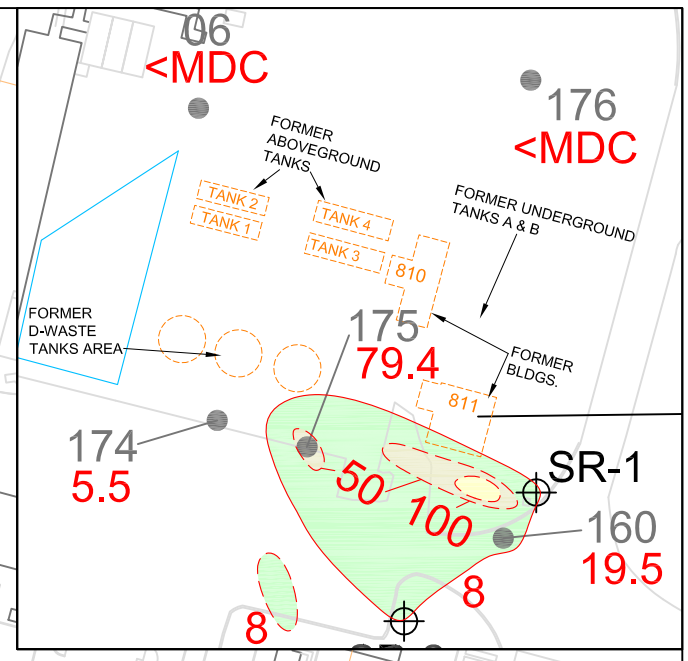
Q:\2023\BNLab\23-01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3-02-10-01 051325.dwg

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
WILLIAM FLOYD WELLFIELD
SENTINEL MONITORING
MONITORING WELL LOCATIONS
PFOS/PFOA DATA JULY 24–SEPT. 22 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/13/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	05/13/25	–

FIGURE NO.: 3.2.10-1



BGRR
REMEDIATION SYSTEM
DISCHARGE DRYWELLS

FORMER WASTE
CONCENTRATION
FACILITY

FORMER
PILE FAN SUMP
LOCATION

BELOW GROUND
DUCTS LOCATION

TO BLDG 855

LAWRENCE DR.
RUTHERFORD DR.
CORNELL AVENUE
PENNSYLVANIA STREET
TECHNOLOGY STREET
BROOKHAVEN AVENUE
RENAISSANCE ROAD
TEMPLE PLACE
BELL AVENUE
ROWLAND STREET
ROCHESTER STREET
GROVE

BGRR
Building 701
FORMER
CANAL
HOUSE
Building 801
HFBR
Building
725
CFN
Building 735
NSLS II

65
75
85
95

SR-1
SR-2
SR-3
SR-4
SR-5
SR-6
SR-7
SR-8
SR-9
FF-RW-A

O
O'
M
M'
N
N'

SCALE
0 150 300 FEET

LEGEND

- 325 / 31.2 — MONITORING WELL ID WITH DETECTED Sr-90 CONCENTRATION (IN pCi/L) FROM THIRD & FOURTH QUARTER 2024.
- SR-1 — EXTRACTION WELL ID
- 8 — ISOCONCENTRATION LINE REPRESENTING LINE OF EQUAL Sr-90 CONCENTRATION (IN pCi/L) (DASHED WHERE INFERRED)
- CROSS SECTION LINE
- ≥ 8–49 pCi/L Sr-90 CONCENTRATION
- ≥ 50–99 pCi/L Sr-90 CONCENTRATION
- ≥ 100–499 pCi/L Sr-90 CONCENTRATION
- BNL RECHARGE BASIN
- ENGINEERED CAP
- 75 — BNL GRID NUMBER

pCi/L – PICO CURIES PER LITER

HFBR – HIGH FLUX BEAM REACTOR

WCF – WASTE CONCENTRATION FACILITY

BGRR – BROOKHAVEN GRAPHITE RESEARCH REACTOR

NOTES:

"<MDC" INDICATES BELOW MINIMUM DETECTABLE CONCENTRATION.

"NS" INDICATES NOT SAMPLED.

CONTOUR INTERVAL AS SHOWN.

IN WELL CLUSTERS THE HIGHEST Sr-90 VALUE WAS USED IN CONTOURING AND DETERMINING PLUME EXTENTS.

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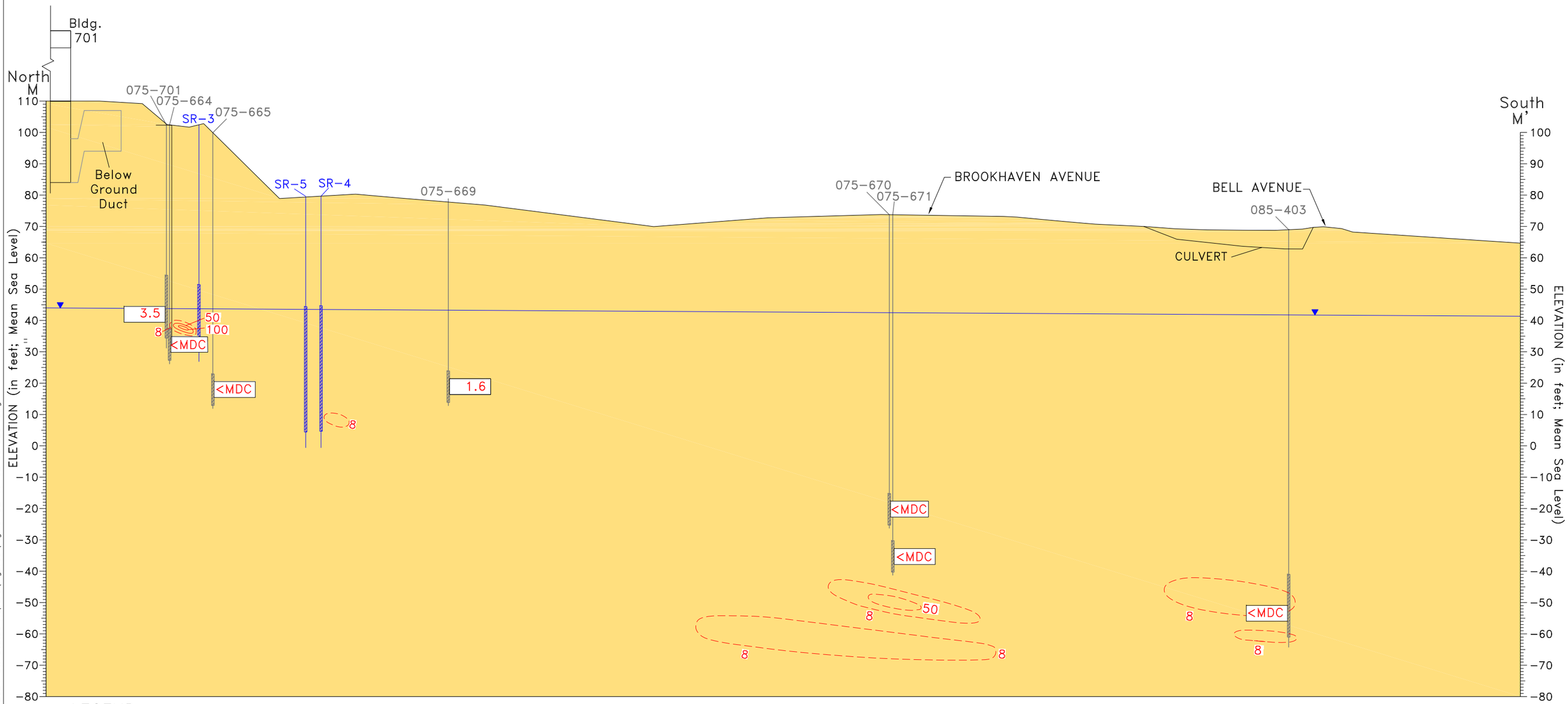
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BGRR/WCF
Sr-90 PLUME DISTRIBUTION
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/14/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.11–1



LEGEND

Upper Glacial aquifer

UG Upper Glacial Sands

8 Strontium-90 (Sr-90) Plume Contours

SR-3 Extraction Well

075-664 Monitoring Well

Well Screen Zone

3.5 Sr-90 results in pCi/L, obtained during 3rd & 4th quarter 2024.

"<MDC" indicates below minimum detectable concentration.

pCi/L - pico Curies per liter

Water Table As Of Aug 12 - Aug 20, 2024

HORIZONTAL SCALE

0 100 200 FEET

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

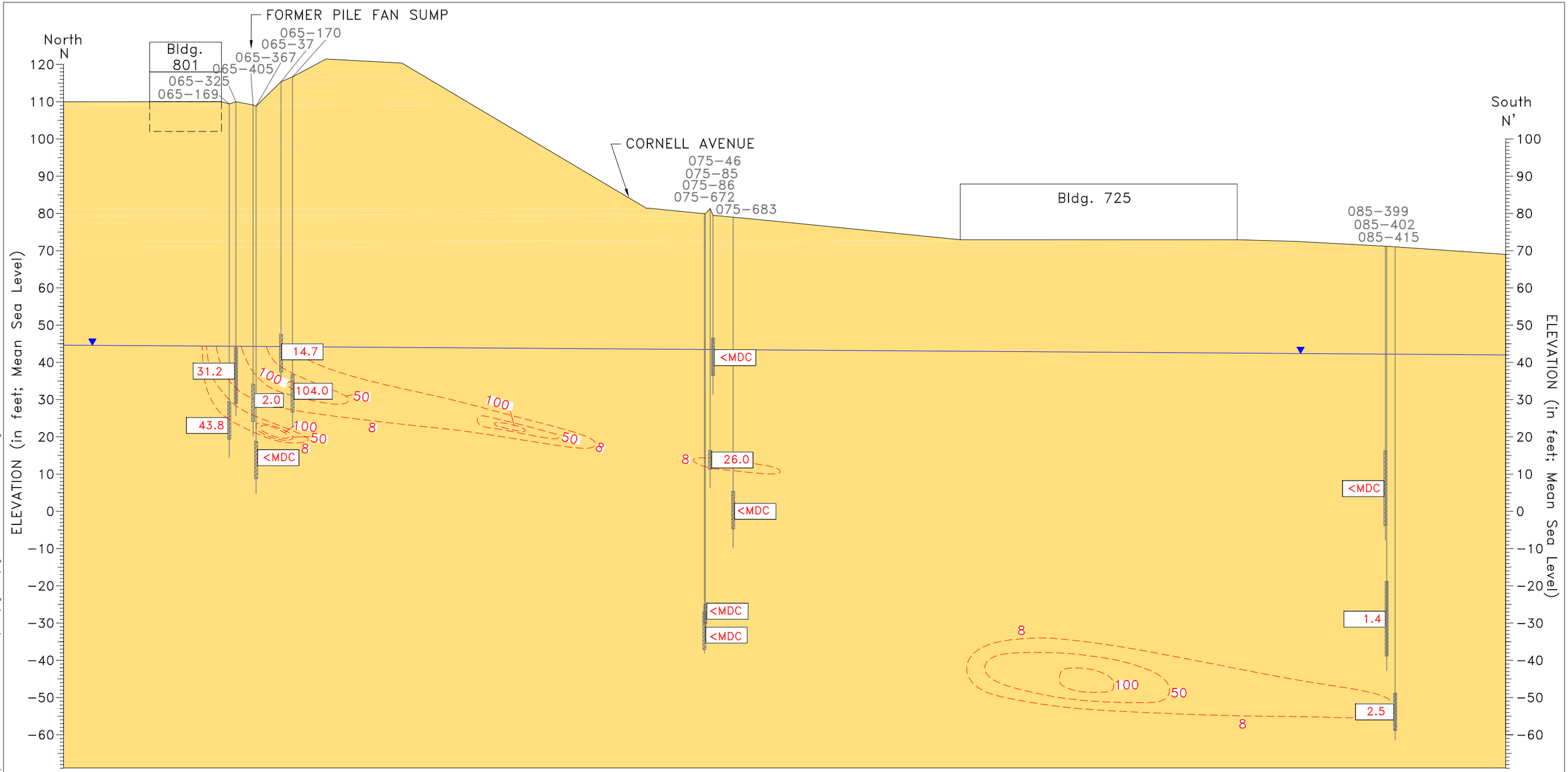
TITLE:

OU III BGRR/WCF
Sr-90 CROSS SECTION (M-M')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	5:1	03/14/25	-
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	05/13/25	-

FIGURE NO.: 3.2.11-2



LEGEND

Upper Glacial aquifer

UG Upper Glacial Sands

8 Strontium–90 (Sr–90) Plume Contours

065–169 Monitoring Well

Well Screen Zone

43.8 Sr–90 results in pCi/L, obtained during 3rd & 4th quarter 2024.

"<MDC" indicates below minimum detectable concentration.

pCi/L – pico Curies per liter

Water Table As Of Aug 12 – Aug 20, 2024

HORIZONTAL SCALE

0 100 200 FEET

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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BGRR/WCF
Sr–90 CROSS SECTION (N–N')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	5:1	03/14/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.2.11–3

North
0

South
0'

ELEVATION (in feet; Mean Sea Level)

120 110 100 90 80 70 60 50 40 30 20 10 0 −10 −20 −30 −40 −50 −60 −70

Former WCF
Sump
Concrete Pad
065−175
065−04
SR−2
065−362
065−360
065−361
065−178
RUTHERFORD DR.
065−38
065−39
CORNELL AVE.
TEMPLE PL.
BROOKHAVEN AVE.
FF-RW-A

79.4
50
8
NS
<MDC
<MDC
<MDC
<MDC
<MDC
6.3
8
8
50
50
8
8

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LEGEND

Upper Glacial aquifer

UG Upper Glacial Sands

8 Strontium−90 (Sr−90) Plume Contours (Dashed where inferred)

SR−2 Sr−90 Plume Extraction Well

FF-RW-A PFAS Plume Extraction Well

065−175 Monitoring Well

Well Screen Zone

79.4 Sr−90 results in pCi/L, obtained during 3rd & 4th quarter 2024.

"<MDC" indicates below minimum detectable concentration.

"NS" indicates not sampled.

pCi/L − pico Curies per liter

Water Table As Of Aug 12 − Aug 20, 2024

HORIZONTAL SCALE

0 100 200 FEET

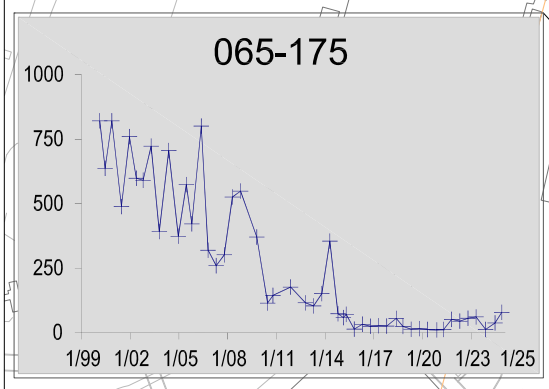
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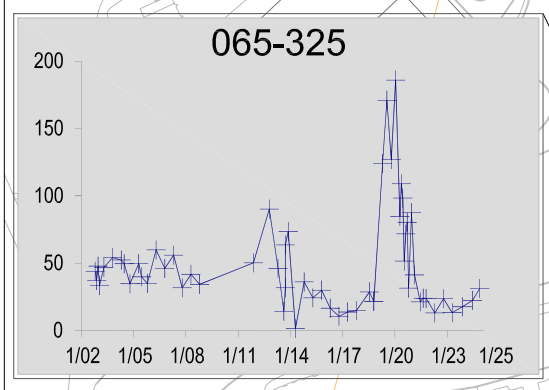
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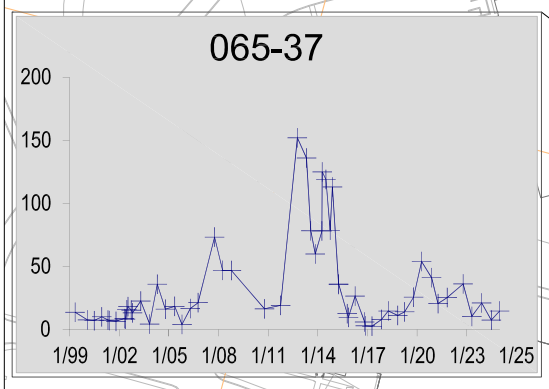
OU III BGRR/WCF
Sr−90 CROSS SECTION (O−O')
2024 BNL GROUNDWATER STATUS REPORT

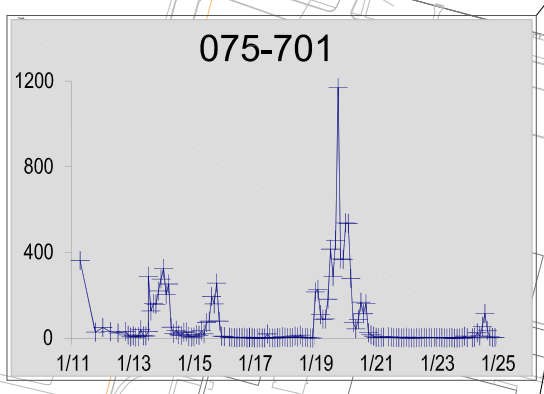
DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	5:1	03/14/25	−
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	−	−

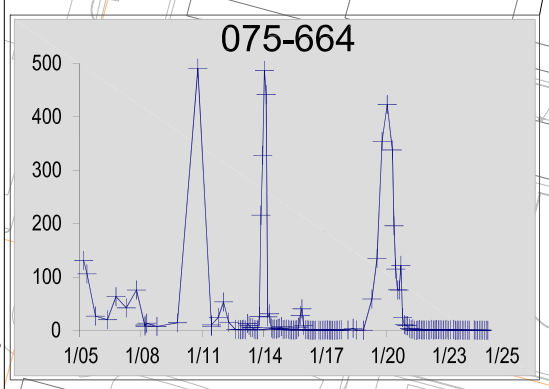
FIGURE NO.: 3.2.11−4

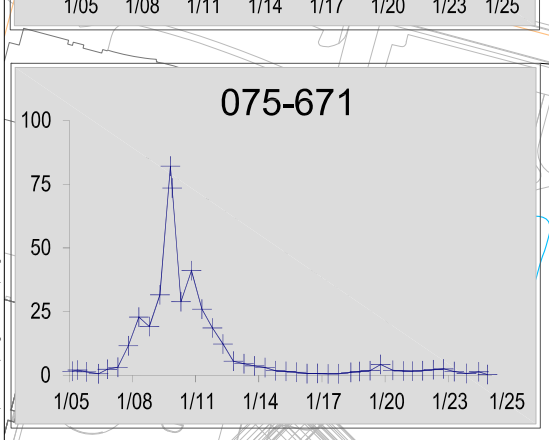


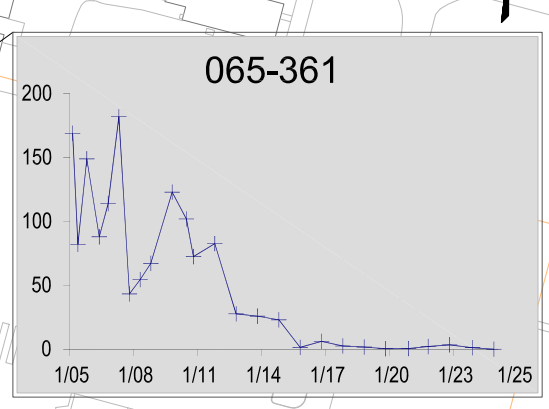


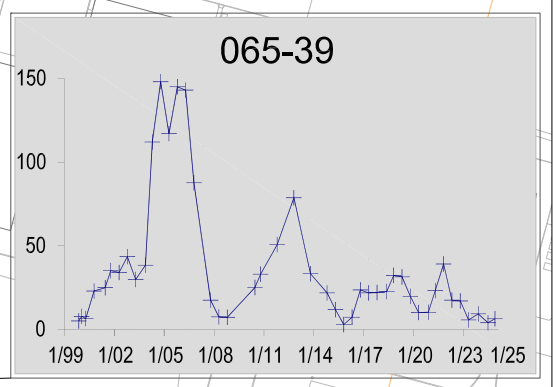


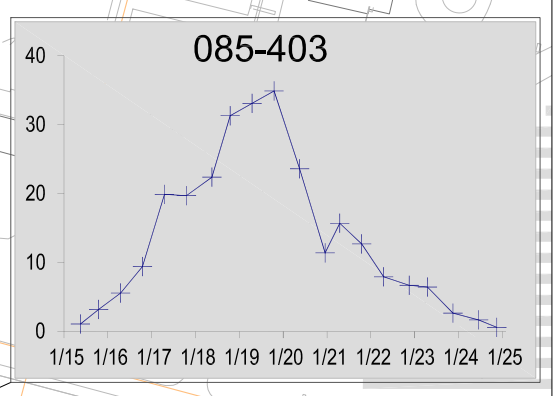












HENRY ST.

WASTE CONCENTRATION FACILITY

175 SR-1 SR-2

361

BGRR

325 37

39

65

701 664 SR-3

SR-6

HFBR

SR-5 SR-4

SR-7 SR-8 SR-9

CORNELL AVENUE

669

TEMPLE STREET

75

TECHNOLOGY

671

BROOKHAVEN AVENUE

85

403

ROCHESTER ROWLAND STREET

SCALE 0 200 400 FEET

LEGEND

- 175 MONITORING WELL ID
- 8 EXTENT OF Sr-90 PLUME BASED ON 8 pCi/L ISOCONTOUR (DASHED WHERE INFERRED)
- 75 BNL GRID NUMBER
- pCi/L- PICOCURIES PER LITER
- WCF- WASTE CONCENTRATION FACILITY
- BGRR- BROOKHAVEN GRAPHITE RESEARCH REACTOR
- -+- STRONTIUM-90 (Sr-90) (pCi/L)

CONCENTRATION (IN pCi/L) vs TIME (MONTH/YEAR)

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BGRR/WCF HISTORICAL Sr-90 TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/14/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	04/17/25	–

FIGURE NO.: 3.2.11-5

Figure 3.2.11-6
OU III BGRR/WCF Monitoring Well 075-701
Sr-90 Concentration Comparison to Water Table Elevation

2024 BNL Groundwater Status Report

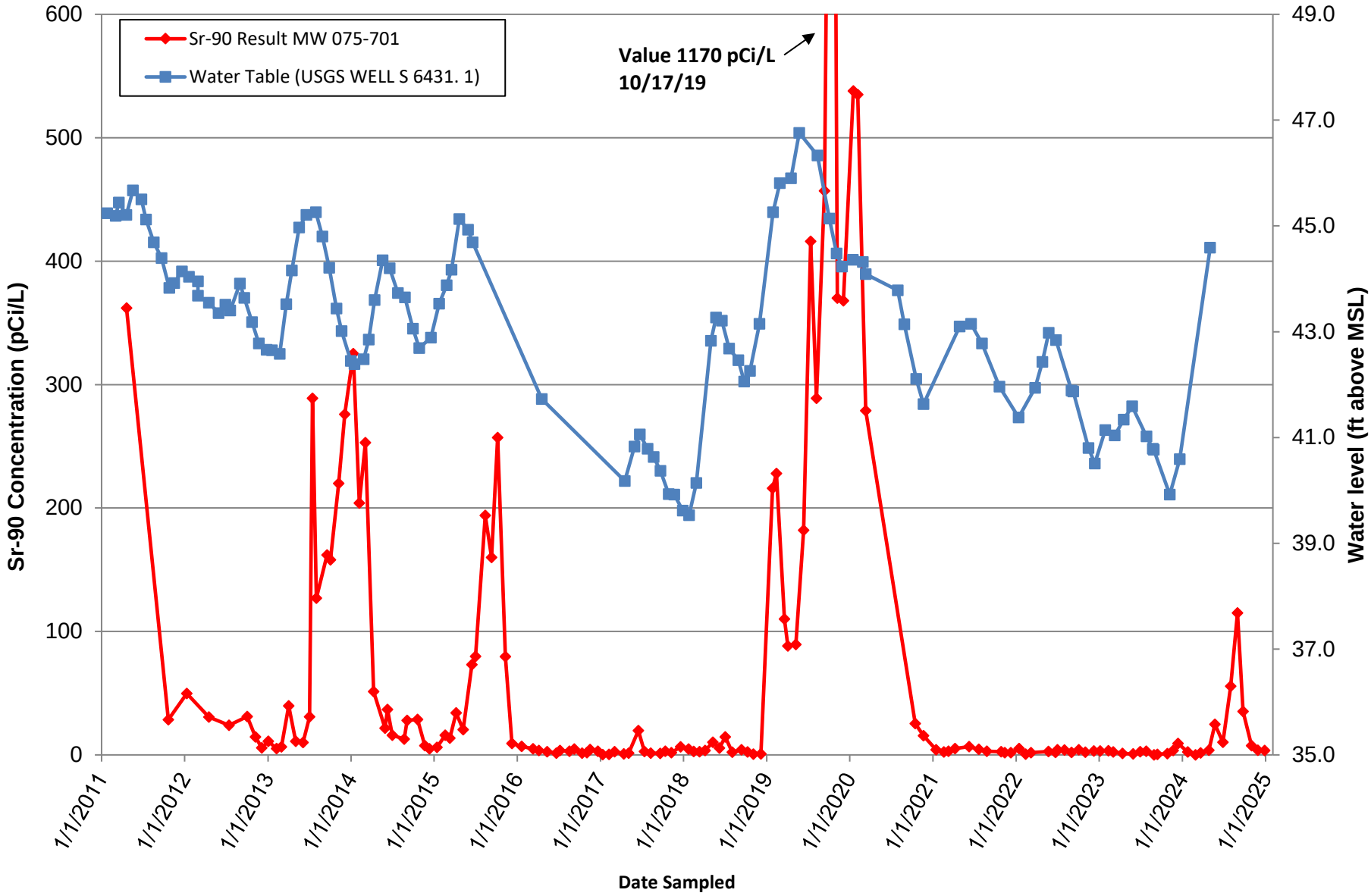


Figure 3.2.11-7
OU III BGRR/WCF
Sr-90 Cumulative
MilliCuries Removed

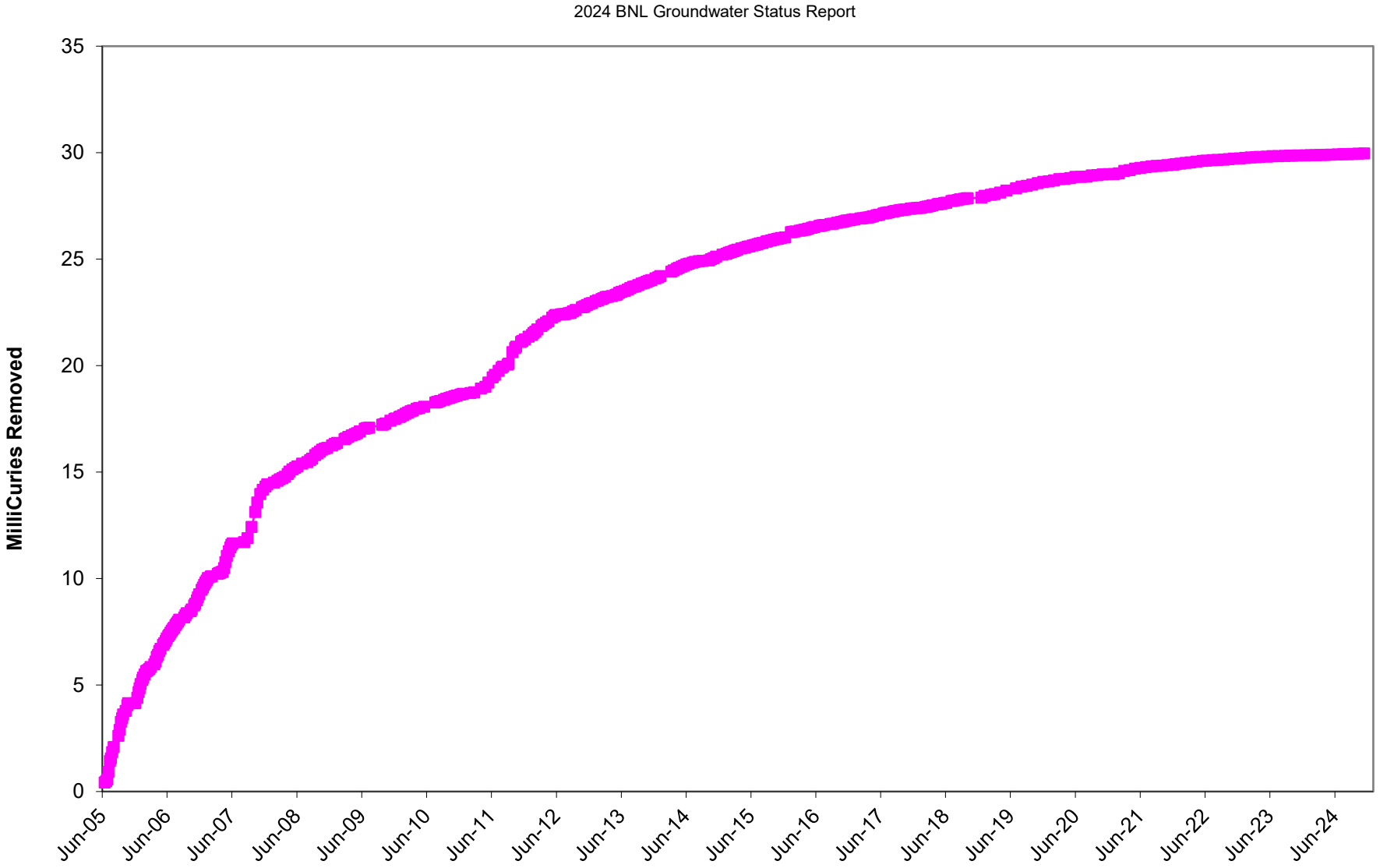


Figure 3.2.11-8
OU III BGRR/WCF
Sr-90 Influent Concentrations For Extraction Wells

2024 BNL Groundwater Status Report

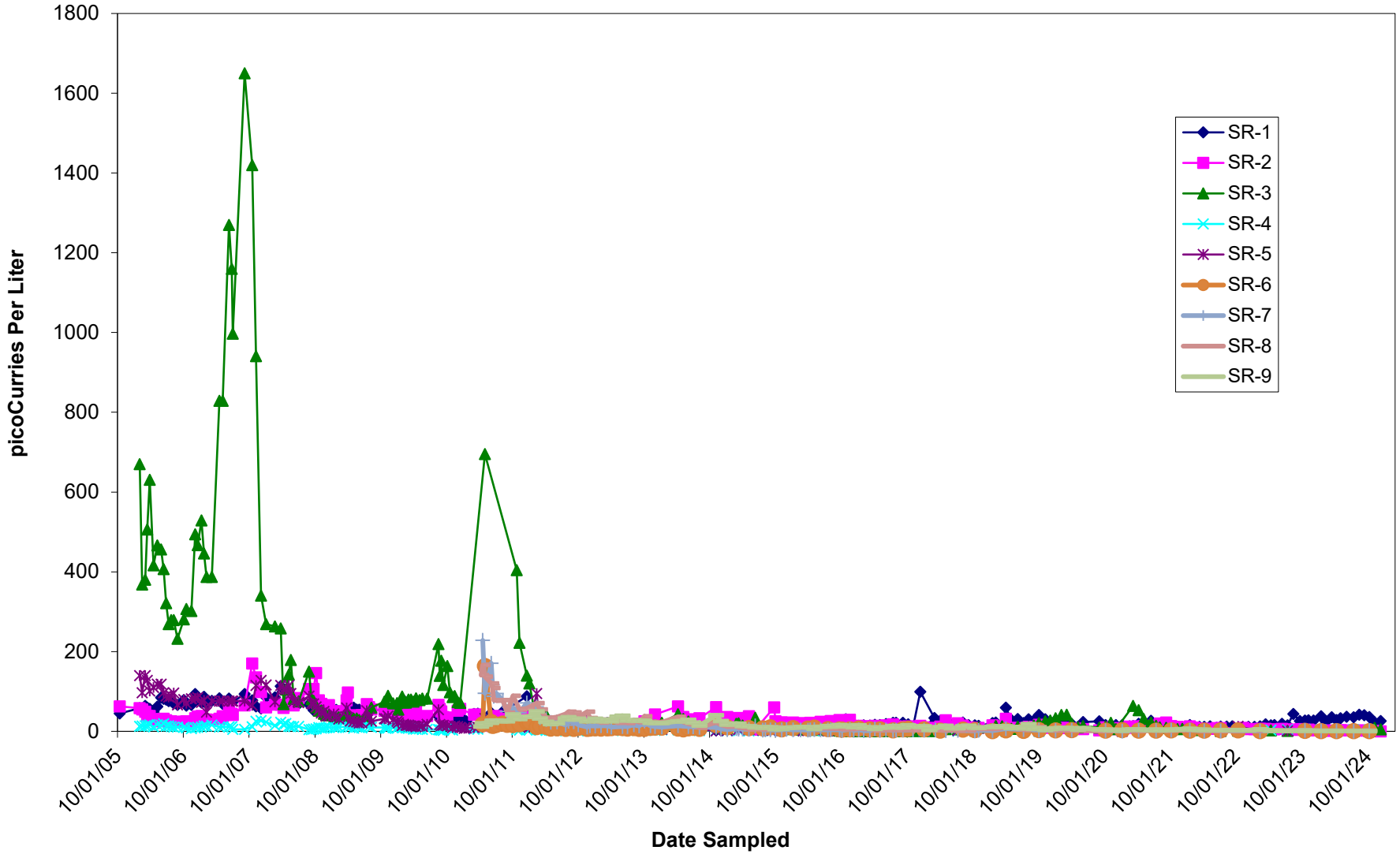
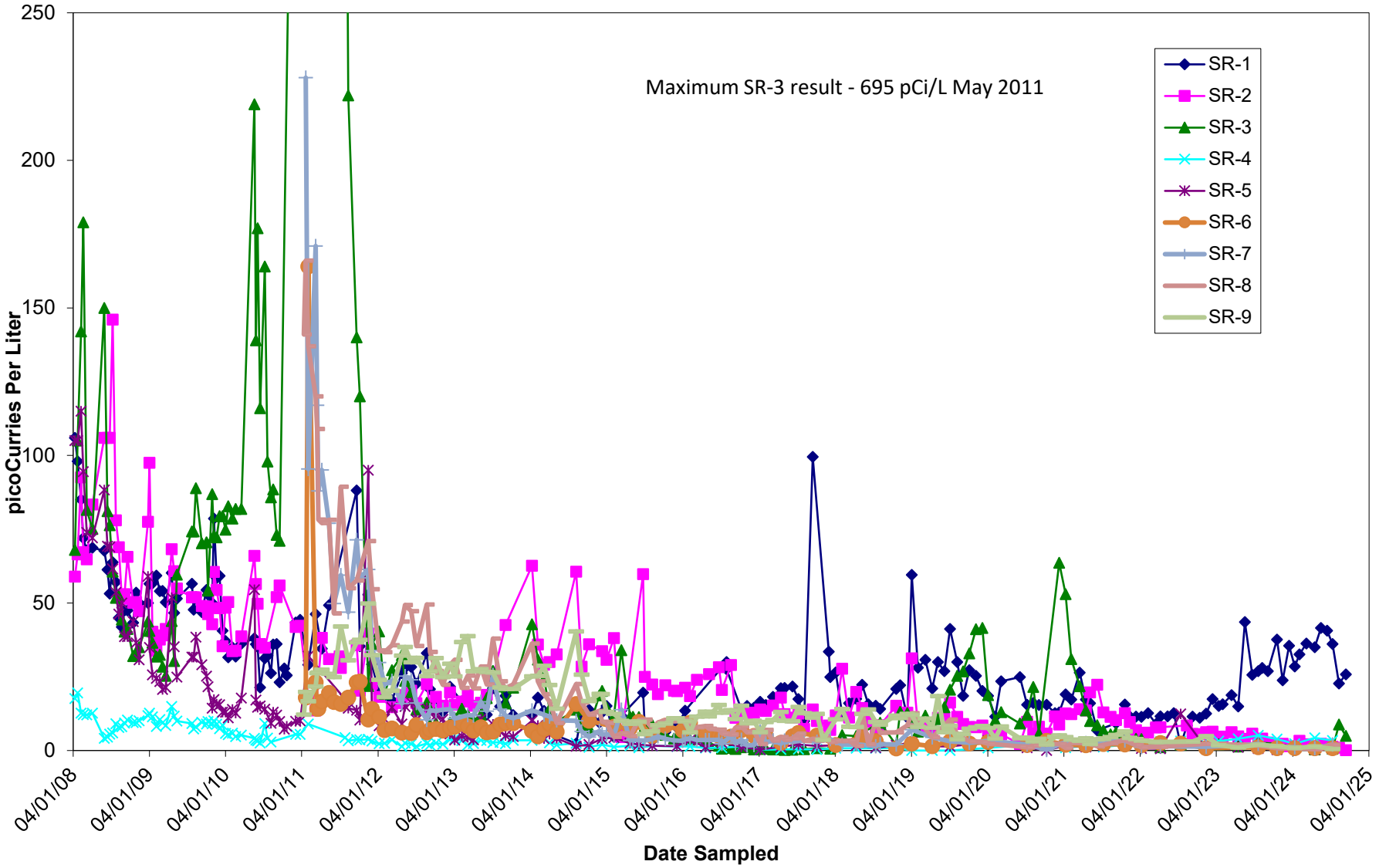


Figure 3.2.11-9
OU III BGRR/WCF
Sr-90 Influent Concentrations From April 2008 to Present



2004

2008

2024

FORMER D-WASTE TANK AREA
WASTE CONCENTRATION FACILITY
SR-1
SR-2
FORMER PILE FAN SUMP LOCATION
Building 801
BGRR
Building 701
FORMER CANAL HOUSE
BELOW GROUND DUCTS LOCATION
SR-3
SR-4
SR-5
SR-6
SR-7
SR-8
SR-9
HFBR
LIGHT SOURCE
Building 725
CFN
Building 735
HENRY ST.
LAWRENCE DR.
RUTHERFORD DR.
CORNELL AVENUE
PENNSYLVANIA STREET
RAILROAD STREET
TEMPLE PLACE
TECHNOLOGY STREET
BROOKHAVEN AVENUE
GROVE STREET
BELL AVENUE
ROWLAND STREET
65
75
85

LEGEND

- TEMPORARY WELL
- MONITORING WELL
- SR-1 GW EXTRACTION WELL
- BGRR– BROOKHAVEN GRAPHITE RESEARCH REACTOR
- HFBR– HIGH FLUX BEAM REACTOR
- pCi/L– PICO CURIES PER LITER
- ≥ 8–49 pCi/L Sr–90 CONCENTRATION
- ≥ 50–99 pCi/L Sr–90 CONCENTRATION
- ≥ 100–499 pCi/L Sr–90 CONCENTRATION
- ≥ 500 – pCi/L Sr–90 CONCENTRATION

SCALE
0 300 600 FEET

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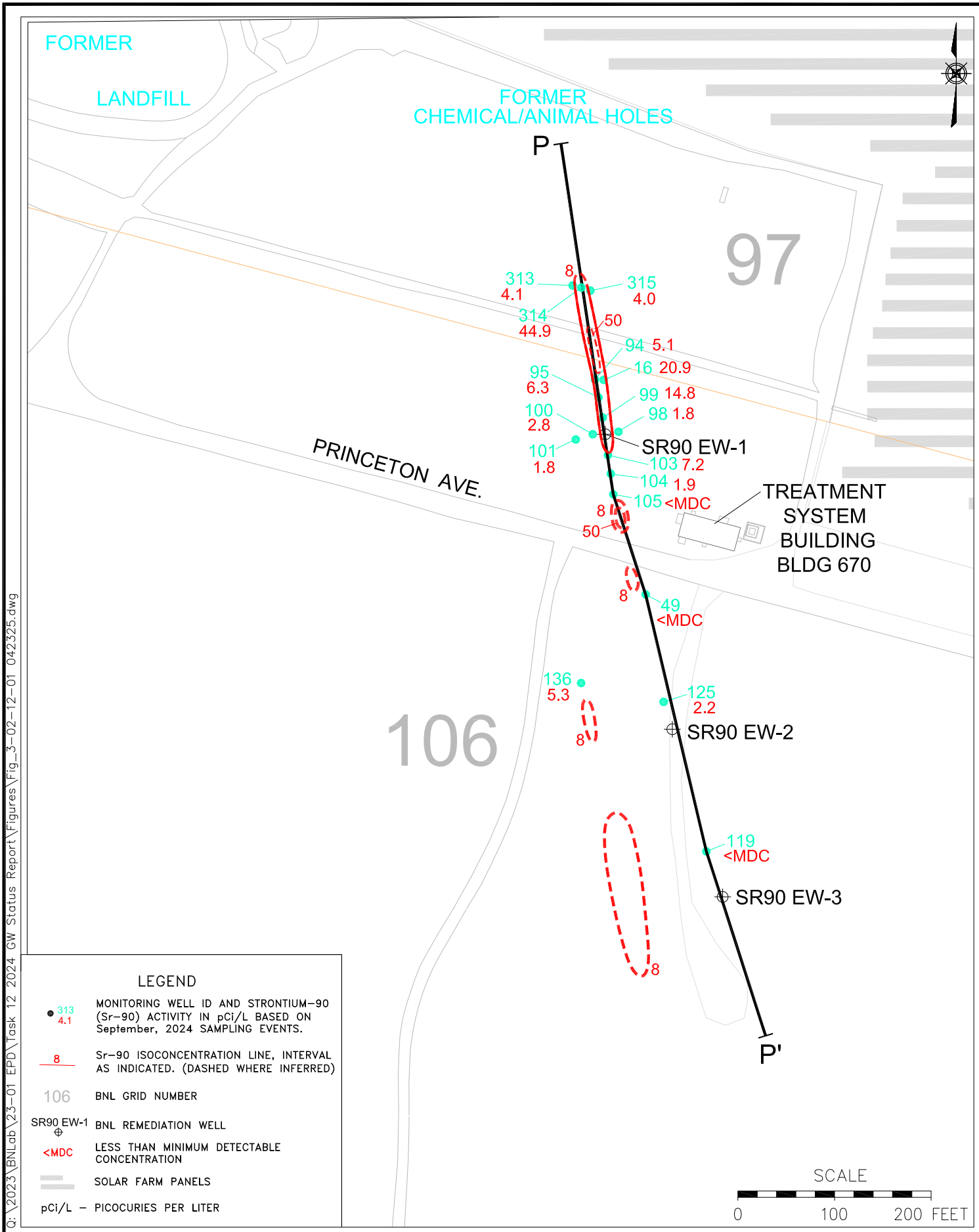
TITLE:

OU III BGRR/WCF
Sr–90 PLUME COMPARISON 2004 – 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/14/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	04/17/25	–

FIGURE NO.: 3.2.11–10



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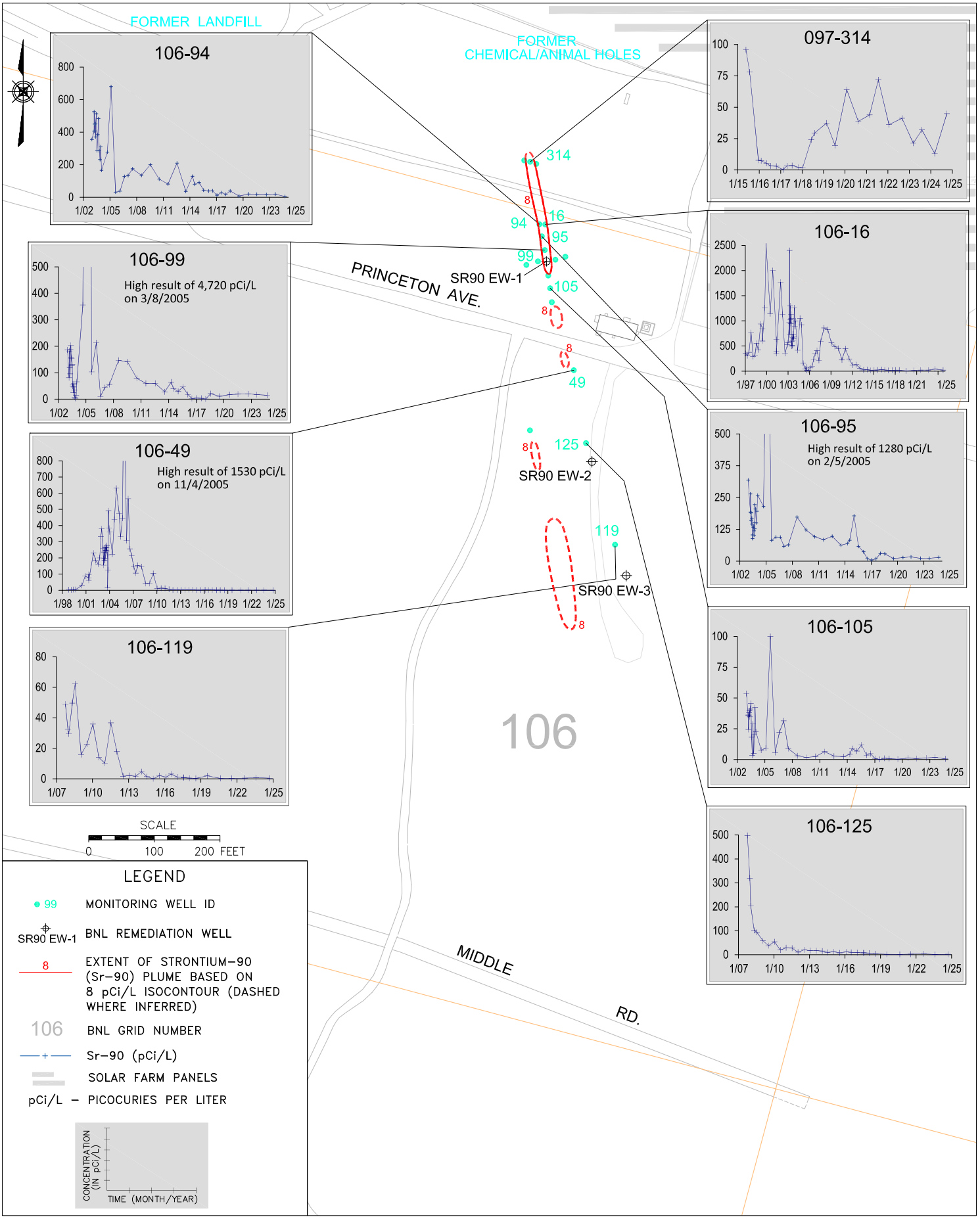
TITLE:

OU III CHEMICAL/ANIMAL HOLES Sr-90 PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/17/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/23/25	–

FIGURE NO.: 3.2.12-1



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

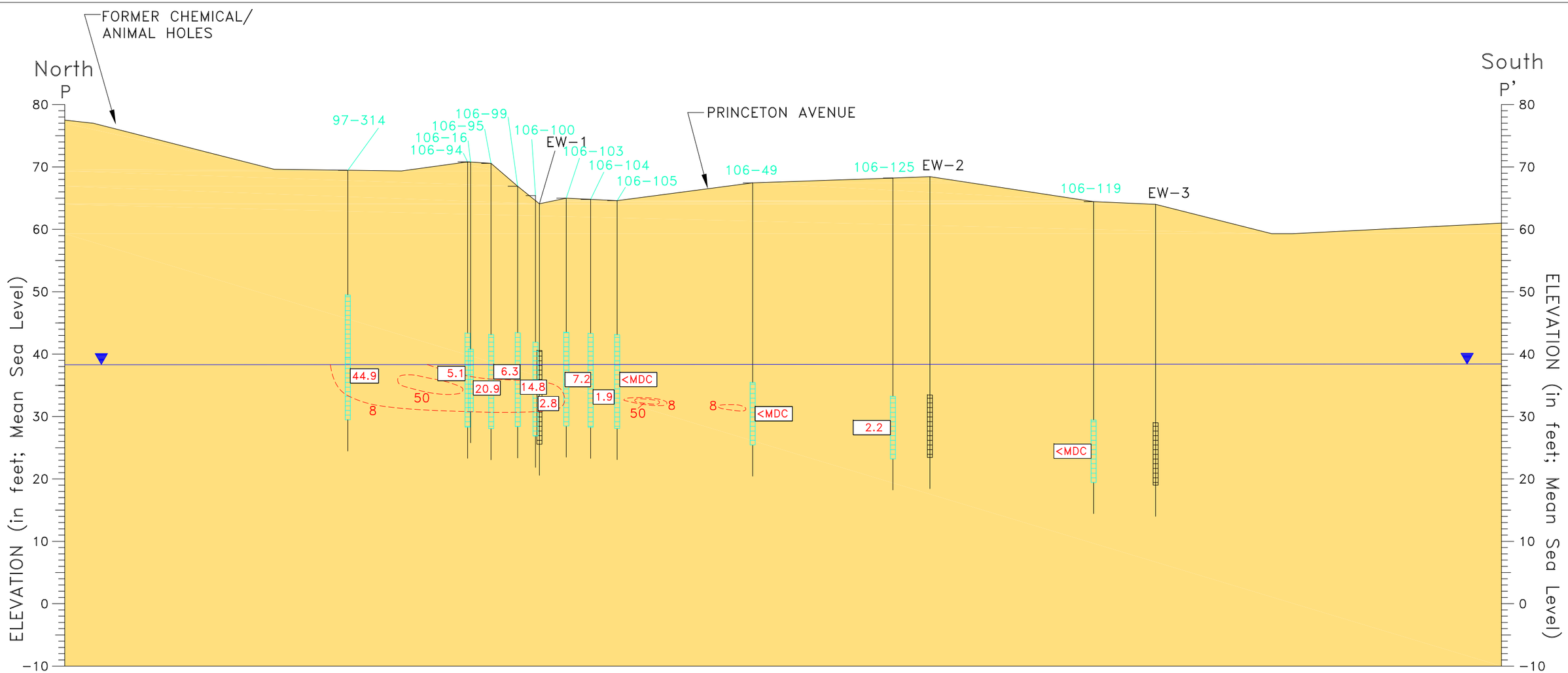
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OU III CHEMICAL/ANIMAL HOLES HISTORICAL Sr-90 TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/17/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	05/13/25	–

FIGURE NO.: 3.2.12-2



LEGEND

Upper Glacial aquifer

UG Upper Glacial Sands

20.9 — Sr-90 results in pCi/L, obtained during SEPTEMBER 2024 sampling events.

"<MDC" indicates below minimum detectable concentration.

8 — Strontium-90 (Sr-90) Plume Contours

106-94 — Monitoring Well

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 - Aug 20, 2024

pCi/L - pico Curies per liter

HORIZONTAL SCALE

0 50 100 FEET

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TITLE:

OU III CHEMICAL/ANIMAL HOLES
Sr-90 HYDROGEOLOGIC CROSS SECTION (P-P')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	5:1	03/17/25	-
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/23/25	-

FIGURE NO.: 3.2.12-3

Figure 3.2.12-4
OU III Chemical/Animal Holes
Sr-90 Extraction Well Concentrations

2024 BNL Groundwater Status Report

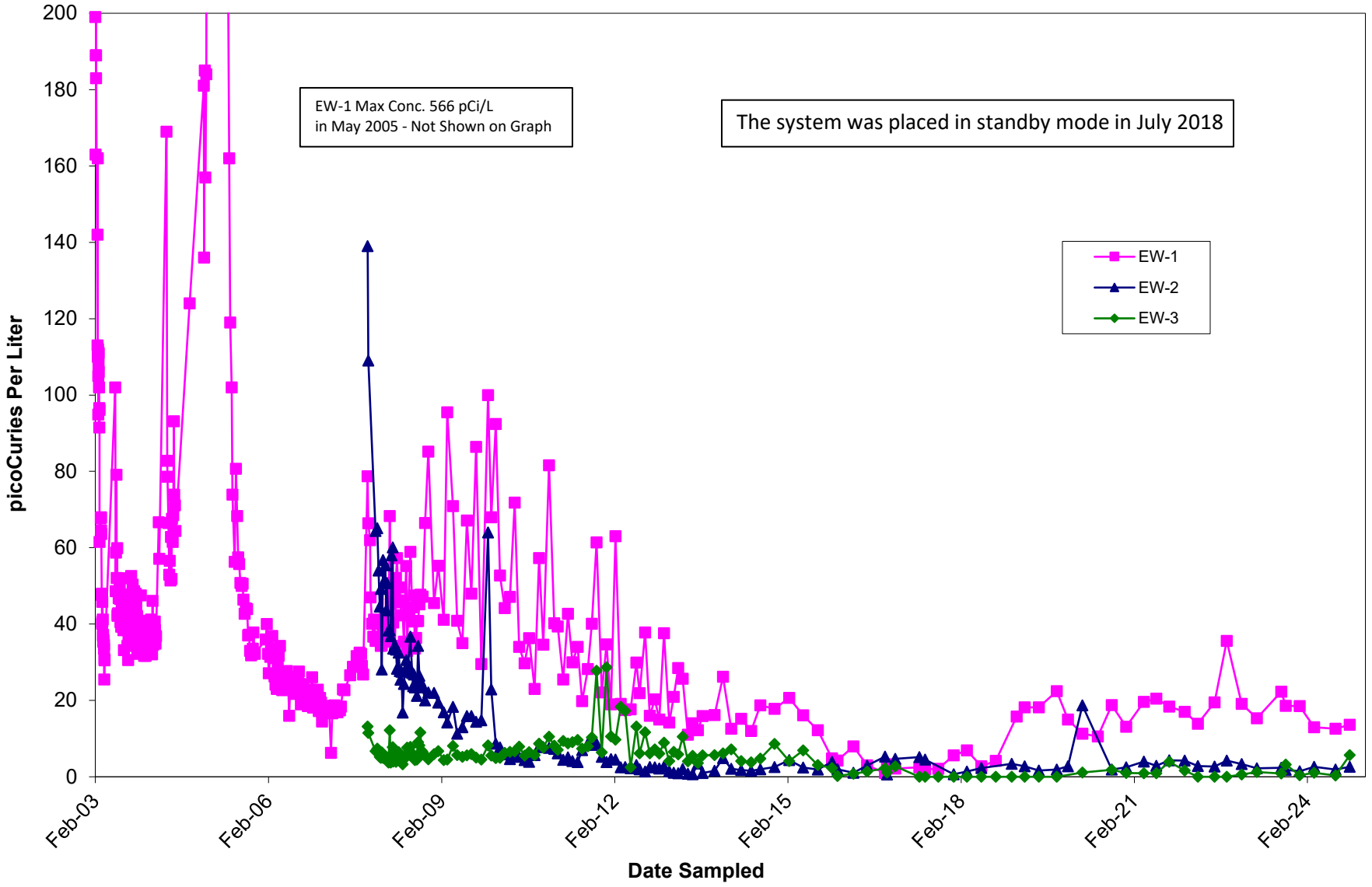
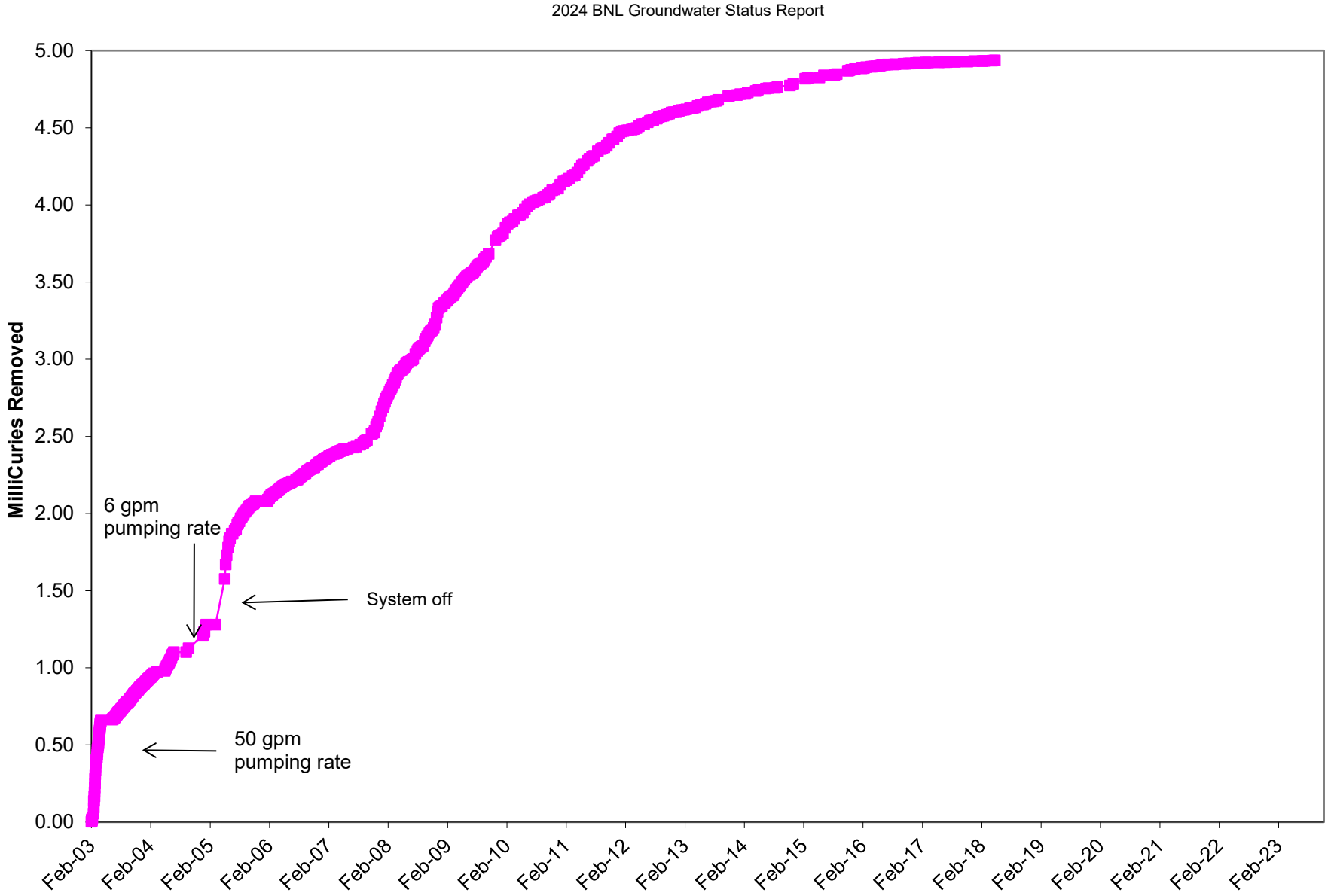
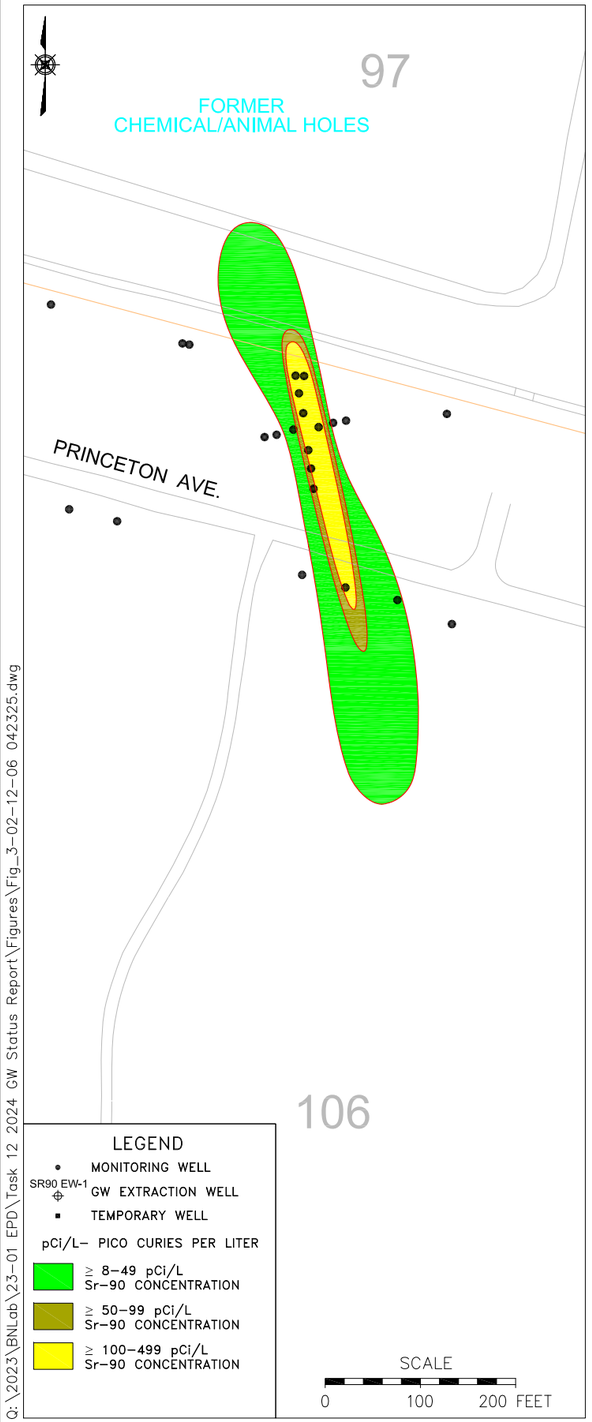


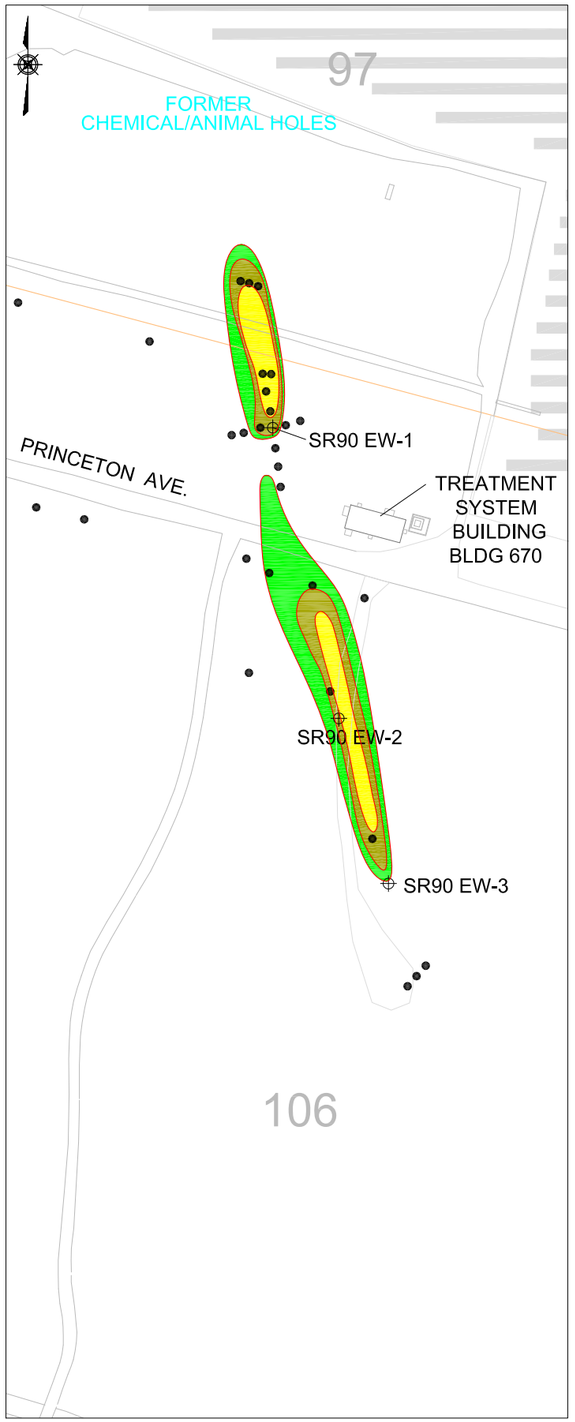
Figure 3.2.12-5
OU III Chemical/Animal Holes
Sr-90 Cumulative MilliCuries Removed



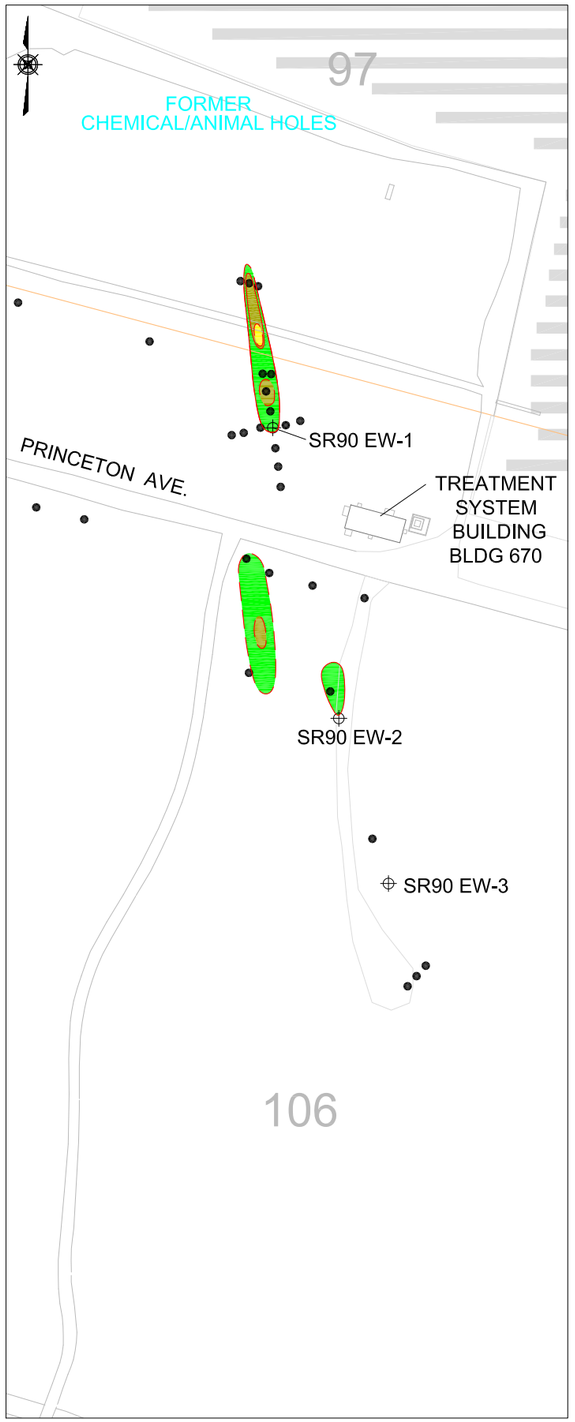
2002 Sr-90 PLUME DISTRIBUTION



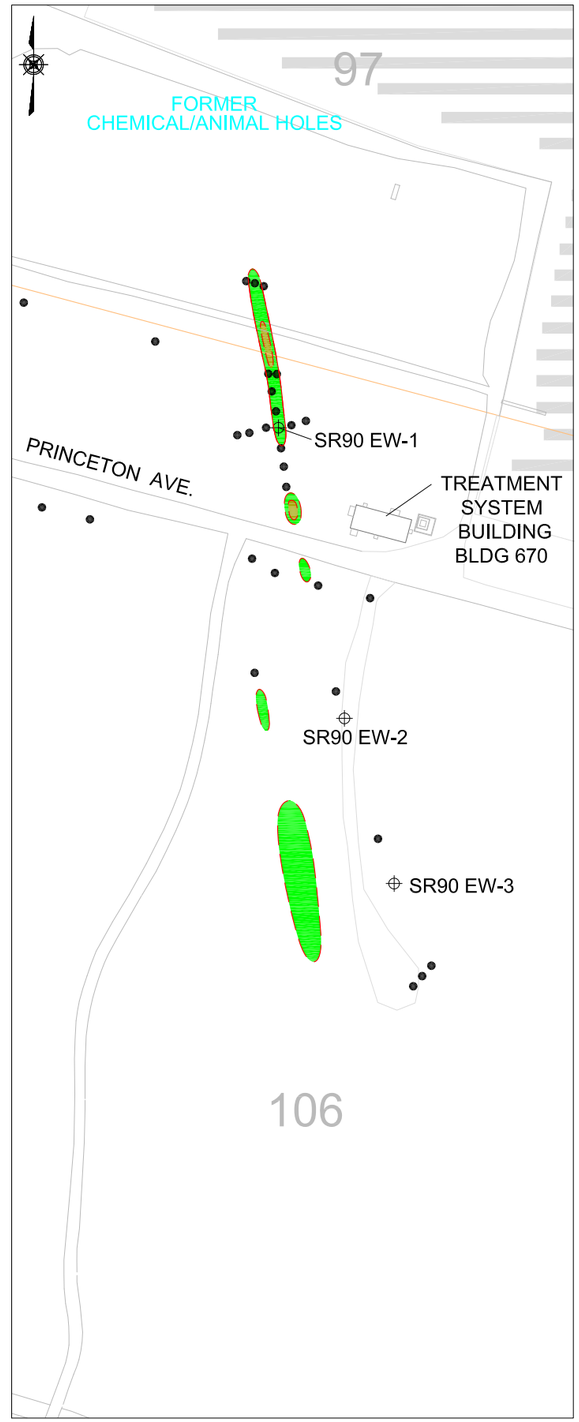
2008 Sr-90 PLUME DISTRIBUTION



2013 Sr-90 PLUME DISTRIBUTION



2024 Sr-90 PLUME DISTRIBUTION



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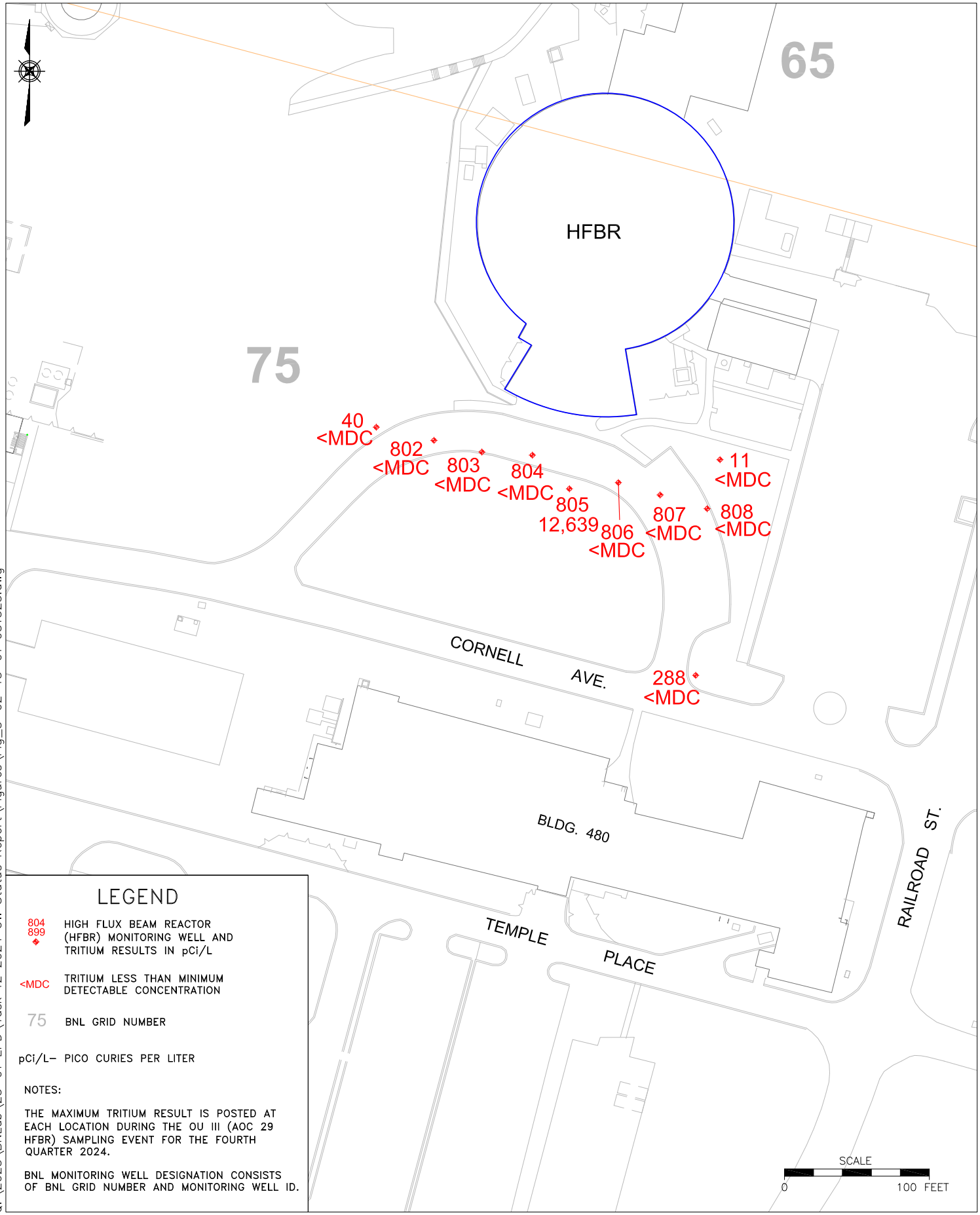
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OU III CHEMICAL/ANIMAL HOLES Sr-90 PLUME COMPARISON 2002, 2008, 2013 AND 2024

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/17/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	04/23/25	–

FIGURE NO.: 3.2.12-6



LEGEND

804 / 899 — HIGH FLUX BEAM REACTOR (HFBR) MONITORING WELL AND TRITIUM RESULTS IN pCi/L

<MDC — TRITIUM LESS THAN MINIMUM DETECTABLE CONCENTRATION

75 — BNL GRID NUMBER

pCi/L— PICO CURIES PER LITER

NOTES:

THE MAXIMUM TRITIUM RESULT IS POSTED AT EACH LOCATION DURING THE OU III (AOC 29 HFBR) SAMPLING EVENT FOR THE FOURTH QUARTER 2024.

BNL MONITORING WELL DESIGNATION CONSISTS OF BNL GRID NUMBER AND MONITORING WELL ID.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III HFBR AOC 29 TRITIUM MONITORING WELL RESULTS

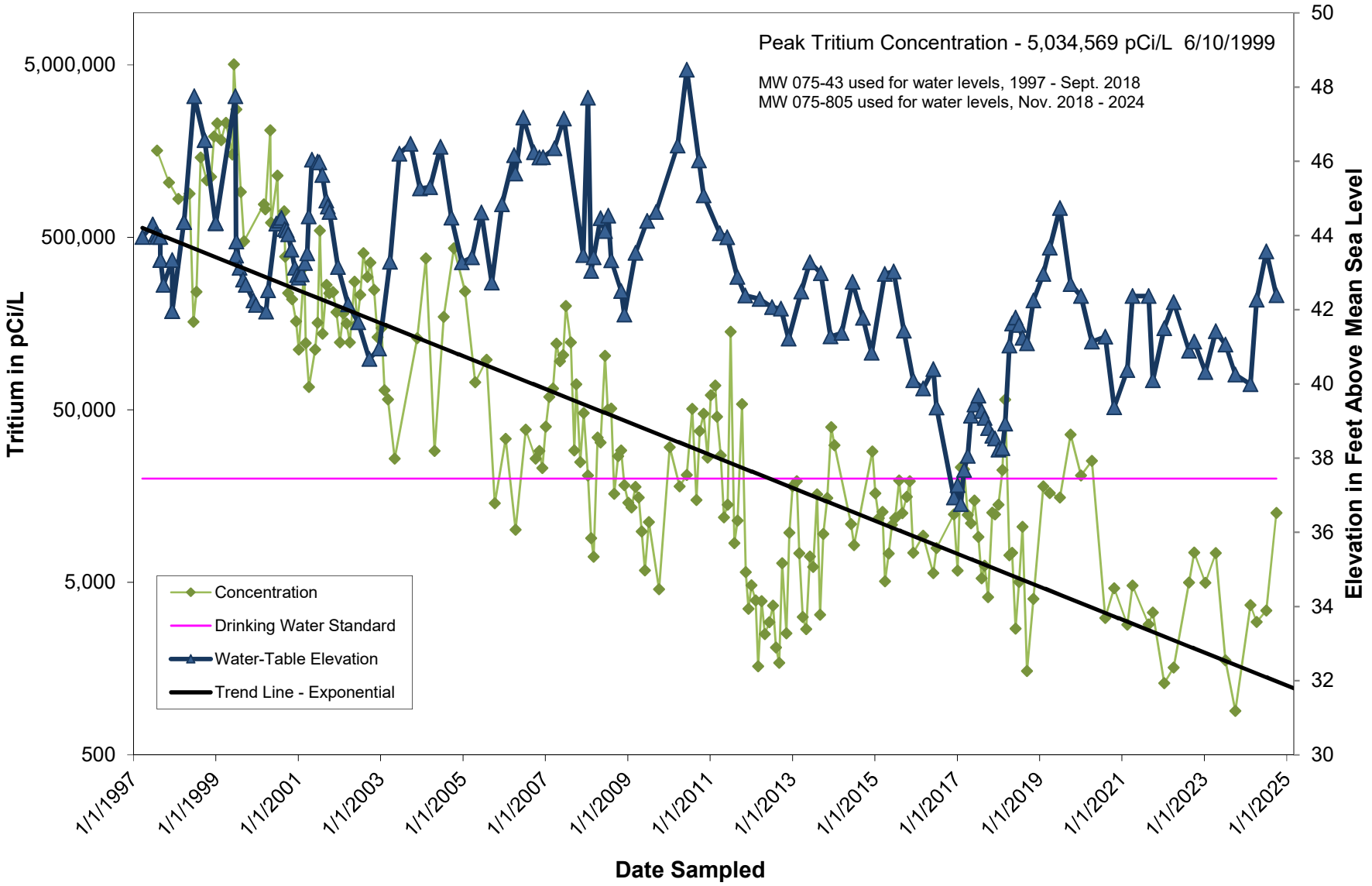
2024 BNL GROUNDWATER STATUS REPORT

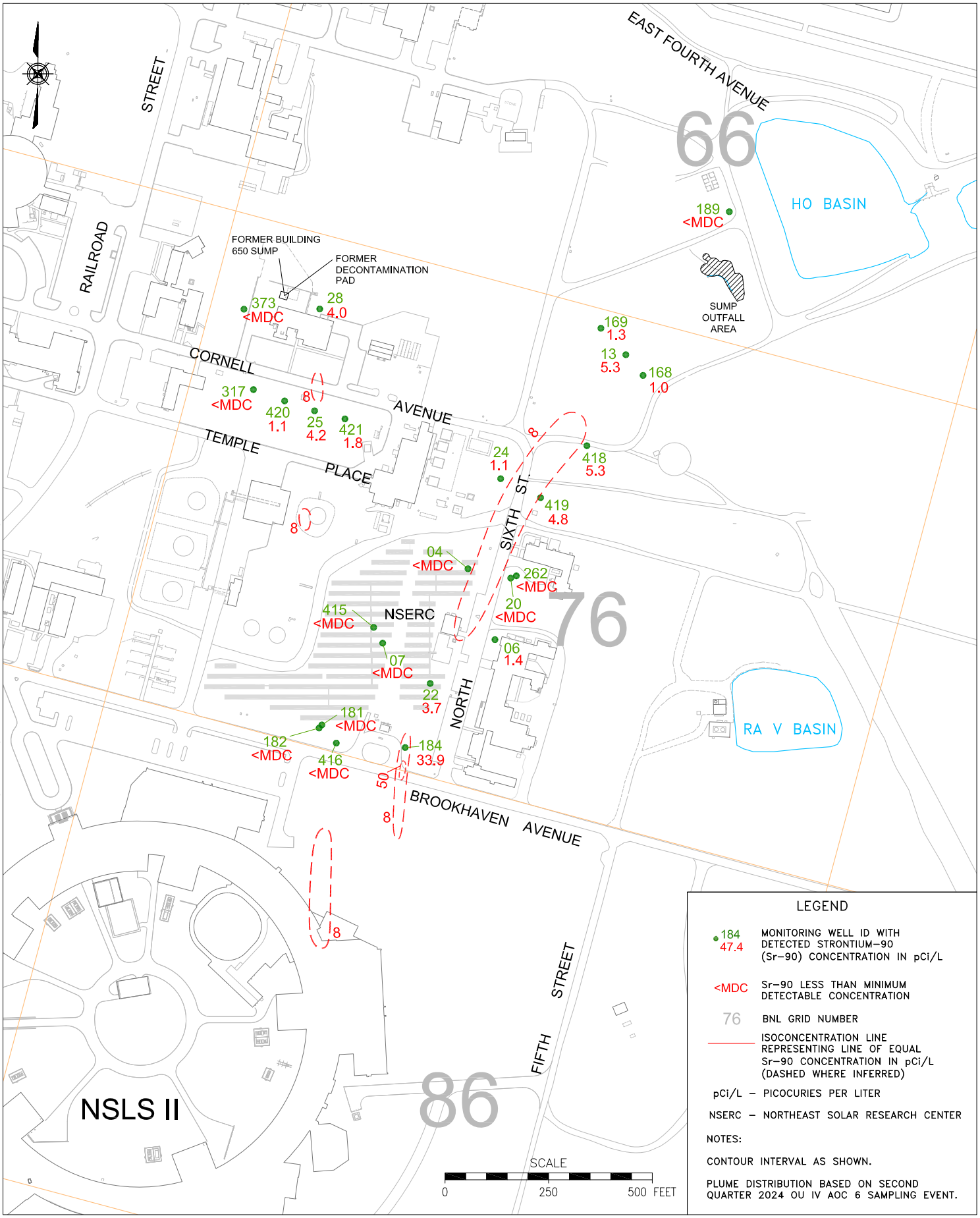
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AJZ	–	03/17/25	–
CHKD:	APPD:	REV.:	NOTES:
BB	BB	05/13/25	–

FIGURE NO.: 3.2.13-1

Figure 3.2.13- 2
OU III HFBR
Peak Tritium Concentrations in Groundwater - HFBR to Cornell Avenue

2024 BNL Groundwater Status Report





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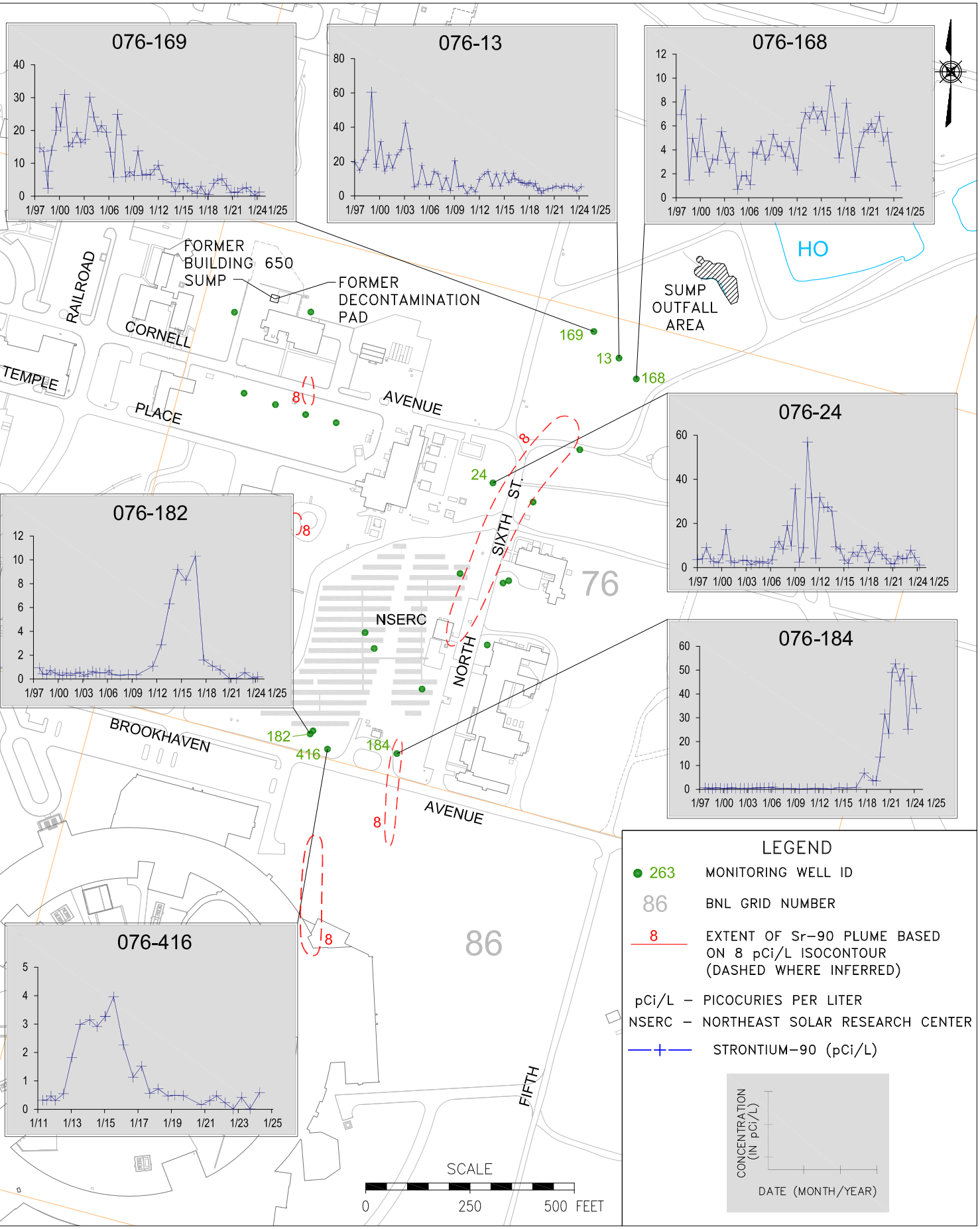
TITLE:

OU IV AOC 6
Sr-90 PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/17/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	04/23/25	–

FIGURE NO.: 3.3.1-1



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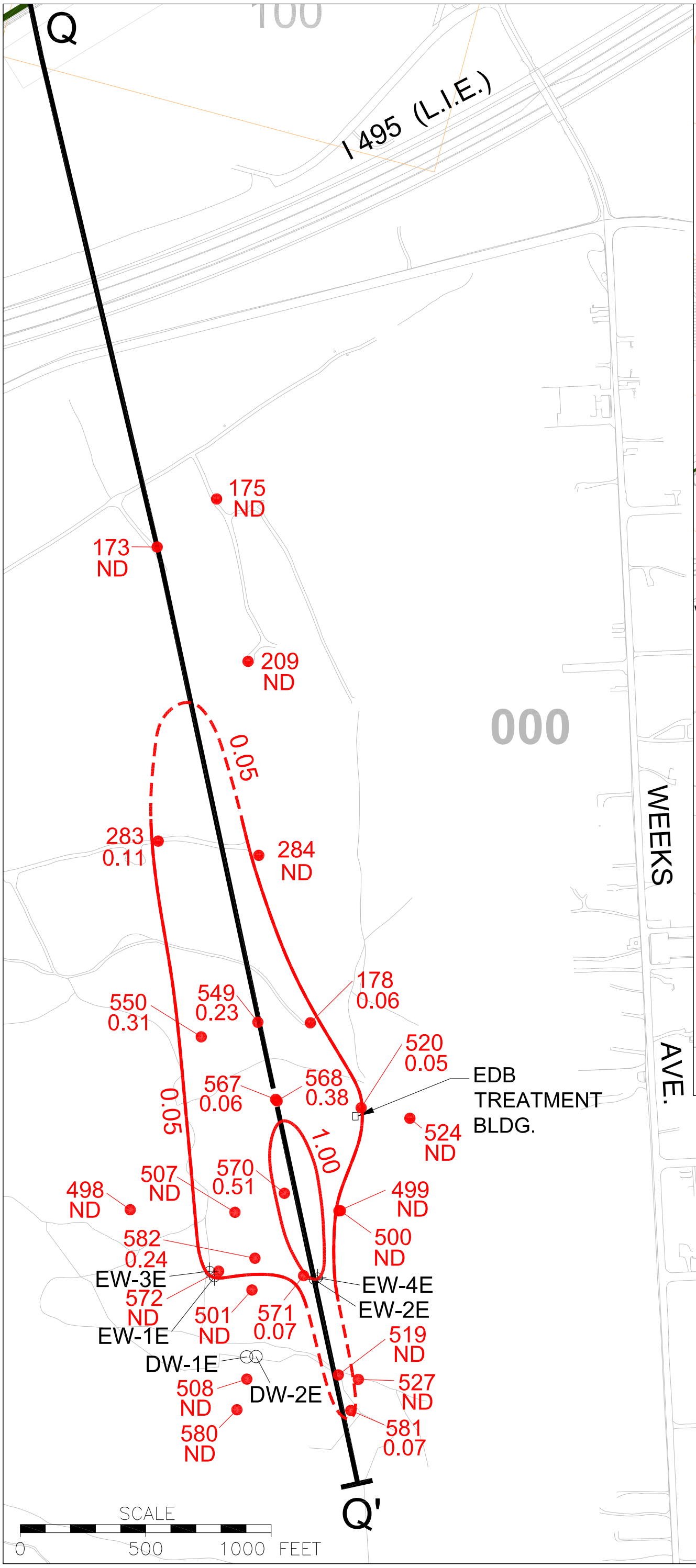
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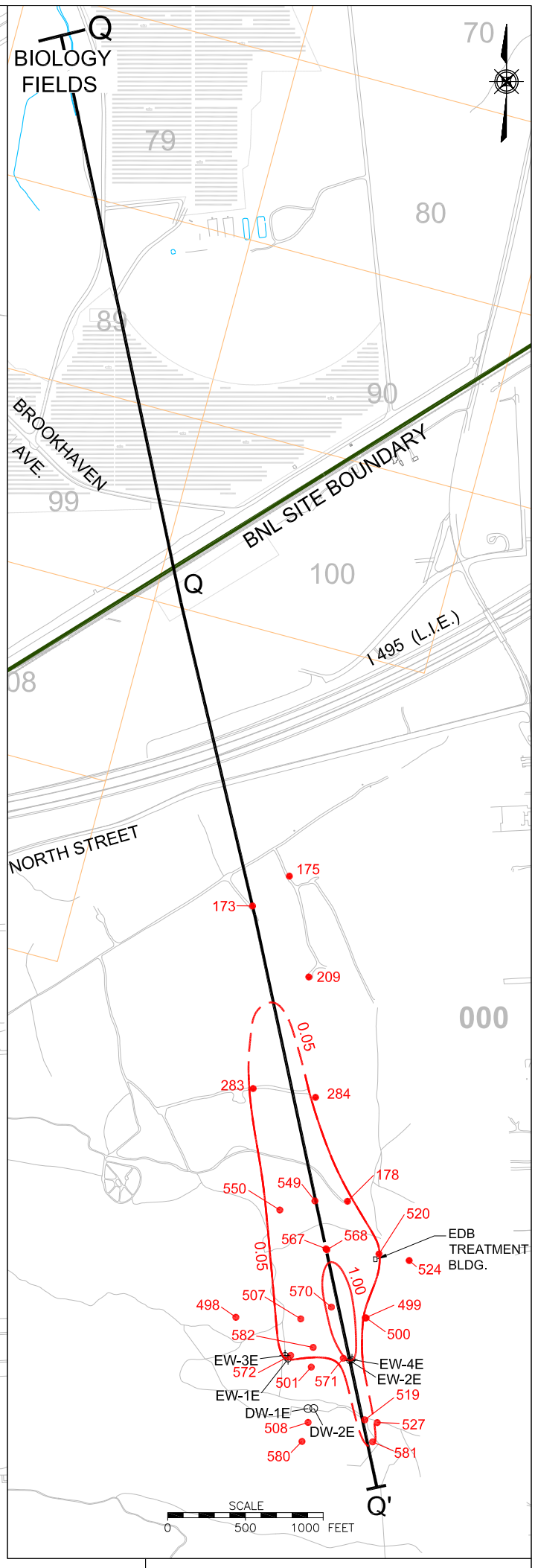
OU IV AOC 6
HISTORICAL Sr-90 TRENDS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	–	–

FIGURE NO.: 3.3.1-2





LEGEND

- 570 / 1.10 — MONITORING WELL ID WITH DETECTED ETHYLENE DIBROMIDE (EDB) CONCENTRATION IN µg/L
- 0.05 — EDB ISOCONCENTRATION CONTOUR IN µg/L
- LOCATION OF EDB HYDROGEOLOGIC CROSS SECTION
- 000 — BNL GRID NUMBER
- EW-1E — BNL REMEDIATION WELL
- DW-1E — BNL DIFFUSION WELL
- µg/L – MICROGRAMS PER LITER

NOTES:

IN WELL CLUSTERS THE HIGHEST EDB VALUE WAS USED IN CONTOURING.

EDB PLUME EXTENT BASED ON FOURTH QUARTER 2024 OU VI EDB SAMPLING EVENT. MONITORING WELLS 000–567, 568 AND 581 BASED ON FEBRUARY 2025 SAMPLING EVENT.

"ND" INDICATES NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMITS.

RESULTS BASED ON EPA METHOD 8011.

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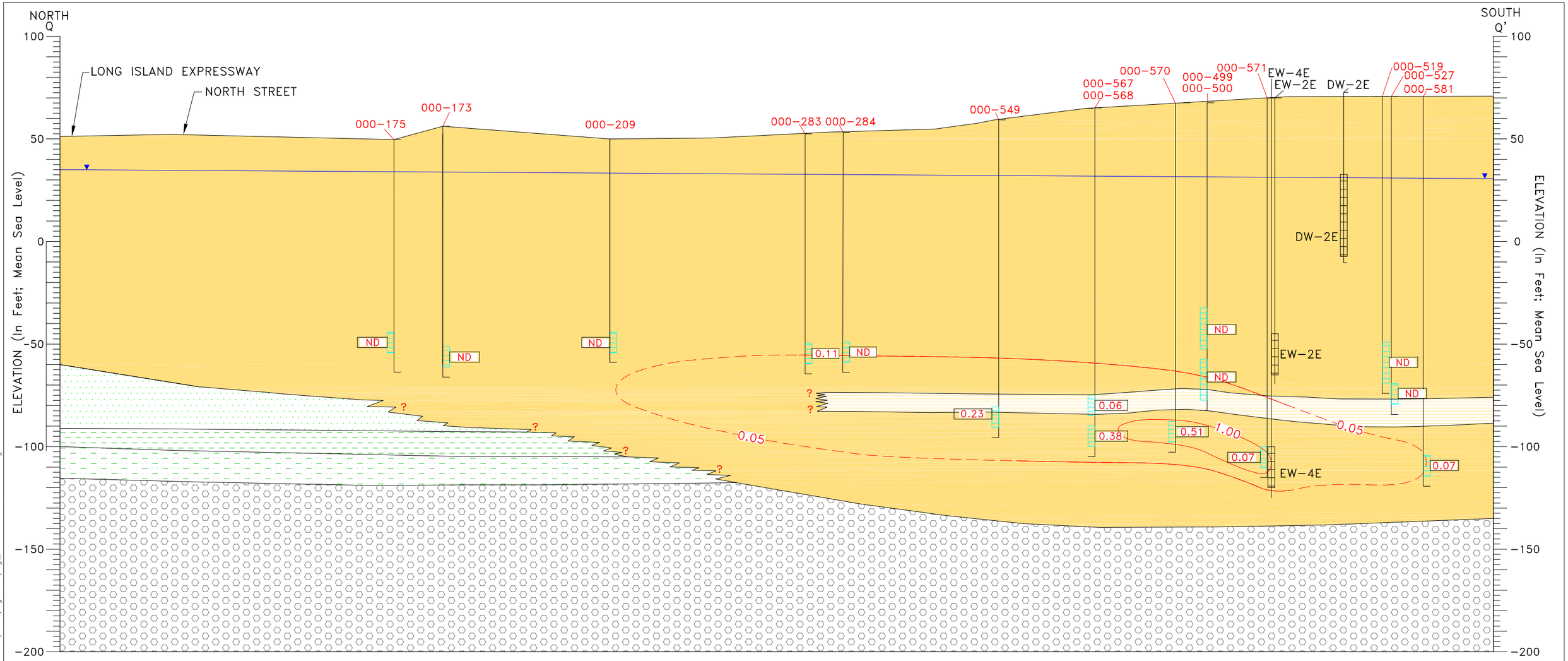
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OU VI
EDB PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.4–1



LEGEND

Upper Glacial aquifer

- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay

- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer

- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

000-500 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

NS Indicates not sampled

.080 Ethylene dibromide (EDB) Concentration (µg/L)

0.05 EDB Contour (µg/L) (Dashed Where Inferred)

µg/L – Micrograms Per Liter

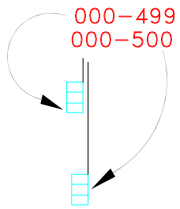
Water Table As Of Aug. 12 – Aug. 20, 2024

Monitoring Well Screen

Extraction Well Screen

HORIZONTAL SCALE
0 300 600

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep



NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, MORE DETAILED REPORTS.

2) EDB EXTENT IS BASED ON FOURTH QUARTER 2024 OU VI SAMPLING EVENT. MONITORING WELLS 000-567, 568 AND 581 BASED ON FEBRUARY 2025 SAMPLING EVENT.

3) RESULTS BASED ON EPA METHOD 8011.

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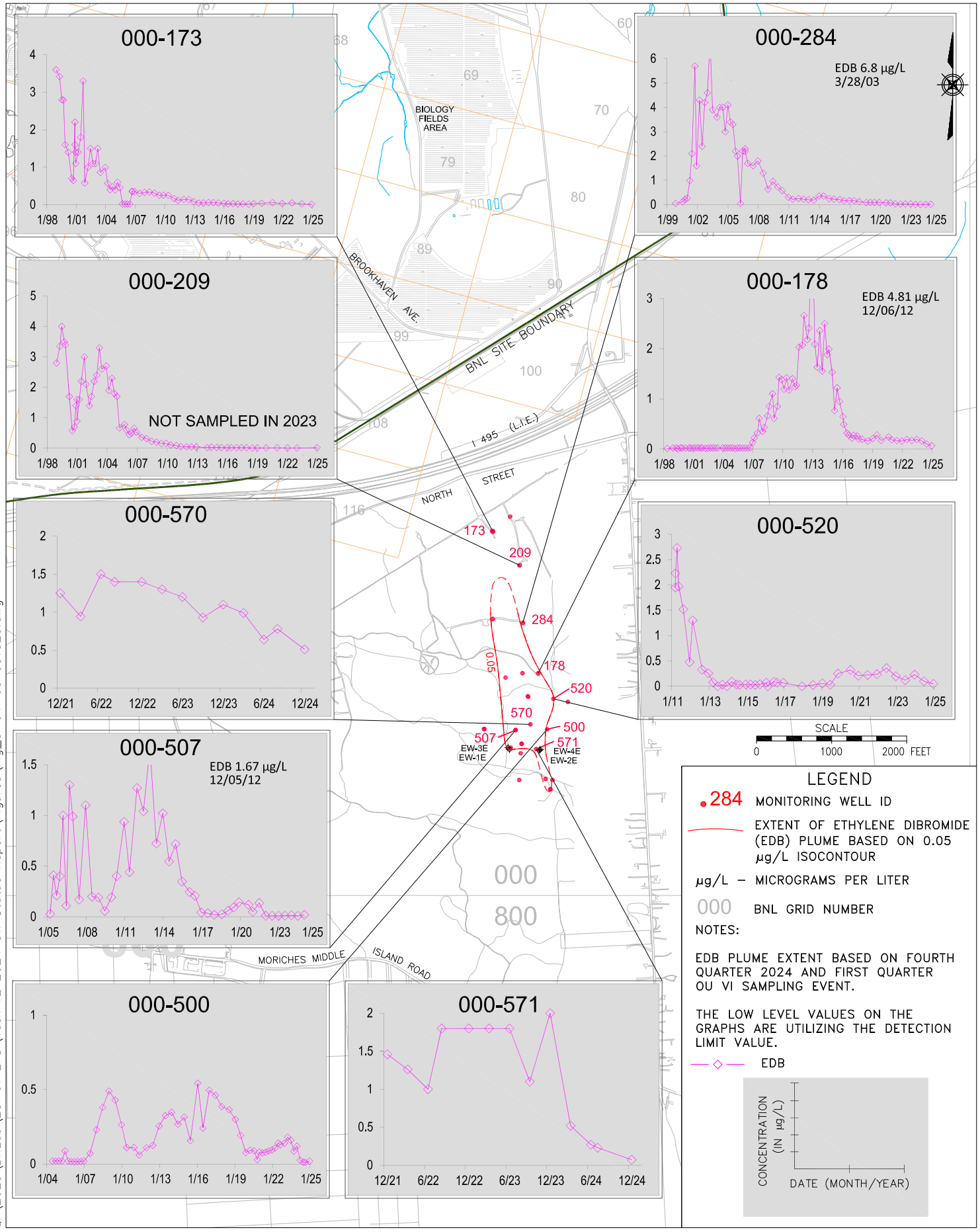
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OU VI
EDB HYDROGEOLOGIC CROSS SECTION (Q–Q')

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	25:1	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.4-2



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TITLE:

OU VI HISTORICAL EDB TRENDS

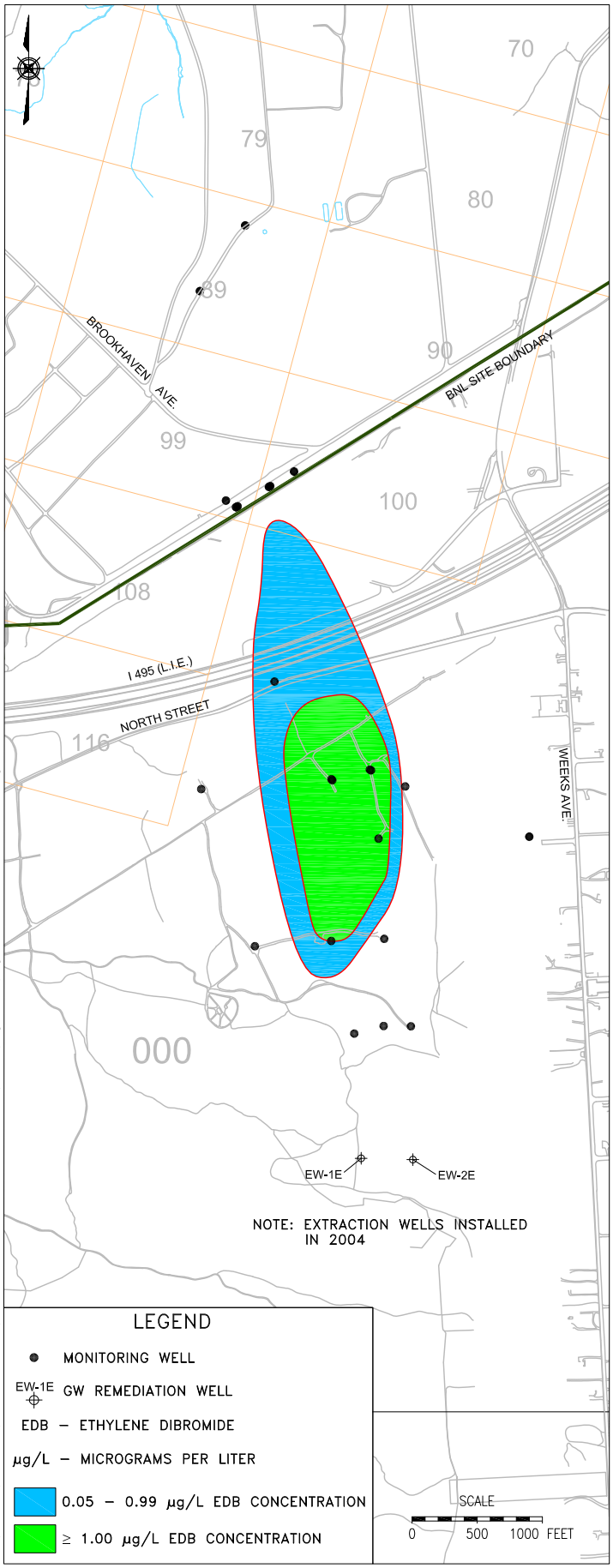
2024 BNL GROUNDWATER STATUS REPORT

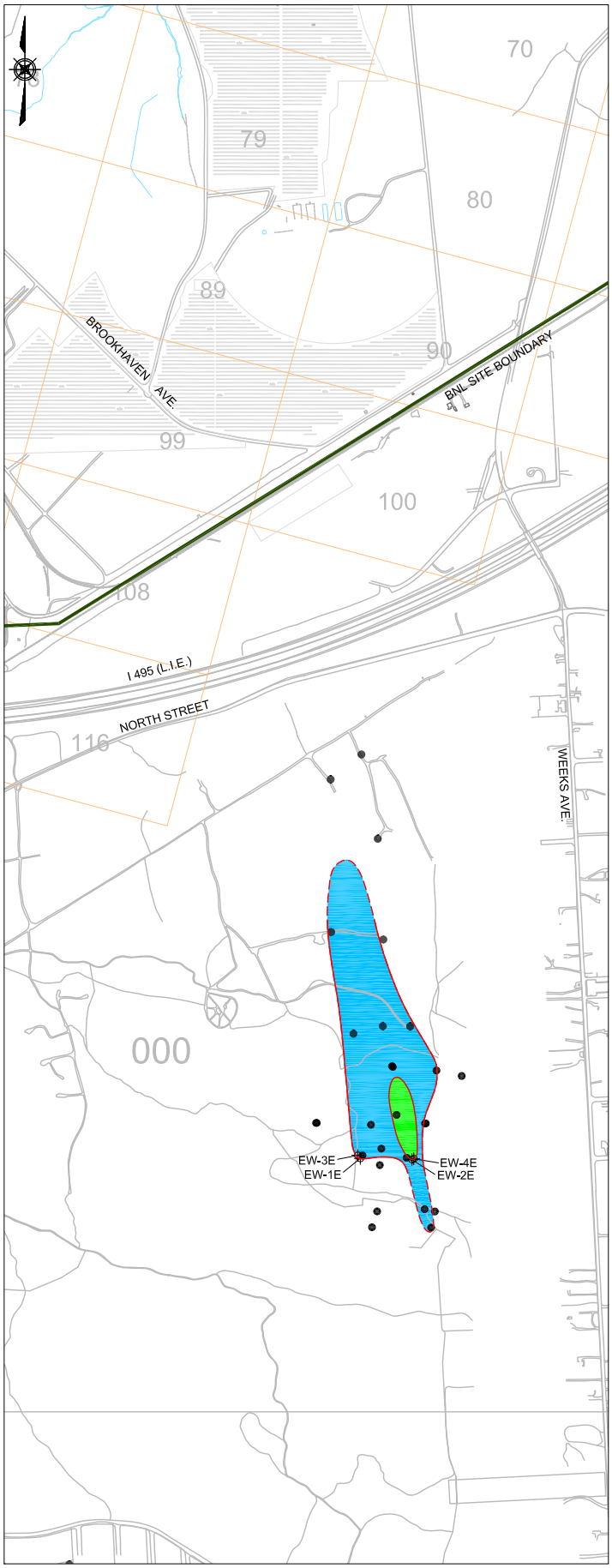
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AJZ	–	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	05/13/25	–

FIGURE NO.: 3.4–3

1999 EDB PLUME DISTRIBUTION

2024 EDB PLUME DISTRIBUTION





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Brookhaven National Laboratory

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TITLE:

OU VI EDB PLUME COMPARISON 1999 – 2024

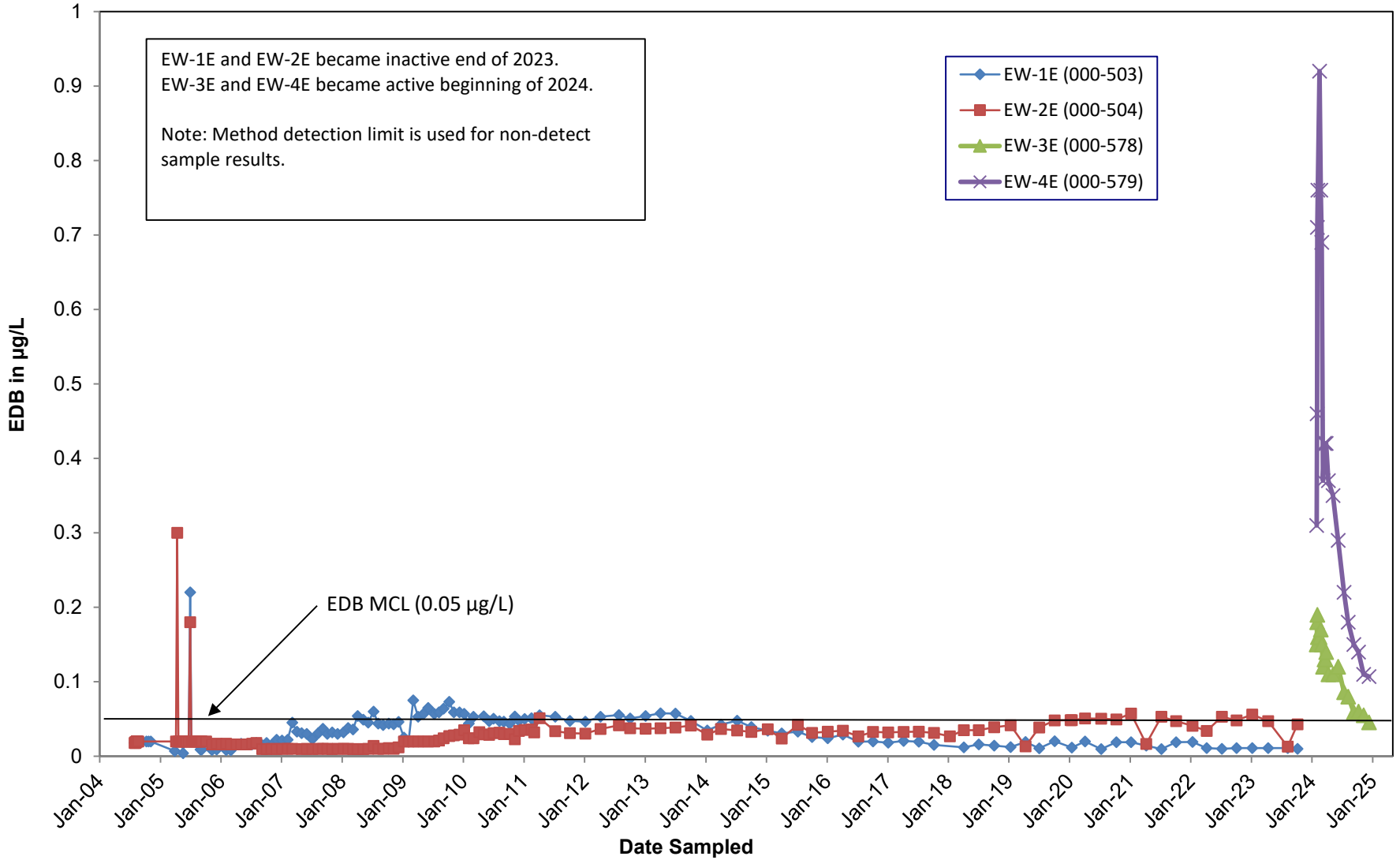
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
VJR	BB	–	–

FIGURE NO.: 3.4–4

Figure 3.4-5
OU VI EDB
EDB Concentrations in Extraction Wells

2024 BNL Groundwater Status Report



LEGEND

- 29 / 2.3 / ND — MONITORING WELL ID WITH DETECTED (PFAS), PFOS/PFOA CONCENTRATIONS (IN ng/L) JULY 24–SEPT. 22, 2024
- GP-200 / 1390 / ND — TEMPORARY GEOPROBE (GP) OR VERTICAL PROFILE (VP) WELL ID (2024) MAXIMUM DETECTED PFOS/PFOA CONCENTRATIONS (IN ng/L)
- 1,4-D 10.0 — VERTICAL PROFILE (VP) WELL ID (2024) MAXIMUM DETECTED 1,4–DIOXANE CONCENTRATIONS (IN µg/L)
- LOCATION OF PFOS HYDROGEOLOGIC CROSS SECTION
- CF-RW-A — GROUNDWATER REMEDIATION WELL
- BNL-4 — POTABLE SUPPLY WELL
- GENERAL GROUNDWATER FLOW DIRECTION
- SUSPECTED FOAM RELEASE AREA
- NS — NOT SAMPLED
- –10– — ISOCONCENTRATION CONTOUR REPRESENTING LINE OF EQUAL PFOS CONCENTRATION IN ng/L (DASHED WHERE INFERRED)

NOTE:
PFAS RESULTS BASED ON METHOD 1633

Water Treatment Plant Recharge Basins
Training Area
Current Fire House
BNL Paint Shop
Training Areas
Bldg. 170
CF-RW-A
CF-RW-B
CF-RW-C
CF-RW-D
CF-RW-E
CF-RW-F
CF-RW-G
CF-RW-H
CF-RW-I
Stormwater Discharge Area
Recreation Center Area
Suffolk County Water Authority William Floyd Well Field
WSB-1
WSB-2
WSB-3
WSB-4
WSB-5
WSB-6
S
S'
R
R'
Route 495 EXIT RAMP
West Brookhaven Ave.
Cornell Ave.
Princeton Ave.
West Princeton Ave.
Upton Road
Woods Road
Bell Avenue
Rochester Street
Center Street
Pennsylvania Street
South Harvard Street
Weaver Drive
Yale Road
Yule Lane
York Lane
East St.
Aston Lane
Yaphank Road
Mendel Lane
Carver Court
William Floyd Parkway
South Gate
HP QUIII BASIN
Well 1
Well 2
Well 3A
000-42
000-43
000-44
BNL-4
BNL-6
BNL-7
S-54883

SCALE
0 500 1,000 FEET

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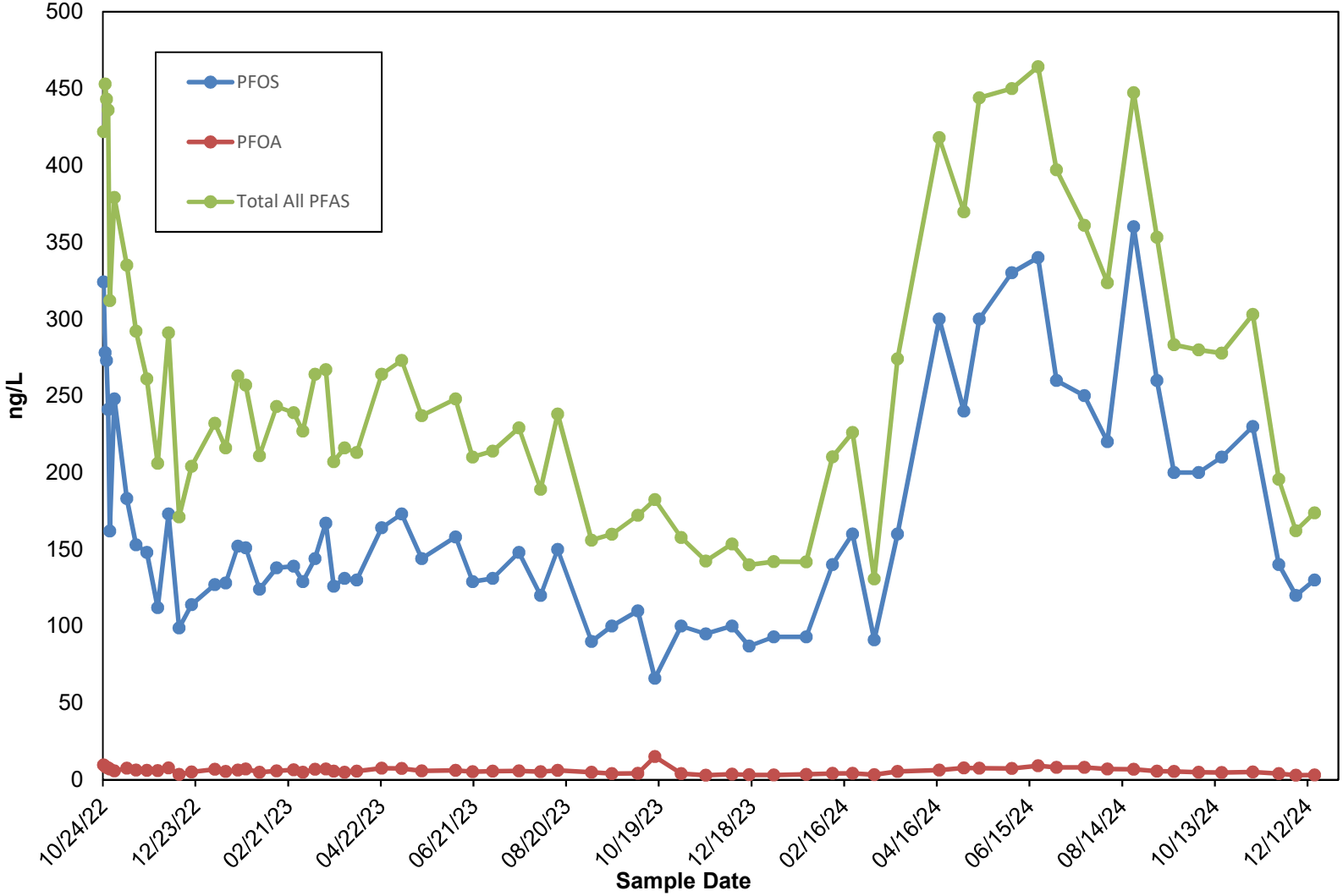
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OU X CURRENT FIREHOUSE AND BUILDING 170 PFAS PLUME DISTRIBUTION
2024 BNL GROUNDWATER STATUS REPORT

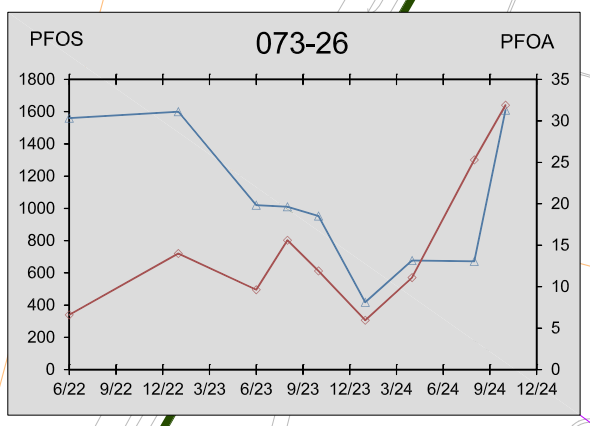
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CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/22/25	–

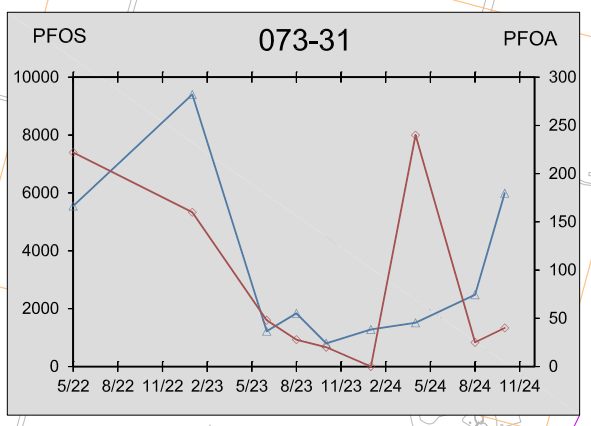
FIGURE NO.: 3.5.1–1

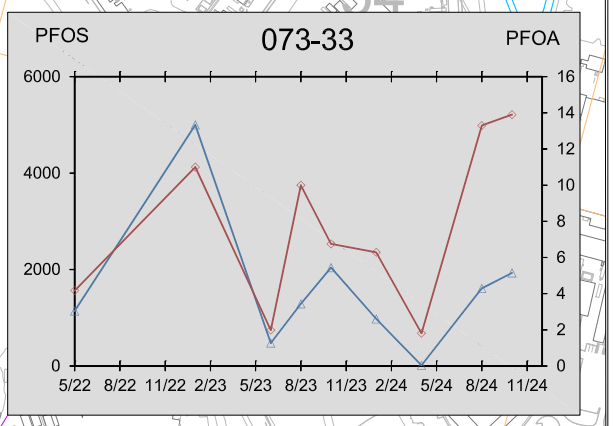
Figure 3.5.1-2
OU X Current Firehouse Treatment System
Influent Concentrations (ng/L)

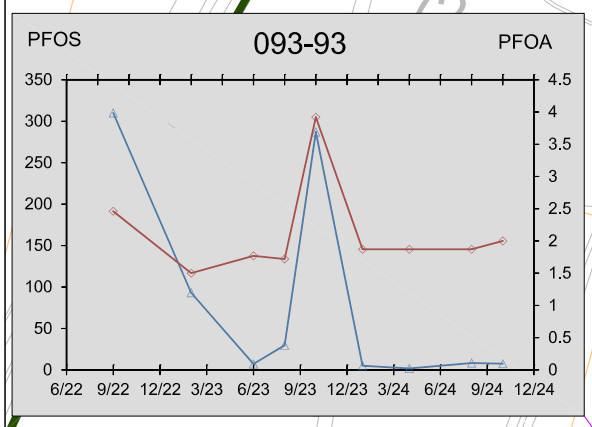
2024 BNL Groundwater Status Report

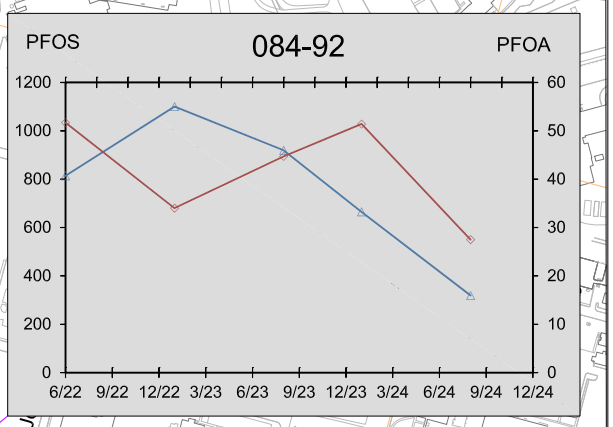


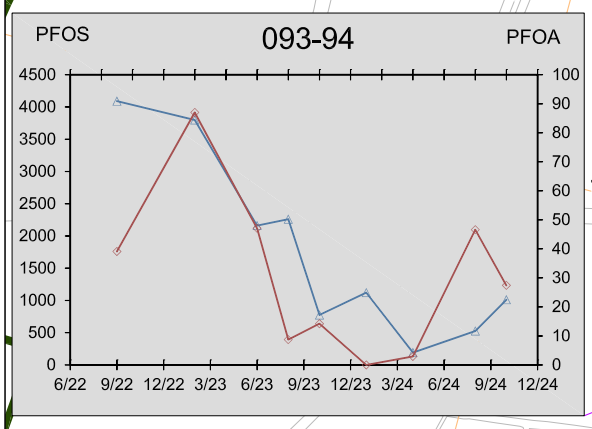


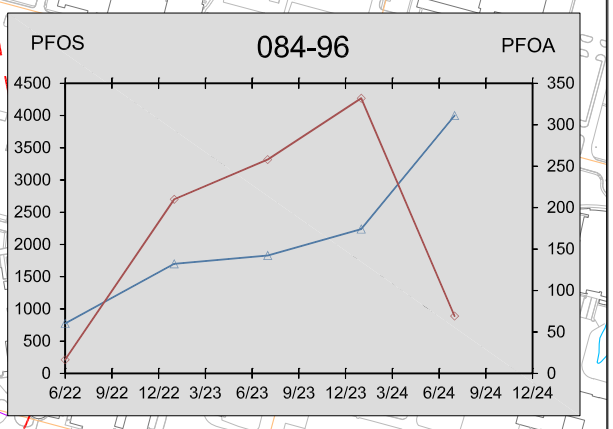


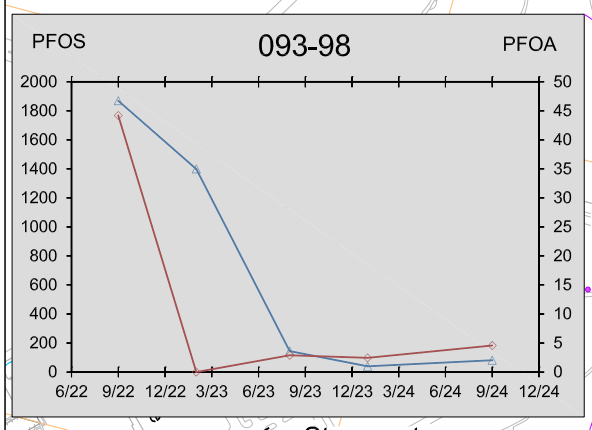


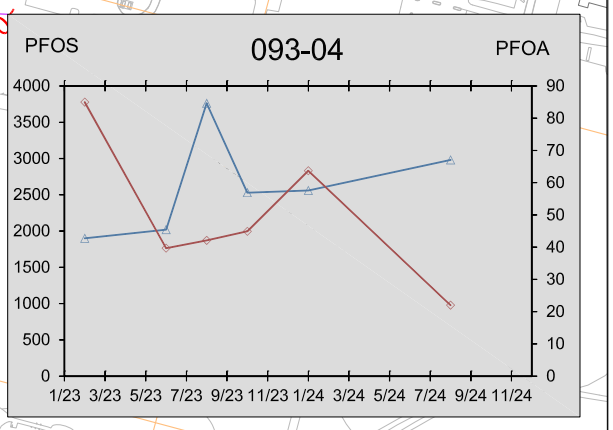


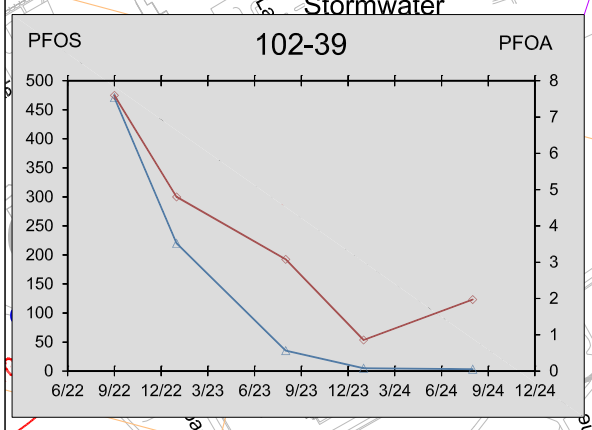


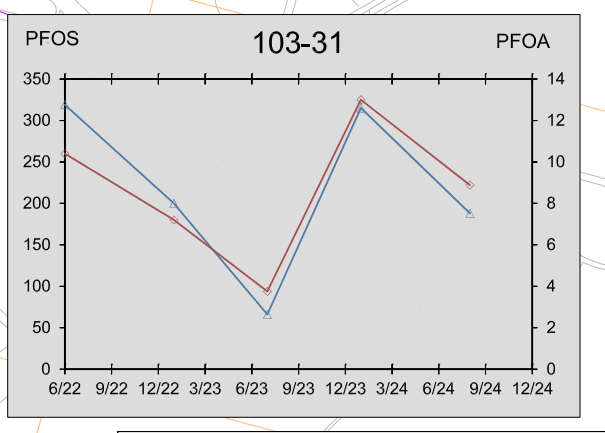


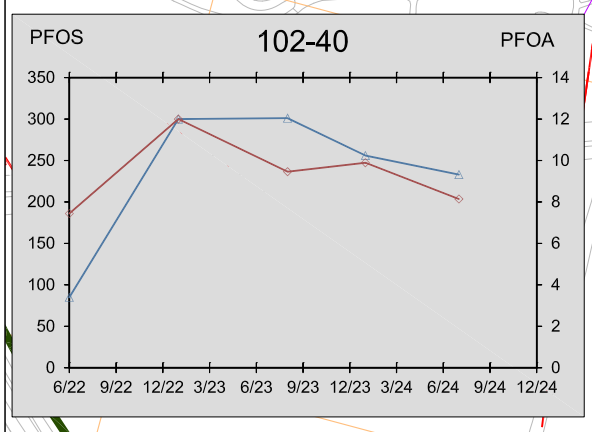












LEGEND

- 26 — MONITORING WELL
- 82 — BNL GRID NUMBER
- CF-RW-A — EXTRACTION WELL LOCATION
- —10— EXTENT OF PFOS PLUME BASED ON 10 ng/L (DASHED WHERE INFERRED)
- PFOS (ng/L) left scale
- PFOA (ng/L) right scale
- PFOS PERFLUOROOCTANE SULFONATE
- PFOA PERFLUOROOCTANOIC ACID

CONCENTRATION (IN ng/L) CONCENTRATION (IN ng/L)

SCALE 0 400 800 FEET

Q:\2023\BNLab\23-01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3-05-01-03 052225.dwg

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU X CURRENT FIREHOUSE AND BUILDING 170 PFAS TREND PLOTS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	—	04/01/25	—
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/22/25	—

FIGURE NO.: 3.5.1-3

2020-2021

2023

2024

LEGEND

- MONITORING WELL
- KEY TEMPORARY WELL
- GEOPROBE WELL (2020–2022)
- CF-RW-A GW EXTRACTION WELL
- PFOS PERFLUOROOCTANE SULFONATE
- ng/L NANOGRAMS PER LITER
- ≥ 10–99 ng/L PFOS CONCENTRATION
- ≥ 100–499 ng/L PFOS CONCENTRATION
- ≥ 500–999 ng/L PFOS CONCENTRATION
- ≥ 1000 ng/L PFOS CONCENTRATION

Current Fire House
CF-RW-A
CF-RW-B
CF-RW-C
CF-RW-D
CF-RW-E
CF-RW-F
CF-RW-G
CF-RW-H
CF-RW-I
BNL-4
BNL-6
BNL-7
HX
HP OUNI BASIN
West Brookhaven Ave.
Union Rd.
West Princeton Ave.
East Princeton Ave.
William Floyd Parkway
Yale Road
Upton Road
BNL SITE BOUNDARY
Well 1
Well 2
Well 3A
SCALE
0 500 1000 FEET

Q:\2023\BNLab\23-01 EPD\Task 12 2024 GW Status Report\Figures\Fig_3-05-01-04 052225.dwg

Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

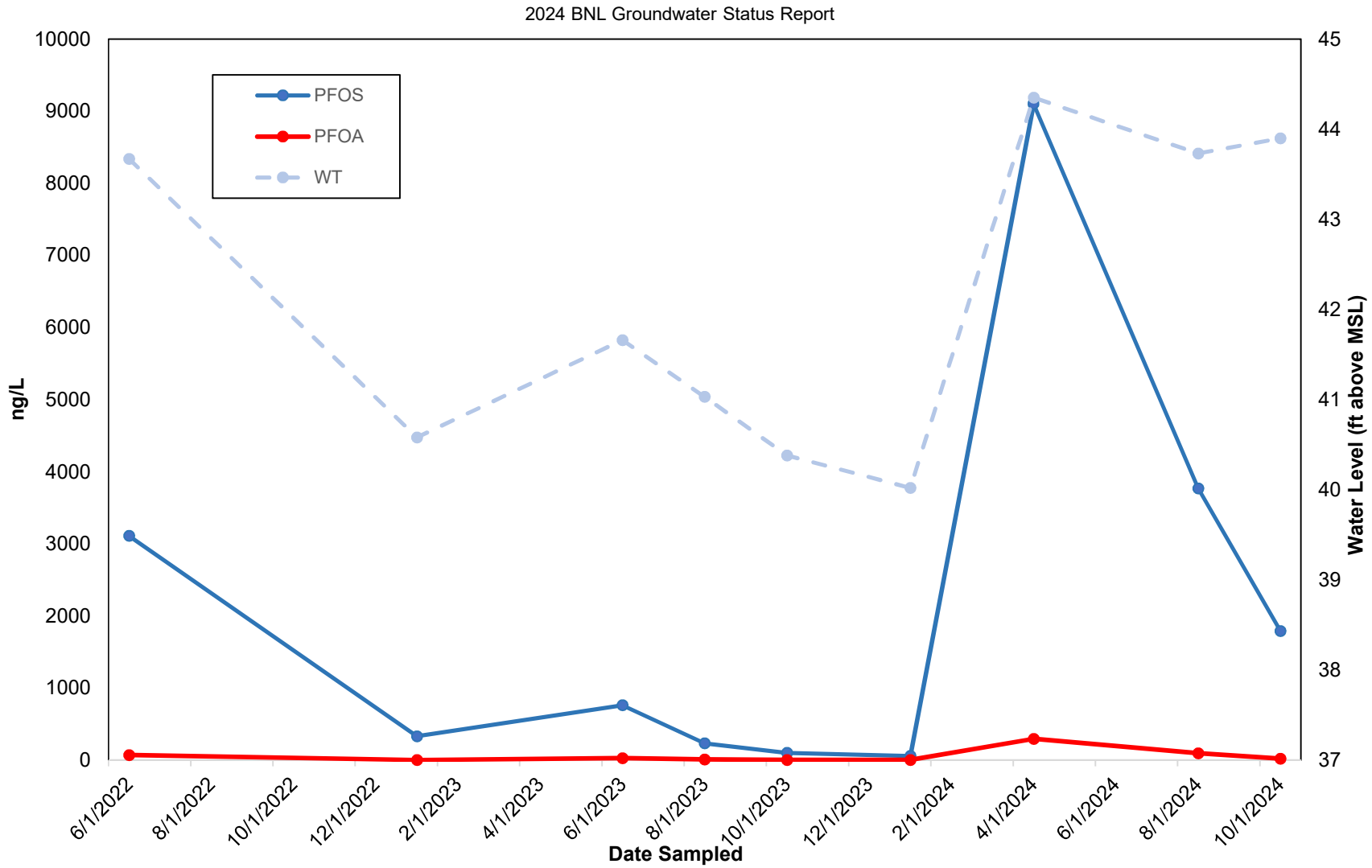
OU X CURRENT FIREHOUSE AND BUILDING 170 PFOS PLUME COMPARISON 2020 – 2024

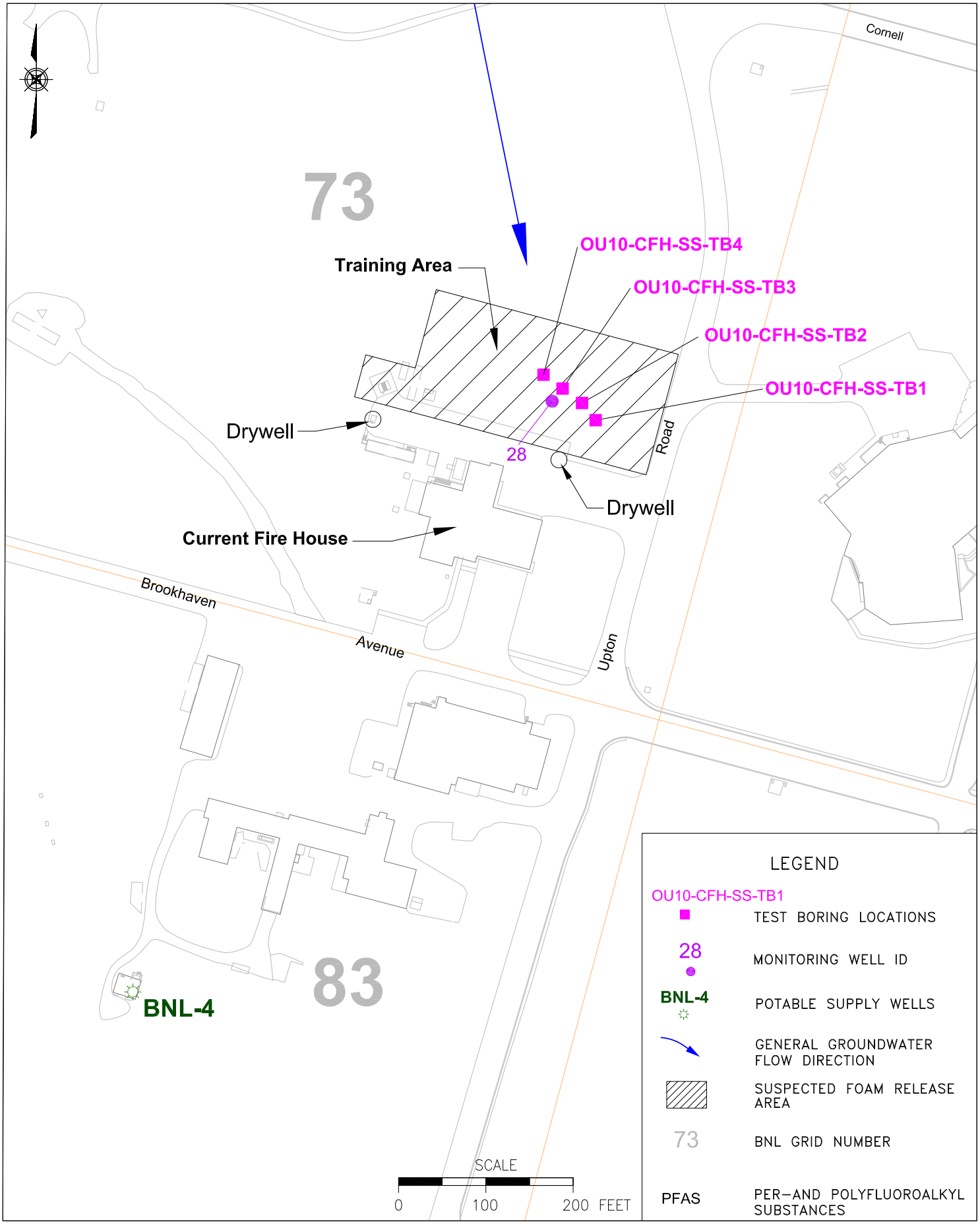
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/02/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/22/25	–
FIGURE NO.:		3.5.1–4	

Figure 3.5.1-5
OU X Current Firehouse Treatment System

Changes in PFOS and PFOA Concentrations in Current Firehouse Source Area Monitoring Well 073-28 Relative to Changes in Water Table Elevation





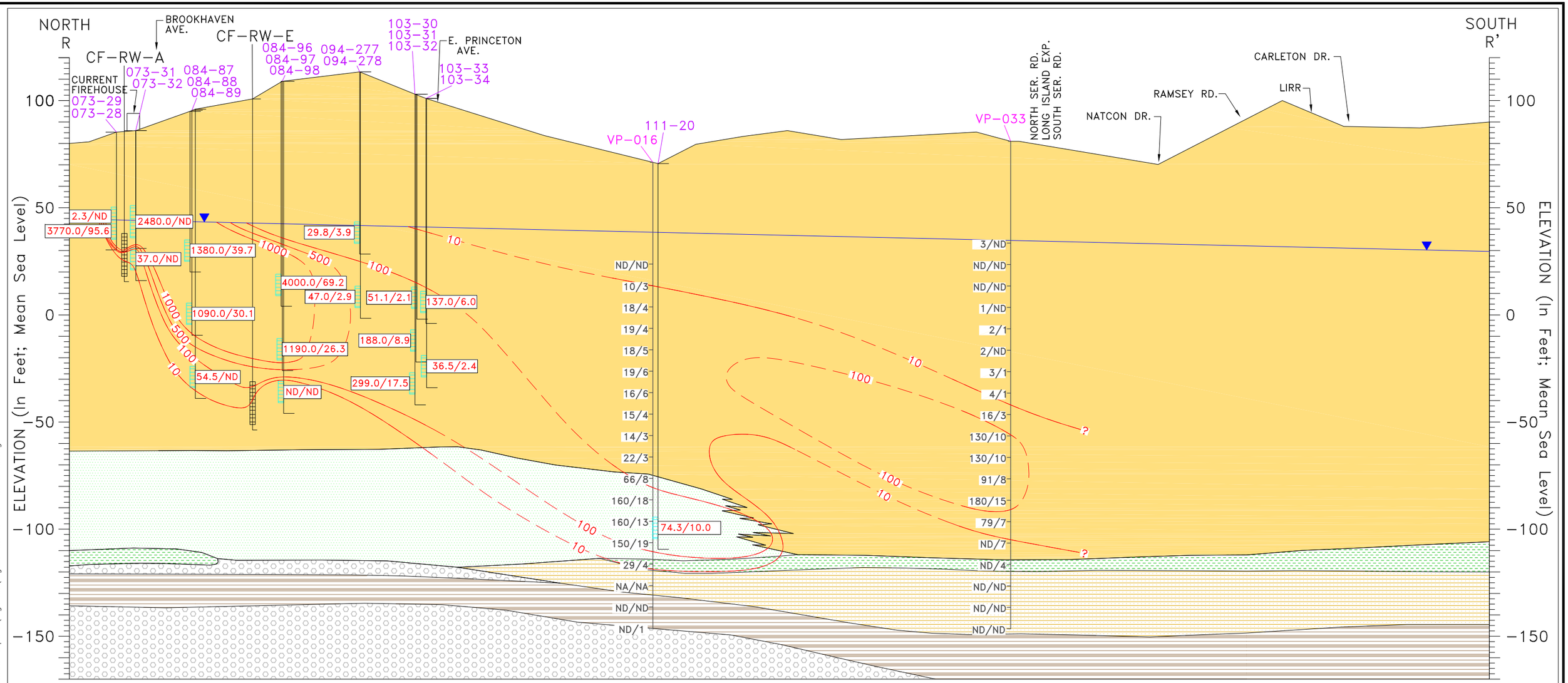
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE: OU X CURRENT FIREHOUSE AREA PFAS SOIL AND GROUNDWATER CHARACTERIZATION TEST BORINGS
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/08/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/22/25	–

FIGURE NO.: 3.5.1-6



LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

84-96 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

74.3/10.0 PFOS Value/PFOA Value in (ng/L)

10 PFOS Contour (ng/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

ng/L– Nanograms Per Liter

HORIZONTAL SCALE
0 500 1000 FEET

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, CHARACTERIZATION REPORTS.

2) PFOS/PFOA RESULTS IN MONITORING WELLS BASED ON JULY 24 THROUGH SEPT. 22, 2024 SAMPLING EVENTS.

3) PFOS/PFOA RESULTS IN TEMPORARY WELLS, (GP) (VP) BASED ON MAY 17, 2024 THGROUGH MAR. 7, 2025 SAMPLING EVENTS.

4) CONTOUR INTERVAL IS AS SHOWN.

5) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM WELL LOCATION MAP.

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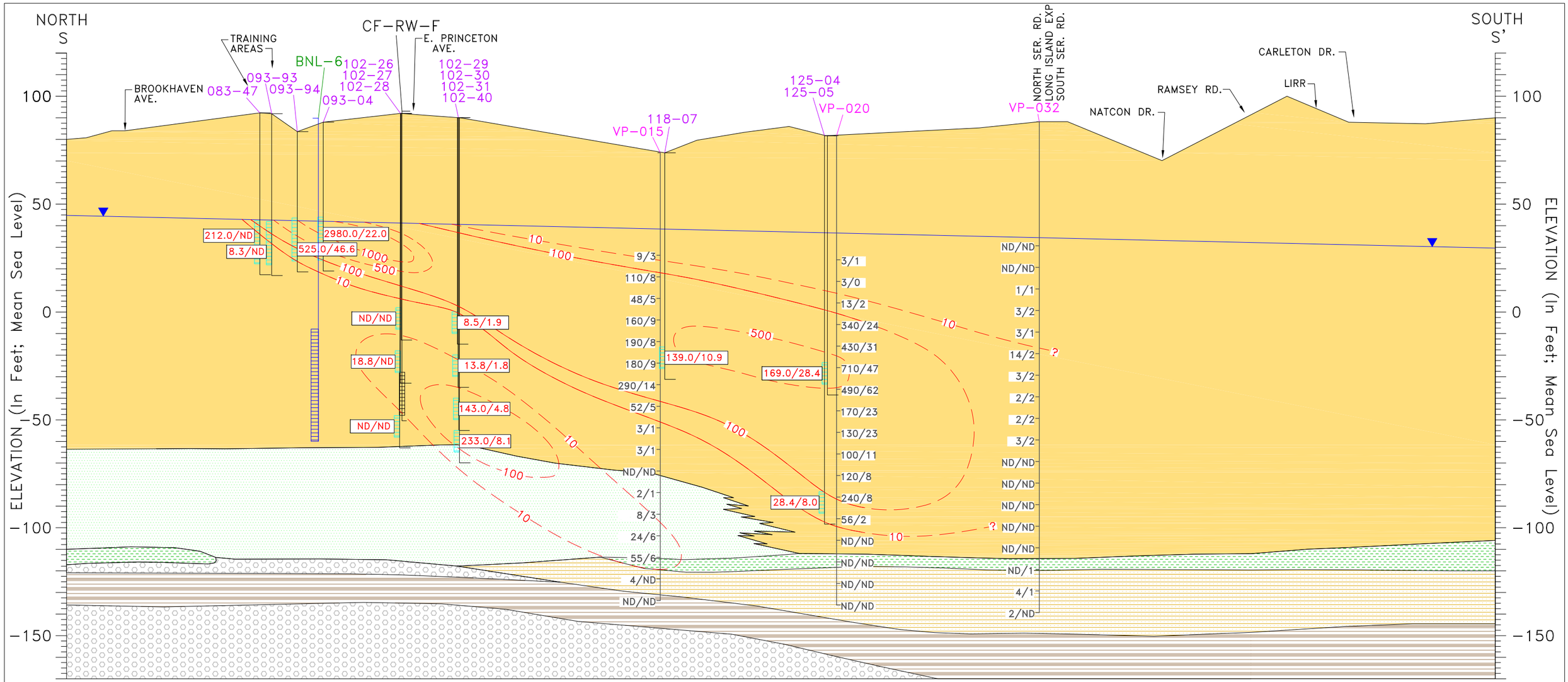
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU X CURRENT FIREHOUSE
PFOS HYDROGEOLOGIC CROSS SECTION (R–R')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	04/10/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/13/25	–

FIGURE NO.: 3.5.1-7



LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undifferentiated)
- MO Magothy – OTHER

93−04 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

74.3/10.0 PFOS Value/PFOA Value in (ng/L)

—10— PFOS Contour (ng/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

ng/L– Nanograms Per Liter

BNL−6 BNL Water Supply Well (Inactive)

HORIZONTAL SCALE
0 500 1000 FEET

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, CHARACTERIZATION REPORTS.

2) PFOS/PFOA RESULTS IN MONITORING WELLS BASED ON JULY 24 THROUGH SEPT. 22, 2024 SAMPLING EVENTS.

3) PFOS/PFOA RESULTS IN TEMPORARY WELLS, (GP) (VP) BASED ON MAY 17, 2024 THGROUGH MAR. 7, 2025 SAMPLING EVENTS.

4) CONTOUR INTERVAL IS AS SHOWN.

5) BNL WELL ID COLOR CORRESPONDS TO LONG−TERM MONITORING PROGRAM WELL LOCATION MAP.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

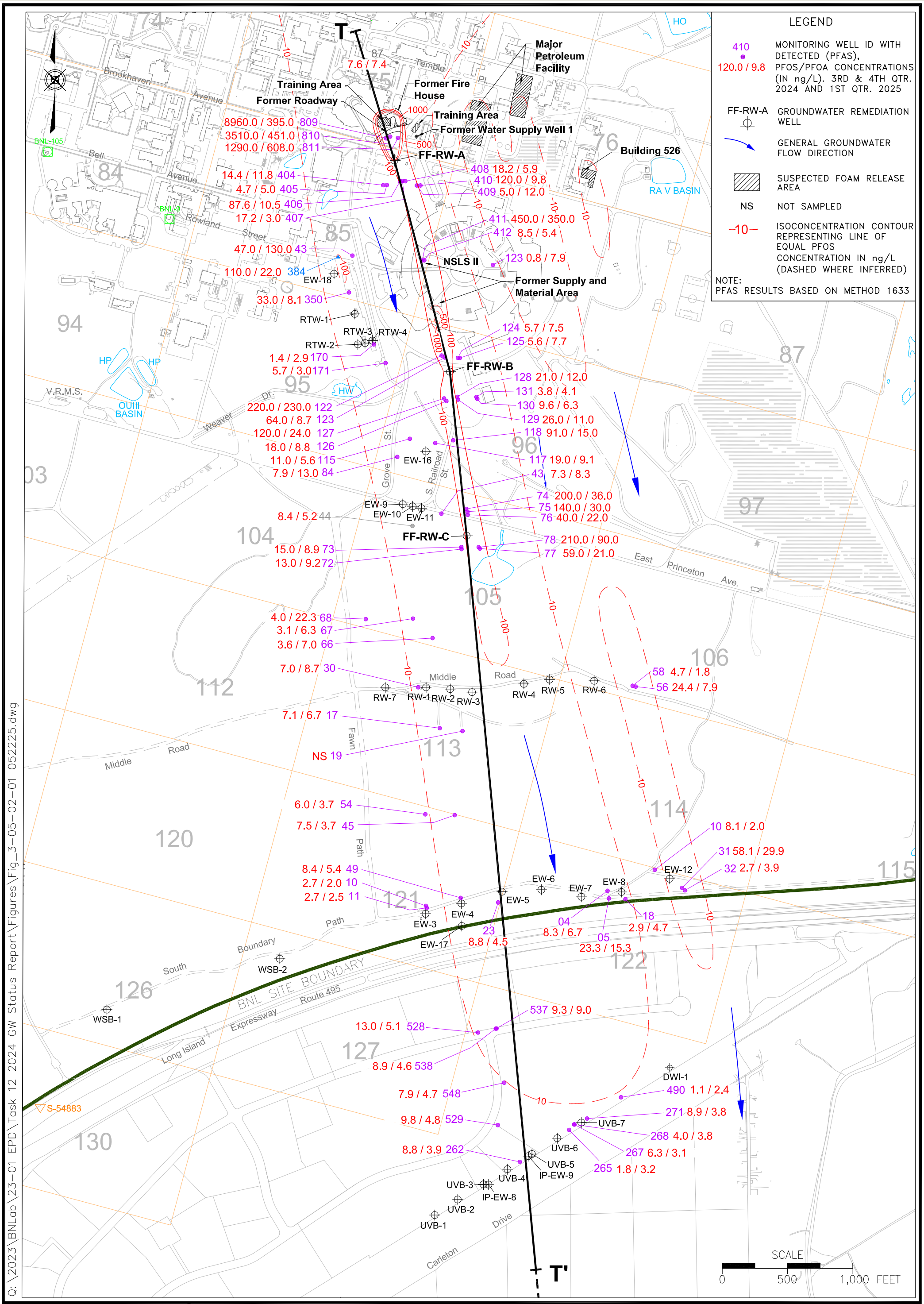
OU X BUILDING 170
PFOS HYDROGEOLOGIC CROSS SECTION (S–S')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	04/14/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	04/16/25	–

FIGURE NO.: 3.5.1–8

OU X FORMER FIREHOUSE PFAS PLUME DISTRIBUTION

2024 BNL GROUNDWATER STATUS REPORT



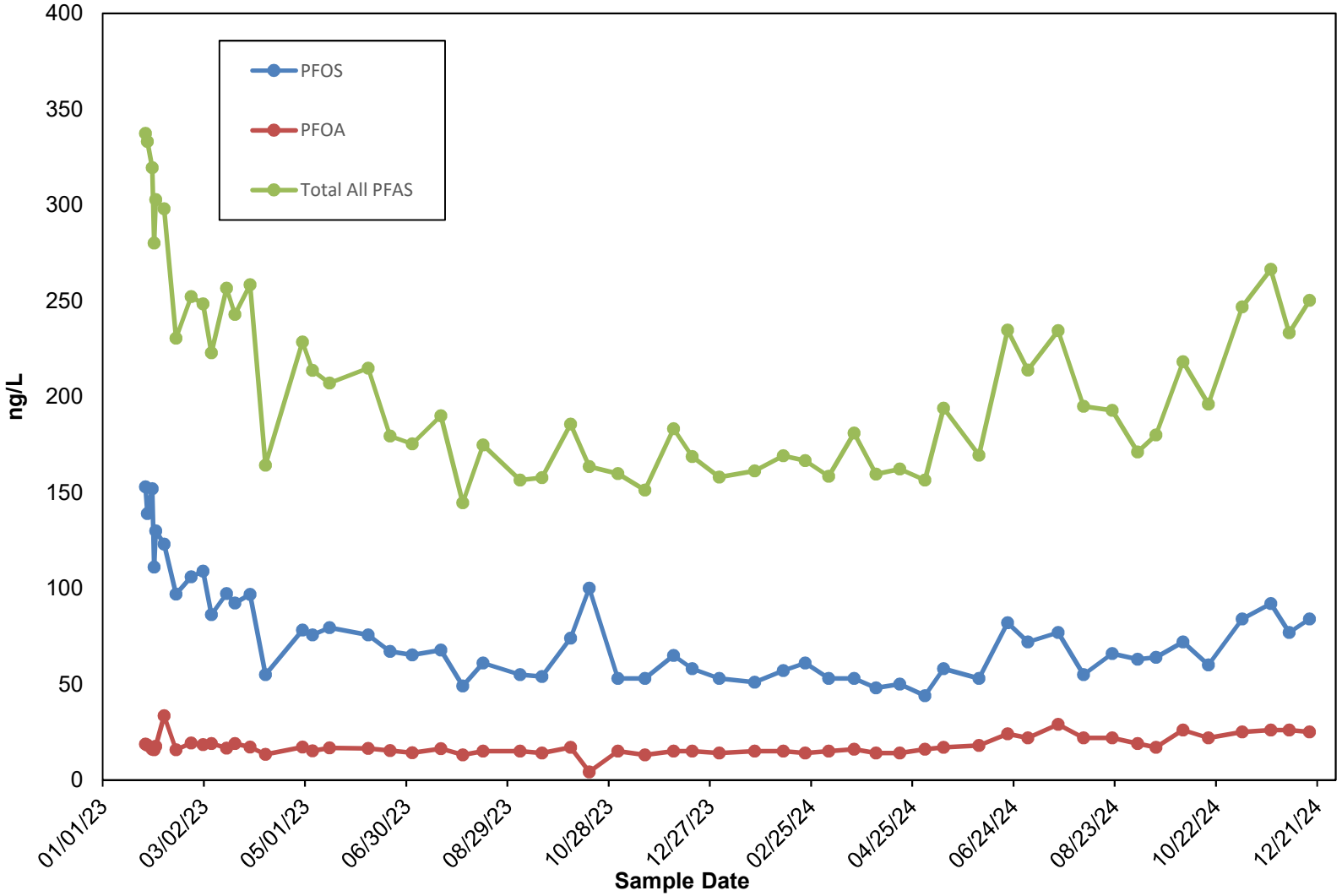
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CHKD: DEP	APPD: BB	REV.: 05/22/25	NOTES: –
FIGURE NO.: 3.5.2–1			

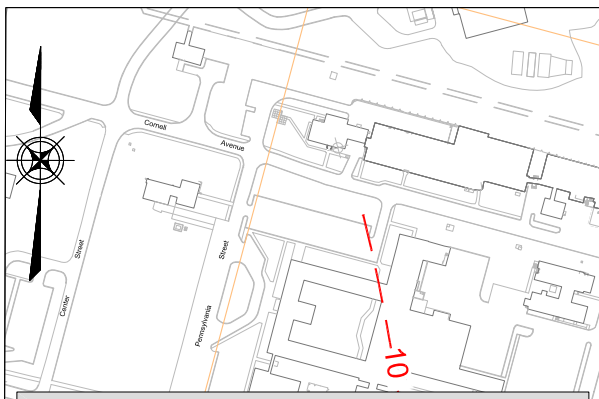
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

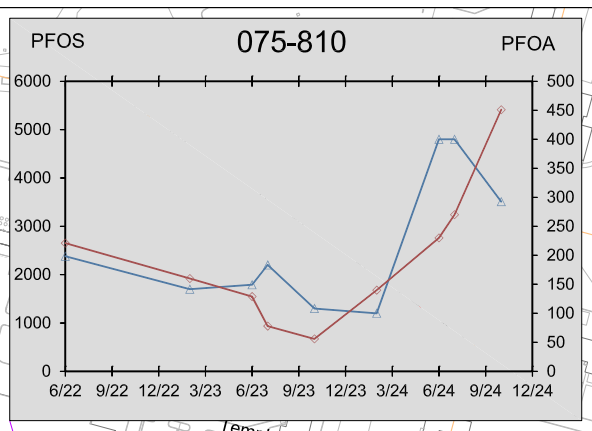
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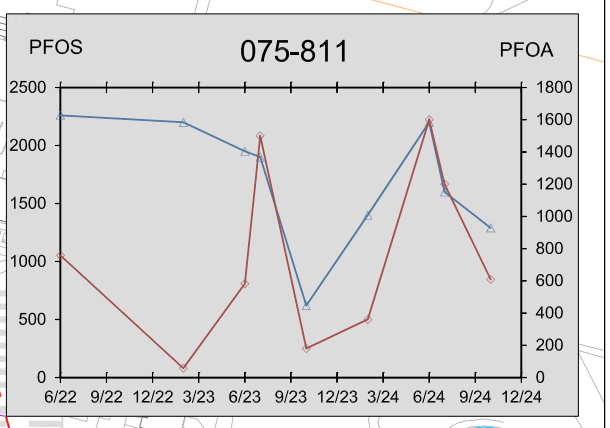
Figure 3.5.2-2
OU X Former Firehouse Treatment System
Influent Concentrations (ng/L)

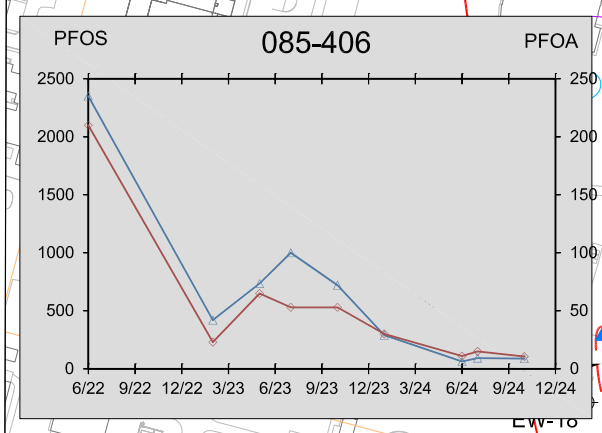
2024 BNL Groundwater Status Report

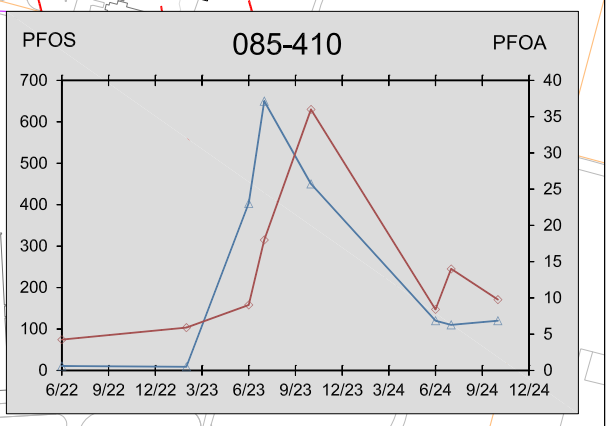


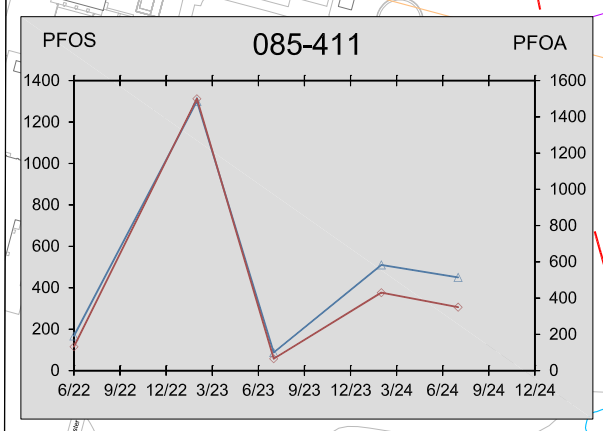


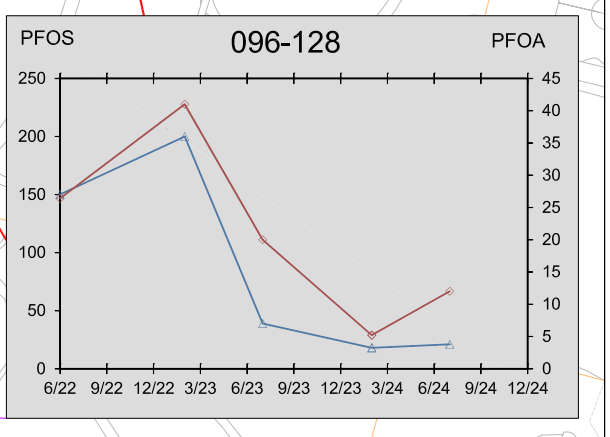


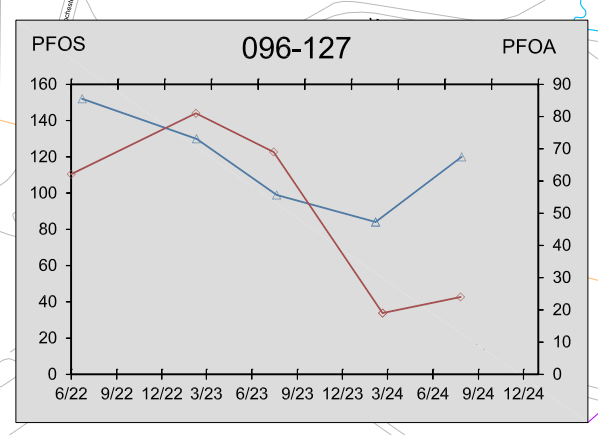


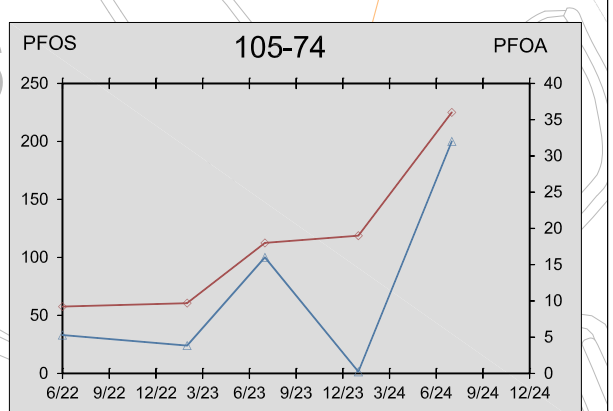


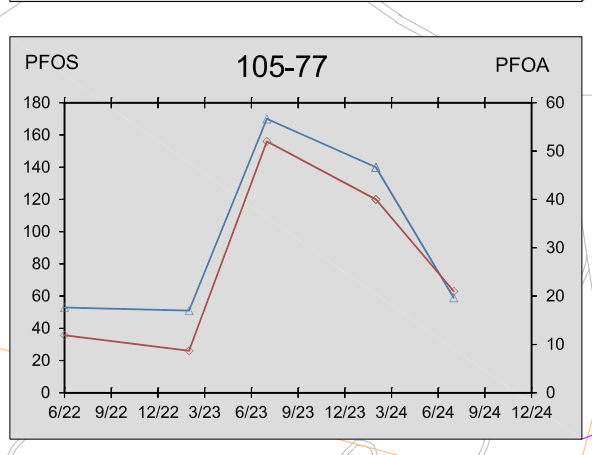












Major Petroleum Facility
Former Fire House
Training Area
Former Roadway
Training Area
Former Water Supply Well 1
Storm Drainage Culvert
Former Supply and Material Area
Building 526
RAV BASIN
HO
HW
FF-RW-A
FF-RW-B
FF-RW-C
RTW-1
RTW-2
RTW-3
RTW-4
EW-9
EW-10
EW-11
EW-16
RW-1
RW-2
RW-3
RW-4
RW-5
RW-7
Temple Place
Avenue
Street
Grove St.
S. Railroad Street
Middle Road
75
76
85
86
96
105
809
810
811
1000
500
406
410
411
127
128
74
77
100
10

LEGEND

- 26 — MONITORING WELL
- 85 — BNL GRID NUMBER
- FF-RW-A — EXTRACTION WELL LOCATION
- —10— EXTENT OF PFOS PLUME BASED ON 10 ng/L (DASHED WHERE INFERRED)
- PFOS (ng/L) left scale
- PFOA (ng/L) right scale
- PFOS PERFLUOROOCTANE SULFONATE
- PFOA PERFLUOROOCTANOIC ACID

CONCENTRATION (IN ng/L) CONCENTRATION (IN ng/L)

SCALE 0 200 400 FEET

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU X FORMER FIREHOUSE PFAS TREND PLOTS

2024 BNL GROUNDWATER STATUS REPORT

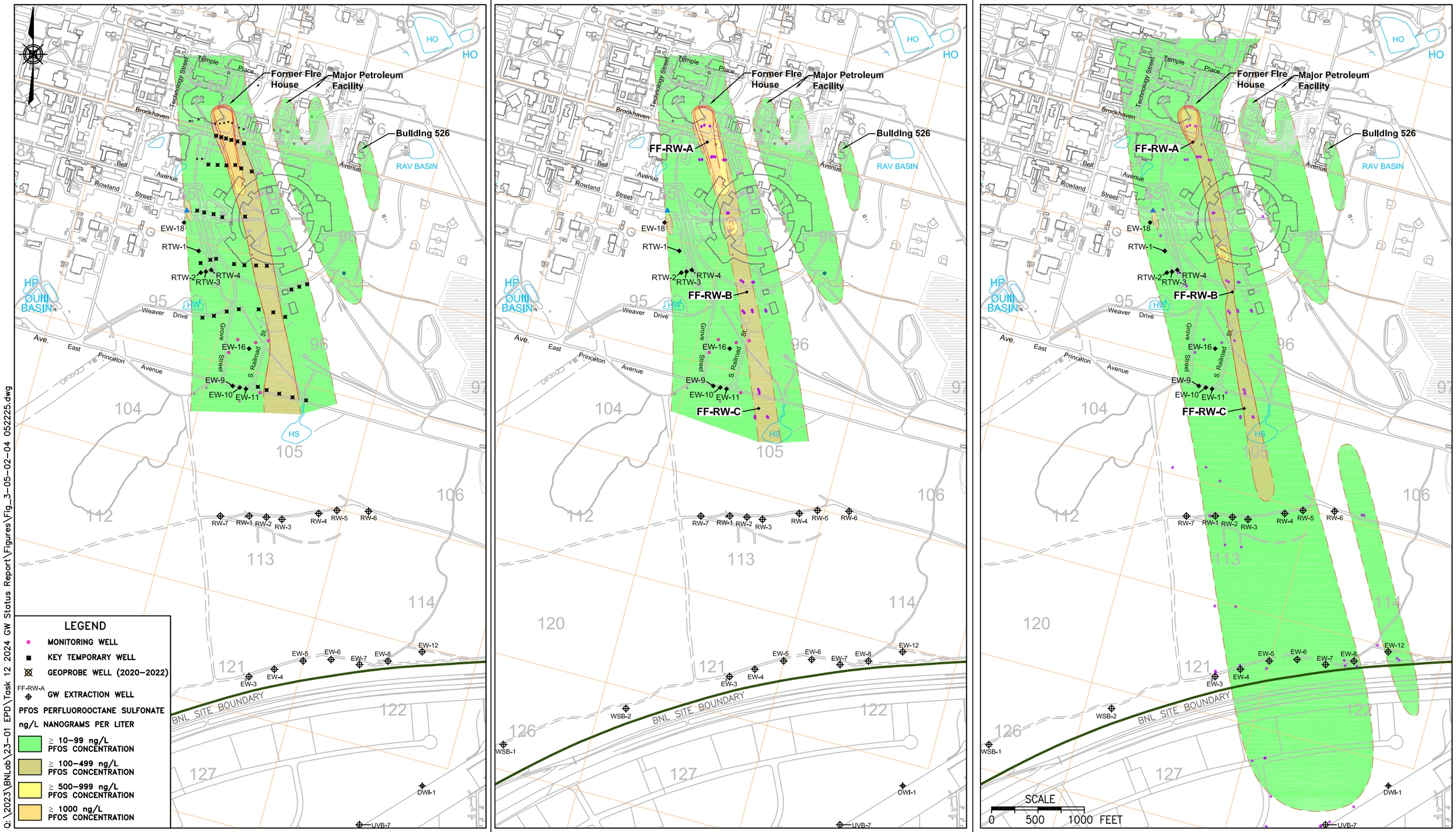
DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	—	04/02/25	—
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/22/25	—

FIGURE NO.: 3.5.2-3

2020-2021

2023

2024



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Brookhaven National Laboratory

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU X FORMER FIREHOUSE
PFOS PLUME COMPARISON 2020 – 2024

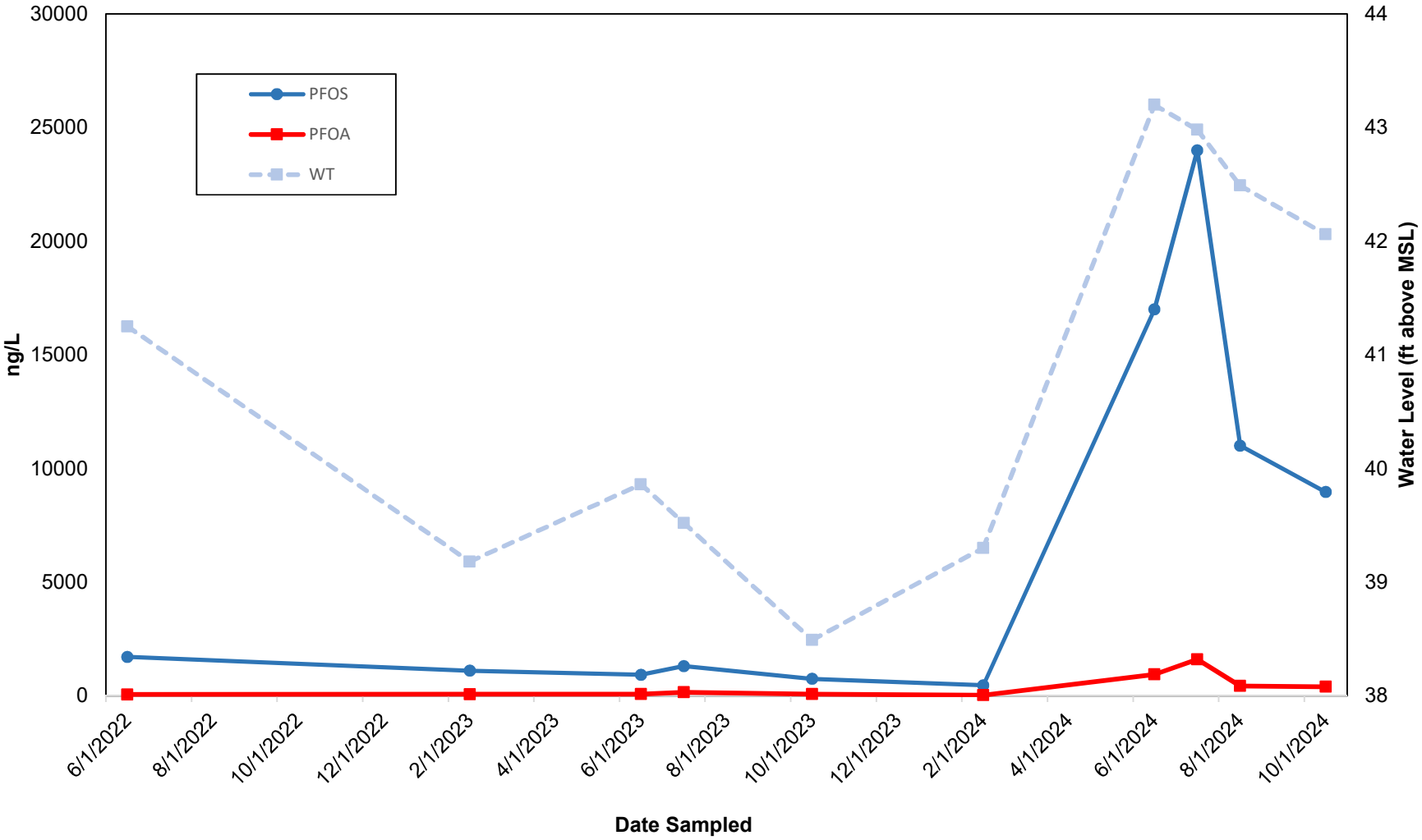
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/02/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/22/25	–
FIGURE NO.:			
3.5.2–4			

Figure 3.5.2-5
OU X Former Firehouse Treatment System

Changes in PFOS and PFOA Concentrations in Former Firehouse Source Area Monitoring Well 075-809 Relative to Changes in Water Table Elevation

2024 BNL Groundwater Status Report



NORTH
T

SOUTH
T'

BROOKHAVEN AVENUE

PRINCETON AVENUE

MIDDLE ROAD

BNL SITE BOUNDARY

CARLETON DRIVE

075-87
075-809
085-406
085-407
085-408
085-411
085-412
096-122
096-123
096-126
096-127
096-118
105-74
105-75
105-76
105-77
105-78
113-17
121-23
000-548
000-538
000-537
000-529
IP-EW-9
000-262

FF-RW-A
FF-RW-B
FF-RW-C
RW-4
RW-3
EW-5

1000
500
8960.0/395.0
87.6/10.5
17.2/3.0
18.2/5.9
450.0/350.0
18.0/8.8
220.0/230.0
1000
500
8.5/5.4
7.6/7.4
91.0/15.0
200.0/36.0
59.0/21.0
120.0/24.0
140.0/30.0
64.0/8.7
210.0/90.0
40.0/22.0
7.1/6.7
8.8/4.5
8.8/3.9
8.9/4.6
9.8/4.8
7.9/4.7
9.3/9.0
100
10
?

ELEVATION (In Feet; Mean Sea Level)

100
50
0
−50
−100
−150
−200

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LEGEND

Upper Glacial aquifer
- UG Upper Glacial Sands
- UC Upper Glacial Silts & Clays
- UU Upton Unit

Gardiners Clay
- GL Gardiners Clay
- GS Gardiners Clay – Silt

Magothy aquifer
- MA Magothy Sands and Clay
- MB Magothy Brown Clay
- MC Magothy Clays (undiff)
- MO Magothy – OTHER

075-809 BNL Well ID

ND Indicates not detected at or above laboratory method detection limits

74.3/10.0 PFOS Value/PFOA Value in (ng/L)

—10— PFOS Contour (ng/L) (Dashed Where Inferred)

Monitoring Well Screen

Extraction Well Screen

Water Table As Of Aug 12 – Aug 20, 2024

ng/L– Nanograms Per Liter

HORIZONTAL SCALE
0 500 1000 FEET

Monitoring Well IDs are stacked in order of the depth of the well from shallow to deep

085-406
085-407
085-408

NOTES:

1) GEOLOGIC INFORMATION SHOWN IS BASED ON ADDITIONAL EXPLORATIONS (e.g., HYDROPUNCHES, GEOPROBES, VERTICAL PROFILES, AND/OR TEST WELLS) DOCUMENTED IN PREVIOUS, CHARACTERIZATION REPORTS.

2) PFOS/PFOA RESULTS IN MONITORING WELLS BASED ON JULY 24 THROUGH SEPT. 22, 2024 SAMPLING EVENTS.

3) CONTOUR INTERVAL IS AS SHOWN.

4) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM WELL LOCATION MAP.

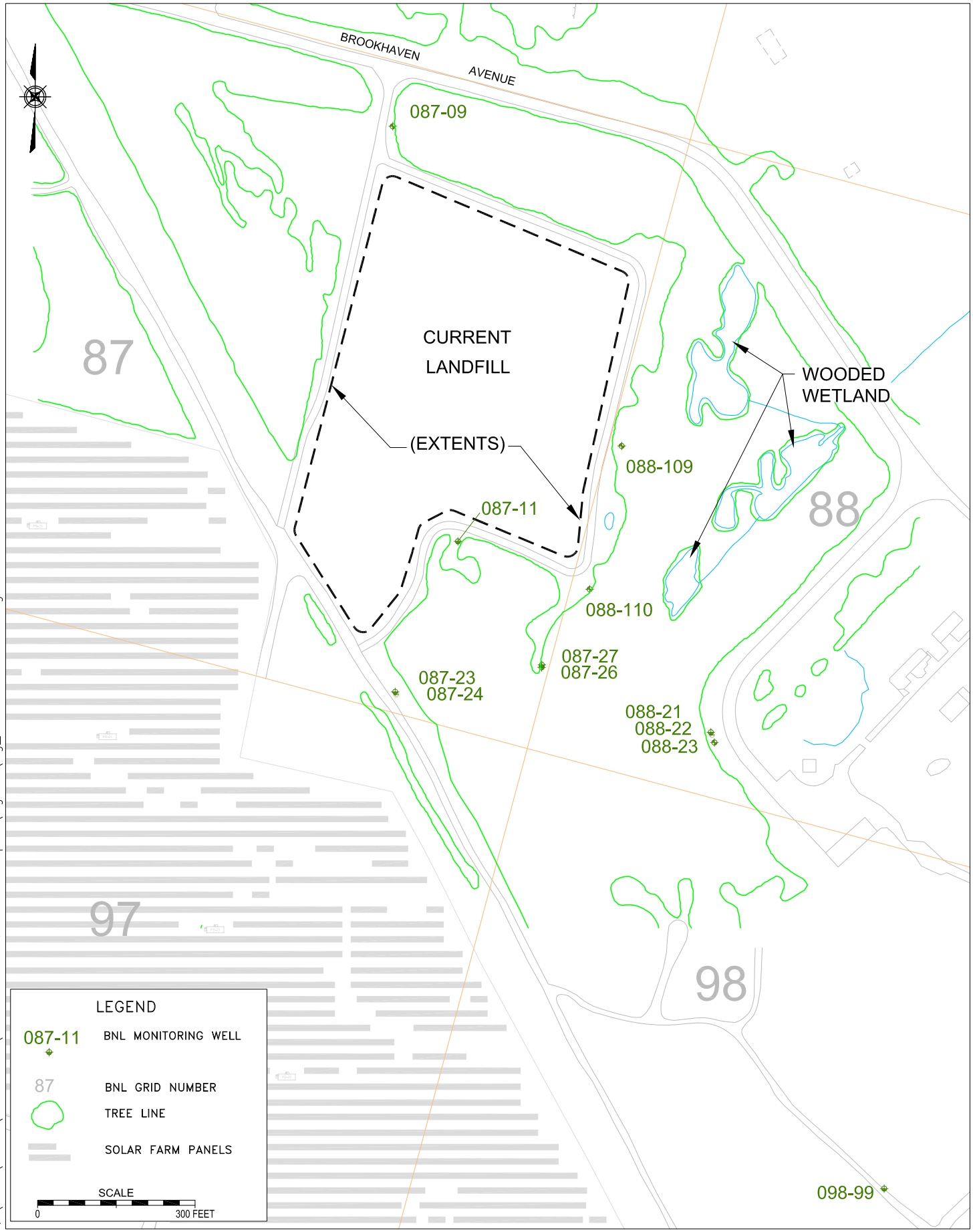
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU X FORMER FIREHOUSE
PFOS HYDROGEOLOGIC CROSS SECTION (T–T')
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	20:1	04/16/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 3.5.2-6



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

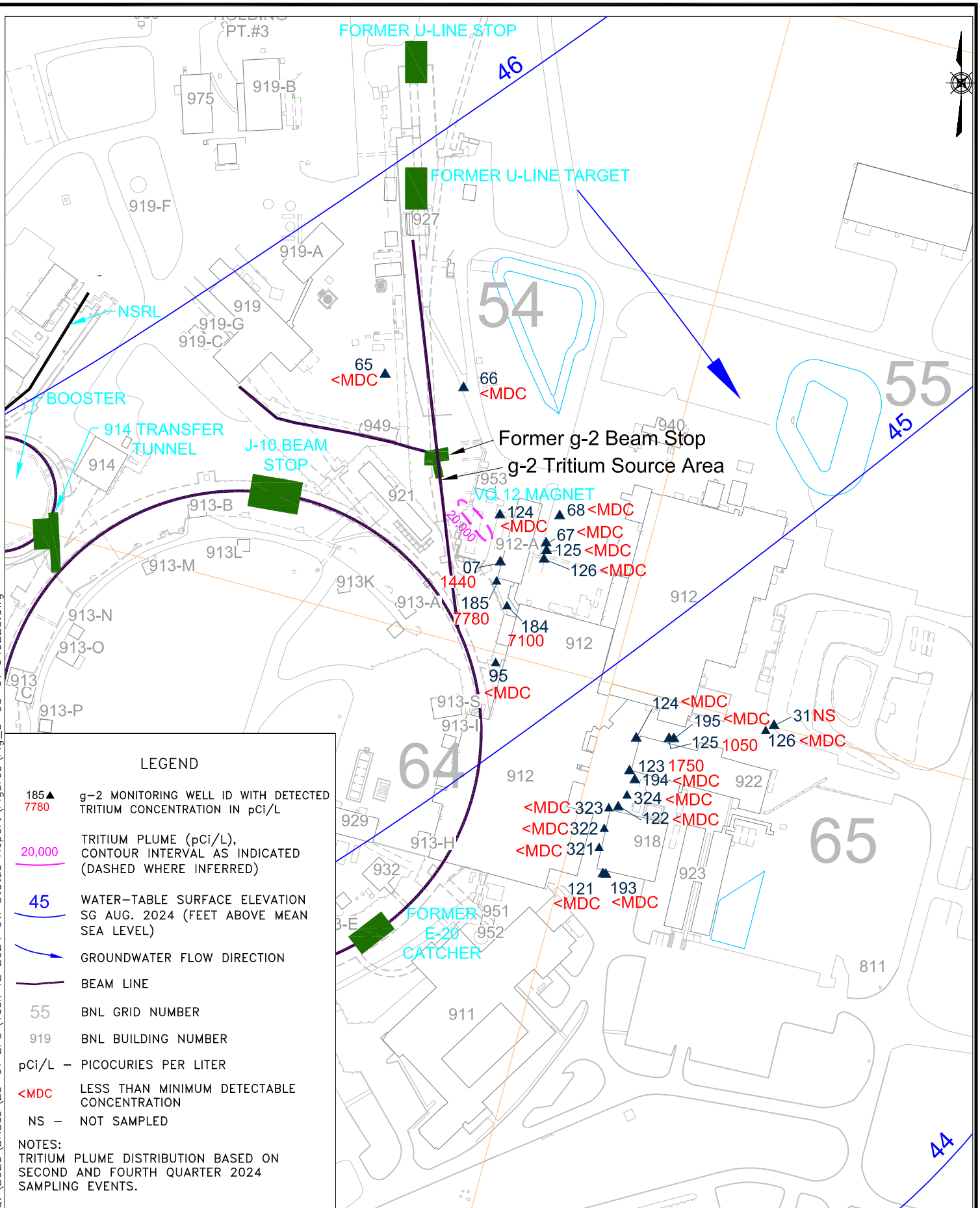
TITLE:

CURRENT LANDFILL MONITORING WELL LOCATIONS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	03/18/25	–
CHKD:	APPD:	REV.:	NOTES:
JM	BB	–	–

FIGURE NO.: 3.7-1



LEGEND

185▲ 7780	g–2 MONITORING WELL ID WITH DETECTED TRITIUM CONCENTRATION IN pCi/L
20,000	TRITIUM PLUME (pCi/L), CONTOUR INTERVAL AS INDICATED (DASHED WHERE INFERRED)
45	WATER–TABLE SURFACE ELEVATION SG AUG. 2024 (FEET ABOVE MEAN SEA LEVEL)
	GROUNDWATER FLOW DIRECTION
	BEAM LINE
55	BNL GRID NUMBER
919	BNL BUILDING NUMBER
pCi/L –	PICOCURIES PER LITER
<MDC	LESS THAN MINIMUM DETECTABLE CONCENTRATION
NS –	NOT SAMPLED

NOTES:
TRITIUM PLUME DISTRIBUTION BASED ON SECOND AND FOURTH QUARTER 2024 SAMPLING EVENTS.

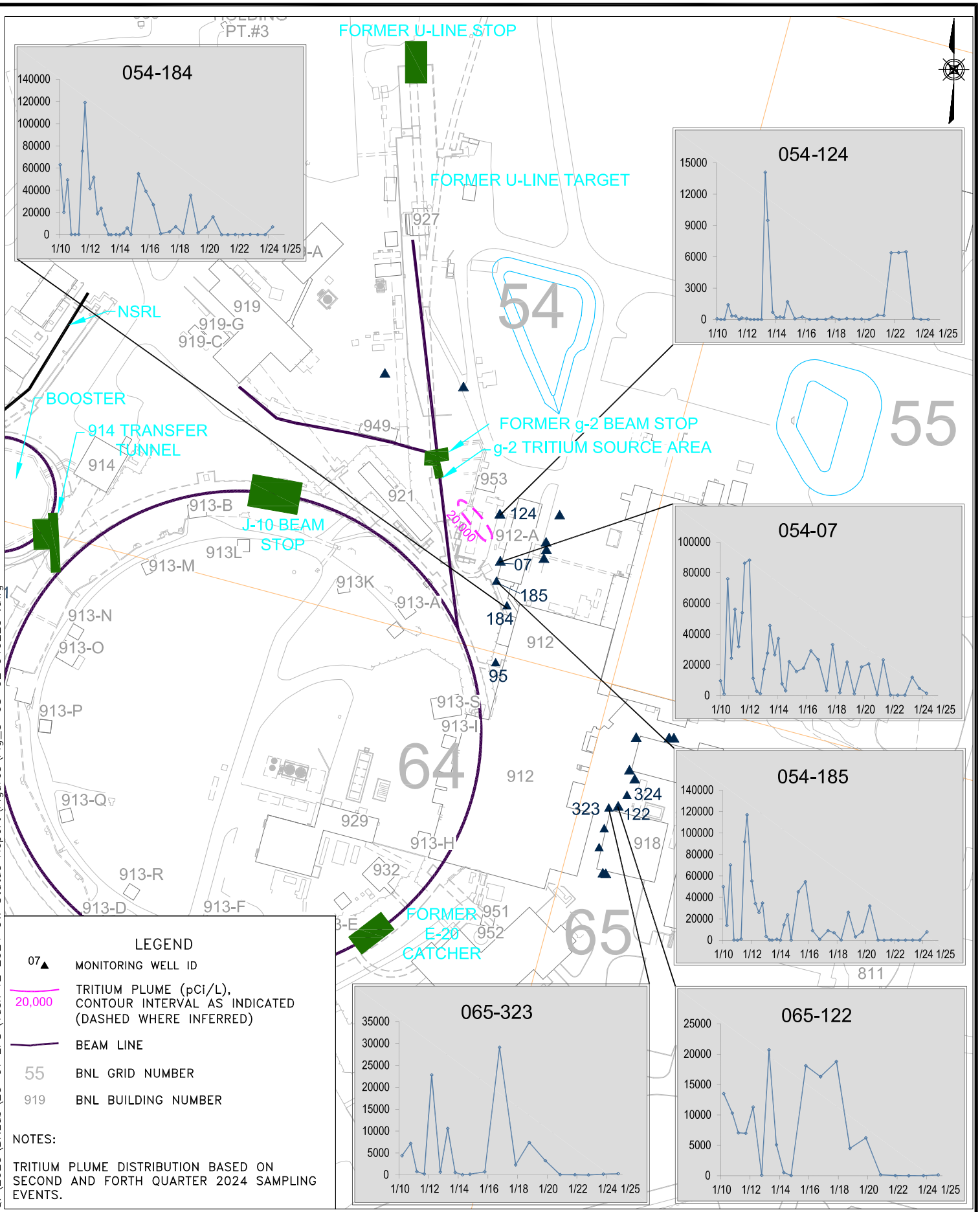
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
FACILITY MONITORING PROGRAM, AOC 16T g–2 TRITIUM PLUME 4th QUARTER 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/02/24	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 3.8–1



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
FACILITY MONITORING PROGRAM, AOC 16T g-2 HISTORICAL TRITIUM TRENDS
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/02/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 3.8-2

Figure 3.8-3
Facility Monitoring Program
AOC 16T g-2 Tritium Plume
Comparison to ROD Trigger

2024 BNL Groundwater Status Report

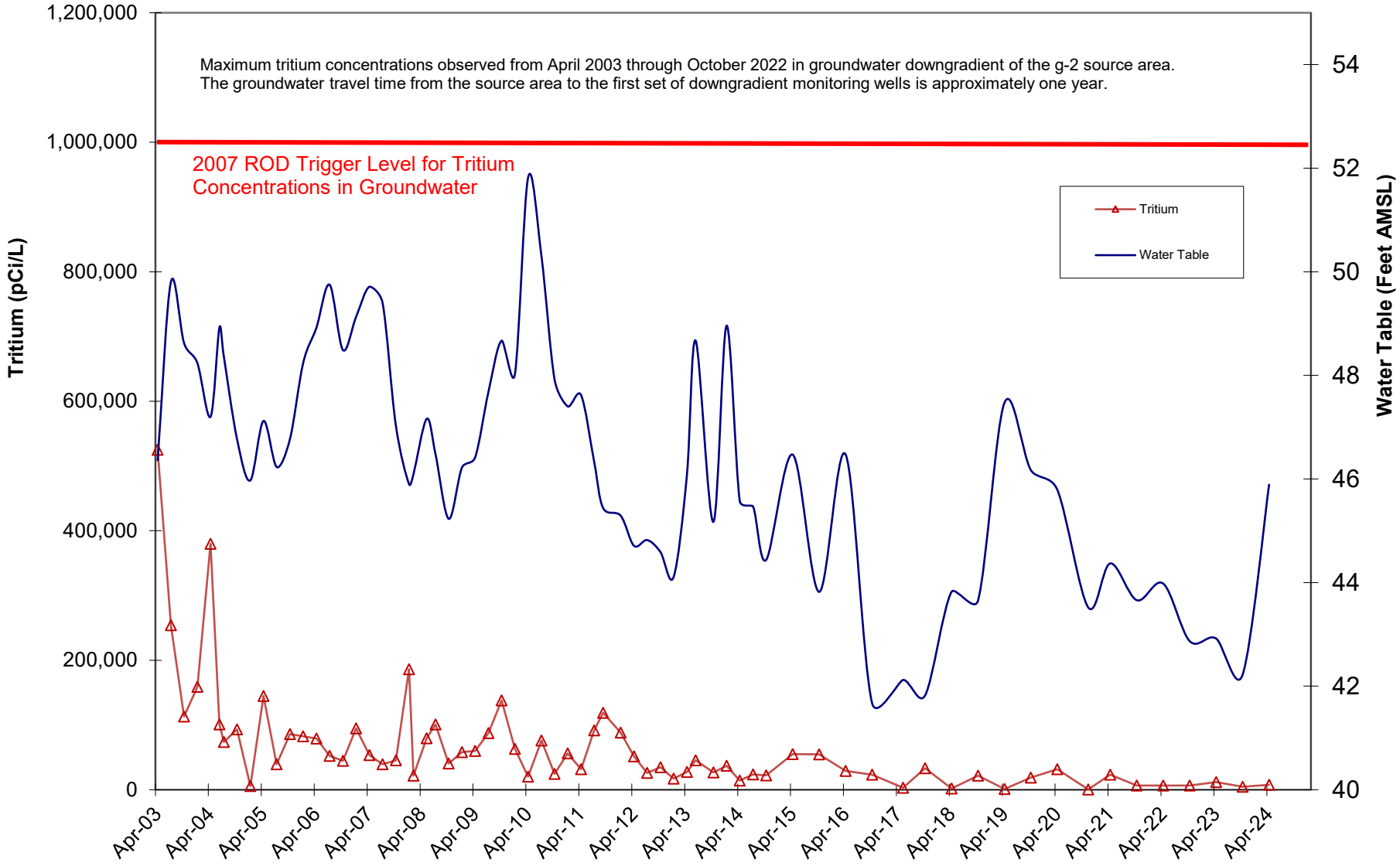
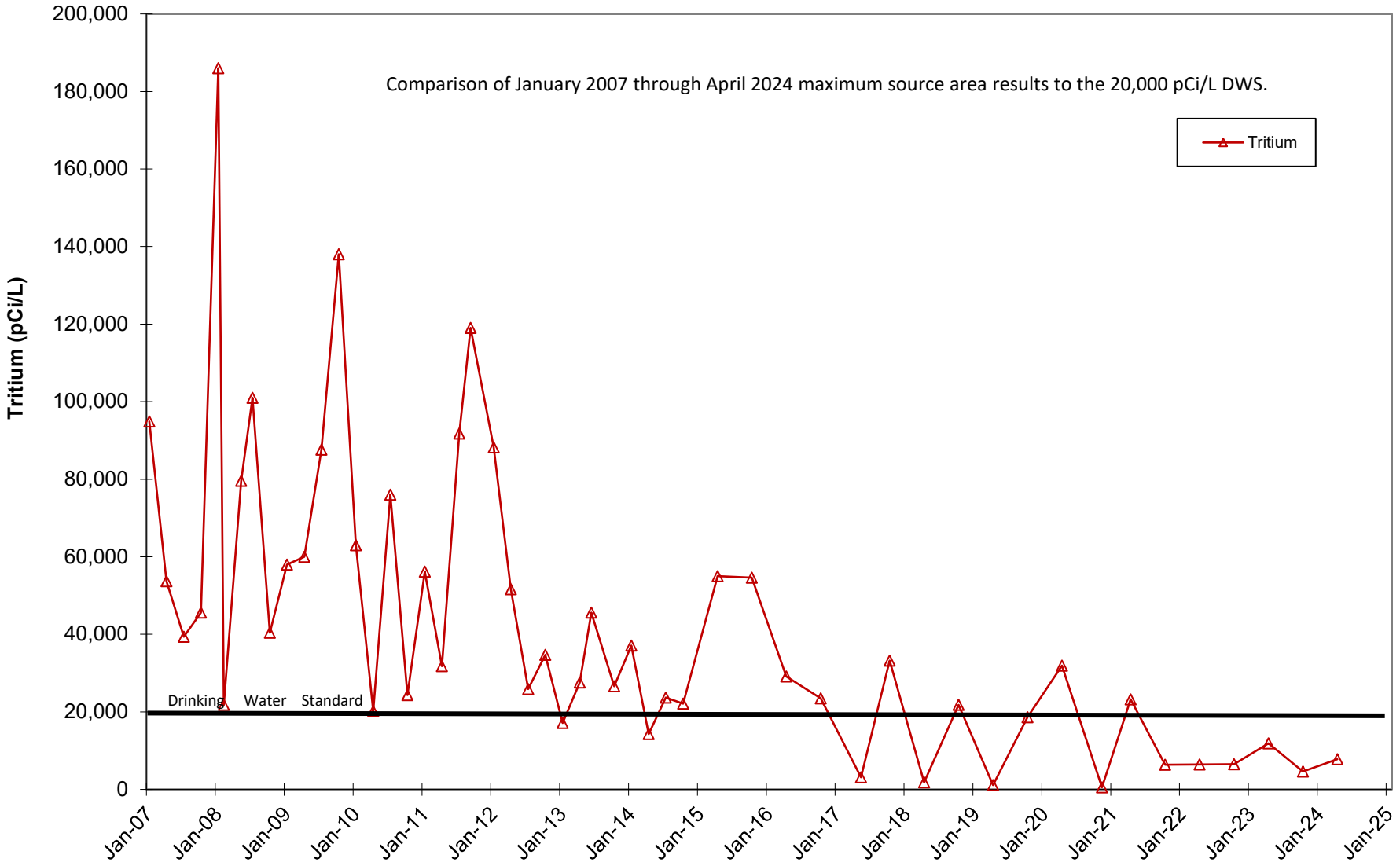
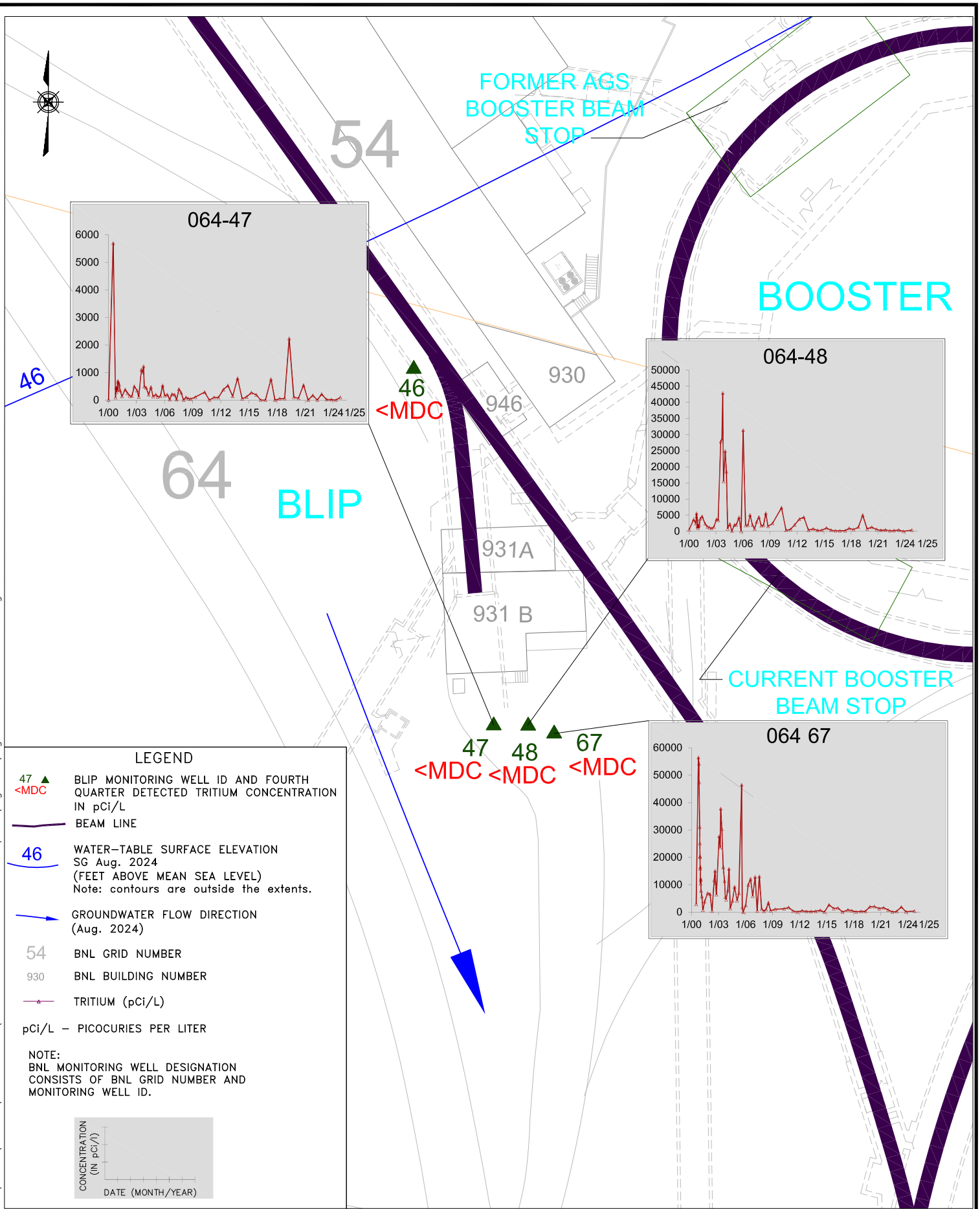


Figure 3.8-4
Facility Monitoring Program
AOC 16T g-2 Tritium Plume
Comparison to DWS

2024 BNL Groundwater Status Report





LEGEND

47 ▲ <MDC — BLIP MONITORING WELL ID AND FOURTH QUARTER DETECTED TRITIUM CONCENTRATION IN pCi/L

BEAM LINE

46 — WATER-TABLE SURFACE ELEVATION SG Aug. 2024 (FEET ABOVE MEAN SEA LEVEL) Note: contours are outside the extents.

GROUNDWATER FLOW DIRECTION (Aug. 2024)

54 — BNL GRID NUMBER

930 — BNL BUILDING NUMBER

TRITIUM (pCi/L)

pCi/L – PICOCURIES PER LITER

NOTE:
BNL MONITORING WELL DESIGNATION CONSISTS OF BNL GRID NUMBER AND MONITORING WELL ID.

CONCENTRATION (IN pCi/l)
DATE (MONTH/YEAR)

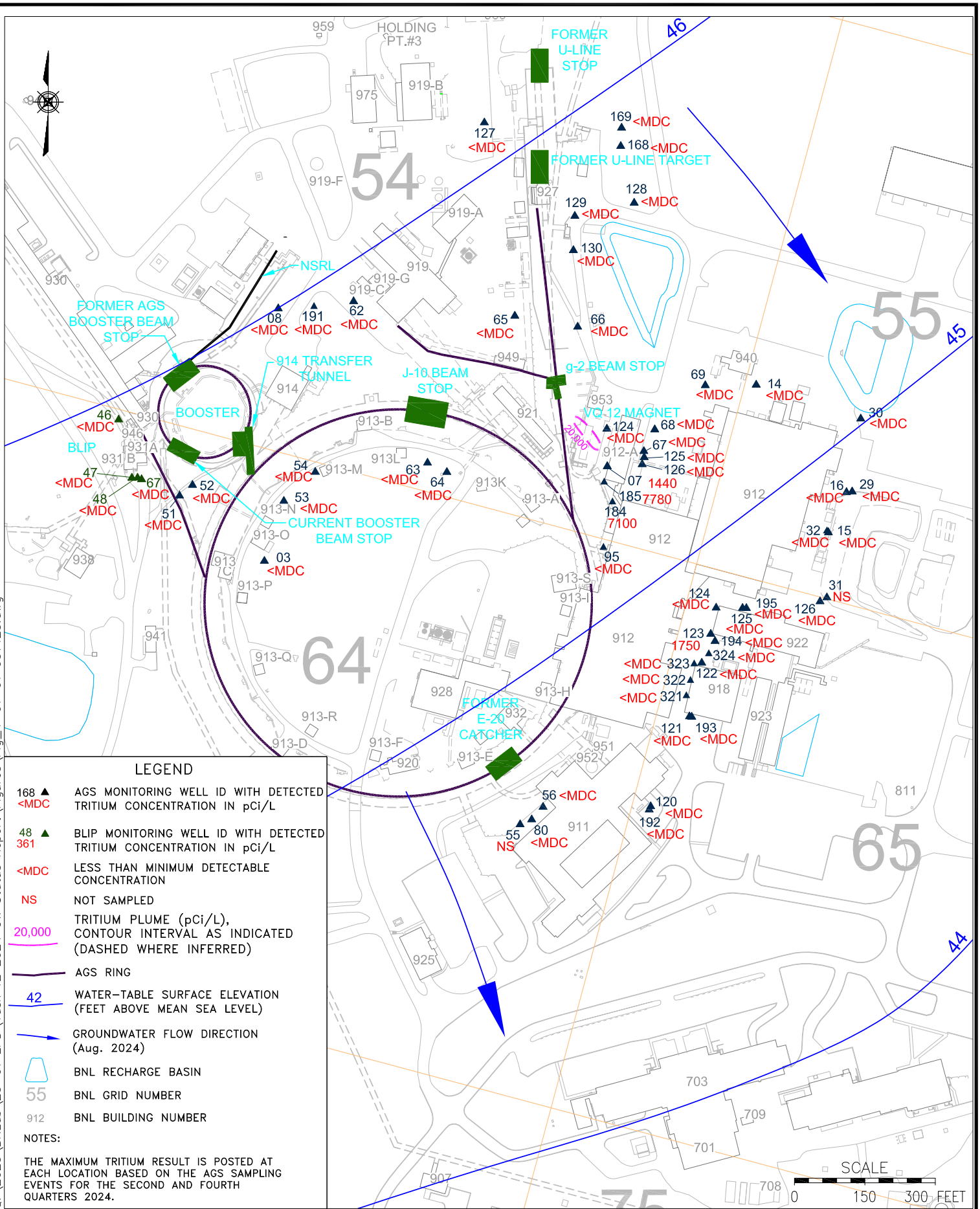
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE: FACILITY MONITORING PROGRAM, BLIP FACILITY AREA MONITORING WELL LOCATIONS AND TRITIUM RESULTS, 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/02/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/14/25	–

FIGURE NO.: 3.9-1



LEGEND

168 ▲ <MDC	AGS MONITORING WELL ID WITH DETECTED TRITIUM CONCENTRATION IN pCi/L
48 ▲ 361	BLIP MONITORING WELL ID WITH DETECTED TRITIUM CONCENTRATION IN pCi/L
<MDC	LESS THAN MINIMUM DETECTABLE CONCENTRATION
NS	NOT SAMPLED
20,000	TRITIUM PLUME (pCi/L), CONTOUR INTERVAL AS INDICATED (DASHED WHERE INFERRED)
	AGS RING
42	WATER-TABLE SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL)
	GROUNDWATER FLOW DIRECTION (Aug. 2024)
	BNL RECHARGE BASIN
55	BNL GRID NUMBER
912	BNL BUILDING NUMBER

NOTES:

THE MAXIMUM TRITIUM RESULT IS POSTED AT EACH LOCATION BASED ON THE AGS SAMPLING EVENTS FOR THE SECOND AND FOURTH QUARTERS 2024.

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE: FACILITY MONITORING PROGRAM, AGS AND BLIP FACILITY AREA MONITORING WELL LOCATIONS AND TRITIUM RESULTS, 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/02/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	05/14/25	–

FIGURE NO.: 4.1-1

Figure 4.1-2
Facility Monitoring Program
AGS Facility Area
Maximum Tritium Concentrations Downgradient of
Booster Stop

2024 BNL Groundwater Status Report

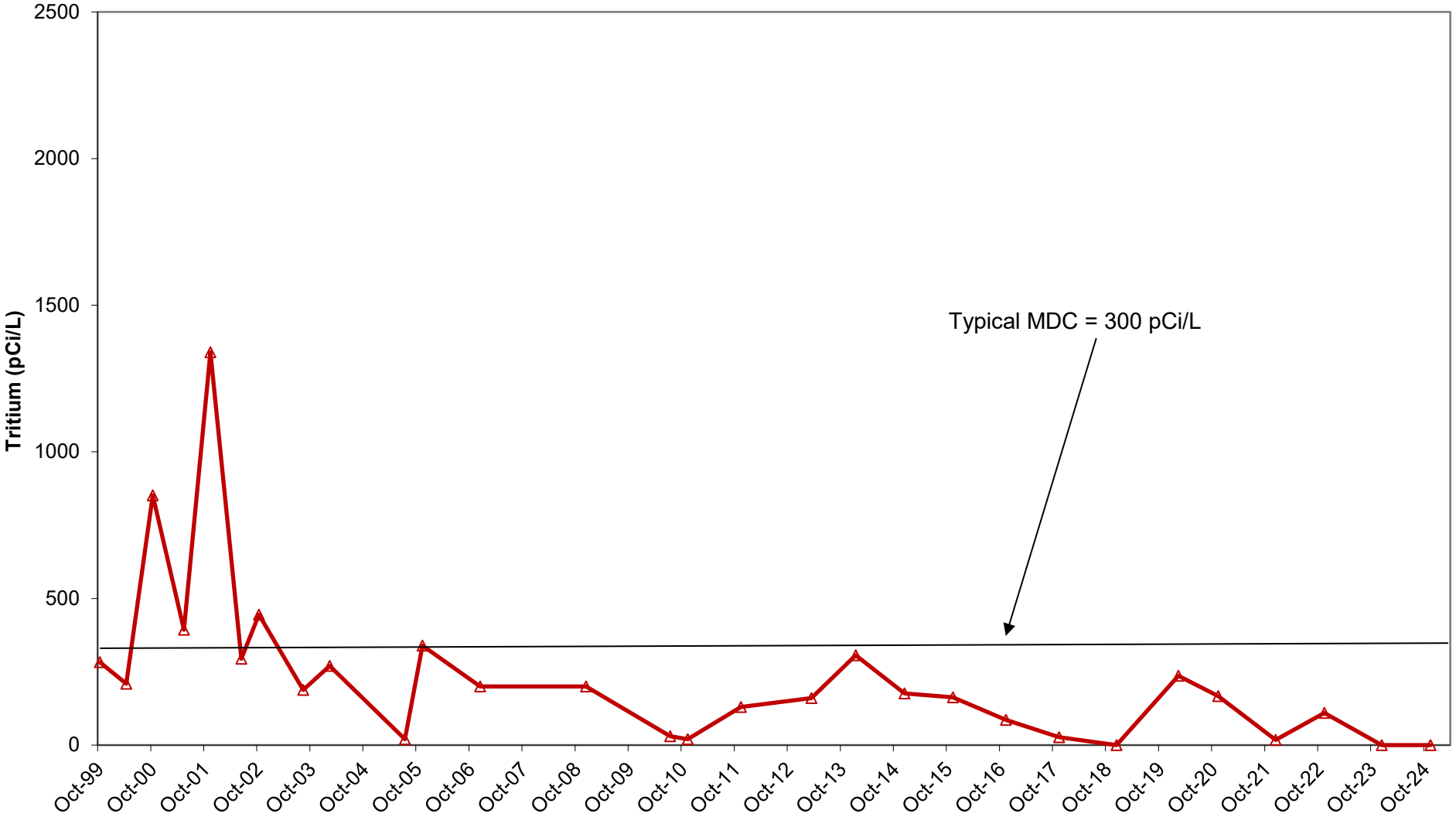


Figure 4.1-3
Facility Monitoring Program
AGS Facility Area
Maximum Tritium Concentrations
Downgradient of Former AGS E-20 Catcher

2024 BNL Groundwater Status Report

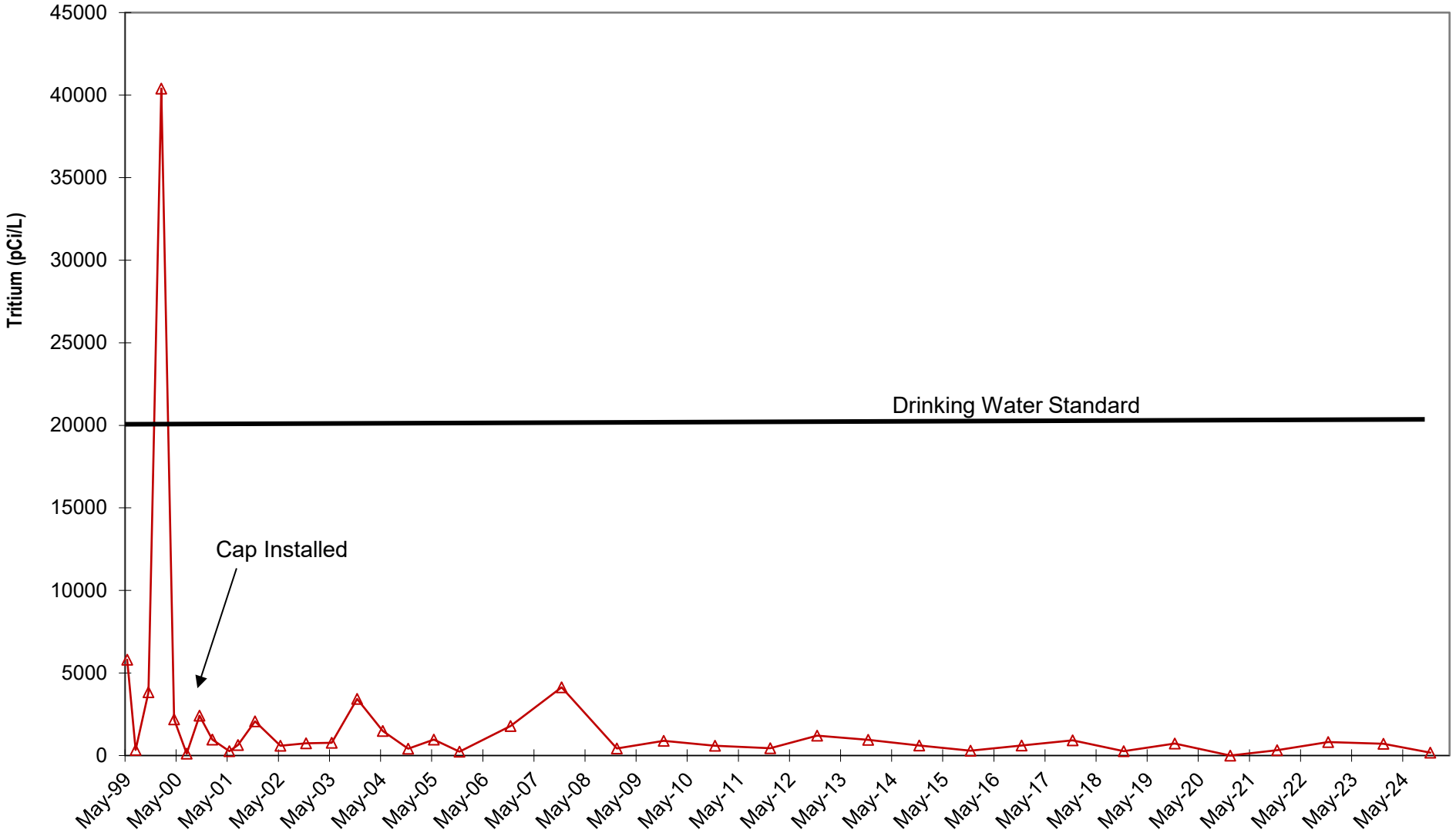


Figure 4.1-4
Facility Monitoring Program
AGS FacilityArea
Maximum Tritium Concentrations
Downgradient of Building 914

2024 BNL Groundwater Status Report

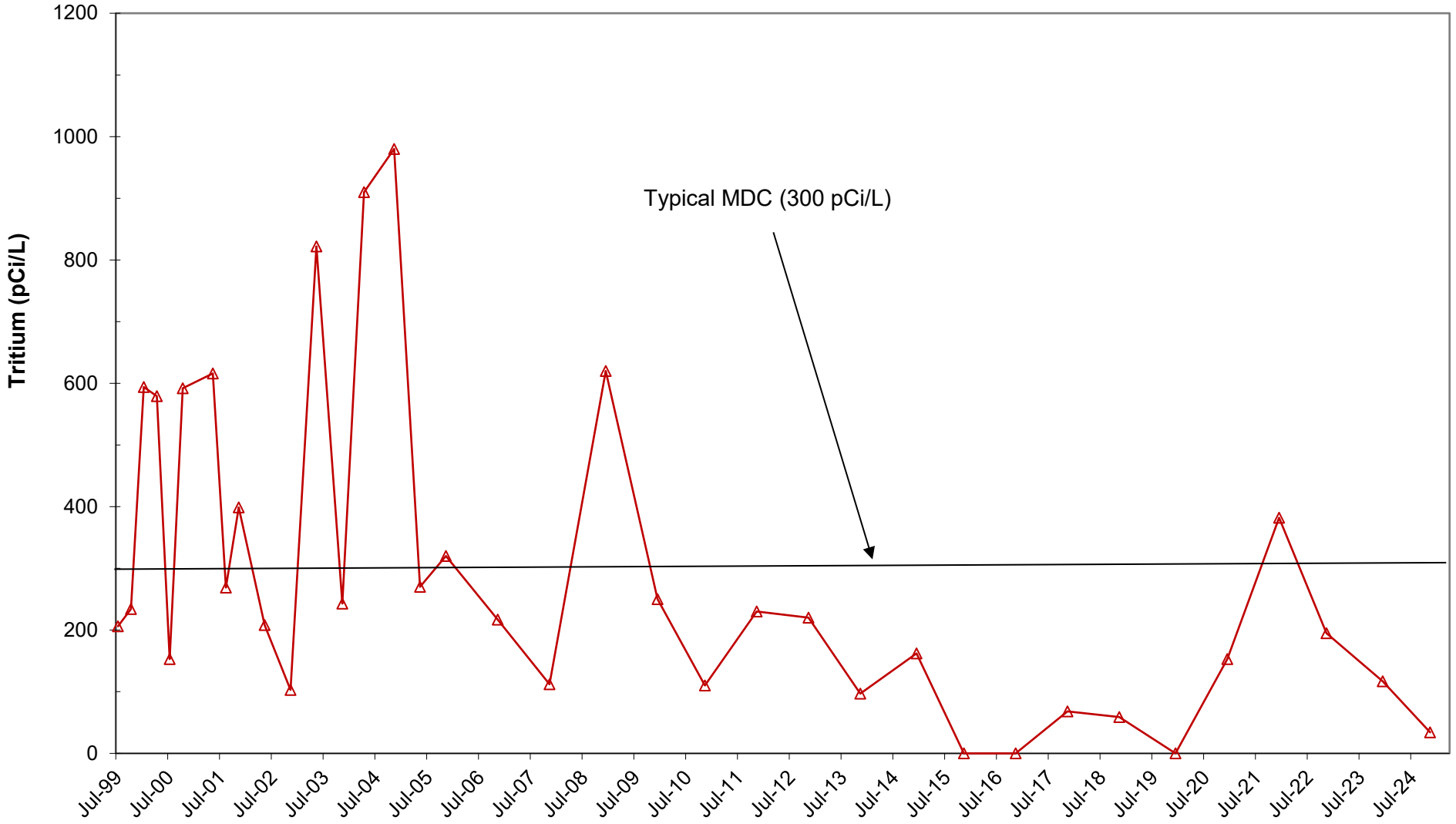


Figure 4.1-5
Facility Monitoring Program
AGS Facility Area
Maximum Tritium Concentrations
Downgradient of J-10 Beam Stop

2024 BNL Groundwater Status Report

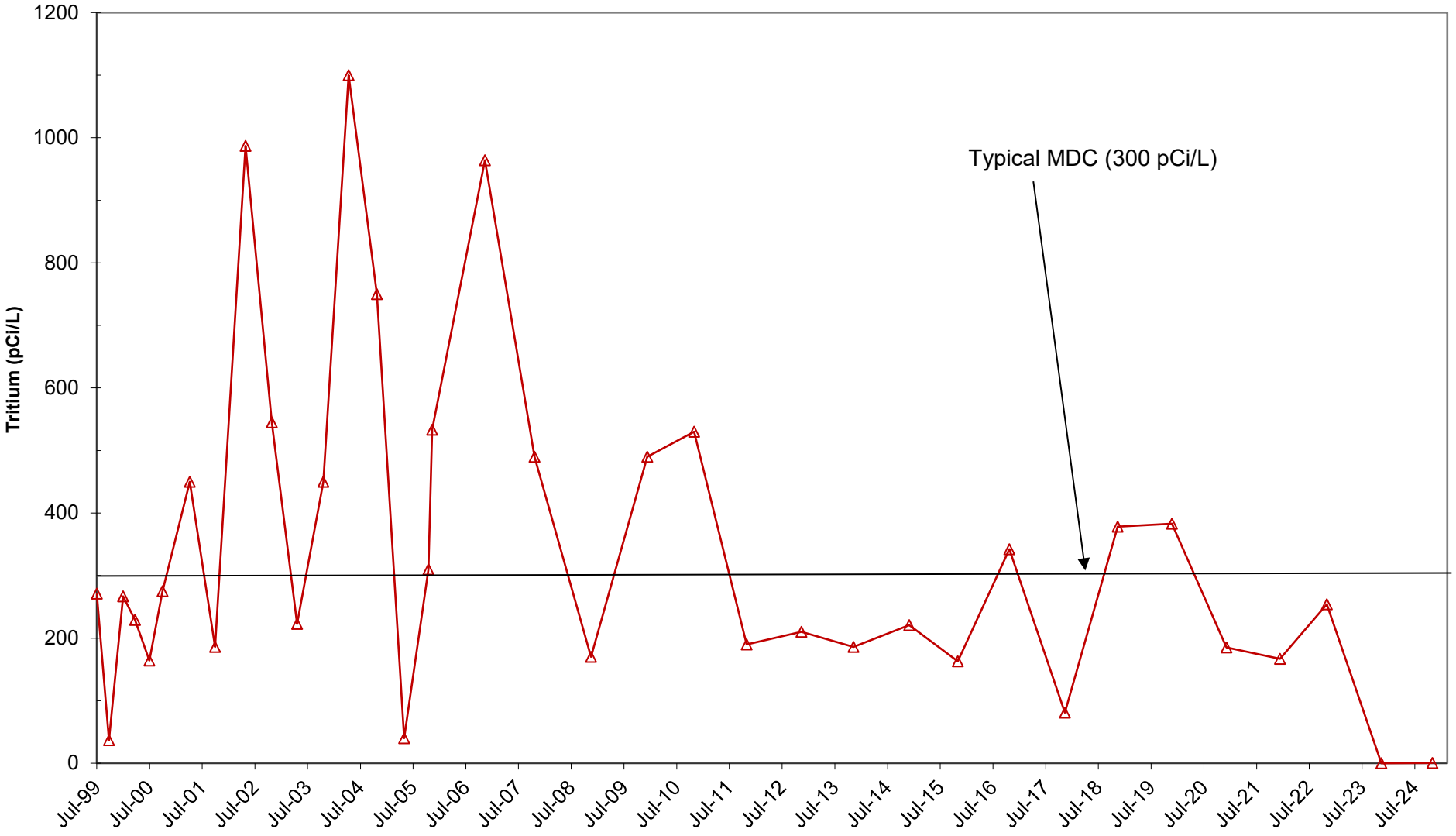


Figure 4.1-6
Facility Monitoring Program
AGS Facility Area
Maximum Tritium Concentrations
Downgradient of Former U-Line Target

2024 BNL Groundwater Status Report

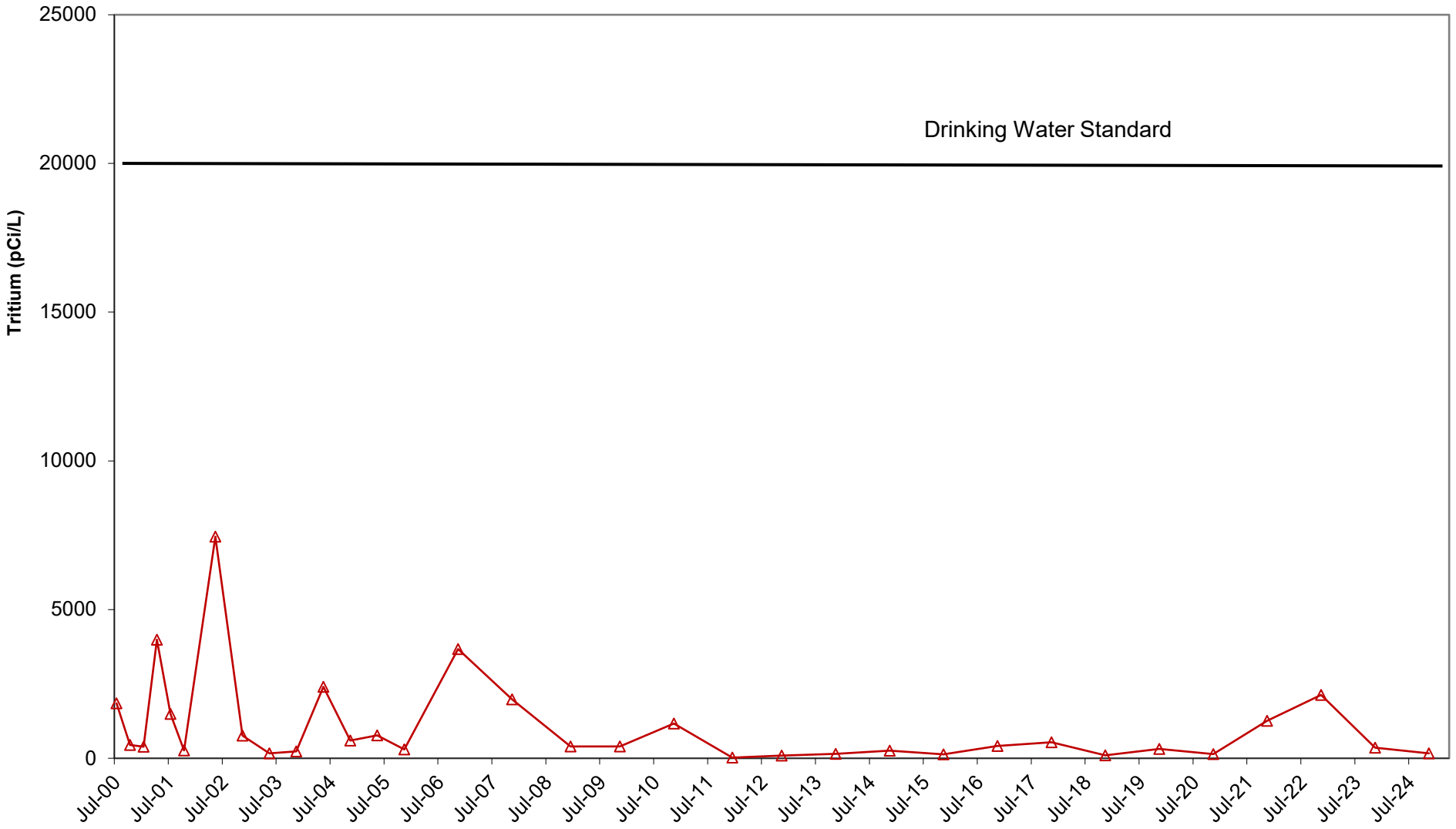
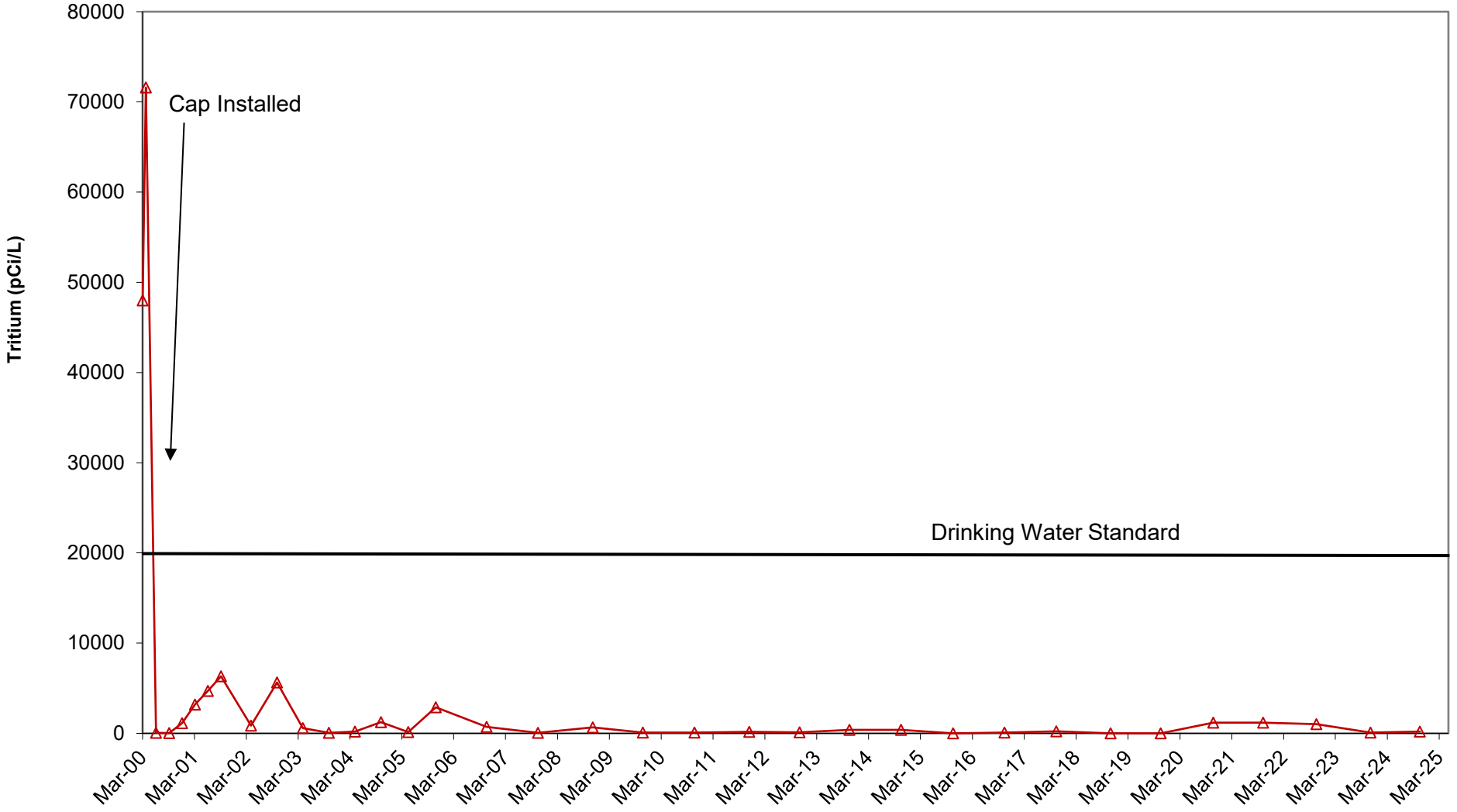
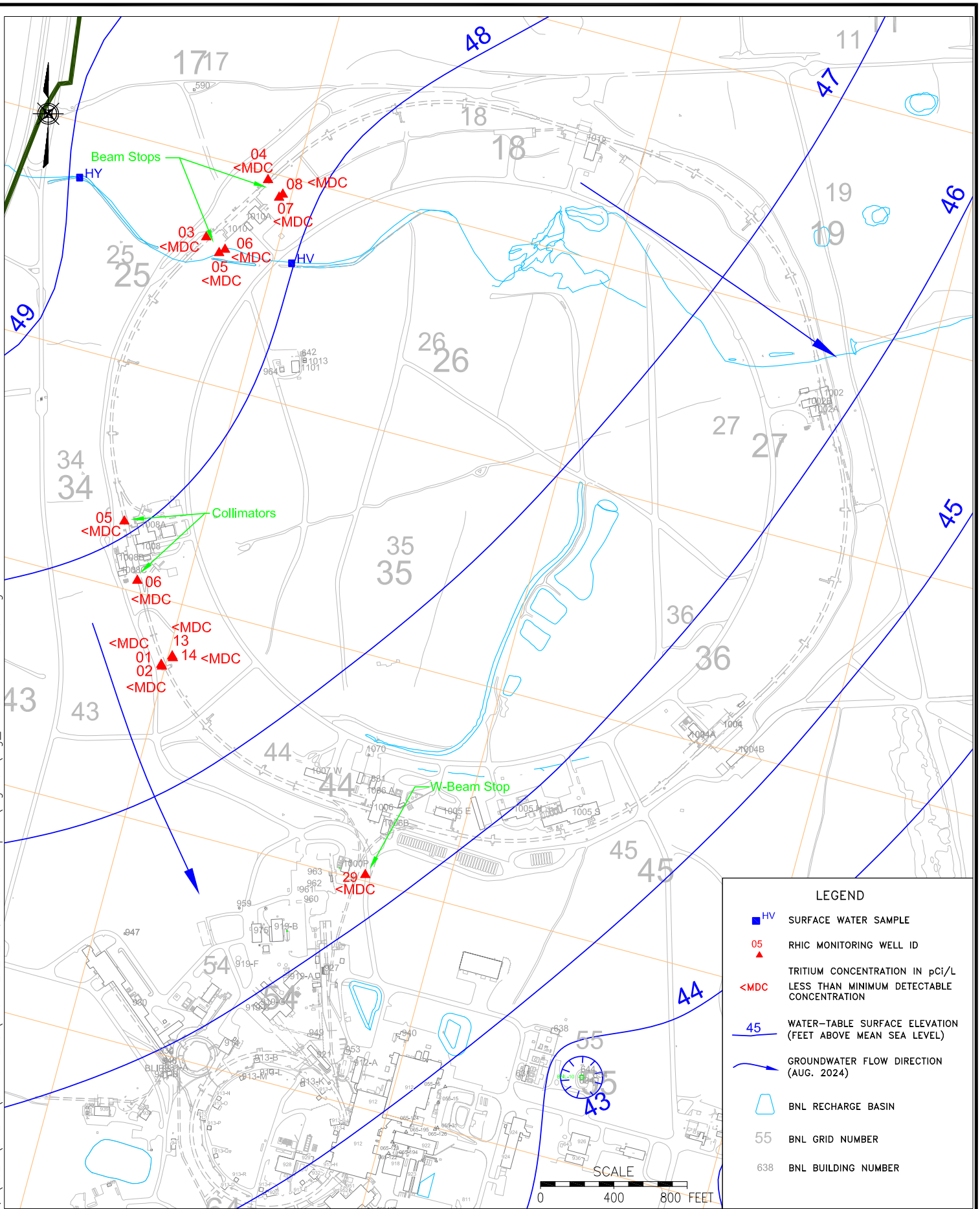


Figure 4.1-7
Facility Monitoring Program
AGS Facility Area
Maximum Tritium Concentrations
Downgradient of Former U-Line Beam Stop Area

2024 BNL Groundwater Status Report





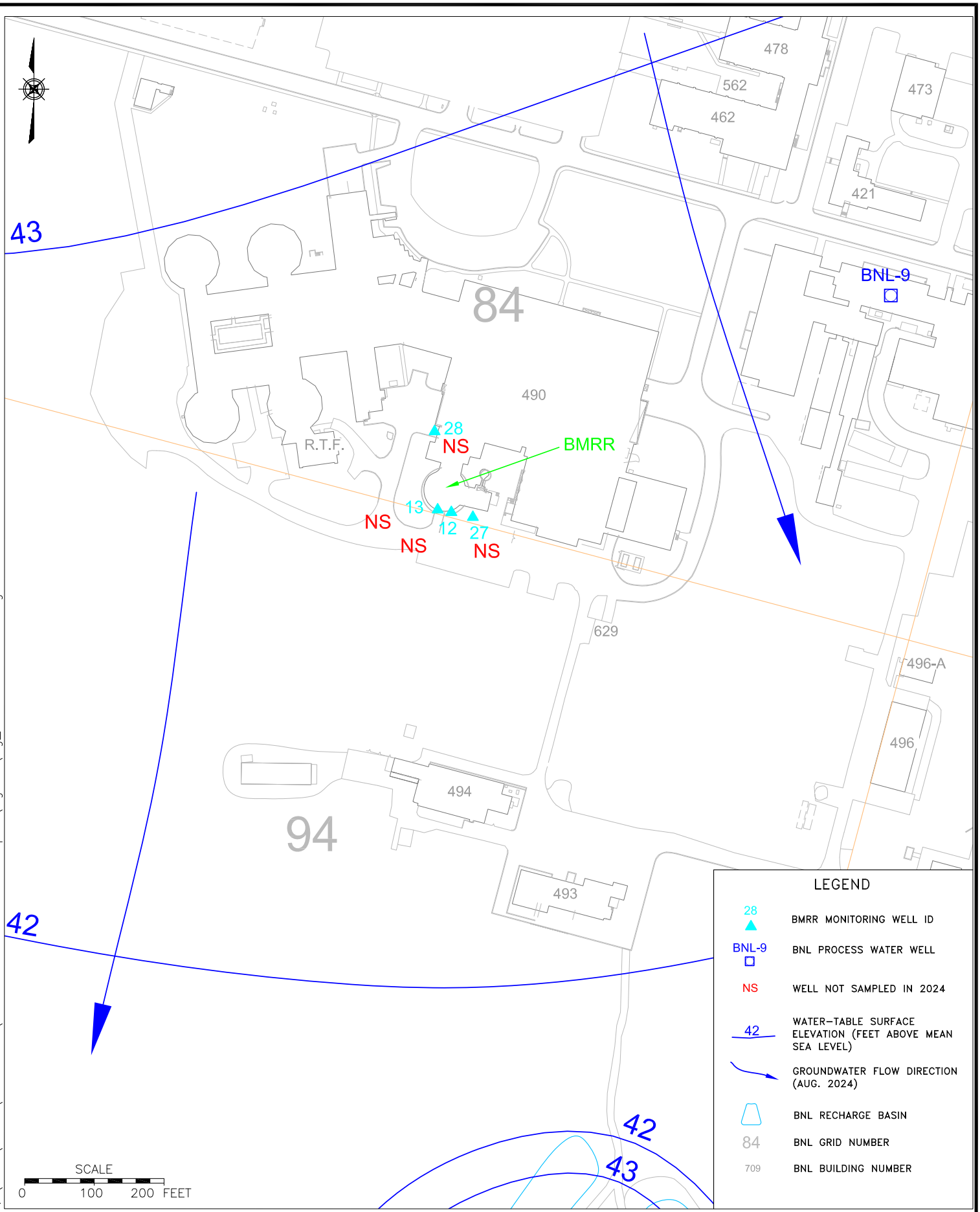
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE: FACILITY MONITORING PROGRAM, RELATIVISTIC HEAVY ION COLLIDER, MONITORING WELL LOCATIONS TRITIUM RESULTS, 3RD QTR 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.2-1



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
FACILITY MONITORING PROGRAM,
BROOKHAVEN MEDICAL RESEARCH REACTOR
MONITORING WELL LOCATIONS

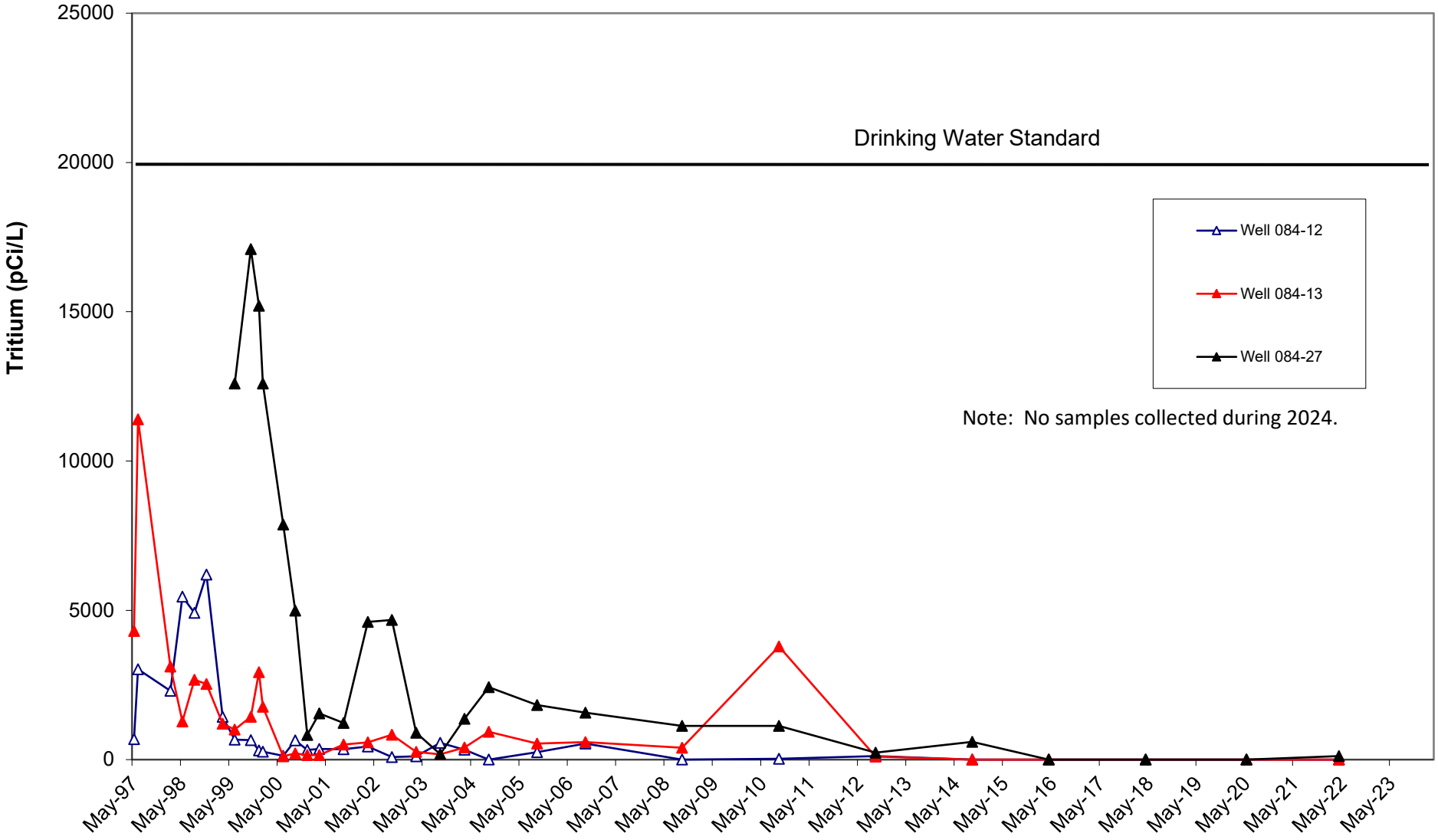
2024 BNL GROUNDWATER STATUS REPORT

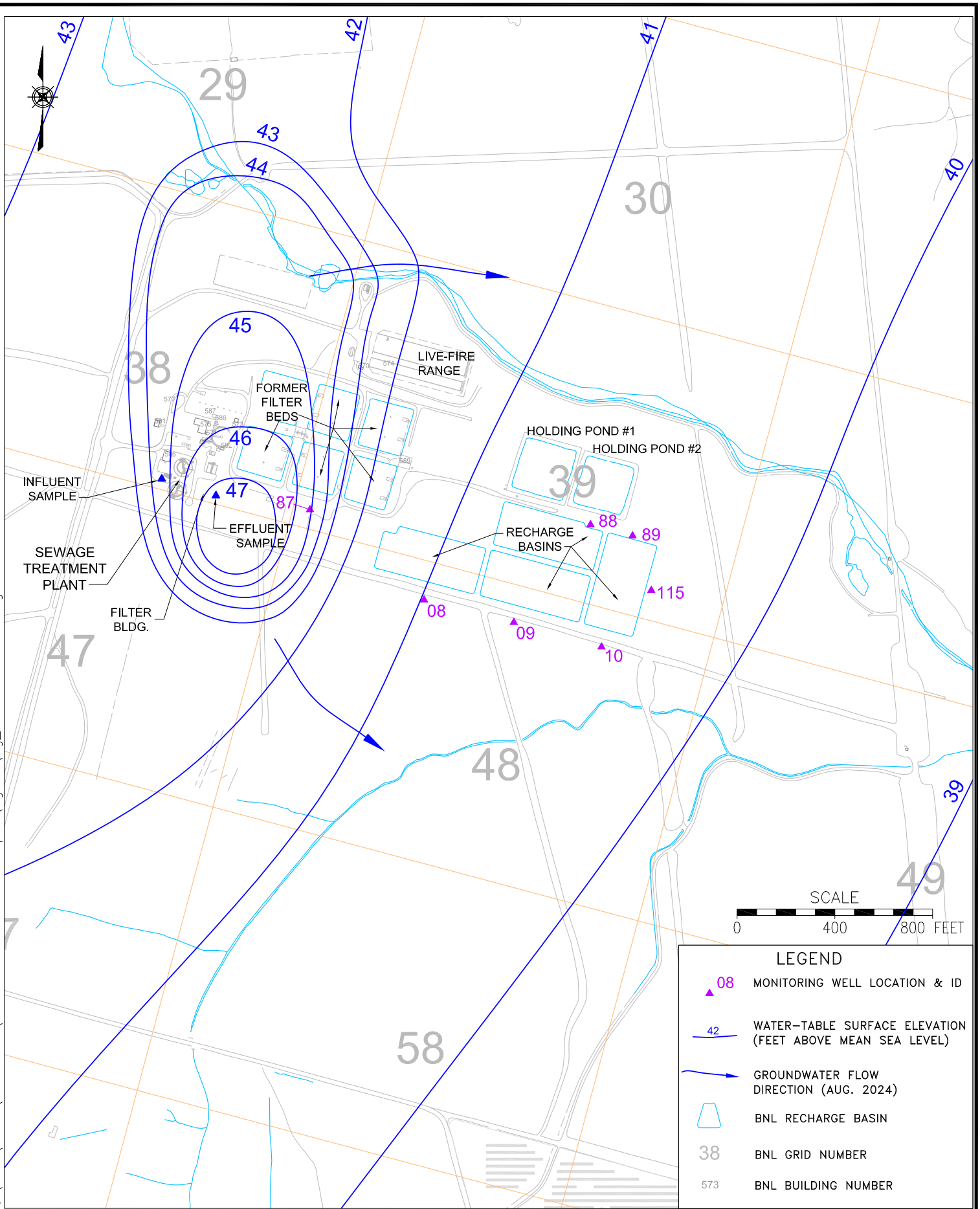
DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.3-1

Figure 4.3-2
Facility Monitoring Program
Brookhaven Medical Research Reactor
Monitoring Well Tritium Concentrations

2024 BNL Groundwater Status Report





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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

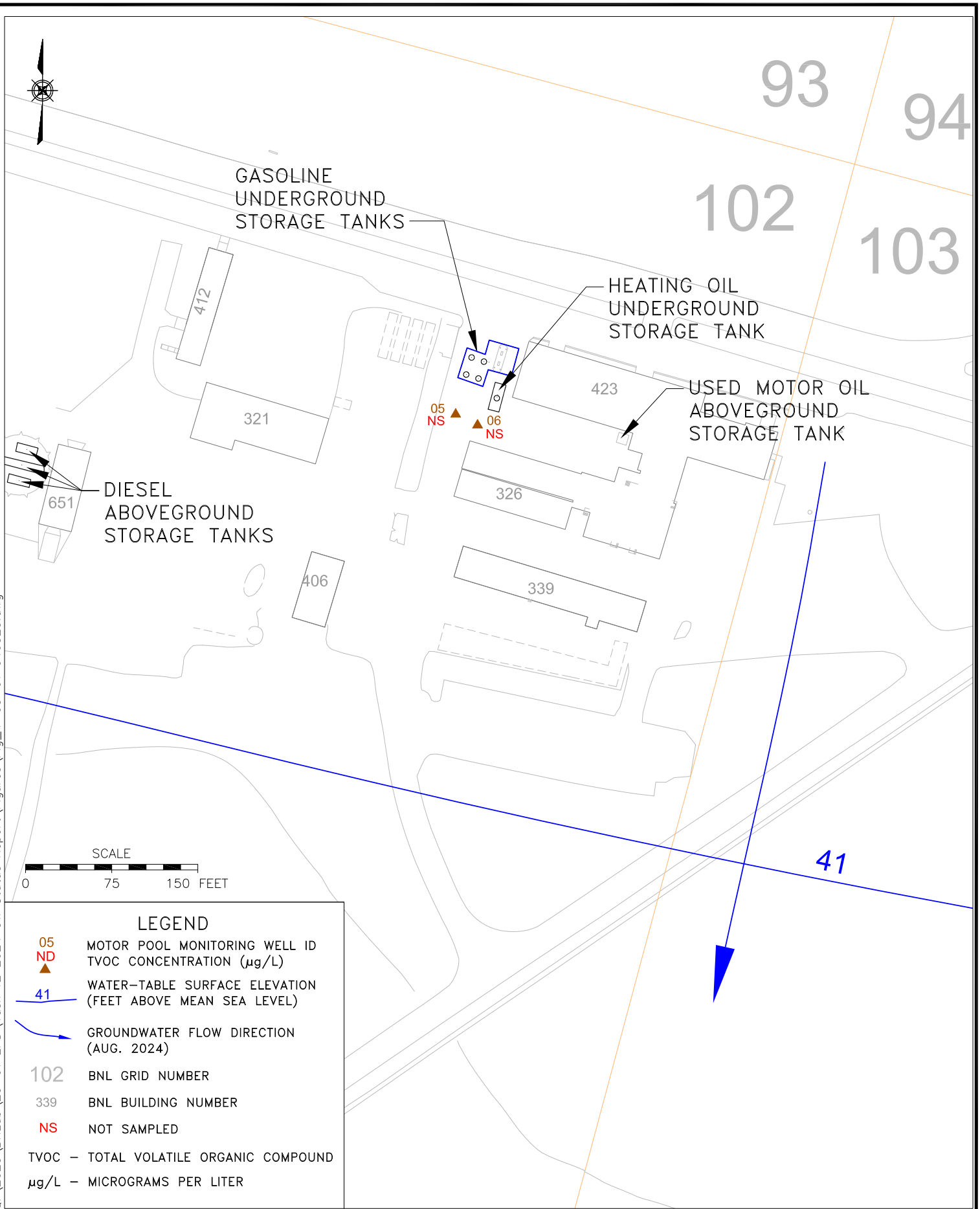
TITLE:

SEWAGE TREATMENT PLANT SYSTEM SAMPLING AND MONITORING WELL LOCATIONS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.4–1



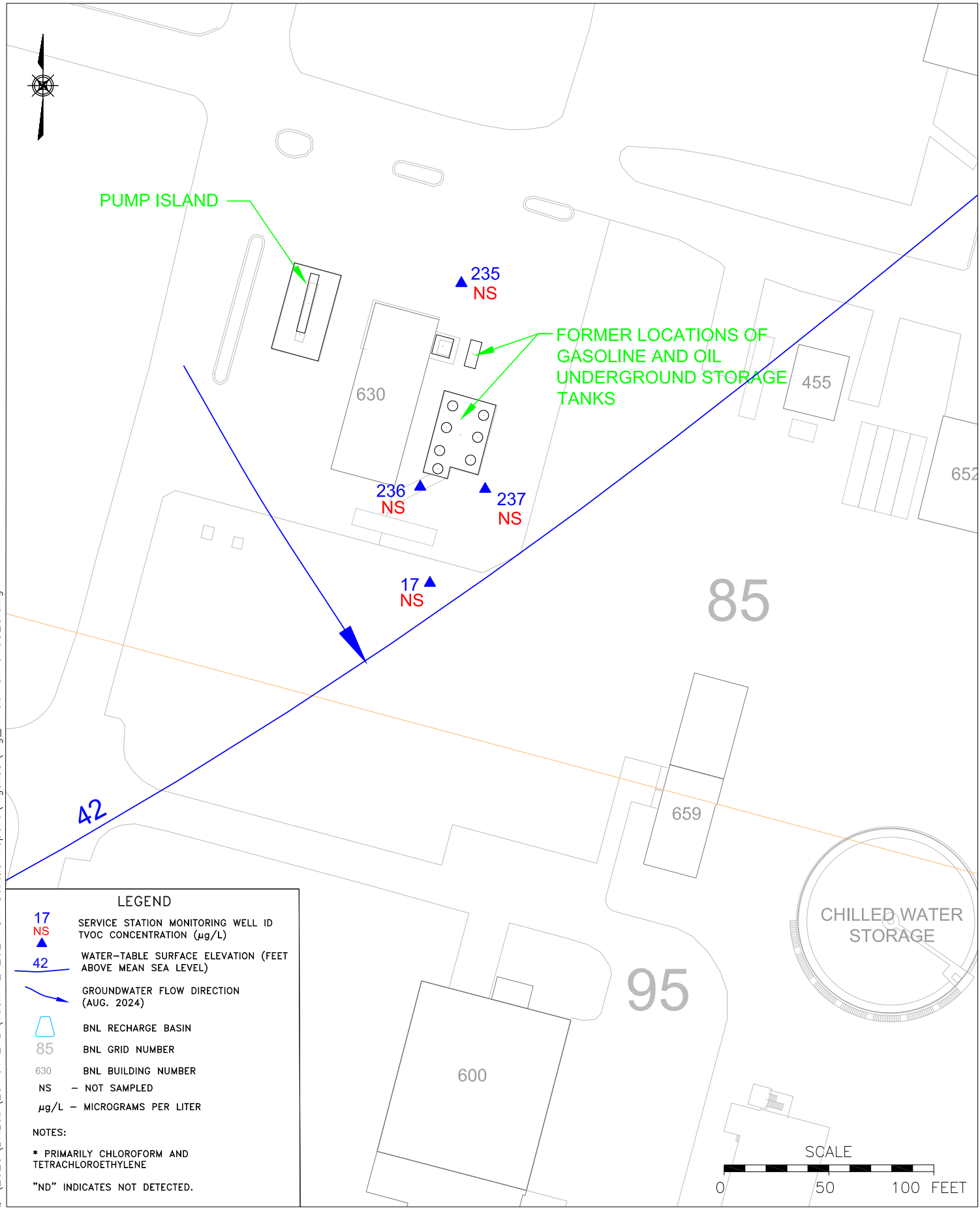
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTON DIVISION

TITLE:
FACILITY MONITORING PROGRAM,
MOTOR POOL
MONITORING WELL LOCATIONS
TVOC RESULTS 4TH QUARTER 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.5–1



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ENVIRONMENTAL PROTECTION DIVISION

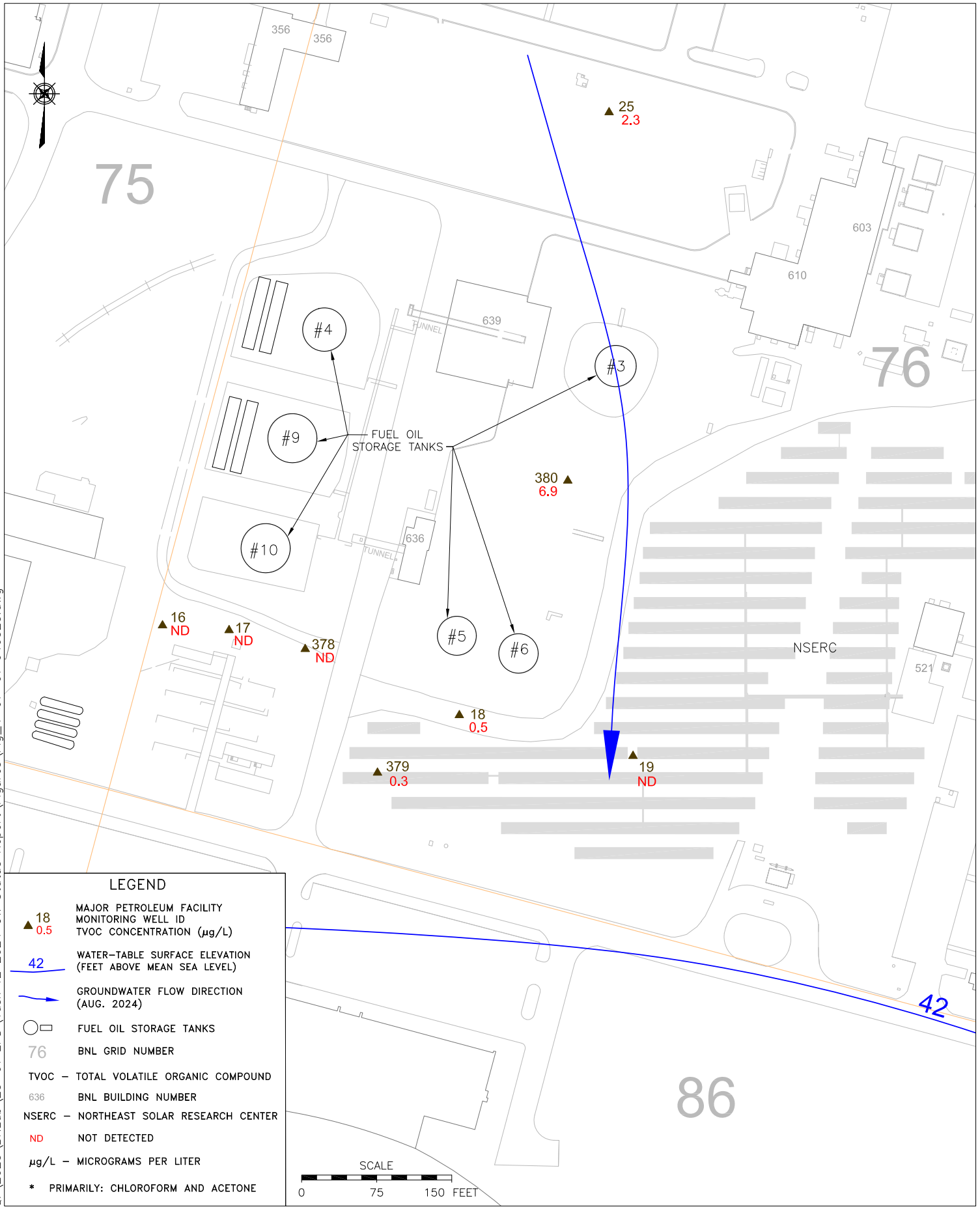
TITLE:

FACILITY MONITORING PROGRAM,
SERVICE STATION

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
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FIGURE NO.: 4.6-1



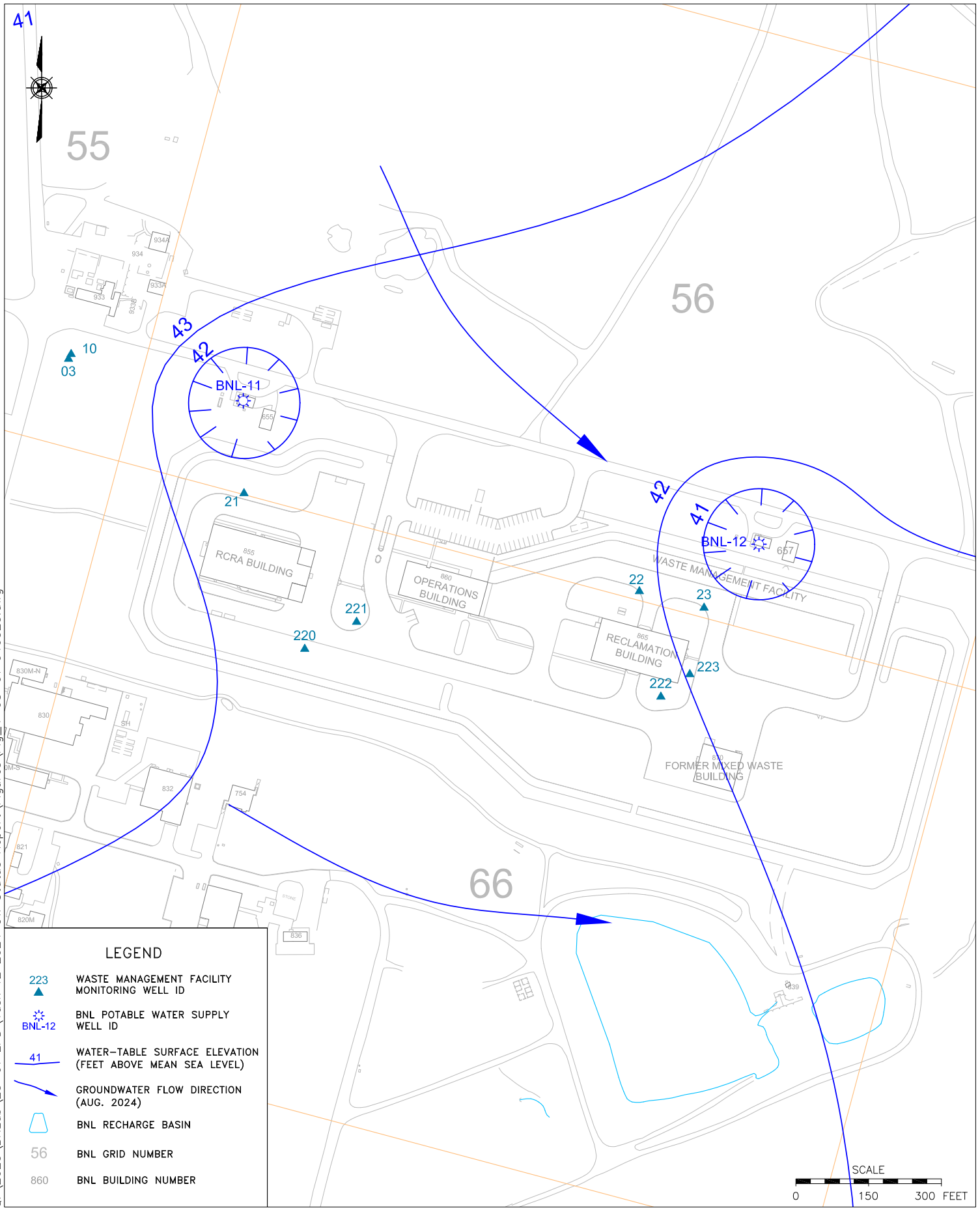
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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
FACILITY MONITORING PROGRAM,
MAJOR PETROLEUM FACILITY
MONITORING WELL LOCATIONS
TVOC CONCENTRATIONS, 4th QTR 2024
2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.7-1



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

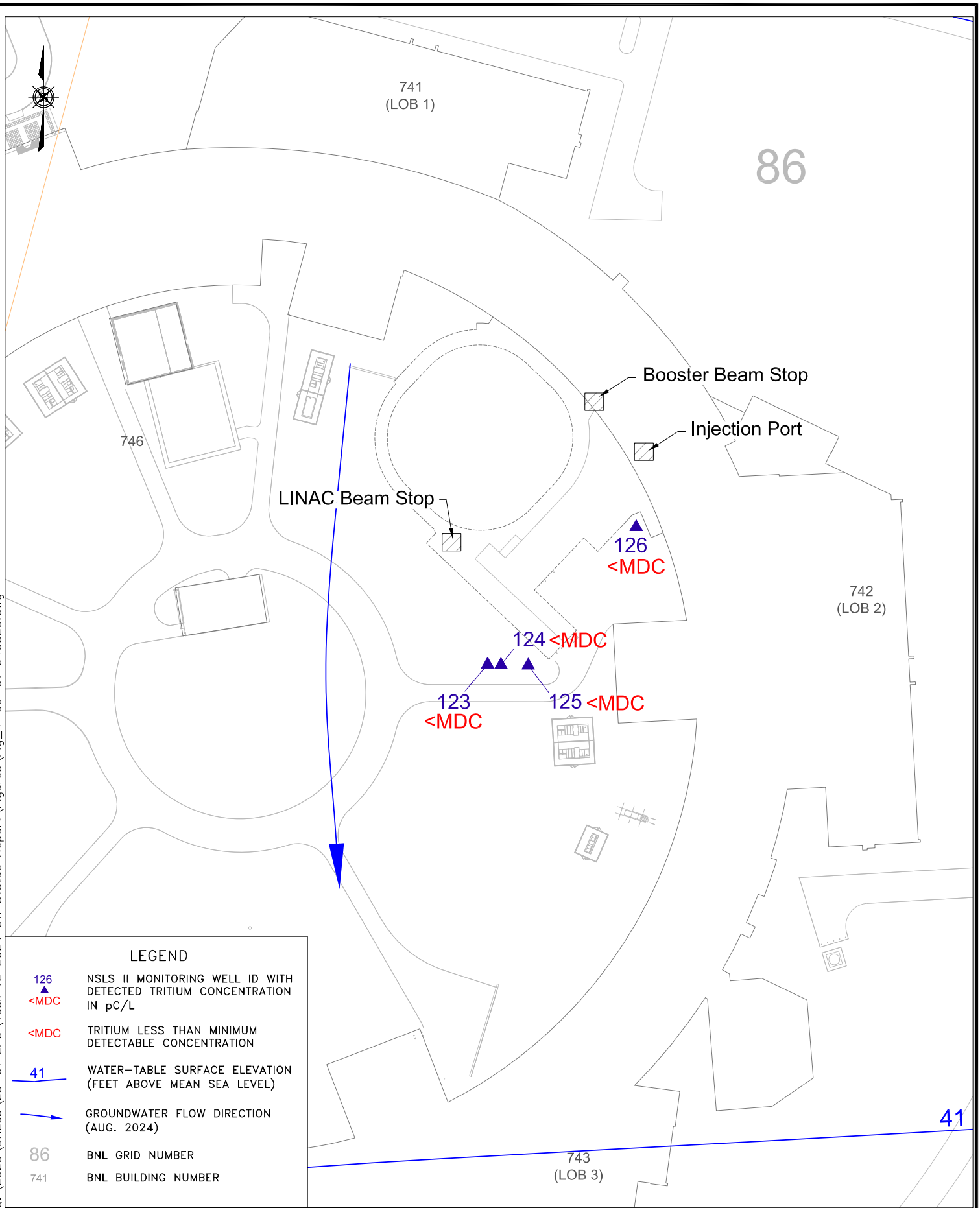
TITLE:

FACILITY MONITORING PROGRAM, WASTE MANAGEMENT FACILITY MONITORING WELL LOCATIONS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.8-1



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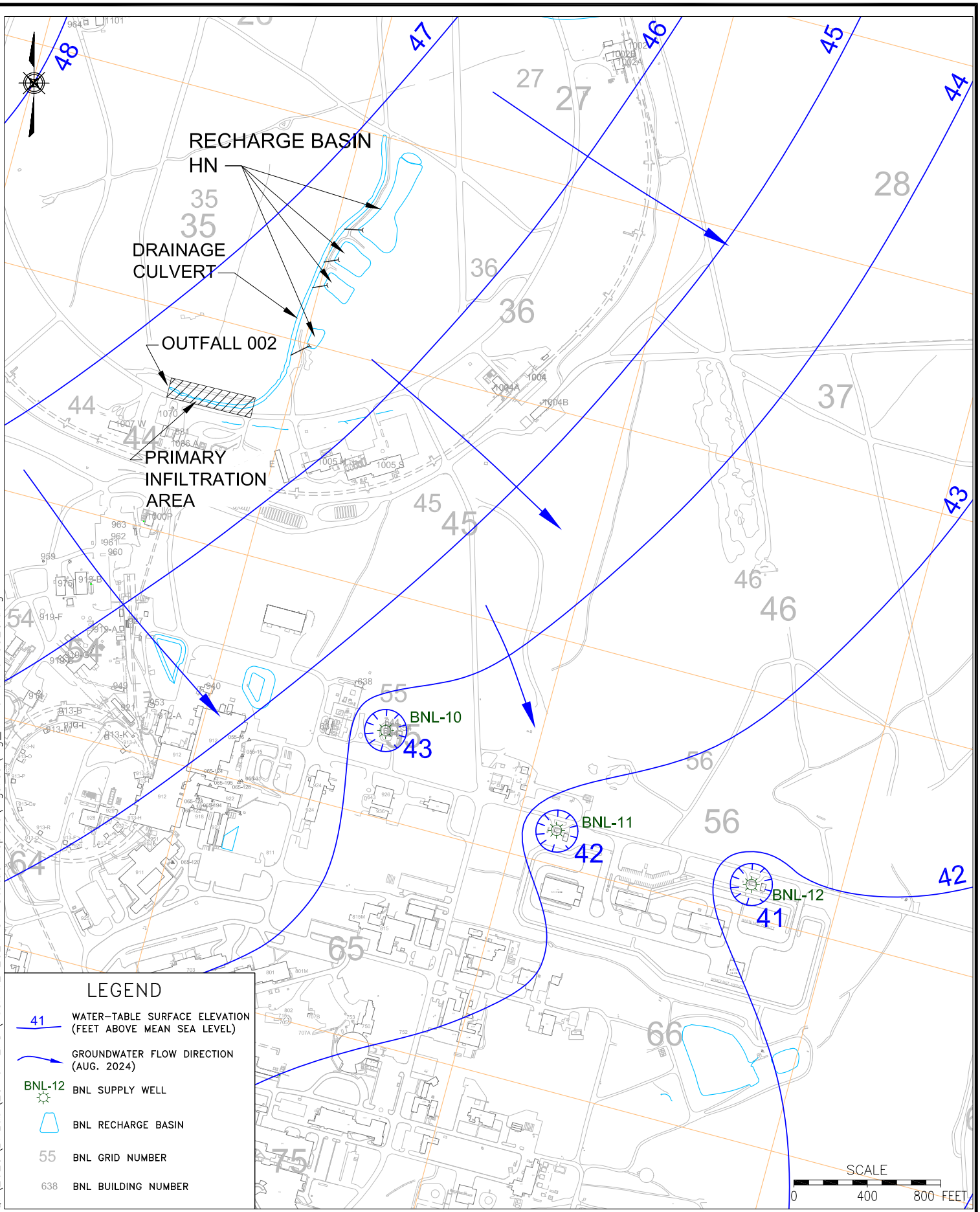
Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
FACILITY MONITORING PROGRAM
NATIONAL SYNCHROTRON LIGHT SOURCE II
MONITORING WELL LOCATIONS

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.9-1



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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:

WATER SUPPLY WELL LOCATIONS DOWNGRADIENT OF BASIN HN (SPDES OUTFALL 002)

2024 BNL GROUNDWATER STATUS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	04/03/25	–
CHKD:	APPD:	REV.:	NOTES:
DEP	BB	–	–

FIGURE NO.: 4.10-1

Table 1-1
Groundwater Standards for
Inorganic Compounds

2024 BNL Groundwater Status Report

CHEMICAL CONSTITUENT	CAS #	NYS AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES µg/L (a)	FEDERAL DRINKING WATER STANDARDS µg/L (b)	
Inorganics				
Aluminum	7429-90-5	-	200	(c)
Antimony	7440-36-0	3	6	
Arsenic	7440-38-2	25	10	
Barium	7440-39-3	1000	2000	
Beryllium	7440-41-7	3	4	
Cadmium	7440-43-9	5	5	
Calcium	7440-70-2	-	-	
Chromium	7440-47-3	50	100 total	
Cobalt	7440-48-4	-	-	
Copper	7440-50-8	200	1300	
Cyanide	57-12-5	200	200	
Iron	7439-89-6	300	300	(c)
Lead	7439-92-1	25	10	
Magnesium	7439-95-4	35000	-	
Manganese	7439-96-5	300	50	(c)
Mercury	7439-97-6	0.7	2	
Nickel	7440-02-0	100	-	
Potassium	7440-09-7	-	-	
Selenium	7782-49-2	10	50	
Silver	7440-22-4	50	100	
Sodium	7440-23-5	20000	-	(c)
Thallium	7440-28-0	0.5	2	
Vanadium	7440-62-2	-	-	
Zinc	7440-66-6	2000	5000	(c)
Hexavalent Chromium	18540-29-9	50	-	

Notes:

- No standard available
(a) NYSDEC June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater Class GA.
(b) USEPA March 2018, Drinking Water Regulations and Health Advisories. Note that the information under MCL was converted from mg/l to µg/L in order to maintain uniform units for this table.
(c) Listed standard represents a secondary MCL, which has been developed to control the aesthetic quality of drinking water only.

NYSDEC = New York State Department of Environmental Conservation
µg/L = micrograms per liter (ppb)
mg/L = milligrams per liter (ppm)
MCL = Maximum Contaminant Level
USEPA = United Stated Environmental Protection Agency

Table 1-2
Groundwater Standards for
Pesticides and PCBs

2024 BNL Groundwater Status Report

CHEMICAL CONSTITUENT	CAS #	NYS AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES µg/L (a)	FEDERAL DRINKING WATER STANDARDS µg/L (b)
PESTICIDES & PCBs			
4,4'-DDD	72-54-8	0.3	-
4,4'-DDE	72-55-9	0.2	-
4,4'-DDT	50-29-3	0.2	-
Aldrin	309-00-2	ND	-
alpha-BHC	319-84-6	0.01	-
Chlordane	57-74-9	0.05	2
Aroclor-1016	12674-11-2	0.09 (c)	-
Aroclor-1221	11104-28-2	0.09 (c)	-
Aroclor-1232	11141-16-5	0.09 (c)	-
Aroclor-1242	53469-21-9	0.09 (c)	-
Aroclor-1248	12672-29-6	0.09 (c)	-
Aroclor-1254	11097-69-1	0.09 (c)	-
Aroclor-1260	11096-82-5	0.09 (c)	-
beta-BHC	319-85-7	0.04	-
delta-BHC	319-86-8	0.04	-
Dieldrin	60-57-1	0.004	-
Endosulfan I	959-98-8	-	-
Endosulfan II	33213-65-9	-	-
Endosulfan sulphate	1031-07-8	-	-
Endrin	72-20-8	ND	2
Endrin aldehyde	7421-93-4	5	-
Endrin ketone	53494-70-5	5	-
gamma-BHC (Lindane)	58-89-9	0.05	0.2
gamma-Chlordane	5103-74-2	-	2
Heptachlor	76-44-8	0.04	0.4
Heptachlor Epoxide	1024-57-3	0.03	0.2
Methoxychlor	72-43-5	35	40
Toxaphene	8001-35-2	0.06	3
PCB (total)	-	0.09	0.5

Notes:

- No standard available

ND Non-dectectable

(a) NYSDEC June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater Class GA.

(b) USEPA March 2018, Drinking Water Regulations and Health Advisories. Note that the information under MCL was converted from mg/l to µg/L in order to maintain uniform units for this table.

(c) Standard listed applies to the sum of these substances.

PCBs = Polychlorinated Biphenyls

NYSDEC = New York State Department of Environmental Conservation

µg/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

MCL = Maximum Contaminant Level

USEPA = United Stated Environmental Protection Agency

Table 1-3
Groundwater Standards for
Organic Compounds

2024 BNL Groundwater Status Report

CHEMICAL CONSTITUENT	CAS #	NYS AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES µg/L (a)	FEDERAL DRINKING WATER STANDARDS µg/L (b)
Volatile Organics			
1,1-Dichloroethane	75-34-3	5	-
1,1-Dichloroethene	75-35-4	5	7
1,1,1-Trichloroethane	71-55-6	5	200
1,1,2-Trichloroethane	79-00-5	1	5
1,1,2,2-Tetrachloroethane	79-34-5	5	-
1,2-Dibromo-3-chloropropane	96-12-8	0.04	0.2
1,2-Dibromoethane (EDB)	106-93-4	0.0006	0.05
1,2-Dichlorobenzene	95-50-1	3	600
1,2-Dichloroethane	107-06-2	0.6	5
1,2-Dichloropropane	78-87-5	1	5
1,3-Dichlorobenzene	541-73-1	3	600
1,4-Dichlorobenzene	106-46-7	3	75
2-Butanone	78-93-3	50	-
2-Hexanone	591-78-6	50	-
4-Methyl-2-pentanone	108-10-1	-	-
Acetone	67-64-1	50	-
Benzene	71-43-2	1	5
Bromochloromethane	74-97-5	5	-
Bromodichloromethane(THM)	75-27-4	50	80(g)
Bromoform(THM)	75-25-2	50	80(g)
Bromomethane	74-83-9	5	-
Carbon disulfide	75-15-0	60	-
Carbon Tetrachloride	56-23-5	5	5
Chlorobenzene	108-90-7	5	100
Chloroethane	75-00-3	5	-
Chloroform(THM)	67-66-3	7	80(g)
Chloromethane	74-87-3	5	-
cis-1,2-Dichloroethene	156-59-2	5	70
cis-1,3-Dichloropropene	10061-01-5	0.4(c)	-
Dibromochloromethane(THM)	124-48-1	50	80(h)
Dichlorodifluoromethane	75-71-8	5	-
Ethylbenzene	100-41-4	5	700
Methylene chloride	75-09-2	5	5
Methyl-tert-butyl ether (MTBE)	1634-04-4	10	-
Styrene	100-42-5	5	100
Tetrachloroethene	127-18-4	5	5
Toluene	108-88-3	5	1000
trans-1,2-Dichloroethene	156-60-5	5	100
trans-1,3-Dichloropropene	10061-02-6	0.4(c)	-
Trichloroethene	79-01-6	5	5
Vinyl chloride	75-01-4	2	2
Xylenes (total)	1330-20-7	5(d)	10000

Table 1-3
Groundwater Standards for
Organic Compounds

2024 BNL Groundwater Status Report

CHEMICAL CONSTITUENT	CAS #	NYS AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES µg/L (a)	FEDERAL DRINKING WATER STANDARDS µg/L (b)
Semivolatile Organics			
1,2,4-Trichlorobenzene	120-82-1	5	70
1,4-Dioxane	123-91-1	1 (f)	-
2-Chloronaphthalene	91-58-7	10	-
2-Chlorophenol	95-57-8	1(e)	-
2-Methylnaphthalene	91-57-6	-	-
2-Methylphenol	95-48-7	1(e)	-
2-Nitroaniline	88-74-4	5	-
2-Nitrophenol	88-75-5	1(e)	-
2,2'-oxybis(1-Chloropropane)	108-60-1	5	-
2,4-Dichlorophenol	120-83-2	1(e)	-
2,4-Dimethylphenol	105-67-9	1(e)	-
2,4-Dinitrophenol	51-28-5	1(e)	-
2,4-Dinitrotoluene	121-14-2	5	-
2,4,5-Trichlorophenol	95-95-4	1(e)	-
2,4,6-Trichlorophenol	88-06-2	1(e)	-
2,6-Dinitrotoluene	606-20-2	5	-
3-Nitroaniline	99-09-2	5	-
3,3'-Dichlorobenzidine	91-94-1	5	-
4-Bromophenyl phenyl ether	101-55-3	-	-
4-Chloro-3-methylphenol	59-50-7	1(e)	-
4-Chloroaniline	106-47-8	5	-
4-Chlorophenyl phenyl ether	7005-72-3	-	-
4-Methylphenol	106-44-5	1(e)	-
4-Nitroaniline	100-01-6	5	-
4-Nitrophenol	100-02-7	1(e)	-
4,6-Dinitro-2-methylphenol	534-52-1	1(e)	-
Acenaphthene	83-32-9	20	-
Acenaphthylene	208-96-8	-	-
Anthracene	120-12-7	50	-
Benzo(a)anthracene	56-55-3	0.002	-
Benzo(a)pyrene	50-32-8	ND	0.2
Benzo(b)fluoranthene	205-99-2	0.002	-
Benzo(g,h,j)perylene	191-24-2	-	-
Benzo(k)fluoranthene	207-08-9	0.002	-
bis-(2-Chloroethoxy)methane	111-91-1	5	-
bis-(2-Chloroethyl)ether	111-44-4	1	-
bis(2-Ethylhexyl)phthalate	117-81-7	5	-
Butylbenzylphthalate	85-68-7	50	-
Carbazole	86-74-8	-	-
Chrysene	218-01-9	0.002	-
Dibenzofuran	132-64-9	-	-
Dibenz(a,h)anthracene	53-70-3	-	-
Diethylphthalate	84-66-2	50	-
Dimethylphalate	131-11-3	50	-

Table 1-3
Groundwater Standards for
Organic Compounds

2024 BNL Groundwater Status Report

CHEMICAL CONSTITUENT	CAS #	NYS AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES µg/L (a)	FEDERAL DRINKING WATER STANDARDS µg/L (b)
Di-n-butylphthalate	84-74-2	50	-
Di-n-octylphthalate	117-84-0	50	-
Fluoranthene	206-44-0	50	-
Fluorene	86-73-7	50	-
Hexachlorobenzene	118-74-1	0.04	1
Hexachlorobutadiene	87-68-3	0.5	-
Hexachlorocyclopentadiene	77-47-4	5	50
Hexachloroethane	67-72-1	5	-
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-
Isophorone	78-59-1	50	-
Naphthalene	91-20-3	10	-
Nitrobenzene	98-95-3	0.4	-
N-Nitroso-di-n-propylamine	621-64-7	-	-
N-Nitrosodiphenylamine	86-30-6	50	-
Pentachlorophenol	87-86-5	1(e)	1
Perchlorate	14797-73-0	18	-
Phenanthrene	85-01-8	50	-
Phenol	108-95-2	1(e)	-
Pyrene	129-00-0	50	-
Emerging contaminants			
Perfluorooctanoic acid (PFOA)	335-67-1	0.0067 (f)	-
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.0027 (f)	-
1,4-dioxane	123-91-1	0.35 (f)	-

Notes:

- No standard available

ND Non-dectectable

(a) NYSDEC June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater Class GA and April 2000 Addendum.

(b) USEPA March 2018, Drinking Water Regulations and Health Advisories. Note that the information under MCL was converted from mg/l to µg/L in order to maintain uniform units for this table.

(c) Refers to sum of cis and trans isomers.

(d) Refers to concentration of individual isomers.

(e) Refers to sum of all phenolic compounds.

(f) NYS Guidance Values est. March 15, 2023

(g) 1998 Final Rule for Disinfectants and Disinfection By-products: The total for trihalomethanes(THM) is 80ug/L

NYSDEC = New York State Department of Environmental Conservation

µg/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

MCL = Maximum Contaminant Level

USEPA = United Stated Environmental Protection Agency

Table 1-4
Groundwater Standards for
Radiological Compounds

2024 BNL Groundwater Status Report

RADIONUCLIDE	CAS #	NYS Ambient Water Quality Standards pCi/L (a)	DOE Derived Concentration Standard pCi/L (b)	DOE Groundwater Screening Level pCi/L (c)	Federal 4 mrem/yr Drinking Water Calculations pCi/L	Federal Drinking Water Standards pCi/L (d)
Americium-241	14596-10-2	-	740	29.6	--	--
Bismuth-212	14913-49-6	-	430000	17200	--	--
Bismuth-214	14733-03-0	-	1000000	40000	--	--
Beryllium-7	13966-02-4	-	2500000	100000	6000	--
Cesium-134	13967-70-9	-	3900	156	80	--
Cesium-134m					20000	
Cesium-137	10045-97-3	-	4100	164	200	--
Cobalt-57	13981-50-5	-	370000	14800	1000	--
Cobalt-58	13981-38-9	-	89000	3560	300	--
Cobalt-58m					9000	
Cobalt-60	10198-40-0	-	14000	560	100	--
Europium-152	14683-23-9	-	75000	3000	200	--
Europium-154	15585-10-1	-	68000	2720	60	--
Europium-155	14391-16-3	-	1000000	40000	600	--
Lead-210	14255-04-0	-	110	4.4	--	--
Lead-212	15092-94-1	-	7300	292	--	--
Lead-214	15067-28-4	-	590000	23600	--	--
Manganese-54	13966-31-9	-	98000	3920	300	--
Neptunium-237	13994-20-2	-	1400	56	--	--
Potassium-40	13966-00-2	-	16000	640	--	--
Protactinium-231	7440-13-3	-	260	10.4	--	--
Radium-224	13233-32-4	-	1000	40	--	--
Radium-226	13982-63-3	3	280	11.2	--	5 (g)
Radium-228	15262-20-1	5 (g)	73	2.92	--	5 (g)
Sodium-22	13966-32-0	-	16000	640	400	--
Strontium-89	14158-27-1	-	39000	1560	20	--
Strontium-90	10098-97-2	8	1700	68	--	8 (e)
Thallium-208	7440-28-00	-	-	-	--	--
Thorium-228	14274-82-9	-	830	33.2	--	--
Thorium-230	14269-63-7	-	720	28.8	--	--
Thorium-232	7440-29-1	-	620	24.8	--	--
Thorium-234	15065-10-8	-	84000	3360	--	--
Tritium (Tritiated Water)	10028-17-8	20000	2600000	104000	--	20000 (e)
Tritium (Organic Bound)		-	1000000	40000		
Uranium-234	13966-29-5	-	1200	48	--	30 ug/L
Uranium-235	15117-96-1	-	1300	52	--	30 ug/L
Uranium-238	7440-61-1	-	1400	56	--	30 ug/L
Zinc-65	13982-39-3	-	1200	48	300	--
Gross Beta	12587-47-2	1000	-	-	--	4 millirem per year (f)
Gross Alpha	12587-46-1	15	-	-	--	15

Notes:

- No standard available

(a) NYSDEC, June 1998, Ambient Water Quality Standards and Guidance Values for Groundwater Class GA.

(b) Department of Energy (DOE) Standard DOE-STD-1196-2021, July 2021, Derived Concentration Standard (DCS) is the concentration of a radionuclide in water that would result in an effective dose equivalent of 100 mrem.

(c) DOE screening levels have been derived for a dose equivalent of 4 mrem/year by multiplying the DCS by 4 percent

(d) USEPA, March 2018, Drinking Water Regulations and Health Advisories.

(e) Beta particle and photon activity less than 4 mrem/year.

(f) The generic standard of 4 mrem is applicable to all radionuclides specifically the sum of the fractions of all radionuclides shall not exceed 4 mrem.

(g) The sum of Ra-226 and Ra-228 must be below 5 pCi/L.

NYSDEC New York State Department of Environmental Conservation

USEPA United Stated Environmental Protection Agency

pCi/L pico Curies per liter

Table 1-5A OUI (South Boundary) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
088-26	OU I South Boundary VOCs		Plume Perimeter	D			3/12/24		9/24/24	
098-100	OU I South Boundary VOCs		Plume Core	D			3/12/24		9/24/24	
098-103	OU I South Boundary VOCs		Plume Core	D			3/4/24		9/23/24	
098-104	OU I South Boundary VOCs		Plume Core	D			3/4/24		9/23/24	
098-21	OU I South Boundary VOCs		Plume Perimeter	D			3/12/24		9/23/24	
098-30	OU I South Boundary VOCs		Plume Perimeter	D			3/12/24		9/24/24	
098-99	OU I South Boundary VOCs	Current Landfill	Plume Perimeter		4	4	3/12/24		9/6/24	
099-04	OU I South Boundary VOCs		Plume Perimeter	D			3/12/24		9/24/24	
107-34	OU I South Boundary VOCs		Plume Core	D	D		3/4/24		9/19/24	
107-35	OU I South Boundary VOCs		Plume Core	D			2/26/24		9/19/24	
107-40	OU I South Boundary VOCs		Plume Core			B			9/19/24	
107-41	OU I South Boundary VOCs		Plume Core			B			9/18/24	
107-42	OU I South Boundary VOCs		Plume Perimeter	D			2/26/24		9/19/24	
108-08	OU I South Boundary VOCs		Plume Perimeter	B					9/24/24	
108-12	OU I South Boundary VOCs		Plume Perimeter	B					9/16/24	
108-13	OU I South Boundary VOCs		Plume Perimeter	B					9/16/24	
108-14	OU I South Boundary VOCs		Plume Perimeter	B					9/16/24	
108-17	OU I South Boundary VOCs		Plume Perimeter	B					9/18/24	
108-18	OU I South Boundary VOCs		Plume Perimeter	B					9/18/24	
108-43	OU I South Boundary VOCs		Plume Core	D			2/27/24		9/23/24	
108-44	OU I South Boundary VOCs		Plume Core	D			2/27/24		9/23/24	
108-45	OU I South Boundary VOCs		Plume Perimeter	D			2/26/24		9/19/24	
108-55	OU I South Boundary VOCs		Plume Core	D			2/27/24		10/4/24	
108-56	OU I South Boundary VOCs		Plume Core	D			2/27/24		10/4/24	
108-57	OU I South Boundary VOCs		Plume Core	D			2/26/24		9/24/24	
108-58	OU I South Boundary VOCs		Plume Core	D			2/26/24		9/19/24	
108-59	OU I South Boundary VOCs		Plume Perimeter	D			2/27/24		9/19/24	
115-13	OU I South Boundary VOCs		Plume Core			B			9/24/24	
115-16	OU I South Boundary VOCs		Plume Core			B			9/24/24	
115-51	OU I South Boundary VOCs		Plume Perimeter	B		B			9/24/24	

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5B OUIII (Building 96) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
085-293	OU III (Building 96)		Plume Core		A				10/2/24
085-335	OU III (Building 96)		Plume Core		F		4/10/24		10/8/24
085-347	OU III (Building 96)		Plume Core		F		4/12/24		10/4/24
085-348	OU III (Building 96)		Plume Core	4	4	2/9/24	4/12/24	9/4/24	10/4/24
085-349	OU III (Building 96)		Plume Core		F		4/11/24		10/2/24
085-350	OU III (Building 96)	OU X Fomer Firehouse MW	Plume Core		F		4/11/24		10/2/24
085-351	OU III (Building 96)		Plume Core		F		4/10/24		10/2/24
085-352	OU III (Building 96)		Plume Core		F		4/10/24		10/2/24
085-354	OU III (Building 96)		Plume Core		F		4/11/24		10/7/24
085-378	OU III (Building 96)		Background		4	2/9/24	4/10/24	9/4/24	10/3/24
085-379	OU III (Building 96)		Plume Core	4	4	2/9/24	4/11/24	9/4/24	10/7/24
085-382	OU III (Building 96)		None		F		4/12/24		10/7/24
085-383	OU III (Building 96)		None		F		4/12/24		10/8/24
085-386	OU III (Building 96)		None		F		4/10/24		10/8/24
095-159	OU III (Building 96)		Plume Core		4	2/12/24	4/10/24	9/4/24	10/3/24
095-162	OU III (Building 96)		Plume Core		4	2/9/24	4/10/24	9/4/24	10/2/24
095-163	OU III (Building 96)		Bypass Detection		4	2/9/24	4/10/24	9/3/24	10/1/24
095-165	OU III (Building 96)		Bypass Detection		A				10/1/24
095-166	OU III (Building 96)		Bypass Detection		A				10/1/24
095-168	OU III (Building 96)		Bypass Detection		A				10/1/24
095-169	OU III (Building 96)		Bypass Detection		A				10/1/24
095-170	OU III (Building 96)	OU X Fomer Firehouse MW	Bypass Detection		A				10/1/24
095-172	OU III (Building 96)		Plume Core		4	2/9/24	4/10/24	9/3/24	10/3/24
095-294	OU III (Building 96)		Plume Core		F		4/10/24		10/3/24
095-305	OU III (Building 96)		Plume Core		4	2/9/24	4/11/24	9/3/24	10/4/24
095-306	OU III (Building 96)		Plume Core		4	2/9/24	4/11/24	9/3/24	10/4/24
095-307	OU III (Building 96)		Plume Core		F		4/10/24		10/3/24
095-308	OU III (Building 96)		Plume Core		F		4/10/24		10/3/24
095-312	OU III (Building 96)		Plume Core		4	2/9/24	4/10/24	9/3/24	10/3/24
095-313	OU III (Building 96)		Plume Core		F		4/11/24		10/3/24
095-318	OU III (Building 96)		Sentinel		A				10/8/24
095-325	OU III (Building 96)		None	4	4	2/12/24	4/11/24	9/3/24	10/8/24
095-84	OU III (Building 96)		Plume Core		4	2/12/24	4/12/24	9/4/24	10/2/24
095-85	OU III (Building 96)		Plume Perimeter		A				10/2/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5C OUIII (Middle Rd) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
095-322	OU III (Middle Rd)		Plume Core		4		2/21/24	5/3/24	8/22/24	10/10/24
095-323	OU III (Middle Rd)		Plume Core		4		2/21/24	5/3/24	9/5/24	10/10/24
095-92	OU III (Middle Rd)		Sentinel		F			5/3/24		10/10/24
104-11	OU III (Middle Rd)		Plume Perimeter		F			4/29/24		10/14/24
104-36	OU III (Middle Rd)		Plume Perimeter		F			4/30/24		10/14/24
104-37	OU III (Middle Rd)		Plume Core	4	4	C	2/21/24	4/30/24	8/28/24	10/15/24
104-38	OU III (Middle Rd)		Plume Perimeter		F	C		4/29/24		10/14/24
105-23	OU III (Middle Rd)		Plume Core		4		3/1/24	5/6/24	8/28/24	10/15/24
105-25	OU III (Middle Rd)		Plume Core		F			5/2/24		10/21/24
105-42	OU III (Middle Rd)		Plume Perimeter		F			5/6/24		10/15/24
105-44	OU III (Middle Rd)	OU X Fomer Firehouse MW	Plume Core		F			5/2/24		10/21/24
105-53	OU III (Middle Rd)		Plume Core		F			5/21/24		10/15/24
105-66	OU III (Middle Rd)		Plume Core		4	C	2/21/24	5/1/24	8/23/24	10/15/24
105-67	OU III (Middle Rd)		Plume Core		4	C	3/1/24	5/1/24	8/23/24	10/15/24
105-68	OU III (Middle Rd)		Plume Core		4	C	2/21/24	4/23/24	9/5/24	10/16/24
105-80	OU III (Middle Rd)		Plume Core		4		SLUG TEST	5/2/24	9/5/24	10/16/24
105-81	OU III (Middle Rd)		Plume Core		4		SLUG TEST	5/2/24	9/5/24	10/17/24
106-56	OU III (Middle Rd)		Plume Core			C				10/16/24
106-58	OU III (Middle Rd)		Plume Core		F	C		5/14/24		10/16/24
106-62	OU III (Middle Rd)		Plume Perimeter		F			5/14/24		10/21/24
113-07	OU III (Middle Rd)		Plume Core		A					10/11/24
113-08	OU III (Middle Rd)		Plume Core		F			5/3/24		10/11/24
113-09	OU III (Middle Rd)	OU III (Magothy) Sampling Program	Plume Core		F			5/2/24		10/11/24
113-11	OU III (Middle Rd)		Plume Core		F			5/6/24		10/14/24
113-17	OU III (Middle Rd)		Bypass Detection		4	C	2/20/24	5/21/24	8/27/24	10/17/24
113-18	OU III (Middle Rd)		Bypass Detection		A					10/17/24
113-19	OU III (Middle Rd)	OU III (Magothy) Sampling Program	Bypass Detection		4	C	2/20/24	5/22/24	8/26/24	10/17/24
113-22	OU III (Middle Rd)	OU III (Magothy) Sampling Program	Plume Core		F			5/21/24		10/23/24
113-29	OU III (Middle Rd)		Plume Core		4		2/21/24	5/3/24	8/23/24	10/14/24
113-30	OU III (Middle Rd)		Plume Perimeter		4	C	2/21/24	5/6/24	8/27/24	10/15/24
113-31	OU III (Middle Rd)		Plume Perimeter		4		2/21/24	4/30/24	8/28/24	10/23/24
114-12	OU III (Middle Rd)		Bypass Detection	4	4		2/21/24	5/21/24	8/27/24	10/16/24
121-45	OU III (Middle Rd)	OU III (South Boundary)	Bypass Detection	4	4	C	2/23/24	5/22/24	8/26/24	10/23/24
121-53	OU III (Middle Rd)	OU III (South Boundary)	Plume Core		4		2/23/24	5/14/24	8/26/24	10/22/24
121-54	OU III (Middle Rd)	OU III (South Boundary)	Plume Core		4	C	2/23/24	5/14/24	8/26/24	10/22/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5D OUIII (South Boundary) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
114-07	OU III (South Boundary)		Plume Core		A					10/16/24
121-06	OU III (South Boundary)		Plume Perimeter		B				9/3/24	
121-08	OU III (South Boundary)		Plume Perimeter		F/B			5/6/24	9/3/24	10/18/24
121-10	OU III (South Boundary)		Plume Core		F	C		4/25/24		10/15/24
121-11	OU III (South Boundary)		Plume Core		F	C		4/25/24		10/15/24
121-12	OU III (South Boundary)		Plume Perimeter		B				9/4/24	
121-14	OU III (South Boundary)		Plume Core		F			5/6/24		10/21/24
121-20	OU III (South Boundary)		Plume Core		A					10/21/24
121-23	OU III (South Boundary)		Plume Core		A	C				10/18/24
121-43	OU III (South Boundary)		Bypass Detection		F			5/20/24		11/7/24
121-45	OU III (South Boundary)	OU III (Middle Rd)	Plume Core	4	4	C	2/23/24	5/22/24	8/26/24	10/23/24
121-47	OU III (South Boundary)	OU III (Middle Rd)	Plume Core		F			5/6/24		10/18/24
121-48	OU III (South Boundary)	OU III (Middle Rd)	None		F			5/20/24		10/18/24
121-49	OU III (South Boundary)	OU III (Middle Rd)	Plume Perimeter	4	4	C	2/28/24	5/6/24	9/4/24	10/21/24
121-53	OU III (South Boundary)	OU III (Middle Rd)	Plume Core		4		2/23/24	4/25/24	8/26/24	10/22/24
121-54	OU III (South Boundary)	OU III (Middle Rd)	Plume Core	4	4	C	2/23/24	4/25/24	8/26/24	10/22/24
121-57	OU III (South Boundary)		Plume Core		4		SLUG TEST	5/13/24	9/23/24	10/18/24
122-04	OU III (South Boundary)		Plume Core		A	C				10/15/24
122-05	OU III (South Boundary)	OU III (Magothy) Sampling Program	Plume Core		F	C		5/23/24		10/15/24
122-10	OU III (South Boundary)		Plume Perimeter			C				10/16/24
122-17	OU III (South Boundary)		Plume Core		F			5/24/24		11/19/24
122-18	OU III (South Boundary)		Plume Perimeter			C				10/17/24
122-19	OU III (South Boundary)		Plume Perimeter		A					10/17/24
122-20	OU III (South Boundary)	OU III (Magothy) Sampling Program	Plume Core		A					10/17/24
122-21	OU III (South Boundary)		Plume Core		A					10/16/24
122-22	OU III (South Boundary)		Plume Core		A					10/16/24
122-31	OU III (South Boundary)		Plume Perimeter			C				10/15/24
122-32	OU III (South Boundary)		Plume Core		A	C				10/15/24
122-33	OU III (South Boundary)		Plume Perimeter		A					10/16/24
122-34	OU III (South Boundary)		Bypass Detection		A					11/8/24
122-35	OU III (South Boundary)		Plume Core		A					11/8/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5E OUIII (Western South Boundary) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-558	OU III (Western South Boundary)		Plume Core		4	3/1/24	5/22/24	7/11/24	11/7/24
000-559	OU III (Western South Boundary)		Plume Core		4	3/1/24	5/22/24	7/11/24	11/7/24
000-560	OU III (Western South Boundary)		Plume Core		4	3/4/24	5/22/24	7/11/24	11/19/24
103-15	OU III (Western South Boundary)		Plume Core		4	3/1/24	5/28/24	9/9/24	10/29/24
103-18	OU III (Western South Boundary)		Plume Core		4	3/19/24	5/31/24	7/15/24	10/29/24
103-19	OU III (Western South Boundary)		Plume Core		4	3/15/24	5/31/24	9/9/24	10/29/24
111-15	OU III (Western South Boundary)		Plume Core		4	3/4/24	5/29/24	9/4/24	10/23/24
111-16	OU III (Western South Boundary)		Plume Core		4	3/4/24	6/5/24	9/4/24	10/23/24
119-06	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/23/24	9/4/24	10/24/24
119-10	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/23/24	9/4/24	10/24/24
119-11	OU III (Western South Boundary)		Plume Core		4	3/15/24	5/23/24	9/4/24	10/30/24
119-12	OU III (Western South Boundary)		Plume Core	4	4	3/5/24	5/23/24	9/9/24	10/30/24
121-42	OU III (Western South Boundary)		Plume Core		F		5/24/24		10/30/24
126-01	OU III (Western South Boundary)		Plume Perimeter		A				10/30/24
126-11	OU III (Western South Boundary)		Plume Core		F		5/31/24		10/30/24
126-13	OU III (Western South Boundary)		Plume Core		F		5/31/24		10/29/24
126-14	OU III (Western South Boundary)		Plume Core	4	4	3/8/24	6/4/24	9/10/24	10/29/24
126-15	OU III (Western South Boundary)		Plume Core		F		6/4/24		10/30/24
126-16	OU III (Western South Boundary)		Bypass Detection		4	3/4/24	5/20/24	7/16/24	11/7/24
126-17	OU III (Western South Boundary)		Plume Core		4	3/15/24	6/4/24	9/10/24	10/29/24
126-18	OU III (Western South Boundary)		Plume Core		4	3/8/24	6/3/24	9/10/24	10/29/24
126-19	OU III (Western South Boundary)		Plume Core		4	3/5/24	6/3/24	9/5/24	10/30/24
126-20	OU III (Western South Boundary)		Plume Core		4	3/15/24	6/4/24	9/10/24	10/29/24
126-21	OU III (Western South Boundary)		Plume Core		4	3/15/24	6/4/24	9/10/24	10/29/24
127-04	OU III (Western South Boundary)		Plume Core		F		5/24/24		10/30/24
127-06	OU III (Western South Boundary)		Plume Core		F		5/24/24		10/30/24
127-07	OU III (Western South Boundary)		Bypass Detection		4	3/4/24	5/20/24	7/16/24	11/7/24
130-02	OU III (Western South Boundary)		Plume Perimeter		F		6/3/24		10/25/24
130-03	OU III (Western South Boundary)		Plume Perimeter		F		6/3/24		10/25/24
130-04	OU III (Western South Boundary)	OU III (Magothy) Sampling Program	Plume Perimeter		A				10/25/24
130-08	OU III (Western South Boundary)		Bypass Detection	4	4	3/4/24	5/20/24	7/16/24	11/7/24
130-09	OU III (Western South Boundary)		Plume Perimeter		4	3/5/24	5/21/24	7/15/24	11/12/24
130-10	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/21/24	7/15/24	11/12/24
130-11	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/21/24	7/15/24	11/12/24
130-14	OU III (Western South Boundary)		Plume Core		4	3/5/24	6/3/24	9/11/24	10/30/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5F OUIII (Industrial Park) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-112	OU III (Industrial Park)		Plume Core		F			4/29/24		10/22/24
000-114	OU III (Industrial Park)		Plume Perimeter		A					10/22/24
000-245	OU III (Industrial Park)		Plume Perimeter		A					11/5/24
000-248	OU III (Industrial Park)		Plume Perimeter		A					10/28/24
000-249	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core	F	F			4/18/24		10/17/24
000-250	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Perimeter		A					10/17/24
000-252	OU III (Industrial Park)		Plume Perimeter		A					10/18/24
000-253	OU III (Industrial Park)		Plume Core	F	F			4/18/24		10/18/24
000-255	OU III (Industrial Park)		Plume Perimeter		A					10/28/24
000-256	OU III (Industrial Park)		Plume Core	F	F			4/19*/24		10/28/24
000-259	OU III (Industrial Park)		Plume Core		F			4/19/24		10/17/24
000-261	OU III (Industrial Park)		Plume Perimeter		A					10/25/24
000-262	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/25/24
000-265	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/24/24
000-267	OU III (Industrial Park)		Plume Perimeter		A	C				10/8/24
000-268	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/8/24
000-271	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/8/24
000-272	OU III (Industrial Park)		Plume Perimeter		A					10/7/24
000-273	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/4/24
000-274	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/4/24
000-275	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/1/24
000-276	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/1/24
000-277	OU III (Industrial Park)		Bypass Detection		F			4/29/24		11/5/24
000-278	OU III (Industrial Park)		Bypass Detection		F			4/29/24		11/5/24
000-279	OU III (Industrial Park)		Plume Core	F	F			4/16/24		10/24/24
000-431	OU III (Industrial Park)		Bypass Detection		F			4/29/24		10/28/24
000-432	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/1/24
000-490	OU III (Industrial Park)		Background			C				10/24/24
000-528	OU III (Industrial Park)		Plume Core		F	C		4/16/24		10/24/24
000-529	OU III (Industrial Park)		Plume Core		4	C	2/22/24	4/19/24	7/8/24	11/4/24
000-530	OU III (Industrial Park)		Plume Core		4		2/22/24	4/26/24	7/10/24	10/18/24
000-531	OU III (Industrial Park)		Plume Core		4		2/22/24	4/17/24	7/10/24	10/25/24
000-537	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		4	C	2/8/24	4/16/24	7/8/24	10/7/24
000-538	OU III (Industrial Park)		Plume Core	4	4	C	2/8/24	4/16/24	7/8/24	10/7/24
000-541	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		4		2/22/24	4/29/24	7/15/24	11/4/24
000-542	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Perimeter		F			4/26/24		10/22/24
000-543	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Perimeter		F			4/17/24		10/25/24
000-544	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Bypass Detection		F			4/29/24		11/5/24
000-548	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Bypass Detection		4	C	2/22/24	4/16/24	7/8/24	10/17/24

Table 1-5F OUIII (Industrial Park) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
127-08	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		4		2/22/24	4/15/24	7/8/24	10/7/24
127-09	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		F			4/15/24		10/7/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5G OUIII (North Street) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-108	OU III (North Street)		Plume Core	A	A				12/16/24
000-154	OU III (North Street)		Plume Core		A				12/11/24
000-212	OU III (North Street)		Plume Core		A				12/18/24
000-343	OU III (North Street)	OU III (Magothy) Sampling Program	Plume Core		A				12/18/24
000-465	OU III (North Street)		Plume Core		A				12/11/24
000-472	OU III (North Street)		Plume Core		A				1/10/25
000-474	OU III (North Street)		Plume Core		A				12/16/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5H OUIII (North Street East-EDB) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 504 EDB/EPA 8011	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-138	OU III (North Street East-EDB)		Plume Core	4			3/5/24	6/3/24	7/23/24	12/18/24
000-394	OU III (North Street East-EDB)		Plume Core	4		A	3/11/24	6/12/24	7/23/24	12/17/24
000-551	OU III (North Street East-EDB)		Plume Core	4	4	A	3/7/24	6/3/24	7/23/24	12/18/24
000-552	OU III (North Street East-EDB)		Plume Core	4		A	3/8/24	5/27/24	7/22/24	12/17/24
000-553	OU III (North Street East-EDB)		Plume Core	4		A	3/8/24	5/27/24	7/22/24	12/17/24
000-554	OU III (North Street East-EDB)		Plume Core	4		A	3/11/24	6/13/24	7/23/24	12/17/24
000-555	OU III (North Street East-EDB)		Sentinel	4		A	3/6/24	6/13/24	7/23/24	12/17/24
000-563	OU III (North Street East-EDB)		Plume Core	4		A	3/7/24	6/13/24	7/23/24	12/17/24
000-564	OU III (North Street East-EDB)		Plume Perimeter	4		A	3/7/24	6/12/24	7/23/24	12/17/24
000-565	OU III (North Street East-EDB)		Bypass Detection	4		A	3/6/24	6/7/24	7/22/24	12/17/24
000-566	OU III (North Street East-EDB)		Bypass Detection	4		A	3/6/24	6/7/24	7/22/24	12/17/24
115-42	OU III (North Street East-EDB)		Plume Perimeter	F				6/17/24		12/20/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5I OUIII (LIPA) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-101	OU III (LIPA)		Plume Perimeter		F		5/1/24		12/30/24
000-102	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/3/24		12/30/24
000-104	OU III (LIPA)		Plume Core	F	F		5/7/24		11/22/24
000-105	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/7/24		11/22/24
000-130	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Core		F		5/9/24		12/4/24
000-131	OU III (LIPA)		Bypass Detection		F		5/2/24		11/19/24
000-425	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Core		F		5/3/24		12/2/24
000-445	OU III (LIPA)		Plume Perimeter		F		5/3/24		12/2/24
000-446	OU III (LIPA)		Plume Perimeter		F		5/3/24		12/4/24
000-447	OU III (LIPA)		Plume Core		F		5/8/24		12/3/24
000-448	OU III (LIPA)		Plume Core		F		5/7/24		11/22/24
000-449	OU III (LIPA)		Plume Core		F		5/2/24		12/13/24
000-450	OU III (LIPA)		Plume Perimeter		F		5/7/24		12/4/24
000-451	OU III (LIPA)		Bypass Detection		F		5/2/24		11/19/24
000-452	OU III (LIPA)		Bypass Detection		F		5/1/24		12/4/24
000-458	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/8/24		12/3/24
000-459	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/8/24		12/3/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5J OUIII (Airport) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-428	OU III (Airport)		Plume Perimeter		F		5/21/24		12/13/24
800-100	OU III (Airport)		Plume Core		F		5/17/24		12/13/24
800-101	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/16/24		12/12/24
800-102	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/16/24		12/12/24
800-103	OU III (Airport)		Plume Core	F	F		5/16/24		12/12/24
800-104	OU III (Airport)		Plume Perimeter		F		5/16/24		12/12/24
800-105	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/16/24		12/12/24
800-106	OU III (Airport)		Plume Core		F		5/21/24		12/11/24
800-108	OU III (Airport)		Bypass Detection		4	2/29/24	5/21/24	7/18/24	12/12/24
800-126	OU III (Airport)		Bypass Detection		4	2/28/24	5/15/24	7/18/24	12/12/24
800-127	OU III (Airport)		Bypass Detection		4	2/28/24	5/15/24	7/18/24	12/13/24
800-128	OU III (Airport)		Bypass Detection		4	2/29/24	5/14/24	7/17/24	12/5/24
800-129	OU III (Airport)		Plume Perimeter		F		5/14/24		12/5/24
800-130	OU III (Airport)		Plume Perimeter		F		5/14/24		12/5/24
800-131	OU III (Airport)		Bypass Detection	4	4	2/28/24	5/14/24	7/16/24	12/5/24
800-133	OU III (Airport)		Bypass Detection		4	2/29/24	5/17/24	7/18/24	12/13/24
800-138	OU III (Airport)		Plume Core		F		5/10/24		12/4/24
800-43	OU III (Airport)		Plume Core		F		5/13/24		12/9/24
800-44	OU III (Airport)		Plume Core		F		5/13/24		12/9/24
800-50	OU III (Airport)		Plume Perimeter		F		5/13/24		12/9/24
800-59	OU III (Airport)		Plume Core		F		5/10/24		12/4/24
800-60	OU III (Airport)		Sentinel		4	2/29/24	5/13/24	7/18/24	12/9/24
800-63	OU III (Airport)		Plume Core		F		5/9/24		12/11/24
800-90	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/9/24		12/3/24
800-92	OU III (Airport)		Plume Core		F		5/9/24		12/3/24
800-94	OU III (Airport)		Plume Core		F		5/10/24		12/12/24
800-95	OU III (Airport)		Plume Core	F	F		5/10/24		12/11/24
800-96	OU III (Airport)		Plume Perimeter		F		5/14/24		12/5/24
800-97	OU III (Airport)		Plume Core		F		5/15/24		12/5/24
800-98	OU III (Airport)		Plume Core		F		5/13/24		12/3/24
800-99	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/13/24		12/3/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5K OUIII (Magothy) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-102	OU III (Magothy) Sampling Program	OU III (LIPA)	None		F		5/3/24		12/30/24
000-105	OU III (Magothy) Sampling Program	OU III (LIPA)	None		A				11/22/24
000-130	OU III (Magothy) Sampling Program	OU III (LIPA)	Magothy		F		5/9/24		12/4/24
000-249	OU III (Magothy) Sampling Program	OU III (Industrial Park)	Magothy	F	F		4/18/24		10/17/24
000-250	OU III (Magothy) Sampling Program	OU III (Industrial Park)	Magothy		A				10/17/24
000-343	OU III (Magothy) Sampling Program	OU III (North Street)	None		F		6/12/24		12/18/24
000-425	OU III (Magothy) Sampling Program	OU III (LIPA)	None		F		5/3/24		12/2/24
000-458	OU III (Magothy) Sampling Program	OU III (LIPA)	None		A				12/3/24
000-459	OU III (Magothy) Sampling Program	OU III (LIPA)	None		A				12/3/24
113-09	OU III (Magothy) Sampling Program	OU III (Middle Rd)	None		F		5/2/24		10/11/24
113-19	OU III (Magothy) Sampling Program	OU III (Middle Rd)	None		4	2/20/24	5/22/24	8/26/24	10/17/24
113-22	OU III (Magothy) Sampling Program	OU III (Middle Rd)	None		F		5/21/24		10/23/24
122-05	OU III (Magothy) Sampling Program	OU III (South Boundary)	None		F		5/23/24		10/15/24
122-20	OU III (Magothy) Sampling Program	OU III (South Boundary)	None		A				10/17/24
130-04	OU III (Magothy) Sampling Program	OU III (Western South Boundary)	None		A				10/25/24
800-101	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/16/24		12/12/24
800-102	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/16/24		12/12/24
800-105	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/16/24		12/12/24
800-90	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/9/24		12/3/24
800-99	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/13/24		12/3/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5L William Floyd Wellfield Sentinel Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 901 Gamma Spec	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
109-03	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-01	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-02	William Floyd Wellfield Sentinel		Sentinel	A	A	A	4	4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-04	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-05	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-06	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5M OUIII (BGRR/WCF Sr-90) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Isotopic Cs-137	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
065-06	OU III (BGRR/WCF Sr-90)		Background			A	A	A				12/2/24
065-160	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/27/24		11/15/24
065-162	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/1/24
065-163	OU III (BGRR/WCF Sr-90)		Background			A						11/18/24
065-164	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
065-169	OU III (BGRR/WCF Sr-90)		Plume Perimeter	F		F				6/12/24		11/26/24
065-170	OU III (BGRR/WCF Sr-90)		Plume Perimeter	A		A	A					12/27/24
065-174	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
065-175	OU III (BGRR/WCF Sr-90)		Plume Core			F	F			6/18/24		11/18/24
065-176	OU III (BGRR/WCF Sr-90)		Background			A						11/1/24
065-178	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/18/24
065-325	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/14/24		11/26/24
065-360	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/1/24
065-361	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/1/24
065-362	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/1/24
065-363	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/15/24
065-364	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/15/24
065-365	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/15/24
065-367	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/26/24
065-37	OU III (BGRR/WCF Sr-90)		Plume Perimeter	F	F	F	F			6/27/24		12/27/24
065-38	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/11/24		11/1/24
065-39	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/11/24		11/1/24
065-401	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/18/24		12/23/24
065-402	OU III (BGRR/WCF Sr-90)		Background			F				6/27/24		11/6/24
065-404	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/28/24		11/18/24
065-405	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/14/24		11/26/24
075-189	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						10/31/24
075-193	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/7/24
075-194	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-201	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/27/24
075-210	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F	F			6/11/24		11/15/24
075-39	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/18/24
075-40	OU III (BGRR/WCF Sr-90)	OU III (AOC 29/HFBR Tritium)	Plume Perimeter		A							10/1/24
075-41	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						10/30/24
075-46	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-47	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/11/24		11/6/24
075-48	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/11/24		11/13/24
075-664	OU III (BGRR/WCF Sr-90)		Plume Core			M			2/27/24	5/23/24	7/31/24	10/31/24
075-665	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/20/24
075-666	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
075-669	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/19/24

Table 1-5M OUIII (BGRR/WCF Sr-90) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Isotopic Cs-137	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
075-670	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/6/24		11/6/24
075-671	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/6/24		11/6/24
075-672	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-673	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
075-674	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/7/24
075-675	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/7/24
075-681	OU III (BGRR/WCF Sr-90)		Sentinel			A						11/15/24
075-682	OU III (BGRR/WCF Sr-90)		Plume Core			F	F			6/11/24		10/31/24
075-683	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/15/24
075-684	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/11/24		11/13/24
075-699	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/28/24		11/20/24
075-700	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/28/24		11/20/24
075-701	OU III (BGRR/WCF Sr-90)		Plume Core			M			2/27/24	5/23/24	7/31/24	10/31/24
075-705	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/27/24		11/20/24
075-706	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/11/24		11/7/24
075-707	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/11/24		11/15/24
075-85	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/26/24
075-86	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-87	OU III (BGRR/WCF Sr-90)	OU X Fomer Firehouse MW	Sentinel			F				6/11/24		11/13/24
085-398	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/13/24		12/10/24
085-399	OU III (BGRR/WCF Sr-90)		Sentinel			F	F			6/11/24		11/6/24
085-402	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/6/24		11/6/24
085-403	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/13/24		11/18/24
085-415	OU III (BGRR/WCF Sr-90)		Background			F				6/11/24		11/6/24
095-326	OU III (BGRR/WCF Sr-90)		None			F				6/13/24		11/18/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5N Chemical/Animal Holes Sr-90 Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
097-313	Chemical/Animal Holes Sr-90		Plume Core	D	D	3/8/24		9/30/24	
097-314	Chemical/Animal Holes Sr-90		Plume Core	D		3/8/24		9/30/24	
097-315	Chemical/Animal Holes Sr-90		Plume Core	D		3/8/24		9/30/24	
106-100	Chemical/Animal Holes Sr-90		Plume Core	B				9/13/24	
106-101	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-103	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-104	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-105	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-119	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-125	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-136	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-16	Chemical/Animal Holes Sr-90		Plume Core	B				9/19/24	
106-49	Chemical/Animal Holes Sr-90		Plume Core	B	B			9/19/24	
106-94	Chemical/Animal Holes Sr-90		Plume Core	B				9/19/24	
106-95	Chemical/Animal Holes Sr-90		Plume Core	B				9/19/24	
106-98	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-99	Chemical/Animal Holes Sr-90		Plume Core	B				9/13/24	

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5O OUIII (AOC 29/HFBR Tritium) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
075-11	OU III (AOC 29/HFBR Tritium)		Plume Perimeter	4		2/15/24	4/15/24	7/1/24	9/30/24
075-288	OU III (AOC 29/HFBR Tritium)		Plume Perimeter	4		2/16/24	4/15/24	7/1/24	10/1/24
075-40	OU III (AOC 29/HFBR Tritium)	OU III (BGRR/WCF Sr-90)	Plume Perimeter	4		2/12/24	4/9/24	7/9/24	10/1/24
075-802	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/12/24	4/16/24	7/2/24	10/1/24
075-803	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/16/24	4/16/24	7/2/24	10/1/24
075-804	OU III (AOC 29/HFBR Tritium)		Plume Core	4	4	2/15/24	4/9/24	7/3/24	9/30/24
075-805	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/15/24	4/15/24	7/3/24	10/1/24
075-806	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/16/24	4/15/24	7/3/24	9/30/24
075-807	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/15/24	4/15/24	7/3/24	9/30/24
075-808	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/16/24	4/15/24	7/3/24	9/30/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5P OUIV (AOC 6 Sr-90) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
066-189	OU IV (AOC 6 Sr-90)		Background	A			4/4/24		
076-04	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/9/24		
076-06	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-07	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-13	OU IV (AOC 6 Sr-90)		Plume Perimeter	A	A		4/2/24		
076-168	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-169	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-181	OU IV (AOC 6 Sr-90)		Sentinel	A			4/5/24		
076-182	OU IV (AOC 6 Sr-90)		Sentinel	A			4/5/24		
076-184	OU IV (AOC 6 Sr-90)		Plume Core	A			4/9/24		
076-20	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-22	OU IV (AOC 6 Sr-90)		Plume Core	A			4/9/24		
076-24	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/3/24		
076-25	OU IV (AOC 6 Sr-90)		Plume Core	A			4/16/24		
076-262	OU IV (AOC 6 Sr-90)		Plume Core	A			4/4/24		
076-28	OU IV (AOC 6 Sr-90)		Plume Core	A			4/4/24		
076-317	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-373	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-415	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-416	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/5/24		
076-418	OU IV (AOC 6 Sr-90)		Plume Core	A			4/3/24		
076-419	OU IV (AOC 6 Sr-90)		Plume Core	A			4/3/24		
076-420	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-421	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5Q OUVI (EDB) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 504 EDB/EPA 8011	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-173	OU VI EDB		Plume Core	A					12/30/24
000-175	OU VI EDB		Plume Core	A					12/30/24
000-178	OU VI EDB		Plume Core	F			6/26/24		12/27/24
000-209	OU VI EDB		Plume Core	A					12/30/24
000-283	OU VI EDB		Plume Core	F			6/25/24		12/27/24
000-284	OU VI EDB		Plume Core	F			6/25/24		12/27/24
000-498	OU VI EDB		Plume Perimeter	F			6/25/24		12/20/24
000-499	OU VI EDB		Plume Core	F			6/20/24		12/20/24
000-500	OU VI EDB		Plume Core	4	4	3/11/24	6/20/24	8/21/24	12/20/24
000-501	OU VI EDB		Plume Perimeter	F			6/17/24		12/19/24
000-507	OU VI EDB		Plume Core	F			6/25/24		12/20/24
000-508	OU VI EDB		Bypass Detection	4		3/13/24	6/17/24	7/31/24	12/19/24
000-519	OU VI EDB		Bypass Detection	4		3/13/24	6/20/24	7/30/24	12/19/24
000-520	OU VI EDB		Plume Core	F			6/17/24		12/19/24
000-524	OU VI EDB		Plume Perimeter	F			6/26/24		12/26/24
000-527	OU VI EDB		Bypass Detection	4		3/13/24	6/21/24	7/30/24	12/19/24
000-549	OU VI EDB		Plume Core	4		3/21/24	6/26/24	8/21/24	12/26/24
000-550	OU VI EDB		Plume Core	4		3/21/24	6/26/24	8/21/24	12/26/24
000-567	OU VI EDB		Plume Core	4		3/19/24	6/20/24	8/21/24	12/19/24
000-568	OU VI EDB		Plume Core	4		3/19/24	6/20/24	8/21/24	12/19/24
000-570	OU VI EDB		Plume Core	4		3/11/24	6/25/24	8/22/24	12/26/24
000-571	OU VI EDB		Plume Core	4		3/14/24	6/24/24	7/31/24	12/20/24
000-572	OU VI EDB		Plume Core	4		3/14/24	6/24/24	8/22/24	12/19/24
000-580	OU VI EDB		Background	4		3/22/24	6/24/24	7/31/24	12/19/24
000-581	OU VI EDB		Background	4		3/14/24	6/21/24	7/30/24	12/19/24
000-582	OU VI EDB		Background	4		3/22/24	6/24/24	8/22/24	12/19/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5R OUX (Former Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
075-809	OU X Fomer Firehouse MW		Plume Core	B			4	2/1/24	6/04/24	7/1/24	10/11/24
075-810	OU X Fomer Firehouse MW		Plume Core	B			4	2/1/24	6/4/24	7/2/24	10/10/24
075-811	OU X Fomer Firehouse MW		Plume Core	B	4		4	2/1/24	6/4/24	7/1/24	10/10/24
075-87	OU X Fomer Firehouse MW	OU III (BGRR/WCF Sr-90)	Plume Core				D	2/5/24		7/10/24	
085-350	OU X Fomer Firehouse MW	OU III (Building 96)	Plume Core				D	2/5/24		7/24/24	
085-384	OU X Fomer Firehouse MW		Plume Core				D	2/7/24		7/10/24	
085-404	OU X Fomer Firehouse MW		Plume Core		4		4	1/29/24	6/4/24	7/9/24	10/10/24
085-405	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/4/24	7/9/24	10/9/2024
085-406	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/5/24	7/2/24	10/10/24
085-407	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/5/24	7/2/24	10/9/24
085-408	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/5/24	7/2/24	10/9/24
085-409	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/4/24	7/9/24	10/10/24
085-410	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/4/24	7/9/24	10/10/24
085-411	OU X Fomer Firehouse MW		Plume Core				D	2/1/24		7/26/24	
085-412	OU X Fomer Firehouse MW		Plume Core				D	2/1/24		7/26/24	
085-43	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/19/24	
086-123	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/29/24	
095-170	OU X Fomer Firehouse MW	OU III (Building 96)	Plume Core				D	2/5/24		7/19/24	
095-171	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/29/24	
096-115	OU X Fomer Firehouse MW		Plume Core		D	D	D	2/6/24		7/25/24	
096-117	OU X Fomer Firehouse MW		Plume Core			D	D	2/6/24		7/25/24	
096-118	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/25/24	
096-122	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/29/24	
096-123	OU X Fomer Firehouse MW		Plume Core				D	1/29/24		7/12/24	
096-124	OU X Fomer Firehouse MW		Plume Core				D	1/30/24		7/19/24	
096-125	OU X Fomer Firehouse MW		Plume Core				D	1/30/24		7/19/24	
096-126	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/19/24	
096-127	OU X Fomer Firehouse MW		Plume Core			D	D	2/6/24		7/29/24	
096-128	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/19/24	
096-129	OU X Fomer Firehouse MW		Plume Core			D	D	2/6/24		7/26/24	
096-130	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/16/24	
096-131	OU X Fomer Firehouse MW		Plume Core			D	D	1/31/24		7/16/24	
096-84	OU X Fomer Firehouse MW		Plume Core				D	2/2/24		7/17/24	
105-43	OU X Fomer Firehouse MW		Plume Core			D	D	1/26/24		7/26/24	
105-44	OU X Fomer Firehouse MW	OU III (Middle Rd)	Plume Core				D	1/24/24		7/17/24	
105-72	OU X Fomer Firehouse MW		Bypass Detection			D	D	1/26/24		7/16/24	
105-73	OU X Fomer Firehouse MW		Bypass Detection			D	D	1/26/24		7/16/24	
105-74	OU X Fomer Firehouse MW		Plume Core			D	D	1/30/24		7/29/24	
105-75	OU X Fomer Firehouse MW		Plume Core			D	D	1/30/24		7/12/24	

Table 1-5R OUX (Former Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
105-76	OU X Fomer Firehouse MW		Plume Core			D	D	1/30/24		7/12/24	
105-77	OU X Fomer Firehouse MW		Bypass Detection			D	D	2/7/24		7/17/24	
105-78	OU X Fomer Firehouse MW		Bypass Detection			D	D	2/7/24		7/17/24	
000-262	OU X Fomer Firehouse MW		Plume Core				A				10/25/24
000-265	OU X Fomer Firehouse MW		Plume Core				A				10/24/24
000-267	OU X Fomer Firehouse MW		Background				CA				10/8/24
000-268	OU X Fomer Firehouse MW		Background				AC				10/8/24
000-271	OU X Fomer Firehouse MW		Background				AC				10/8/24
000-490	OU X Fomer Firehouse MW		Background				A				10/24/24
000-528	OU X Fomer Firehouse MW		Plume Core				A				10/24/24
000-529	OU X Fomer Firehouse MW		Plume Core				A				11/4/24
000-537	OU X Fomer Firehouse MW		Background				CA				10/7/24
000-538	OU X Fomer Firehouse MW		Background				CA				1/10/25
000-548	OU X Fomer Firehouse MW		Plume Core				A				10/17/24
105-66	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
105-67	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
105-68	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
106-56	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
106-58	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
113-17	OU X Fomer Firehouse MW		Plume Core				A				10/17/24
113-19	OU X Fomer Firehouse MW		Plume Core				A				NS
113-30	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
121-10	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
121-11	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
121-23	OU X Fomer Firehouse MW		Plume Core				A				10/18/24
121-45	OU X Fomer Firehouse MW		Plume Core				A				10/23/24
121-49	OU X Fomer Firehouse MW		Plume Core				A				10/21/24
121-54	OU X Fomer Firehouse MW		Plume Core				A				10/22/24
122-04	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
122-05	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
122-10	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
122-18	OU X Fomer Firehouse MW		Plume Core				A				10/17/24
122-31	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
122-32	OU X Fomer Firehouse MW		Plume Core				A				10/15/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

NS No Sample

Table 1-5S OUX (Current Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
073-01	OU X Current Firehouse MW		Plume Core			D	1/23/24		8/30/24	
073-26	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/23/24	8/20/24	10/3/24
073-27	OU X Current Firehouse MW		Plume Core			4	1/3/24	4/19/24	8/29/24	10/4/24
073-28	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/16/24	8/29/24	10/3/24
073-29	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/16/24	8/29/24	10/3/24
073-30	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/22/24	8/20/24	10/3/24
073-31	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/19/24	8/29/24	10/2/24
073-32	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/19/24	8/29/24	10/2/24
073-33	OU X Current Firehouse MW		Plume Core			4	1/2/24	4/19/24	8/21/24	10/3/24
074-135	OU X Current Firehouse MW		Plume Core	4		4	1/18/24	4/16/24	8/21/24	10/4/24
083-01	OU X Current Firehouse MW		Plume Core			D	1/24/24		8/22/24	
083-02	OU X Current Firehouse MW		Plume Core			D	1/24/24		8/30/24	
083-05	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/30/24	
083-33	OU X Current Firehouse MW		Plume Core			D	1/8/24		8/19/24	
083-34	OU X Current Firehouse MW		Plume Core			D	1/8/24		8/19/24	
083-35	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
083-36	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
083-37	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
083-38	OU X Current Firehouse MW		Plume Core			D	1/4/24		8/20/24	
083-39	OU X Current Firehouse MW		Plume Core			D	1/18/24		9/3/24	
083-40	OU X Current Firehouse MW		Plume Core			D	1/18/24		8/26/24	
083-41	OU X Current Firehouse MW		Plume Core	D	D	D	1/18/24		8/23/24	
083-42	OU X Current Firehouse MW		Plume Core		D	D	1/18/24		8/28/24	
083-43	OU X Current Firehouse MW		Plume Core		D	D	1/19/24		8/28/24	
083-44	OU X Current Firehouse MW		Plume Core			D	1/4/24		8/23/24	
083-47	OU X Current Firehouse MW		Plume Core			D	1/4/24		8/2/24	
084-03	OU X Current Firehouse MW		Plume Core			D	1/23/24		9/3/24	
084-04	OU X Current Firehouse MW		Plume Core			D	1/23/24		9/3/24	
084-28	OU X Current Firehouse MW		Plume Core			D	1/24/24		9/11/24	
084-86	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/26/24	
084-87	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/26/24	
084-88	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
084-89	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
084-90	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/21/24	
084-91	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/22/24	
084-92	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/21/24	
084-93	OU X Current Firehouse MW		Plume Core			D	1/10/24		9/3/24	
084-94	OU X Current Firehouse MW		Plume Core	D	D	D	1/12/24		7/25/24	

Table 1-5S OUX (Current Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
084-95	OU X Current Firehouse MW		Plume Core		D	D	1/12/24		8/29/24	
084-96	OU X Current Firehouse MW		Plume Core			D	1/8/24		7/25/24	
084-97	OU X Current Firehouse MW		Plume Core		D	D	1/10/24		7/25/24	
084-98	OU X Current Firehouse MW		Plume Core		D	D	1/10/24		7/25/24	
093-04	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/19/24	8/5/24	10/2/24
093-88	OU X Current Firehouse MW		Plume Core			D	1/8/24		8/5/24	
093-89	OU X Current Firehouse MW		Plume Core			D	1/9/24		7/26/24	
093-90	OU X Current Firehouse MW		Plume Core		D	D	1/12/24		7/26/24	
093-91	OU X Current Firehouse MW		Plume Core			D	1/9/24		7/29/24	
093-92	OU X Current Firehouse MW		Plume Core		D	D	1/23/24		7/26/24	
093-93	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/19/24	8/2/24	10/2/24
093-94	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/22/24	8/5/24	10/2/24
093-95	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/22/24	8/5/24	10/2/24
093-96	OU X Current Firehouse MW		Plume Core	D		D	1/9/24		8/22/24	
093-97	OU X Current Firehouse MW		Plume Core			D	1/24/24		9/6/24	
093-98	OU X Current Firehouse MW		Plume Core			D	1/24/24		9/6/24	
094-275	OU X Current Firehouse MW		Plume Core			D	1/10/24		8/2/24	
094-276	OU X Current Firehouse MW		Plume Core		D	D	1/10/24		8/2/24	
094-277	OU X Current Firehouse MW		Plume Core			D	1/12/24		8/2/24	
094-278	OU X Current Firehouse MW		Plume Core		D	D	1/12/24		8/6/24	
102-12	OU X Current Firehouse MW		Plume Core			D	1/24/24		8/30/24	
102-26	OU X Current Firehouse MW		Plume Core			D	1/11/24		8/27/24	
102-27	OU X Current Firehouse MW		Plume Core			D	1/11/24		8/26/24	
102-28	OU X Current Firehouse MW		Plume Core			D	1/11/24		8/26/24	
102-29	OU X Current Firehouse MW		Bypass Detection			D	1/11/24		7/25/24	
102-30	OU X Current Firehouse MW		Bypass Detection		D	D	1/11/24		7/24/24	
102-31	OU X Current Firehouse MW		Bypass Detection		D	D	1/11/24		7/24/24	
102-36	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/27/24	
102-37	OU X Current Firehouse MW		Plume Core	D		D	1/22/24		8/27/24	
102-38	OU X Current Firehouse MW		Bypass Detection			D	1/22/24		8/30/24	
102-39	OU X Current Firehouse MW		Bypass Detection			D	1/22/24		8/30/24	
102-40	OU X Current Firehouse MW		Bypass Detection		D	D	1/11/24		7/24/24	
103-02	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		NO SAMPLE	
103-10	OU X Current Firehouse MW		Plume Core		D	D	1/23/24		8/29/24	
103-30	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/5/24	
103-31	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/6/24	
103-32	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/6/24	
103-33	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/27/24	
103-34	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/27/24	
111-20	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/5/24	
118-07	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/6/24	

Table 1-5S OUX (Current Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
125-04	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/5/24	
125-05	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/5/24	

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5T Site Background Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
017-01	Site Background		Background	B			9/10/24	
017-03	Site Background		Background	B			9/10/24	
017-04	Site Background		Background	B			9/10/24	
018-01	Site Background		Background	B			9/10/24	
018-02	Site Background		Background	B			9/10/24	
018-04	Site Background		Background	B			9/10/24	
018-05	Site Background		Background	B			9/10/24	
034-02	Site Background		Background	B			9/10/24	
034-03	Site Background		Background	B			9/10/24	

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5U Current Landfill Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	TSS/TDS	Sulfates/Chloride/Alkalinity	TK Nitrogen	Total Nitrogen	Nitrates	Nitrites	Ammonia	TAL Metals	Cyanide	EPA 901 Gamma Spec	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
087-09	Current Landfill		Background	F	F	F	F	F	F	F	F	F					F	A	A		5/28/24		11/12/24
087-11	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					F	A	A		5/30/24		11/14/24
087-23	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A		F	A	A		5/30/24		11/14/24
087-24	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					A	A	A		5/30/24		11/14/24
087-26	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					F	A	A		5/29/24		11/13/24
087-27	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A		F	A	A		5/29/24		11/13/24
088-109	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A	4	4	A	A	3/15/24	5/28/24	9/6/24	11/12/24
088-110	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					F	A	A		5/29/24		11/13/24
088-21	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A		F	A	A		5/30/24		11/14/24
088-22	Current Landfill		Downgradient	A	A	A	A	A	A	A	A	A					A	A	A				11/14/24
088-23	Current Landfill		Downgradient	A	A	A	A	A	A	A	A	A					A	A	A				11/14/24
098-99	Current Landfill	OU I South Boundary VOCs	Downgradient														4	A	A	3/12/24	5/29/24	9/6/24	11/14/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-6
Summary of Environmental Surveillance Samples and Analytical Methods

2024 BNL Groundwater Status Report

Table 1-6A AGS Research Areas Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
054-07	40~	AGS Research Areas (AGS)	g-2 Tritium Plume	Downgradient	F				04/29/24						10/16/24			FM-Compliance-AGS
054-124	45~	AGS Research Areas (AGS)	g-2 Tritium Plume	Downgradient	F				04/29/24						10/16/24			FM-Compliance-AGS
054-126	45~	AGS Research Areas (AGS)	g-2 Tritium Plume	Downgradient	F				04/29/24						10/16/24			FM-Compliance-AGS
054-184	40~	AGS Research Areas (AGS)	g-2 Tritium Plume	Downgradient	F				04/29/24						10/16/24			FM-Compliance-AGS
054-185	40~	AGS Research Areas (AGS)	g-2 Tritium Plume	Downgradient	F				04/29/24						10/16/24			FM-Compliance-AGS
054-65	37.7~	AGS Research Areas (AGS)	g-2 Tritium Plume	Upgradient	F				04/29/24						10/16/24			FM-Compliance-AGS
064-95	40~	AGS Research Areas (AGS)	g-2 Tritium Plume	Downgradient	F				05/22/24						10/16/24			FM-Compliance-AGS

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

054-126 also sampled 10/28/2024

Table 1-6
Summary of Environmental Surveillance Samples and Analytical Methods

2024 BNL Groundwater Status Report

Table 1-6B AGS Surveillance Research Areas Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
054-08		AGS Research Areas (AGS)	NSRL	Downgradient	A											11/19/24		FM-Surveillance-AGS
054-125	45~	AGS Research Areas (AGS)	g-2 Stop	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-127	42~	AGS Research Areas (AGS)	U-line Target	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-128	42~	AGS Research Areas (AGS)	U-line Target	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-129	41~	AGS Research Areas (AGS)	U-line Target	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-130	42~	AGS Research Areas (AGS)	U-line Target	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-168	38~	AGS Research Areas (AGS)	U-line Stop	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-169	38~	AGS Research Areas (AGS)	U-line Stop	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-191	41~	AGS Research Areas (AGS)	NSRL	Downgradient	A											11/19/24		FM-Surveillance-AGS
054-62	32.8~	AGS Research Areas (AGS)	Bkgd J-10 Stop	Upgradient	A											11/18/24		FM-Surveillance-AGS
054-63	62.3~	AGS Research Areas (AGS)	J-10 Stop	Downgradient	A											11/18/24		FM-Surveillance-AGS
054-64	62~	AGS Research Areas (AGS)	J-10 Stop	Downgradient	A											11/18/24		FM-Surveillance-AGS
054-66	38~	AGS Research Areas (AGS)	g-2 Stop	Upgradient	A											11/13/24		FM-Surveillance-AGS
054-67	37.6~	AGS Research Areas (AGS)	g-2 Stop	Downgradient	A											11/13/24		FM-Surveillance-AGS
054-68	37.6~	AGS Research Areas (AGS)	g-2 Stop	Downgradient	A											11/14/24		FM-Surveillance-AGS
054-69	37.3~	AGS Research Areas (AGS)	g-2/U-line Stop	Upgradient	A											11/14/24		FM-Surveillance-AGS
055-14	37.2~	AGS Research Areas (AGS)	g-2/U-line Stop	Upgradient	A											11/14/24		FM-Surveillance-AGS
055-15	38~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/18/24		FM-Surveillance-AGS
055-16	37.7~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/18/24		FM-Surveillance-AGS
055-29	62~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/18/24		FM-Surveillance-AGS
055-30	40~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/18/24		FM-Surveillance-AGS
055-31	60~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
055-32	60~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/18/24		FM-Surveillance-AGS
064-03	64~	AGS Research Areas (AGS)	Building 914	Downgradient	A											11/18/24		FM-Surveillance-AGS
064-51	58.5~	AGS Research Areas (AGS)	Booster Stop	Downgradient	A											11/19/24		FM-Surveillance-AGS
064-52	62.5~	AGS Research Areas (AGS)	Booster Stop	Downgradient	A											11/19/24		FM-Surveillance-AGS
064-53	52.3~	AGS Research Areas (AGS)	Building 914	Downgradient	A											11/18/24		FM-Surveillance-AGS
064-54	53~	AGS Research Areas (AGS)	Building 914	Downgradient	A											11/18/24		FM-Surveillance-AGS
064-55	43~	AGS Research Areas (AGS)	E-20 Catcher	Downgradient	A											11/15/24		FM-Surveillance-AGS
064-56	42~	AGS Research Areas (AGS)	E-20 Catcher	Downgradient	A											11/14/24		FM-Surveillance-AGS
064-80	43~	AGS Research Areas (AGS)	E-20 Catcher	Downgradient	A											11/14/24		FM-Surveillance-AGS
065-120	42.4~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/19/24		FM-Surveillance-AGS
065-121	39~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-122	38.8~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-123	38.2~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS

Table 1-6B AGS Surveillance Research Areas Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
065-124	38.3~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/30/24			FM-Surveillance-AGS
065-125	38~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-126	38.5~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-192	65~	AGS Research Areas (AGS)	Building 912	Downgradient	A											11/19/24		FM-Surveillance-AGS
065-193	65~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-194	60~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-195	60~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS
065-321	38~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/28/24			FM-Surveillance-AGS
065-322	38~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/28/24			FM-Surveillance-AGS
065-323	36~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/28/24			FM-Surveillance-AGS
065-324	34~	AGS Research Areas (AGS)	g-2/B912	Downgradient	A										10/29/24			FM-Surveillance-AGS

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

Table 1-6C Waste Mgt Facility Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	Water Quality	TAL Metals	EPA 900 Gross Alpha/Beta	EPA 901 Gamma Remediation	EPA 906 Tritium	EPA 905 Sr 90	Water Level *	8260 (VOCs)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
055-03	60~	New Waste Mgt Facility (WMF)	Facility Background	Upgradient	B	B	D	D	D		D	D		02/07/24						08/14/24					FM-Compliance-WMF
055-10	104~	New Waste Mgt Facility (WMF)	Facility Background	Upgradient	B	B	D	D	D		D	D		02/07/24						08/14/24					FM-Compliance-WMF
056-04		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
056-05		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
056-21	66~	New Waste Mgt Facility (WMF)	RCRA Building	Downgradient	B	B	D	D	D	B	D	D		02/07/24						08/14/24					FM-Compliance-WMF
056-22	66~	New Waste Mgt Facility (WMF)	Rad Building	Downgradient	B	B	D	D	D	B	D	D		02/07/24						08/14/24					FM-Compliance-WMF
056-23		New Waste Mgt Facility (WMF)	Water Level	None	B	B	D	D	D		D	D		02/08/24											FM-Compliance-WMF
057-10		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
066-07		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
066-08		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
066-13		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
066-220	65~	New Waste Mgt Facility (WMF)	RCRA Building	Downgradient	B	B	D	D	D	B	D	D		02/07/24						08/14/24					FM-Compliance-WMF
066-221	65~	New Waste Mgt Facility (WMF)	RCRA Building	Downgradient	B	B	D	D	D	B	D	D		02/08/24						08/15/24					FM-Compliance-WMF
066-222	65~	New Waste Mgt Facility (WMF)	Rad Building	Downgradient	B	B	D	D	D	B	D	D		02/08/24						08/15/24					FM-Compliance-WMF
066-223	63~	New Waste Mgt Facility (WMF)	Rad Building	Downgradient	B	B	D	D	D	B	D	D		02/08/24						08/15/24					FM-Compliance-WMF
066-224		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
066-83		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF
066-84		New Waste Mgt Facility (WMF)	Water Level	None							D														FM-Compliance-WMF

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

055-03	also sampled 2/16/2024
055-10	also sampled 2/16/2024
056-23	also sampled 2/16/2024
066-221	also sampled 2/16/2024
066-223	also sampled 2/16/2024

Table 1-6D Major Petroleum t Facility Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	Floating Product *	8260 (VOCs)	8270 (SVOCs)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Purge Water Reqs	Contained Water Reqs	Project 3
076-16	25~-45~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/16/24						10/03/24			none	none	FM-Compliance-MPF
076-17	25~-45~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/16/24						10/03/24			none	none	FM-Compliance-MPF
076-18	20~-40~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/17/24						10/03/24			none	none	FM-Compliance-MPF
076-19	20~-40~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/16/24						10/04/24			none	none	FM-Compliance-MPF
076-25	32~-52~	Major Petroleum Facility (MPF)	Tanks Area	Upgradient	M	F	F				01/16/24						10/03/24			none	none	FM-Compliance-MPF
076-378	27~-42~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/16/24						10/03/24			none	none	FM-Compliance-MPF
076-379	28~-43~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/16/24						10/04/24			none	none	FM-Compliance-MPF
076-380	27~-42~	Major Petroleum Facility (MPF)	Tanks Area	Downgradient	M	F	F				01/17/24						10/03/24			none	none	FM-Compliance-MPF

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

Table 1-6E Motor Pool Area Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	Floating Product *	8260 (VOCs)		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
102-05	71~	Motor Pool Area (MTP)	Gasoline USTs	Downgradient	A	A											10/30/24			FM-Surveillance-MTP
102-06	70~	Motor Pool Area (MTP)	Gasoline USTs	Downgradient	A	A											10/30/24			FM-Surveillance-MTP

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

Table 1-6F STP and Peconic River Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	TAL Metals	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
039-115	10~-25~, 30~	STP and Peconic River (STP)	Recharge Basins	Downgradient	A											11/07/24		FM-Compliance-STP
039-87	14~-24~, 29~	STP and Peconic River (STP)	Recharge Basins	Downgradient	A											11/07/24		FM-Compliance-STP
039-88	17~-32~, 37~	STP and Peconic River (STP)	Recharge Basins	Downgradient	A											11/07/24		FM-Compliance-STP
039-89	15~-30~, 35~	STP and Peconic River (STP)	Recharge Basins	Downgradient	A											11/07/24		FM-Compliance-STP
048-08	10~-25~, 30~	STP and Peconic River (STP)	Recharge Basins	Upgradient	A											11/05/24		FM-Compliance-STP
048-09	10~-25~, 30~	STP and Peconic River (STP)	Recharge Basins	Downgradient	A											11/07/24		FM-Compliance-STP
048-10	10~-25~, 30~	STP and Peconic River (STP)	Recharge Basins	Downgradient	A											11/07/24		FM-Compliance-STP

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

Table 1-6G RHIC Facility Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
025-03	58.2~	RHIC Facility (RHIC)	B/Y Beam Stop	Downgradient	D		02/29/24						08/28/24					FM-Surveillance-RHIC
025-04	58.3~	RHIC Facility (RHIC)	B/Y Beam Stop	Downgradient	D		02/29/24						08/28/24					FM-Surveillance-RHIC
025-05	24.3~	RHIC Facility (RHIC)	B/Y Beam Stop	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
025-06	24.9~	RHIC Facility (RHIC)	B/Y Beam Stop	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
025-07	25.8~	RHIC Facility (RHIC)	B/Y Beam Stop	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
025-08	24.8~	RHIC Facility (RHIC)	B/Y Beam Stop	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
034-05	55~	RHIC Facility (RHIC)	B/Y Collimator	Downgradient	D		02/29/24						08/28/24					FM-Surveillance-RHIC
034-06	54.3~	RHIC Facility (RHIC)	B/Y Collimator	Downgradient	D		02/29/24						08/28/24					FM-Surveillance-RHIC
043-01	53.8~	RHIC Facility (RHIC)	B/Y Collimator	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
043-02	73.8~	RHIC Facility (RHIC)	B/Y Collimator	Downgradient	D		02/28/24						08/28/24					FM-Surveillance-RHIC
044-13	50.8~	RHIC Facility (RHIC)	B/Y Collimator	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
044-14	69~	RHIC Facility (RHIC)	B/Y Collimator	Downgradient	D		02/28/24						08/29/24					FM-Surveillance-RHIC
044-29	48~	RHIC Facility (RHIC)	W-Line Beam Stop	Downgradient	D		02/29/24						08/29/24					FM-Surveillance-RHIC

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

Table 1-6H NSLS II Schedule 2024

Well ID	Well Depth	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Project 3
086-123	47~	NSLS II (NSLS)	Linac Area	Downgradient	A												12/10/24	FM-Surveillance-NSLS
086-124	57~	NSLS II (NSLS)	Linac Area	Downgradient	A												12/10/24	FM-Surveillance-NSLS
086-125	47~	NSLS II (NSLS)	Linac Area	Downgradient	A												12/10/24	FM-Surveillance-NSLS
086-126	49~	NSLS II (NSLS)	Linac Area	Downgradient	A												12/10/24	FM-Surveillance-NSLS

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters
*	dates not included in schedule

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
000-37	Water Levels	18-28	33	42.3	SG
000-38	Water Levels	29-39	41	56.4	SG
000-40	Water Levels	24-34	36	66.5	SG
000-97	OU III Off-site, Water Levels	284-304	310	101.3	MAG
000-98	OU III Off-site, Water Levels	190-210	215	100.1	DG
000-99	OU III Off-site, Water Levels	83-93	98	100.1	SG
000-100	Water Levels	79-89	94	100.9	SG
000-101	OU III LIPA, Water Levels	185-205	210	101.4	DG
000-102	OU III LIPA, Magothy, Water Levels	305-325	330	101.2	MAG
000-103	Water Levels	82-92	97	106.5	SG
000-104	OU III LIPA, Water Levels	195-215	220	106.2	DG
000-105	OU III LIPA, Magothy, Water Levels	275-295	300	105.5	MAG
000-106	Water Levels	90-100	105	115.2	SG
000-107	OU III Off-site, Water Levels	195-215	220	116.0	DG
000-108	OU III North Street, Water Levels	215-225	225	69.0	DG
000-109	Water Levels	50-60	65	68.7	SG
000-110	OU VI EDB, Water Levels	97-107	112	52.2	SD
000-111	Water Levels	35-45	50	55.3	SG
000-112	OU III Industrial Park, Water Levels	175-185	190	72.1	DG
000-113	Water Levels	69-79	84	72.1(a)	SG
000-114	OU III Industrial Park, Water Levels	130-140	145	72.5	MG
000-115	Water Levels	74-84	89	94.2	SD
000-117	Water Levels	55-65	70	86.1	SD
000-118	Water Levels	150-160	165	78.4	DG
000-119	Water Levels	110-120	125	78.4	DG
000-120	Water Levels	45-55	60	78.4	SG
000-121	Water Levels	51-61	66	87.6	SD
000-122	OU V, Water Levels	240-260	265	43.0	DG
000-123	OU V, Water Levels	150-170	175	43.0	MG
000-124	OU III North Street East, Water Levels	115-125	130	63.0	SD
000-130	OU III LIPA, Magothy, Water Levels	275-285	295	87.4	MAG
000-131	OU III LIPA, Water Levels	220-230	235	100.8	DG
000-137	OU III North Street East, Water Levels	98-118	123	60.9	SG
000-138	OU III North Street East, Water Levels	158-178	183	61.2	DG
000-141	OU V, Water Levels	37-57	62	48.1	SG
000-142	OU V, Water Levels	145-165	170	48.4	DG
000-143	OU V, Water Levels	240-260	265	48.7	MAG
000-144	OU V, Water Levels	25-45	50	41.0	SG
000-145	OU V, Water Levels	130-150	155	41.1	DG
000-146	OU V, Water Levels	239-259	264	41.3	MAG
000-147	OU V, Water Levels	34-54	59	43.0	SG
000-148	Water Levels	84-89	89	65.0	SG
000-150	Water Levels	28-32	32	77.6	SG
000-152	Water Levels	32-36	36	56.5	SG
000-153	OU III North Street, Water Levels	190-210	215	94.4	DG
000-154	OU III North Street, Water Levels	193-203	208	97.4	DG
000-173	OU VI EDB, Water Levels	106-116	121	54.8	DG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
000-174	OU VI EDB, Water Levels	56-66	71	57.1	DG
000-175	OU VI EDB, Water Levels	100-110	115	50.4	DG
000-176	OU VI EDB, Water Levels	55-65	70	49.7	DG
000-177	OU VI EDB, Water Levels	106-116	121	60.1	DG
000-178	OU VI EDB, Water Levels	128-138	143	58.0	DG
000-179	OU VI EDB, Water Levels	117-127	132	56.1	DG
000-180	OU VI EDB, Water Levels	140-155	160	51.8	DG
000-201	OU VI EDB, Water Levels	93-103	108	50.3	DG
000-209	OU VI EDB, Water Levels	94-104	109	50.7	DG
000-211	OU III Industrial Park East, North Street, Water Levels	212-232	232	73.4	DG
000-212	OU III North Street, Water Levels	200-210	215	74.0	DG
000-213	OU III North Street, Water Levels	185-205	210	86.1	DG
000-215	OU III North Street East, Water Levels	260-270	275	64.0	DG
000-245	OU III Industrial Park, Water Levels	202-222	227	80.7	DG
000-246	OU III Industrial Park, Water Levels	133-143	145	82.2	MG
000-247	OU III Industrial Park	178-183	184	82.2	DG
000-248	OU III Industrial Park, Water Levels	230-235	238	82.2	DG
000-249	OU III Industrial Park	259-269	270	82.5	MAG
000-249	OU III Magothy, Water Levels	259-269	270	82.5	MAG
000-250	OU III Industrial Park, Magothy, Water Levels	293-303	304	82.9	MAG
000-251	OU III Industrial Park	133-143	144	81.9	MG
000-252	OU III Industrial Park	169-174	175	81.9	MG
000-253	OU III Industrial Park, Water Levels	223-228	229	81.9	DG
000-254	OU III Industrial Park	128-138	139	79.9	MG
000-255	OU III Industrial Park	165-170	171	79.9	MG
000-256	OU III Industrial Park, Water Levels	220-225	226	79.9	DG
000-257	OU III Industrial Park	109-119	120	73.9	MG
000-258	OU III Industrial Park	145-150	151	73.9	MG
000-259	OU III (Industrial Park), Water Levels	200-205	206	73.9	DG
000-260	OU III Industrial Park	95-105	106	71.4	SG
000-261	OU III Industrial Park	130-135	136	71.4	MG
000-262	OU III Industrial Park, Water Levels	180-185	186	71.4	DG
000-263	OU III Industrial Park	118-128	129	83.4	MG
000-264	OU III Industrial Park, Water Levels	155-160	161	83.4	MG
000-265	OU III Industrial Park, Water Levels	210-215	216	83.4	DG
000-266	OU III Industrial Park, Water Levels	119-129	130	84.9	MG
000-267	OU III Industrial Park	158-163	164	84.9	MG
000-268	OU III Industrial Park	213-218	219	84.9	DG
000-269	OU III Industrial Park, Water Levels	116-126	127	83.7	MG
000-270	OU III Industrial Park	152-157	158	83.9	MG
000-271	OU III Industrial Park, Water Levels	213-218	219	83.7	DG
000-272	OU III Industrial Park, Water Levels	181-201	206	80.1	DG
000-273	OU III Industrial Park, Water Levels	175-195	196	86.8	DG
000-274	OU III Industrial Park, Water Levels	232-252	253	88.4	MAG
000-275	OU III Industrial Park	124-144	145	85.2	MG
000-276	OU III Industrial Park	154-174	175	85.3	MG
000-277	OU III Industrial Park	137-157	158	81.8	MG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
000-278	OU III Industrial Park,Water Levels	184-204	205	82.5	DG
000-279	OU III Industrial Park	183-203	208	72.7	DG
000-283	OU VI EDB, Water Levels	102-112	117	52.6	DG
000-284	OU VI EDB, Water Levels	102-112	117	53.0	DG
000-285	OU VI EDB, Water Levels	145-155	160	103.6	DG
000-311	Water Levels	135-145	146	83.5	MG
000-343	OU III Magothy, Water Levels	320-340	345	61.0	MAG
000-394	OU I South Boundary	168-188	193	65.7	DG
000-425	OU III LIPA, Magothy, Water Levels	305-325	325	109.2	MAG
000-426	OU III Magothy,Water Levels	290-310	315	77.8	MAG
000-427	OU III Magothy, Water Levels	265-285	290	75.7	MAG
000-428	OU III Magothy, Water Levels	293-303	308	99.3	MAG
000-429	OU III Magothy, Water Levels	290-310	315	75.7	MAG
000-431	OU III Industrial Park, Water Levels	250-270	275	99.9	DG
000-432	OU III Industrial Park, Water Levels	220-240	245	85.2	DG
000-445	OU III LIPA, Water Levels	209-229	232	108.8	DG
000-446	OU III LIPA	202-222	225	115.4	DG
000-447	OU III LIPA, Water Levels	209-229	232	102.9	DG
000-448	OU III LIPA	202-222	225	105.4	DG
000-449	OU III LIPA	183-203	208	112.8	DG
000-450	OU III LIPA, Water Levels	198-218	221	114.1	MAG
000-451	OU III LIPA	188-198	201	101.2	DG
000-452	OU III LIPA, Water Levels	212-222	225	105.7	MAG
000-453	OU III Airport (EW-1L)	217-237	240	105.9	DG
000-455	OU III Airport (EW-2L)	224-244	247	108.6	DG
000-457	OU III Airport (EW-3L)	216-236	239	112.2	DG
000-458	OU III Magothy, Water Levels	291-311	316	103.0	MAG
000-459	OU III Magothy, Water Levels	294-314	319	107.1	MAG
000-460	OU III LIPA, Magothy, Water Levels	290-310	315	108.8	MAG
000-461	OU III Airport (EW-4L)	304-324	327	111.8	MAG
000-463	OU III North Street	163-173	178	102.1	DG
000-464	OU III North Street	183-203	208	101.5	DG
000-465	OU III North Street	185-195	200	104.6	DG
000-466	OU III North Street	180-190	195	92.3	DG
000-467	OU III North Street	202-212	217	89.7	DG
000-468	OU III North Street	162-182	185	96.3	DG
000-469	OU III North Street	197-217	222	96.4	DG
000-470	OU III North Street	170-180	185	97.9	DG
000-471	OU III North Street (NS-1)	165-205	208	101.4	DG
000-472	OU III North Street	206-216	221	96.8	DG
000-473	OU III North Street (NS-2)	190-220	223	94.1	DG
000-474	OU III North Street	195-205	210	84.0	DG
000-475	OU III North Street	187-207	212	78.9	DG
000-476	OU III North Street	195-215	220	104.5	DG
000-477	OU III North Street East	165-175	180	95.0	DG
000-478	OU III North Street East, Water Levels	167-177	182	101.1	DG
000-479	OU III North Street East	165-175	180	98.2	DG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
000-480	OU III North Street East, Water Levels	167-177	182	103.0	DG
000-481	OU III North Street East	169-179	184	94.2	DG
000-482	OU III North Street East	157-167	172	84.6	DG
000-483	OU III North Street East, Water Levels	159-169	174	86.1	DG
000-484	OU III North Street East	165-175	180	92.3	DG
000-485	OU III North Street East	160-170	175	88.0	DG
000-486	OU III North Street East, Water Levels	160-170	175	88.4	DG
000-487	OU III North Street East (NSE-1)	161-191	194	90.4	DG
000-488	OU III North Street East (NSE-2)	152-182	185	80.6	DG
000-489	OU III Industrial Park East	215-235	240	78.1	MAG
000-490	OU III Industrial Park East	245-265	270	77.7	MAG
000-491	OU III Industrial Park East	215-235	240	66.8	MAG
000-492	OU III Industrial Park East	245-265	270	66.5	MAG
000-493	OU III Industrial Park East	240-260	265	75.6	MAG
000-494	OU III Industrial Park East	300-320	325	76.8	MAG
000-495	OU III Industrial Park East	235-255	260	82.5	MAG
000-497	OU VI EDB	100-120	125	81.9	MG
000-498	OU VI EDB, Water Levels	125-145	150	81.9	DG
000-499	OU VI EDB	100-120	125	67.6	DG
000-500	OU VI EDB, Water Levels	125-145	150	67.6	DG
000-501	OU VI EDB, Water Levels	115-135	140	74.7	DG
000-503	OU VI EDB (EW-1)	115-135	138	70.4	DG
000-504	OU VI EDB (EW-2)	115-135	138	69.9	DG
000-507	OU VI EDB, Water Levels	115-135	140	75.9	DG
000-508	OU VI EDB, Water Levels	110-130	135	71.6	DG
000-513	OU III Industrial Park East	235-255	260	68.1	DG
000-514	OU III Industrial Park East	225-245	250	72.7	DG
000-519	OU VI EDB	120-140	145	71.4	DG
000-520	OU VI EDB	135-145	150	66.4	DG
000-524	OU VI EDB	135-145	150	68.3	DG
000-525	OU III North Street East	155-165	170	69.8	DG
000-526	OU III Industrial Park East	330-350	355	113.0	MAG
000-527	OU VI EDB	140-150	155	71.2	DG
000-528	OU III Industrial Park	215-225	230	73.0	DG
000-529	OU III Industrial Park	210-220	225	71.4	DG
000-530	OU III Industrial Park	205-215	220	75.0	DG
000-531	OU III Industrial Park	200-210	215	76.2	DG
000-532	OU III Industrial Park (IP-EW-8)	230-250	253	75.0	MAG
000-533	OU III Industrial Park (IP-EW-9)	220-240	243	72.2	MAG
000-537	OU III Industrial Park	240-250	255	72.6	MAG
000-538	OU III Industrial Park	210-220	225	72.7	MAG
000-539	OU III Industrial Park	235-245	250	70.9	MAG
000-540	OU III Industrial Park	220-230	235	70.8	MAG
000-541	OU III Industrial Park	230-240	245	70.5	MAG
000-542	OU III Industrial Park	230-240	245	74.2	MAG
000-543	OU III Industrial Park	225-235	240	72.7	MAG
000-544	OU III Industrial Park	220-240	245	76.7	MAG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
000-548	OU III Industrial Park	230-240	245	76.7	MAG
000-549	OUVI EDB	140-150	155	58.9	DG
000-550	OUVI EDB	125-135	140	64.2	DG
000-551	OU III North Street East	170-180	185	64.4	DG
000-552	OU III North Street East	150-160	165	64.7	DG
000-553	OU III North Street East	170-180	185	64.1	DG
000-554	OU III North Street East	190-200	205	82.4	DG
000-555	OU III North Street East	195-205	210	86.8	DG
000-558	OU III Western South Boundary	160-170	175	89.9	DG
000-559	OU III Western South Boundary	210-220	225	90.1	DG
000-560	OU III Western South Boundary	154-164	169	84.0	DG
000-561	OU III North Street East EW-03	196-215	218	83.8	DG
000-562	OU III North Street East EW-04	182-202	205	70.3	DG
000-563	OU III North Street East	192-202	207	82.6	DG
000-564	OU III North Street East	183-193	198	72.2	DG
000-565	OU III North Street East	200-220	225	90.6	DG
000-566	OU III North Street East	200-220	225	90.6	DG
000-567	OU III North Street East	140-150	155	64.6	DG
000-568	OU III North Street East	155-165	170	64.5	DG
000-570	OU VI EDB	155-165	170	61.0	DG
000-571	OU VI EDB	170-180	185	69.9	DG
000-572	OU VI EDB	195-205	210	67.1	DG
000-578	OU VI EDB (EW-3E)	174-194	197	74.3	DG
000-579	OU VI EDB (EW-4E)	170-190	193	70.4	DG
000-580	OU VI EDB	180-190	195	77.3	DG
000-581	OU VI EDB	175-185	790	69.5	DG
000-582	OU VI EDB	180-190	195	70.7	DG
007-02	Water Levels	252-257	262	62.0	MAG
007-03	Water Levels	--	23	55.3	SG
007-04	Water Levels	15-35	40	60.2	SG
007-05	Water Levels	200-205	210	60.3	DG
013-01	Water Levels	23-43	48	68.3	SD
017-01	Site Background, Water Levels	15-25	30	63.1	SG
017-02	Water Levels	85-95	100	63.5	SG
017-03	Site Background, Water Levels	115-125	130	63.7	DG
017-04	Site Background, Water Levels	162-167	172	64.4	MAG
018-01	Site Background, Water Levels	5-35	40	53.3	SG
018-02	Site Background, Water Levels	65-85	90	53.0	SG
018-04	Site Background, Water Levels	140-150	155	53.4	DG
018-05	Site Background, Water Levels	270-280	285	53.9	MAG
020-01	Water Levels	5-15	20	50.4	SG
021-01	Water Levels	18-28	33	60.5	SG
022-01	Water Levels	13-33	38	57.7	SG
025-02	Water Levels	29-39	39	75.5	SG
025-03	RHIC, Water Levels	38-53	58	93.0	SG
025-04	RHIC, Water Levels	38-53	58	92.6	SG
025-05	RHIC, Water Levels	4-19	24	55.9	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
025-06	RHIC, Water Levels	5-20	25	56.1	SG
025-07	RHIC, Water Levels	6-21	26	58.3	SG
025-08	RHIC, Water Levels	5-20	24.8	57.2	SG
026-02	Water Levels	4-14	19	52.6	SG
027-01	Water Levels	13-23	28	58.4	SG
029-01	Water Levels	5-10	10	47.9	SG
030-01	Water Levels	24-27	27	51.7	SG
034-01	Water Levels	12-22	27	57.7	SG
034-02	Site Background, Water Levels	130-140	145	57.6	DG
034-03	Site Background, Water Levels	170-180	185	57.8	DG
034-04	Water Levels	249-254	259.9	57.5	MAG
034-05	RHIC, Water Levels	35-50	55	89.8	SG
034-06	RHIC	34-49	54	88.5	SG
034-06	Water Levels	34-49	54	88.5	SG
036-02	Water Levels	14-24	29	58.9	SG
037-01	Water Levels	20-40	45	63.6	SG
037-02	OU V, Water Levels	31-41	46	72.6	SG
037-03	OU V, Water Levels	90-100	105	73.6	SG
037-04	OU V, Water Levels	178-188	193	74.1	DG
038-01	Water Levels	5-25	30	54.1	SG
038-02	STP, Water Levels	13-23	28	57.7	SG
038-03	STP, Water Levels	6-18	21	59.6	SG
038-04	Water Levels	19-29	32	66.9	SG
038-05	Water Levels	38-43	48	59.0	SG
038-06	Water Levels	39-44	49	59.3	SG
039-05	Water Levels	4-24	29	46.4	SG
039-06	Water Levels	5-10	10	47.4	SG
039-07	STP, Water Levels	15-25	30	56.6	SG
039-08	STP, Water Levels	17-27	32	58.7	SG
039-09	Water Levels	10-20	25	49.5	SG
039-10	Water Levels	188-193	198	49.0	DG
039-86	STP, Water Levels	15-25	30	57.2	SG
039-87	STP, Water Levels	14-24	29	61.0	SG
039-88	STP	16-31	36	48.1	SG
039-89	STP, Water Levels	15-30	35	49.3	SG
039-90	STP	15-30	35	47.1	SG
039-91	Water Levels	10-20	25	47.1	SG
039-92	Water Levels	10-20	25	47.7	SG
039-93	Water Levels	41-56	61	47.0	SG
039-115	STP	10-25	30	52.4	SG
040-01	Water Levels	12-15	15	44.1	SG
040-02	Water Levels	12-17	17	43.7	SG
040-03	Water Levels	9-14	14	44.2	SG
040-04	Water Levels	15-20	20	47.3	SG
040-05	Water Levels	13-18	18	48.4	SG
040-07	Water Levels	15-20	20	45.4	SG
040-08	Water Levels	10-25	30	42.6	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
041-01	OU V, Water Levels	9-19	24	46.4	SG
041-02	OU V, Water Levels	90-100	105	46.4	MG
041-03	OU V, Water Levels	210-220	225	46.6	DG
042-01	Water Levels	25-35	41	74.5	SG
043-01	RHIC, Water Levels	34-49	54	87.3	SG
043-02	RHIC	59-69	74	87.2	SG
044-01	Water Levels	18-28	32	65.5	SG
044-13	RHIC, Water Levels	31-46	51	82.5	SG
044-14	RHIC	54-64	69	82.5	SG
044-29	RHIC	27-43	48	79.9	SG
046-01	Water Levels	46-56	61	89.4	SG
046-02	Water Levels	41-56	61	85.9	SG
046-03	Water Levels	39-54	59	83.9	SG
047-01	Water Levels	21-26	26	61.3	SG
047-02	Water Levels	14-19	19	57.8	SG
047-03	Water Levels	31-51	56	75.3	SG
047-04	Water Levels	35-45	45	60.4	SG
048-01	Water Levels	19-22	22	54.5	SG
048-02	Water Levels	13-23	28	52.9	SG
048-08	STP	10-25	30	54.8	SG
048-09	STP	10-25	30	52.6	SG
048-10	STP	10-25	30	48.8	SG
048-11	Water Levels	15-20	20	48.1	SG
049-02	Water Levels	15-20	20	49.7	SG
049-04	Water Levels	9-19	24	47.3	SG
049-05	OU V	90-100	105	46.8	MG
049-06	OU V, Water Levels	175-185	190	45.4	DG
050-01	OU V, Water Levels	205-225	230	45.0	DG
050-02	OU V, Water Levels	140-160	160	45.0	MG
053-03	Water Levels	26-36	37	71.0	SG
053-05	Water Levels	32-42	47	73.3	SG
054-02	Water Levels	28-33	33	62.2	SG
054-03	Water Levels	28-31	31	64.2	SG
054-06	Water Levels	20-30	30	63.4	SG
054-07	AGS, Water Levels	69-79	79	70.9	SG
054-08	AGS	27-47	52	70.5	SG
054-09	Water Levels	23-33	38	67.4	SG
054-10	Water Levels	32-42	47	74.1	SG
054-124	AGS, Water Levels	25-40	45	73.2	SG
054-125	AGS	25-40	45	68.0	SG
054-126	AGS	25-40	45	67.9	SG
054-127	AGS, Water Levels	22-37	42	70.6	SG
054-128	AGS, Water Levels	22-37	42	69.9	SG
054-129	AGS	21-36	41	69.9	SG
054-130	AGS, Water Levels	22-37	42	69.7	SG
054-14	Water Levels	38-48	53	74.0	SG
054-16	Water Levels	149-159	164	72.5	DG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
054-168	AGS	17-33	38	69.3	SG
054-169	AGS	17-33	38	69.6	SG
054-184	AGS	35-45	46	75.6	SG
054-185	AGS	29-39	40	71.3	SG
054-191	AGS	21-36	61	70.7	SG
054-61	BLIP	18-33	38	68.9	SG
054-62	AGS, Water Levels	18-33	38	69.8	SG
054-63	AGS	42-57	62	93.8	SG
054-64	AGS, Water Levels	42-57	62	92.8	SG
054-65	AGS, Water Levels	18-33	38	69.6	SG
054-66	AGS, Water Levels	18-33	38	70.0	SG
054-67	AGS, Water Levels	18-33	38	68.1	SG
054-68	AGS, Water Levels	17-32	37	68.2	SG
054-69	AGS, Water Levels	17-32	37	67.8	SG
055-01	Water Levels	136-139	139	89.1	SG
055-03	WMF, Water Levels	45-55	60	86.8	SG
055-04	Water Levels	44-54	59	87.8	SG
055-05	Water Levels	40-50	55	82.3	SG
055-06	Water Levels	162-172	177	79.9	DG
055-10	WMF	89-99	104	86.6	MG
055-14	AGS	17-32	37	67.9	SG
055-15	AGS, Water Levels	18-33	38	68.0	SG
055-16	AGS, Water Levels	18-33	38	68.0	SG
055-29	AGS	47-57	62	69.2	SG
055-30	AGS, Water Levels	20-35	40	68.8	SG
055-31	AGS, Water Levels	45-55	60	100.5	SG
055-32	AGS	40-55	60	68.0	SG
056-01	Water Levels	115-118	120	90.0	DG
056-02	Water Levels	--	90	90.1	SG
056-03	Water Levels	--	122	85.5	DG
056-04	Water Levels	40-50	55	80.3	SG
056-05	Water Levels	45-55	60	85.8	SG
056-06	Water Levels	44-54	59	85.9	SG
056-07	Water Levels	214-229	234	80.2	MAG
056-21	WMF, Water Levels	41-61	66	86.3	SG
056-22	WMF Water Levels	41-61	66	87.4	SG
056-23	WMF	41-61	66	86.3	SG
057-01	Water Levels	--	23	51.2	SG
058-01	Water Levels	5-25	30	48.7	SG
058-02	OU VI EDB	60-70	75.25	49.3	SG
058-03	Water Levels	120-130	135	49.6	DG
060-01	Water Levels	5-15	20	42.6	SG
061-03	OU V, Water Levels	6-16	21	42.7	SG
061-04	OU V, Water Levels	90-100	105	42.3	MG
061-05	OU V, Water Levels	195-205	210	43.3	DG
061-07	Water Levels	--	--	38.1	SG
063-01	Water Levels	21-41	46	65.0	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
063-02	Water Levels	27-47	52	69.8	SG
063-04	Water Levels	29-39	44	68.8	SG
063-05	Water Levels	22-32	37	63.1	SG
063-06	Water Levels	33-43	48	74.5	SG
063-07	Water Levels	29-39	44	71.7	SG
063-09	Site Background, Water Levels	207-212	217	69.1	MAG
064-01	Water Levels	39-59	64	83.5	SG
064-02	Water Levels	42-62	67	85.1	SG
064-03	AGS, OU III Central, Water Levels	38-58	63	80.8	SG
064-46	BLIP, Water Levels	47-62	67	98.7	SG
064-47	BLIP	48-63	68	100.4	SG
064-48	BLIP	48-63	68	100.2	SG
064-49	BLIP, Water Levels	34-49	53	84.2	SG
064-50	BLIP	33-48	53	83.0	SG
064-51	AGS, Water Levels	39-54	58	92.7	SG
064-53	AGS, Water Levels	32-47	52	83.6	SG
064-54	AGS	33-48	53	84.2	SG
064-55	AGS, Water Levels	23-38	43	73.4	SG
064-56	AGS	22-37	42	73.6	SG
064-67	BLIP, Water Levels	51-66	71	100.2	SG
064-80	AGS	22-37	42	73.4	SG
064-95	AGS	39-48	49	70(a)	SG
065-01	OU III AOC 29/HFBR Tritium, Water Levels	42-62	67	87.9	SG
065-02	AGS, OU III Central	55-65	70	83.3	SG
065-03	OU III BGRR/WCF Sr-90	55-65	70	83.4	SG
065-04	OU III BGRR/WCF Sr-90	55-65	70	84.2	SG
065-05	OU III Central, Water Levels	55-65	70	84.8	SG
065-06	OU III BGRR/WCF Sr-90	55-65	70	84.8	SG
065-11	OU III BGRR/WCF Sr-90	51-56	56	83.8	SG
065-120	AGS, Water Levels	22-37	42	73.2	SG
065-121	AGS, Water Levels	19-34	39	70.6	SG
065-122	AGS, Water Levels	19-34	39	69.2	SG
065-123	AGS	18-33	38	68.7	SG
065-124	AGS, Water Levels	18-33	38	68.6	SG
065-125	AGS	18-33	38	68.5	SG
065-126	AGS	18-33	38	69.3	SG
065-160	OU III (BGRR/WCF Sr-90)	35-45	50	84.5	SG
065-161	OU III BGRR/WCF Sr-90, Water Levels	90-100	105	84.5	MG
065-162	OU III BGRR/WCF Sr-90, Water Levels	41-51	56	87.8	SG
065-163	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	96.9	SG
065-164	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	100.8	SG
065-165	OU III BGRR/WCF Sr-90, Water Levels	110-120	125	99.4	MG
065-166	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	109.5	SG
065-167	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	109.6	SG
065-168	OU III BGRR/WCF Sr-90	80-90	95	112.7	MG
065-169	OU III BGRR/WCF Sr-90, Water Levels	80-90	95	109.4	SG
065-170	OU III BGRR/WCF Sr-90	80-90	95	116.7	MG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
065-171	OU III BGRR/WCF Sr-90, Water Levels	130-140	145	117.0	MG
065-172	OU III BGRR/WCF Sr-90, Water Levels	85-95	100	121.2	SG
065-173	AGS	35-45	50	83.6	SG
065-173	OU III BGRR/WCF Sr-90, Water Levels	35-45	50	83.6	SG
065-174	OU III BGRR/WCF Sr-90	35-45	50	83.4	SG
065-175	OU III BGRR/WCF Sr-90, Water Levels	35-45	50	83.8	SG
065-176	OU III BGRR/WCF Sr-90, Water Levels	35-45	50	84.0	SG
065-177	OU III BGRR/WCF Sr-90, Water Levels	35-45	50	85.4	SG
065-178	OU III BGRR/WCF Sr-90, Water Levels	75-85	90	94.0	SG
065-18	OU III BGRR/WCF Sr-90, Water Levels	50-60	65	84.5	SG
065-19	OU III BGRR/WCF Sr-90	90-100	105	85.9	MG
065-192	AGS	50-60	65	73.0	SG
065-193	AGS	50-60	65	70.7	SG
065-194	AGS	45-55	60	67.9	SG
065-195	AGS	45-55	60	68.5	SG
065-20	OU III BGRR/WCF Sr-90, Water Levels	170-180	185	84.8	DG
065-321	AGS	27-37	38	68.3	SG
065-322	AGS	27-37	38	68.1	SG
065-323	AGS	25-35	36	68.2	SG
065-324	AGS	23-33	34	69.0	SG
065-325	801	66-81	66	110.0	SG
065-360	OU III BGRR/WCF Sr-90	40-50	55	85.9	SG
065-361	OU III BGRR/WCF Sr-90	50-60	65	85.9	SG
065-362	OU III BGRR/WCF Sr-90	40-50	55	86.2	SG
065-363	OU III BGRR/WCF Sr-90	55-65	70	96.3	SG
065-364	OU III BGRR/WCF Sr-90	65-75	80	96.5	SG
065-365	OU III BGRR/WCF Sr-90	75-85	90	98.4	SG
065-366	OU III BGRR/WCF Sr-90	75-85	90	109.0	SG
065-367	OU III BGRR/WCF Sr-90	90-100	105	108.9	MG
065-368	OU III BGRR/WCF Sr-90 SR-1	33-53	56	80.1	SG
065-369	OU III BGRR/WCF Sr-90 SR-2	33-53	56	80.4	SG
065-37	OU III AOC 29/HFBR Tritium	68-78	83	115.5	SG
065-37	OU III BGRR/WCF Sr-90	68-78	83	115.5	SG
065-38	OU III AOC 29/HFBR Tritium	58-68	73	103.7	SG
065-38	OU III BGRR/WCF Sr-90, Water Levels	58-68	73	103.7	SG
065-384	OU III BGRR/WCF Sr-90	50-70	75	NM	SG
065-385	OU III BGRR/WCF Sr-90	50-70	75	NM	SG
065-39	OU III AOC 29/HFBR Tritium	82-92	97	104.0	SG
065-39	OU III BGRR/WCF Sr-90	82-92	97	104.1	SG
065-401	OU III BGRR/WCF Sr-90	57-77	82	NM	SG
065-402	OU III BGRR/WCF Sr-90	37-57	62	91.25(a)	SG
065-403	OU III BGRR/WCF Sr-90 SR-6	85-105	108	123.7	SG
065-404	OU III BGRR/WCF Sr-90	57-77	82	117.8	SG
065-405	OU III BGRR/WCF Sr-90	75-85	90	109.1	SG
065-41	OU III AOC 29/HFBR Tritium, Water Levels	47-57	62	93.6	SG
065-42	OU III AOC 29/HFBR Tritium, Water Levels	47-57	62	92.8	SG
066-01	Water Levels	45-50	50	79.6	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
066-07	WMF, Water Levels	65-85	90	87.5	SG
066-08	OU III Central, Water Levels	35-55	60	86.8	SG
066-09	OU III Central	75-95	100	86.9	SG
066-13	Water Levels	36-41	41	79.3	SG
066-14	Water Levels	36-41	41	77.0	SG
066-16	Water Levels	25-45	50	72.3	SG
066-17	OU IV AOC 6 Sr-90	34-54	59	79.6	SG
066-189	OU IV AOC 6 Sr-90, Water Levels	26-46	51	73.3	SG
066-190	OU IV AOC 6 Sr-90, Water Levels	27-47	52	74.6	SG
066-29	Water Levels	165-175	180	71.8	DG
066-83	WMF, Water Levels	41-61	66	84.7	SG
066-84	WMF, Water Levels	58.5-75	80	87.2	SG
066-85	Water Levels	34-44	44	80.8	SG
067-01	Water Levels	14-24	29	54.6	SG
069-10	Water Levels	15-25	30	53.2	SG
070-01	Water Levels	15-35	40	57.2	SG
072-01	Water Levels	37-57	62	80.5	SG
072-03	Water Levels	35-45	50	68.6	SG
072-04	Water Levels	163-173	178	68.3	SG
073-01	Water Levels	32-52	57	75.8	SG
073-26	Current Firehouse PFAS	35-50	55	84.4	SG
073-27	Current Firehouse PFAS	35-50	55	84.3	SG
073-28	Current Firehouse PFAS	35-50	55	84.4	SG
073-29	Current Firehouse PFAS	35-50	55	85.3	SG
073-30	Current Firehouse PFAS	35-50	55	84.2	SG
073-31	Current Firehouse PFAS	35-50	55	86.0	SG
073-32	Current Firehouse PFAS	55-65	70	86.3	SG
073-33	Current Firehouse PFAS	35-50	55	88.3	SG
073-34	Current Firehouse CF-RW-A	48-68	73	86.0	SG
073-35	Currenr Firehouse CF-RW-B	54-74	79	84.9	SG
074-135	Current Firehouse PFAS	55-65	70	88.8	SG
075-01	OU III (central)	40-60	65	86.0	SG
075-01	Water Levels	40-60	65	86.0	SG
075-02	OU III Central	40-60	65	82.0	SG
075-09	OU III BGRR/WCF Sr-90	60-70	75	77.0	SG
075-10	OU III BGRR/WCF Sr-90, Water Levels	120-130	130	76.8	DG
075-11	OU III AOC 29/HFBR Tritium, Water Levels	56-66	71	93.3	SG
075-188	OU III BGRR/WCF Sr-90, Water Levels	85-95	100	80.0	SG
075-189	OU III BGRR/WCF Sr-90	67-72	77	91.6	SG
075-190	OU III BGRR/WCF Sr-90, Water Levels	40-50	55	80.2	SG
075-191	OU III BGRR/WCF Sr-90	85-95	100	80.2	SG
075-192	OU III BGRR/WCF Sr-90, Water Levels	140-150	155	80.3	MG
075-193	OU III BGRR/WCF Sr-90, Water Levels	80-90	95	81.4	SG
075-194	OU III BGRR/WCF Sr-90, Water Levels	140-150	155	81.4	MG
075-195	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	76.1	SG
075-196	OU III BGRR/WCF Sr-90, Water Levels	85-95	100	76.2	SG
075-197	OU III BGRR/WCF Sr-90, Water Levels	120-130	135	76.1	MG

Table 1-7
Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
075-198	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	74.8	SG
075-199	OU III BGRR/WCF Sr-90, Water Levels	85-95	100	74.7	SG
075-200	OU III BGRR/WCF Sr-90, Water Levels	120-130	135	74.8	MG
075-201	OU III BGRR/WCF Sr-90, Water Levels	120-130	135	111.0	SG
075-202	OU III BGRR/WCF Sr-90, Water Levels	63-73	78	77.0	SG
075-203	OU III BGRR/WCF Sr-90, Water Levels	70-80	85	78.2	SG
075-210	OU III AOC 29/HFBR Tritium	53-63	68	85.7	SG
075-286	OU III AOC 29/HFBR Tritium, Water Levels	48-52	53	85.8	SG
075-287	OU III AOC 29/HFBR Tritium, Water Levels	56-60	61	85.8	SG
075-288	OU III AOC 29/HFBR Tritium, Water Levels	52-56	57	87.6	SG
075-291	OU III AOC 29/HFBR Tritium, Water Levels	52-56	57	82.6	SG
075-296	OU III AOC 29/HFBR Tritium, Water Levels	62-66	67	79.2	SG
075-297	OU III AOC 29/HFBR Tritium, Water Levels	62-66	67	78.9	SG
075-298	OU III AOC 29/HFBR Tritium, Water Levels	56-60	61	78.4	SG
075-299	OU III AOC 29/HFBR Tritium, Water Levels	56-60	61	78.1	SG
075-39	OU III BGRR/WCF Sr-90, AOC29/HFBR, Water Levels	47-57	62	93.0	SG
075-40	OU III BGRR/WCF Sr-90, AOC 29/HFBR, Water Levels	120-125	130	92.6	MG
075-41	OU III BGRR/WCF Sr-90, AOC29/HFBR, Water Levels	193-198	198	92.6	DG
075-413	OU III AOC 29/HFBR Tritium, Water Levels	56-60	61	81.1	SG
075-414	OU III AOC 29/HFBR Tritium, Water Levels	60-64	65	79.4	SG
075-415	OU III AOC 29/HFBR Tritium, Water Levels	62-66	67	77.5	SG
075-416	OU III AOC 29/HFBR Tritium, Water Levels	60-64	65	77.6	SG
075-417	OU III AOC 29/HFBR Tritium, Water Levels	60-64	65	78.0	SG
075-418	OU III AOC 29/HFBR Tritium, Water Levels	56-60	61	78.1	SG
075-419	OU III AOC 29/HFBR Tritium, Water Levels	56-60	61	77.9	SG
075-46	OU III BGRR/WCF Sr-90, Water Levels	33-43	48	79.5	SG
075-47	OU III BGRR/WCF Sr-90, Water Levels	31-41	46	81.0	SG
075-48	OU III BGRR/WCF Sr-90	63-73	78	78.8	SG
075-49	Water Levels	40-50	56	84.6	SG
075-50	Water Levels	30-40	46	75.9	SG
075-51	Water Levels	33-43	48	79.2	SG
075-558	OU III AOC 29/HFBR Tritium	56-60	61	88.1	SG
075-558	Water Levels	56-60	61	88.1	SG
075-663	OU III BGRR/WCF Sr-90	113-123	128	123.6	MG
075-664	OU III BGRR/WCF Sr-90	65-75	80	103.1	SG
075-665	OU III BGRR/WCF Sr-90	77-87	93	102.7	SG
075-666	OU III BGRR/WCF Sr-90	46-56	61	80.2	SG
075-667	OU III BGRR/WCF Sr-90	61-71	76	79.8	SG
075-668	OU III BGRR/WCF Sr-90	76-86	91	80.0	SG
075-669	OU III BGRR/WCF Sr-90	55-65	70	78.0	SG
075-670	OU III BGRR/WCF Sr-90	89-99	104	73.0	SG
075-671	OU III BGRR/WCF Sr-90	104-114	119	72.9	MG
075-672	OU III BGRR/WCF Sr-90	107-117	122	79.8	MG
075-673	OU III BGRR/WCF Sr-90	36-46	51	80.5	SG
075-674	OU III BGRR/WCF Sr-90	70-80	85	81.1	SG
075-675	OU III BGRR/WCF Sr-90	90-100	105	81.2	SG
075-676	OU III BGRR/WCF Sr-90 (SR-3)	51-71	74	97.4	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
075-677	OU III BGRR/WCF Sr-90 (SR-4)	35-75	78	75.3	SG
075-678	OU III BGRR/WCF Sr-90 (SR-5)	35-75	78	74.2	SG
075-680	OU III BGRR/WCF Sr-90	90-100	105	124.2	SG
075-681	OU III BGRR/WCF Sr-90	54-64	69	83.0	SG
075-682	OU III BGRR/WCF Sr-90	76-86	91	89.8	SG
075-683	OU III BGRR/WCF Sr-90	76-86	91	78.8	SG
075-684	OU III BGRR/WCF Sr-90	74-84	89	78.7	SG
075-699	OU III BGRR/WCF Sr-90	65-85	90	122.7	SG
075-700	OU III BGRR/WCF Sr-90	50-70	75	106.6	SG
075-701	OU III BGRR/WCF Sr-90	48-68	73	103.7	SG
075-702	OU III BGRR/WCF Sr-90 (SR-7)	82-102	105	95.2	SG
075-703	OU III BGRR/WCF Sr-90 (SR-8)	77-97	100	92.1	SG
075-704	OU III BGRR/WCF Sr-90 (SR-9)	67-87	90	91.6	SG
075-705	OU III BGRR/WCF Sr-90	85-95	100	NM	SG
075-706	OU III BGRR/WCF Sr-90	90-100	105	NM	SG
075-707	OU III BGRR/WCF Sr-90	70-80	85	NM	SG
075-85	OU III BGRR/WCF Sr-90	65-70	75	81.33(a)	SG
075-86	OU III BGRR/WCF Sr-90, Water Levels	105-110	115	77.9	MG
075-87	OU III BGRR/WCF Sr-90	105-110	115	78.6	MG
075-802	OU III HFBR	42-62	67	93.4	SG
075-803	OU III HFBR	42-62	67	94.5	SG
075-804	OU III HFBR	42-62	67	94.5	SG
075-805	OU III HFBR	42-62	67	94.4	SG
075-806	OU III HFBR	42-62	67	93.8	SG
075-807	OU III HFBR	42-62	67	93.0	SG
075-808	OU III HFBR	42-62	67	91.7	SG
075-809	Former Firehouse PFAS	30-45	50	73.5	SG
075-810	Former Firehouse PFAS	30-45	50	73.6	SG
075-811	Former Firehouse PFAS	30-45	50	74.3	SG
076-04	OU IV AOC 5 AS/SVE, Water Levels	30-50	50	75.9	SG
076-05	OU IV AOC 6 Sr-90	30-50	50	73.6	SG
076-06	OU IV AOC 5 AS/SVE, Water Levels	30-50	50	78.5	SG
076-07	OU IV AOC 6 Sr-90, Water Levels	55-65	70	76.3	SG
076-09	OU IV AOC 6 Sr-90	55-65	70	74.5	SG
076-10	OU IV AOC 6 Sr-90, Water Levels	30-50	50	78.4	SG
076-122	Water Levels	5-45	47	73.3	SG
076-13	OU IV AOC 6 Sr-90, Water Levels	31-51	56	79.0	SG
076-16	MPF, Water Levels	27-47	53	79.4	SG
076-167	OU IV AOC 6 Sr-90, Water Levels	37-57	62	79.8	SG
076-168	OU IV AOC 6 Sr-90	36-56	61	78.6	SG
076-169	OU IV AOC 6 Sr-90	36-56	62	79.2	SG
076-17	MPF	27-47	53	78.4	SG
076-171	Water Levels	100-120	125	80.2	SD
076-172	OU III AOC 29/HFBR Tritium, Water Levels	110-130	135	87.9	DG
076-173	OU III AOC 29/HFBR Tritium, Water Levels	34-54	59	83.3	SG
076-174	OU III AOC 29/HFBR Tritium, Water Levels	102-122	127	83.2	MG
076-175	OU III AOC 29/HFBR Tritium, Water Levels	142-162	167	82.9	DG

Table 1-7
Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
076-176	Water Levels	50-60	60	69.0	SG
076-18	MPF, Water Levels	23-43	48	74.0	SG
076-181	OU IV AOC 6 Sr-90	60-70	74.75	75.1	SG
076-182	OU IV AOC 6 Sr-90	80-90	94.8	75.0	SG
076-183	OU IV AOC 6 Sr-90, Water Levels	4.5-44.5	49.5	77.2	SG
076-184	OU IV AOC 6 Sr-90	60-70	75.5	77.0	SG
076-185	OU IV AOC 5 AS/SVE, Water Levels	4.5-44.5	49.6	74.1	SG
076-19	MPF, Water Levels	23-43	48	74.5	SG
076-20	OU IV AOC 6 Sr-90, Water Levels	24-44	49	76.4	SG
076-22	OU IV AOC 6 Sr-90, Water Levels	52-62	67	78.5	SG
076-24	OU IV AOC 6 Sr-90, Water Levels	30-50	55	75.6	SG
076-25	MFF, OU IV AOC 6 Sr-90, Water Levels	32-52	57	78.6	SG
076-258	Water Levels	47-48	48	79.6	SG
076-26	OU IV AOC 6 Sr-90	34-54	59	82.1	SG
076-262	OU IV AOC 6 Sr-90, Water Levels	70-80	85	76.0	SG
076-263	OU IV (AOC 6 Sr-90	70-80	85	73.3	SG
076-264	OU IV AOC 6 Sr-90, Water Levels	55-65	70	71.1	SG
076-265	OU IV AOC 6 Sr-90	70-80	85	78.6	SG
076-27	OU IV AOC 6 Sr-90, Water Levels	34-54	59	78.7	SG
076-28	OU IV Central, AOC 6 Sr-90, Water Levels	35-55	60	80.2	SG
076-29	Water Levels	19-39	44	69.0	SG
076-314	OU III Central, OUIV AOC 6 Sr-90, Water Levels	32-52	57	79.8	SG
076-317	OU III Central, OUIV AOC 6 Sr-90, Water Levels	31-51	56	78.8	SG
076-373	OU III Central, OUIV AOC 6 Sr-90, Water Levels	34-54	59	81(a)	SG
076-378	MPF, Water Levels	27-42	47	76.2	SG
076-379	MPF	28-43	48	75.7	SG
076-380	MPF, Water Levels	27-42	47	73.6	SG
076-415	OU IV AOC 6 Sr-90	50-60	65	75.78(a)	SG
076-416	OU IV AOC 6 Sr-90	50-60	65	75.49(a)	SG
076-417	OU IV AOC 6 Sr-90	50-60	65	75.05(a)	SG
076-418	OU IV AOC 6 Sr-90	47-57	62	76.0	SG
076-419	OU IV AOC 6 Sr-90	45-55	60	74.2	SG
076-420	OU IV AOC 6 Sr-90	32-52	57	78.7	SG
076-421	OU IV AOC 6 Sr-90	32-52	57	78.0	SG
077-02	Water Levels	26-46	51	74.4	SG
077-03	Water Levels	9-29	34	56.9	SG
077-10	OU III AOC 29/HFBR Tritium, Water Levels	94-114	119	75.1	SD
077-11	OU III AOC 29/HFBR Tritium, Water Levels	110-130	135	93.1	SD
078-01	Water Levels	15-25	30	46.9	SG
079-17	Water Levels	15-25	25	47.0	SG
080-02	Water Levels	35-55	60	49.0	SG
080-03	Water Levels	76-96	101	50.0	DG
080-04	Water Levels	12-32	37	54.4	SG
080-11	Water Levels	20-30	35	52.8	SG
082-01	Water Levels	40-50	55	82.3	SG
083-01	OU III Central, Water Levels	70-100	105	87.7	SG
083-02	OU III Central, Water Levels	120-150	155	91.9	MG

Table 1-7
Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
083-03	Water Levels	72-92	92	86.4	SG
083-05	Water Levels	65-75	80	107.8	SG
083-06	Water Levels	44-54	59	86.3	SG
083-33	Current Firehouse PFAS	50-60	65	90.1	SG
083-34	Current Firehouse PFAS	70-80	85	91.1	SG
083-35	Current Firehouse PFAS	50-60	65	90.2	SG
083-36	Current Firehouse PFAS	70-80	85	90.3	SG
083-37	Current Firehouse PFAS	50-60	65	91.0	SG
083-38	Current Firehouse PFAS	70-80	85	92.8	SG
083-39	Current Firehouse PFAS	60-70	75	93.5	SG
083-40	Current Firehouse PFAS	100-110	115	93.7	MG
083-41	Current Firehouse PFAS	120-130	135	107.8	MG
083-42	Current Firehouse PFAS	90-100	105	106.4	MG
083-43	Current Firehouse PFAS	120-130	135	106.4	MG
083-44	Current Firehouse PFAS	70-80	85	107.5	SG
083-45	Current Firehouse CF-RW-C	117-137	142	99.5	MG
083-46	Current Firehouse CF-RW-D	70-90	95	101.4	SG
083-47	Building 170 PFAS	50-70	75	92.3	SG
084-01	Water Levels	65-85	90	105.7	SG
084-02	Water Levels	54-64	69	93.6	SG
084-03	Water Levels	100-110	114	94.3	MG
084-04	OU III Central	145-155	160	94.1	DG
084-05	OU III Central, Water Levels	179-189	194	94.2	DG
084-12	BMRR, Water Levels	55-70	75	101.2	SG
084-13	BMRR	53-68	73	101.6	SG
084-27	BMRR	50-65	70	100.0	SG
084-28	BMRR, Water Levels	48-63	68	99.2	SG
084-36	Water Levels	39-54	59	84.0	SG
084-37	Water Levels	39-54	59	84.2	SG
084-86	Current Firehouse PFAS	120-130	135	94.0	MG
084-87	Current Firehouse PFAS	60-70	75	95.2	SG
084-88	Current Firehouse PFAS	90-100	105	95.5	MG
084-89	Current Firehouse PFAS	120-130	135	96.4	MG
084-90	Current Firehouse PFAS	90-100	105	97.0	MG
084-91	Current Firehouse PFAS	120-130	135	96.9	MG
084-92	Current Firehouse PFAS	140-150	155	96.9	MG
084-93	Current Firehouse PFAS	90-100	105	110.1	MG
084-94	Current Firehouse PFAS	120-130	135	110.3	MG
084-95	Current Firehouse PFAS	140-150	155	110.1	MG
084-96	Current Firehouse PFAS	90-100	105	108.8	MG
084-97	Current Firehouse PFAS	120-130	135	108.9	MG
084-98	Current Firehouse PFAS	140-150	155	109.2	MG
084-102	Current Firehouse CF-RW-E	132-152	157	100.8	MG
085-01	OU III AOC 29/HFBR Tritium, Water Levels	60-90	95	73.9	MG
085-02	OU III AOC 29/HFBR Tritium	130-160	165	73.9	DG
085-07	OU III Carbon tet, Water Levels	140-145	150	81.6	DG
085-13	OU III Carbon tet, Water Levels	250-255	260	81.6	MAG

Table 1-7
Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
085-16	OU III Carbon tet, Gas Station, Water Levels	34-54	59	80.8	SG
085-17	OU III Carbon tet, Gas Station, Water Levels	34-54	59	80.6	SG
085-39	Water Levels	26-36	42	71.1	SG
085-41	Water Levels	187-192	192	72.1	DG
085-43	Water Levels	21-31	36	66.5	SG
085-65	Water Levels	85-90	95	78.1	MG
085-66	Water Levels	120-125	130	78.1	MG
085-67	Water Levels	85-90	95	68(a)	SG
085-68	Water Levels	120-125	130	68(a)	MG
085-69	Water Levels	35-40	45	68(a)	SG
085-70	Water Levels	135-140	145	69.3	DG
085-72	Water Levels	135-140	145	68.2	DG
085-73	Water Levels	35-40	45	68(a)	SG
085-74	Water Levels	95-100	105	67(a)	MG
085-75	Water Levels	190-195	200	68(a)	DG
085-76	Water Levels	35-40	45	66(a)	SG
085-77	OU III AOC 29/HFBR Tritium, Water Levels	95-100	105	66(a)	MG
085-78	OU III AOC 29/HFBR Tritium, Water Levels	187-192	197	66(a)	DG
085-97	OU III Bldg 96, Water Levels	15-35	40	64.7	SG
085-98	OU III Carbon tet, Water Levels	39-49	54	81.3	SG
085-160	OU III Carbon tet, Water Levels	34-54	59	81.1	SG
085-161	OU III Carbon tet, Water Levels	33-53	58	81.5	SG
085-162	OU III Carbon tet, Water Levels	29-49	54	82.0	SG
085-163	OU III Carbon tet, Water Levels	29-49	54	81.8	SG
085-170	OU III AOC 29/HFBR Tritium	90-100	105	72.4	MG
085-171	OU III AOC 29/HFBR Tritium	125-135	140	72.4	MG
085-235	Gas Station, Water Levels	35-50	55	80.4	SG
085-236	OU III Carbon tet, Gas Station, Water Levels	35-50	55	80.8	SG
085-237	OU III Carbon tet, Gas Station, Water Levels	35-50	55	80.3	SG
085-238	OU III Carbon tet, Water Levels	25-45	50	71.9	SG
085-285	OU III AOC 29/HFBR Tritium, Water Levels	64-68	69	72.4	SG
085-286	OU III AOC 29/HFBR Tritium, Water Levels	64-68	69	72.6	SG
085-287	OU III AOC 29/HFBR Tritium, Water Levels	64-68	69	72.9	SG
085-288	OU III AOC 29/HFBR Tritium, Water Levels	64-68	69	72.9	SG
085-289	OU III AOC 29/HFBR Tritium, Water Levels	64-68	69	73.1	SG
085-290	OU III AOC 29/HFBR Tritium, Water Levels	61-71	72	74.0	SG
085-291	OU III AOC 29/HFBR Tritium, Water Levels	132-142	143	65.7	DG
085-292	Water Levels	132-142	143	67.8	DG
085-293	OU III Bldg 96, Water Levels	45-55	60	62.9	SG
085-335	OU III Bldg 96	30-40	45	62.8	SG
085-347	OU III Bldg 96	20-25	25	61.2	SG
085-348	OU III Bldg 96	32-37	37	61.1	SG
085-349	OU III Bldg 96	20-25	25	62.4	SG
085-350	OU III Bldg 96	32-37	37	62.4	SG
085-351	OU III Bldg 96	20-25	25	62.9	SG
085-352	OU III Bldg 96	32-37	37	62.8	SG
085-353	OU III Bldg 96	20-25	25	62.3	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
085-354	OU III Bldg 96	20-25	25	62.7	SG
085-359	OU III Bldg 96	15-25	25	60.9	SG
085-378	OU III Bldg 96	10-30	35	65.7	SG
085-379	OU III Bldg 96	7-27	32	61.4	SG
085-380	OU III Bldg 452	22-42	47	73.3	SG
085-381	OU III Bldg 452	22-42	47	72.9	SG
085-382	OU III Bldg 452	30-45	50	67.7	SG
085-383	OU III Bldg 452	30-45	50	66.8	SG
085-384	OU III Bldg 452	30-45	50	65.7	SG
085-385	OU III Bldg 452	40-55	60	66.6	SG
085-386	OU III Bldg 96	40-55	60	65.2	SG
085-387	OU III Bldg 452	47-62	67	59.9	SG
085-388	OU III Bldg 452	50-65	70	62.7	SG
085-389	OU III Bldg 452 (EW-18)	55-65	68	68.6	SG
085-398	OU III BGRR/WCF Sr-90	120-140	145	73.9	DG
085-399	OU III BGRR/WCF Sr-90	55-75	80	71.9	SG
085-400	OU III BGRR/WCF Sr-90	90-110	115	71.1	SG
085-402	OU III BGRR/WCF Sr-90	90-110	115	71.1	SG
085-403	OU III BGRR/WCF Sr-90	110-130	135	68.9	MG
085-404	Former Firehouse PFAS	30-45	50	71.1	SG
085-405	Former Firehouse PFAS	50-60	65	71.0	SG
085-406	Former Firehouse PFAS	30-45	50	70.9	SG
085-407	Former Firehouse PFAS	50-60	65	71.0	SG
085-408	Former Firehouse PFAS	60-70	75	71.3	SG
085-409	Former Firehouse PFAS	30-45	50	72.2	SG
085-410	Former Firehouse PFAS	50-60	65	72.4	SG
085-411	Former Firehouse PFAS	50-60	65	75.0	SG
085-412	Former Firehouse PFAS	90-100	105	74.5	MG
085-414	Former Firehouse FF-RW-A	44-64	69	73.4	SG
085-415	OU III BGRR/WCF Sr-90	123-130	135	70.9	MG
085-416	OU III Bldg 96	15-35	40	61.2	SG
086-05	OU III North Street, Water Levels	80-90	95	75.6	MG
086-06	Water Levels	120-140	145	75.8	DG
086-123	NSLS II	27-42	47	72.1	SG
086-124	NSLS II	42-52	57	72.1	SG
086-125	NSLS II	27-47	47	72.4	SG
086-126	NSLS II	29-44	49	74.4	SG
086-42	FLF, Water Levels	65-75	80	76.9	SG
086-43	OU III North Street, Water Levels	115-125	130	77.0	DG
086-68	Water Levels	250-255	260	73.1	MAG
086-70	OU III North Street	65-75	80	75.6	SG
086-72	FLF, Water Levels	42-57	62	25.6	SG
087-09	CLF, Water Levels	24-34	34	66.9	SG
087-11	CLF, Water Levels	11-21	21	52.8	SG
087-21	OU I South Boundary, Water Levels	125-135	140	67.8	DG
087-22	FLF, Water Levels	43-53	58	85.1	SG
087-23	CLF, Water Levels	25-40	45	70.3	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
087-24	CLF	70-80	85	70.2	SG
087-25	Water Levels	148-158	163	70.6	DG
087-26	CLF	70-80	85	50.7	SG
087-27	CLF, Water Levels	5-20	25	50.8	SG
087-28	Water Levels	130-140	145	50.6	DG
088-03	Water Levels	10-20	20	49.9	SG
088-108	Water Levels	226-231	236	47.9	MAG
088-109	CLF, Water Levels	6-21	26	50.0	SG
088-110	CLF, Water Levels	10-25	30	50.0	SG
088-13	OU I South Boundary, Water Levels	8-18	23	48.7	SG
088-14	OU I South Boundary	75-85	90	47.4	SG
088-20	OU I South Boundary, Water Levels	120-130	135	48.4	DG
088-21	CLF, Water Levels	5-20	25	45.4	SG
088-22	CLF	70-80	85	45.4	SG
088-23	CLF, Water Levels	120-130	135	45.3	DG
088-26	OU I South Boundary	13-23	28	50.7	SG
088-27	Water Levels	33-43	48	50.6	SG
089-13	OU VI EDB, Water Levels	15-25	30	43.8	SG
089-14	OU VI EDB, Water Levels	45-55	60	47.6	SG
090-02	Water Levels	16-26	31	51.1	SG
090-03	Water Levels	138-143	148	51.0	SG
090-10	Water Levels	8-18	23	47.2	SG
092-01	Water Levels	39-49	54	82.7	SG
092-02	Water Levels	46-56	61	89.0	SG
093-02	Water Levels	70-80	80	89.0	SG
093-04	Water Levels	44-54	59	88.0	SG
093-05	Water Levels	39-49	54	79.1	SG
093-06	Water Levels	250-255	260	108.7	MAG
093-88	Current Firehouse PFAS	120-130	135	90.9	MG
093-89	Current Firehouse PFAS	70-80	85	110-8	SG
093-90	Current Firehouse PFAS	100-110	115	111.5	MG
093-91	Current Firehouse PFAS	80-90	95	114-9	SG
093-92	Current Firehouse PFAS	100-110	115	114-8	MG
093-93	Building 170 PFAS	50-70	75	91.9	SG
093-94	Building 170 PFAS	40-60	65	83.6	SG
093-95	Building 170 PFAS	60-70	75	85.9	SG
093-96	Building 170 PFAS	55-65	70	87.0	SG
093-97	Building 170 PFAS	58-68	73	90.6	SG
093-98	Building 170 PFAS	60-70	75	89.3	SG
094-01	Water Levels	60-70	70	95.7	SG
094-11	Water Levels	26-36	36	72.0	SG
094-12	Water Levels	45-55	55	88.6	SG
094-13	Water Levels	51-61	61	98.4	SG
094-14	Water Levels	64-74	74	100.9	SG
094-275	Current Firehouse PFAS	80-90	95	116.3	SG
094-276	Current Firehouse PFAS	100-110	115	116.3	MG
094-277	Current Firehouse PFAS	70-80	85	113.4	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
094-278	Current Firehouse PFAS	100-110	115	113.5	MG
095-04	Water Levels	36-56	61	84.4	SG
095-28	Water Levels	5-15	20	47.1	SG
095-29	Water Levels	30-40	45	73.4	SG
095-42	OU III Carbon tet, Water Levels	100-105	110	64.5	SG
095-43	OU III Carbon tet	108-113	118	71.8	MG
095-45	OU III Carbon tet	108-113	118	70.4	MG
095-47	OU III Carbon tet, Water Levels	195-200	205	71.7	DG
095-52	Water Levels	35-40	45	72.1	SG
095-53	OU III AOC 29/HFBR Tritium, Carbon tet, Water Levels	87-92	97	51(a)	MG
095-54	OU IIIAOC 29/HFBR Tritium, Water Levels	119-124	129	49.1	MG
095-55	OU III AOC 29/HFBR Tritium	135-140	145	62(a)	MG
095-84	OU III Bldg 96	15-35	40	62.9	SG
095-85	OU III Bldg 96	90-100	105	62.8	MG
095-87	Water Levels	135-140	145	71.6	SG
095-88	OU III Carbon tet, Water Levels	155-160	165	71.6	DG
095-89	OU III Carbon tet, Water Levels	155-160	165	76.0	DG
095-90	OU III Carbon tet, AOC 29/HFBR, Water Levels	98-108	113	48.1	SG
095-91	Water Levels	156-166	171	57.2	DG
095-92	OU III Carbon tet	116-126	131	67.1	MG
095-93	OU III AOC 29/HFBR Tritium, Water Levels	170-180	185	71.4	DG
095-139	OU III AOC 29/HFBR Tritium	90-100	105	63.7	MG
095-140	OU III AOC 29/HFBR Tritium	125-135	140	63.9	DG
095-159	OU III Bldg 96, Water Levels	45-55	60	62.2	SG
095-161	OU III Bldg 96, Water Levels	45-55	60	62.5	SG
095-162	OU III Bldg 96	45-55	60	62.4	SG
095-163	OU III Bldg 96	45-55	60	59.4	SG
095-164	OU III Bldg 96, Water Levels	24-34	39	60.0	SG
095-165	OU III Bldg 96	43-53	58	58.2	SG
095-166	OU III Bldg 96	45-55	60	59.7	SG
095-167	OU III Bldg 96	44-54	59	60.3	SG
095-168	OU III Bldg 96	44-54	59	60.3	SG
095-169	OU III Bldg 96	44-54	59	60.4	SG
095-170	OU III Bldg 96, Water Levels	45-55	60	60.6	SG
095-171	OU III Bldg 96, Water Levels	44-54	59	60.9	SG
095-172	OU III Bldg 96, Water Levels	45-55	60	61.1	SG
095-183	OU III Carbon tet, Water Levels	29-49	54	74.7	SG
095-185	OU III Carbon tet, Water Levels	32-62	67	83.9	SG
095-272	OU III AOC 29/HFBR Tritium, Water Levels	155-165	166	61.9	DG
095-273	OU III AOC 29/HFBR Tritium	130-140	141	61.7	MG
095-274	OU III AOC 29/HFBR Tritium, Water Levels	155-165	166	62.1	DG
095-275	OU III AOC 29/HFBR Tritium	125-135	136	61.0	MG
095-276	OU III AOC 29/HFBR Tritium, Water Levels	165-175	176	61.0	DG
095-277	OU III Carbon tet	47-57	62	72.4	SG
095-279	OU III Carbon tet	70-80	85	65.4	SG
095-280	OU III Carbon tet	85-95	100	56.7	SG
095-294	OU III Bldg 96	25-35	40	58.9	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
095-295	OU III Bldg 96	45-55	60	67.3	SG
095-296	OU III Bldg 96	60-70	75	64.0	SG
095-296	OU III Carbon tet	60-70	75	64.0	SG
095-300	OU III Carbon tet	70-80	85	62.0	SG
095-301	OU III Carbon tet	70-80	85	69.3	SG
095-305	OU III Bldg 96	20-25	25	60.8	SG
095-306	OU III Bldg 96	32-37	37	60.9	SG
095-307	OU III Bldg 96	30-35	35	59.0	SG
095-308	OU III Bldg 96	35-40	40	58.9	SG
095-312	OU III Bldg 96	45-55	60	61.8	SG
095-313	OU III Bldg 96/452	45-60	65	58.3	SG
095-314	OU III Bldg 452	60-80	85	58.1	SG
095-315	OU III Bldg 452	60-80	85	62.6	SG
095-318	OU III Bldg 96	60-70	80	51.7	MG
095-322	OU III Middle Road	175-185	190	48.2	DG
095-323	OU III Middle Road	200-210	214	69.8	DG
095-325	OU III Bldg 96	40-50	55	60.3	SG
095-326	OU III BGRR/WCF Sr-90	110-130	135	63.9	MG
096-02	Water Levels	45-55	57	71.2	SG
096-115	OU III AOC 29/HFBR Tritium	85-95	100	66.6	SG
096-116	OU III AOC 29/HFBR Tritium	85-95	100	65.1	SG
096-117	OU III AOC 29/HFBR Tritium	85-95	100	64.8	SG
096-118	OU III AOC 29/HFBR Tritium	84-94	99	63.6	SG
096-119	OU III AOC 29/HFBR Tritium (EW-16)	80-120	123	65.6	SG
096-52	Water Levels	24-34	39	68.1	SG
096-55	OU III AOC 29/HFBR Tritium	131-136	141	73(a)	MG
096-82	OU III AOC 29/HFBR Tritium	100-110	115	62.0	SG
096-83	OU III AOC 29/HFBR Tritium	22-32	37	68.3	SG
096-84	OU III AOC 29/HFBR Tritium	128-138	143	68.4	MG
096-88	OU III AOC 29/HFBR Tritium, Water Levels	135-145	146	61.5	DG
096-122	Former Firehouse PFAS	60-70	75	68.3	SG
096-123	Former Firehouse PFAS	120-130	135	68.4	MG
096-124	Former Firehouse PFAS	70-80	85	70.0	SG
096-125	Former Firehouse PFAS	120-130	135	70.1	MG
096-126	Former Firehouse PFAS	55-65	70	68.7	SG
096-127	Former Firehouse PFAS	110-120	125	68.6	MG
096-128	Former Firehouse PFAS	55-65	135	68.6	SG
096-129	Former Firehouse PFAS	110-120	125	68.6	MG
096-130	Former Firehouse PFAS	55-65	70	69.6	SG
096-131	Former Firehouse PFAS	110-120	125	69.7	MG
096-132	Former Firehouse FF-RW-B	83-103	108	68.5	MG
097-01	Water Levels	42-52	54	79.3	SG
097-08	Water Levels	37-42	42	72.0	SG
097-14	Water Levels	61-81	86	57.0	SG
097-17	FLF, Water Levels	29-39	44	69.2	SG
097-276	Water Levels	28-43	48	80.9	SG
097-277	FLF	40-55	60	81.0	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
097-64	FLF	29-44	49	69.2	SG
097-313	Chemical/Animal Holes Sr-90	20-40	45	69.2	SG
097-314	Chemical/Animal Holes Sr-90	20-40	45	69.0	SG
097-315	Chemical/Animal Holes Sr-90	20-40	45	21.4	SG
098-01	Water Levels	18-48	50	45.9	SG
098-09	Water Levels	18-48	50	46.3	SG
098-19	Water Levels	40-50	50	53.5	SG
098-21	OU I South Boundary, Water Levels	24-34	36	54.9	SG
098-22	OU I (South Boundary), Water Levels	33-43	45	53.7	SG
098-30	OU I South Boundary, Water Levels	33-43	45	57.5	SG
098-33	OU I South Boundary	60-80	85	57.6	SG
098-36	Water Levels	20-25	25	54.7	SG
098-40	Water Levels	23-28	33	56.5	SG
098-41	Water Levels	18-23	28	55.3	SG
098-42	Water Levels	13-18	23	50.4	SG
098-58	OU I South Boundary	90-100	105	52.7	MG
098-59	OU I South Boundary, Water Levels	130-140	145	52.8	DG
098-61	OU I South Boundary, Water Levels	120-130	135	54.3	DG
098-63	Water Levels	135-145	150	53.5	DG
098-64	Water Levels	90-100	105	55.2	MG
098-99	Current Landfill	39-49	54	47.8	SG
098-100	OU I South Boundary	5-20	25	50.1	SG
098-103	OU I South Boundary	10-30	35	53.3	SG
098-104	OU I South Boundary	10-30	35	53.2	SG
099-01	Water Levels	19-24	24	48.8	SG
099-04	OU I South Boundary, Water Levels	110-130	135	57.8	DG
099-05	Water Levels	35-55	60	45.8	SG
099-06	OU VI EDB	75-95	100	45.9	SG
099-07	Water Levels	20-25	30	52.7	SG
099-10	OU VI EDB	75-85	90	50.4	SG
099-11	OU VI EDB, Water Levels	110-120	125	50.3	DG
100-03	Water Levels	31-51	56	44.8	SG
100-04	Water Levels	155-160	160	45.8	MAG
100-10	Water Levels	15-25	30	47.9	SG
100-12	OU VI EDB, Water Levels	95-105	110	47.8	DG
100-13	OU VI EDB	64-74	79	48.8	SG
100-14	OU VI EDB	105-115	120	48.7	MG
101-01	Water Levels	45-65	70	88.2	SG
101-09	Water Levels	75-85	90	101.2	SG
101-10	Water Levels	60-70	75	84.3	SG
102-05	Motor Pool	47-67	72	93.9	SG
102-06	Motor Pool	46-66	71	94.2	SG
102-08	Motor Pool, Water Levels	45-60	65	93.1	SG
102-10	Motor Pool	44-59	64	93.3	SG
102-11	Motor Pool	44-59	64	93.6	SG
102-12	Motor Pool, Water Levels	44-59	64	93.8	SG
102-13	Motor Pool	45-60	65	94.1	SG

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Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
102-25	Water Levels	52-62	67	77.6	SG
102-26	Current Firehouse PFAS	90-100	105	91.9	MG
102-27	Current Firehouse PFAS	110-120	125	92.0	MG
102-28	Current Firehouse PFAS	140-150	155	91.8	MG
102-29	Current Firehouse PFAS	90-100	105	90.1	MG
102-30	Current Firehouse PFAS	110-120	125	90.2	MG
102-31	Current Firehouse PFAS	130-140	145	90.1	MG
102-32	Current Firehouse CF-RW-F	121-141	146	93.1	MG
102-33	Curent Firehouse CF-RW-G	88-108	113	95.1	MG
102-34	Current Firehouse CF-RW-H	98-118	123	104.4	MG
102-35	Building 170 CF-RW-I	70-90	95	91.8	SG
102-36	Building 170 PFAS	70-80	85	89.6	SG
102-37	Building 170 PFAS	65-75	80	92.2	SG
102-38	Building 170 PFAS	70-80	85	81.7	SG
102-39	Building 170 PFAS	70-80	85	83.1	SG
102-40	Current Firehouse PFAS	145-155	160	90.1	MG
103-01	Water Levels	--	49	81.4	SG
103-02	Current Firehouse PFAS, Water Levels	45-50	50	89.8	SG
103-10	Curent Firehouse PFAS	57-67	67	99.5	SG
103-15	OU III Western South Boundary	195-205	208	83.7	DG
103-18	OU III Western South Boundary	165-175	180	101.07(a)	DG
103-19	OU III Western South Boundary	165-175	180	83.7 (a)	DG
103-30	Current Firehouse PFAS	90-100	105	102.5	MG
103-31	Current Firehouse PFAS	110-120	125	103.2	MG
103-32	Current Firehouse PFAS	130-140	145	103.4	MG
103-33	Current Firehouse PFAS	90-100	105	100.9	MG
103-34	Current Firehouse PFAS	120-130	135	100.7	MG
104-01	Water Levels	45-65	70	64.1	SG
104-11	OU III Carbon tet, Water Levels	185-195	200	64.4	DG
104-25	Water Levels	125-130	135	72.8	SD
104-36	OU III Carbon tet	126-146	151	55.6	DG
104-37	OU III Middle Road	204-214	219	67.6	DG
104-38	OU III Middle Road	195-215	218	66.4	DG
105-02	Water Levels	80-85	85	69.4	SG
105-05	OU III Central, Water Levels	20-30	35	58.6	SG
105-06	OU III Central	70-80	85	58.8	SG
105-21	Water Levels	37-47	52	67.6	SG
105-22	OU III AOC 29/HFBR Tritium	100-110	115	67.2	MG
105-23	OU III Carbon tet, Middle Road, AOC 29/HFBR, Water Levels	175-185	190	67.3	DG
105-24	Water Levels	180-190	195	59.0	DG
105-25	OU III Middle Road, Water Levels	145-150	155	69.7	DG
105-26	Water Levels	145-150	155	69.3	DG
105-27	Water Levels	28-38	43	69.3	SG
105-28	Water Levels	24-34	39	66.0	DG
105-29	OU III AOC 29/HFBR Tritium	170-190	195	65.9	DG
105-39	OU III AOC 29/HFBR Tritium (EW-10)	130-150	153	70.0	DG
105-40	OU III AOC 29/HFBR Tritium (EW-9)	130-150	153	70.0	DG

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Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
105-41	OU III AOC 29/HFBR Tritium (EW-11)	130-150	153	70.3	DG
105-42	OU III Carbon tet	145-150	155	67.3	DG
105-43	OU III AOC 29/HFBR Tritium, Water Levels	145-150	155	67(a)	DG
105-44	OU III Middle Road, AOC 29/HFBR, Water Levels	150-155	160	66(a)	DG
105-52	OU III Middle Road, Water Levels	100-110	112	74(a)	MG
105-53	OU III Middle Road, Water Levels	170-180	182	73(a)	DG
105-54	OU III Middle Road, Water Levels	110-120	122	55(a)	MG
105-65	OU III AOC 29/HFBR Tritium	90-100	105	68.8	MG
105-66	OU III Middle Road	179-189	194	67.6	DG
105-67	OU III Middle Road	180-190	195	69(a)	DG
105-68	OU III Middle Road	200-210	215	60.8	DG
105-72	Former Firehouse PFAS	100-110	115	62.3	MG
105-73	Former Firehouse PFAS	120-130	135	63.2	MG
105-74	Former Firehouse PFAS	90-100	105	65.0	SG
105-75	Former Firehouse PFAS	110-120	125	64.4	MG
105-76	Former Firehouse PFAS	130-140	145	63.9	MG
105-77	Former Firehouse PFAS	100-110	115	60.1	MG
105-78	Former Firehouse PFAS	120-130	135	60.9	MG
105-79	Former Firehouse FF-RW-C	104-124	129	64.3	MG
105-80	OU III Middle Road	175-185	190	69.5	DG
105-81	OU III Middle Road	188-198	203	59.5	DG
106-02	FLF, Water Levels	55-65	70	66.8	SG
106-04	Chemical/Animal Holes Sr-90, Water Levels	55-65	70	68.1	SG
106-13	Chemical/Animal Holes Sr-90	29-39	44	70.3	SG
106-14	Chemical/Animal Holes Sr-90	30-40	45	71.2	SG
106-15	Chemical/Animal Holes Sr-90	55-65	70	71.2	SG
106-16	Chemical/Animal Holes Sr-90, Water Levels	30-40	45	70.5	SG
106-17	Chemical/Animal Holes Sr-90, Water Levels	30-40	45	69.2	SG
106-19	Water Levels	250-255	260	66.9	MAG
106-20	Chemical/Animal Holes Sr-90, Water Levels	85-95	100	66.6	MG
106-21	Chemical/Animal Holes Sr-90, Water Levels	55-65	70	66.6	SG
106-22	Chemical/Animal Holes Sr-90, Water Levels	85-95	100	62.9	DG
106-23	Chemical/Animal Holes Sr-90, Water Levels	55-65	70	62.9	SG
106-24	Chemical/Animal Holes Sr-90	80-90	95	51.0	SG
106-25	Chemical/Animal Holes Sr-90, Water Levels	50-60	65	51.2	SG
106-30	FLF, Water Levels	29-44	49	20.7	SG
106-43	Chemical/Animal Holes Sr-90	43-53	58	64.9	SG
106-44	Chemical/Animal Holes Sr-90	44-54	59	64.8	SG
106-45	Chemical/Animal Holes Sr-90	44-55	60	64.8	SG
106-46	Chemical/Animal Holes Sr-90	29-39	44	66.0	SG
106-47	Chemical/Animal Holes Sr-90	29-39	44	65.9	SG
106-48	Chemical/Animal Holes Sr-90	31-41	46	66.5	SG
106-49	Chemical/Animal Holes Sr-90	32-42	47	67.4	SG
106-50	Chemical/Animal Holes Sr-90	32-42	47	67.9	SG
106-53	OU III Middle Road, Water Levels	200-210	215	68.3	DG
106-54	OU III Middle Road	200-210	215	67.4	DG
106-55	OU III Middle Road	170-180	185	66.1	DG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
106-56	OU III Middle Road	160-170	175	66.2	DG
106-58	OU III Middle Road	200-210	215	65.9	DG
106-62	OU III Middle Road, Chemical/Animal Holes Sr-90	67-77	82	62.4	SG
106-63	Chemical/Animal Holes Sr-90	65-75	80	60.3	SG
106-64	Chemical/Animal Holes Sr-90	30-40	45	64.7	SG
106-66	OU III Middle Road RW-6	188-218	218	64(a)	DG
106-92	Chemical/Animal Holes Sr-90 (EW-1)	23-38	40	64.1	SG
106-94	Chemical/Animal Holes Sr-90	27-42	42	70.8	SG
106-95	Chemical/Animal Holes Sr-90	27-42	42	70.6	SG
106-96	Chemical/Animal Holes Sr-90	27-42	42	70.0	SG
106-97	Chemical/Animal Holes Sr-90	27-42	42	70.1	SG
106-98	Chemical/Animal Holes Sr-90	22-37	37	65.9	SG
106-99	Chemical/Animal Holes Sr-90	23-38	38	65.8	SG
106-100	Chemical/Animal Holes Sr-90	23-38	39	65.3	SG
106-101	Chemical/Animal Holes Sr-90	26-41	42	67.0	SG
106-102	Chemical/Animal Holes Sr-90	25-40	41	67.0	SG
106-103	Chemical/Animal Holes Sr-90	21-36	37	65.0	SG
106-104	Chemical/Animal Holes Sr-90	21-36	37	64.8	SG
106-105	Chemical/Animal Holes Sr-90, Water Levels	21-36	37	64.6	SG
106-119	Chemical/Animal Holes Sr-90	35-45	50	64.4	SG
106-120	Chemical/Animal Holes Sr-90	35-45	50	59.1	SG
106-121	Chemical/Animal Holes Sr-90	35-45	50	59.1	SG
106-122	Chemical/Animal Holes Sr-90	35-45	50	59.4	SG
106-123	Chemical/Animal Holes Sr-90 (EW-2)	35-45	48	67.6	SG
106-124	Chemical/Animal Holes Sr-90 (EW-3)	35-45	48	62.6	SG
106-125	Chemical/Animal Holes Sr-90	35-45	50	68.2	SG
106-135	Chemical/Animal Holes Sr-90	30-40	45	66.0	SG
106-136	Chemical/Animal Holes Sr-90	25-45	50	66.9	SG
107-07	Water Levels	93-113	118	65.8	DG
107-10	OU I South Boundary, Water Levels	110-130	135	60.8	DG
107-11	Water Levels	95-115	120	67.4	DG
107-12	Water Levels	50-70	75	67.4	SG
107-14	Water Levels	60-80	85	67.4	SG
107-23	OU I South Boundary	115-125	130	47.2	MG
107-24	OU I South Boundary	73-83	88	48.3	SG
107-25	OU I South Boundary, Water Levels	113-123	128	48.7	DG
107-26	OU I South Boundary, Water Levels	135-145	150	55.0	DG
107-34	OU I South Boundary, Water Levels	50-60	65	66.8	SG
107-35	OU I South Boundary, Water Levels	60-70	75	66.9	SG
107-40	OU I South Boundary	140-150	155	66.9	DG
107-41	OU I South Boundary	128-138	143	68.0	MG
107-42	OU I South Boundary	63-73	78	67(a)	SG
108-01	Water Levels	52-72	72	57.4	SG
108-05	Water Levels	50-70	70	61.0	SG
108-08	OU I South Boundary, Water Levels	51-71	71	62.9	SG
108-12	OU I South Boundary	58-78	78	65.8	SG
108-13	OU I South Boundary, Water Levels	45-65	70	65.9	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
108-14	OU I South Boundary	85-105	110	65.6	MG
108-15	Water Levels	26-31	36	58.1	SG
108-16	Water Levels	25-30	35	58.2	SG
108-17	OU I South Boundary	65-85	90	63.9	SG
108-18	OU I South Boundary, Water Levels	95-115	120	64.0	DG
108-30	Water Levels	95-105	110	61.2	DG
108-31	Water Levels	124-134	139	65.4	DG
108-43	OU I South Boundary, Water Levels	60-70	75	66.0	SG
108-44	OU I South Boundary, Water Levels	50-60	65	66.0	SG
108-45	OU I South Boundary	63-73	78	67(a)	SG
108-55	OU I South Boundary	54-64	69	59.4	SG
108-56	OU I South Boundary	54-64	69	59.5	SG
108-57	OU I South Boundary	65-75	80	64.9	MG
108-58	OU I South Boundary	65-75	80	64.2	MG
108-59	OU I South Boundary	90-100	105	64.2	MG
109-03	Wm. Floyd Well Field/Water Levels	120-140	145	115.8	MG
109-04	Wm. Floyd Well Field/Water Levels	205-220	225	115.7	DG
109-12	OU III Magothy, Water Levels	255-275	280	115.6	MAG
109-13	OU III Magothy, Water Levels	228-248	253	115.7	MAG
109-29	Water Levels	99-109	114	122.6	SG
110-26	Water Levels	66-76	81	88.6	SG
110-27	Water Levels	70-80	85	93.3	SG
111-01	Water Levels	35-45	50	75.2	SG
111-15	OU III Western South Boundary	170-180	185	75(a)	DG
111-16	OU III Western South Boundary	168-178	183	67(a)	DG
111-17	OU III Western South Boundary (WSB-3)	168-188	191	73.4	DG
111-20	Current Firehouse PFAS	165-175	180	70.6	DG
113-06	OU III Middle Road, Water Levels	44-54	59	73.2	SG
113-07	OU III Middle Road	94-104	109	73.2	MG
113-08	OU III Middle Road, Water Levels	137-147	147	73.5	MG
113-09	OU III Middle Road, Water Levels	217-227	232	73.3	DG
113-10	Water Levels	90-100	105	71.2	DG
113-11	OU III Middle Road, Water Levels	196-206	211	70.9	DG
113-16	OU III Middle Road, Water Levels	100-120	125	72(a)	MG
113-17	OU III Middle Road, Water Levels	167-187	192	72(a)	DG
113-18	OU III Middle Road	142-162	167	71(a)	DG
113-19	OU III Middle Road, Water Levels	220-240	245	71(a)	DG
113-20	OU III Middle Road	158-178	183	63(a)	DG
113-21	OU III Middle Road, Water Levels	180-190	192	71(a)	DG
113-22	OU III Middle Road, Water Levels	235-245	247	72(a)	DG
113-23	OU III Middle Road (RW-1)	90-130	140	72(a)	MG
113-24	OU III Middle Road (RW-2)	170-200	200	70(a)	DG
113-25	OU III Middle Road (RW-3)	228-268	268	68(a)	MAG
113-26	OU III Middle Road (RW-4)	150-180	180	51(a)	DG
113-27	OU III Middle Road (RW-5)	150-180	180	58(a)	DG
113-29	OU III Middle Road	180-200	205	63.2	DG
113-30	OU III Middle Road	185-195	200	73(a)	DG

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Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
113-31	OU III Middle Road	185-195	200	58.5	DG
114-01	Chemical/Animal Holes Sr-90	70-80	85	62.1	SG
114-02	Water Levels	26-36	41	61.9	SG
114-06	OU III South Boundary	180-190	195	52.2	DG
114-07	OU III South Boundary, Water Levels	200-210	215	52.2	DG
114-12	OU III Middle Road, Water Levels	145-165	170	60(a)	DG
115-01	Water Levels	40-60	65	52.8	SG
115-03	OU I South Boundary, Water Levels	110-130	136	52.7	DG
115-04	Water Levels	65-85	90	61.2	SG
115-05	Water Levels	95-115	120	60.9	DG
115-13	OU I South Boundary, Water Levels	140-150	155	61.6	DG
115-14	OU I South Boundary, Water Levels	180-190	195	59.4	DG
115-15	OU I South Boundary, Water Levels	180-190	195	55.0	DG
115-16	OU I South Boundary, Water Levels	125-135	140	55.1	SG
115-27	OU I South Boundary (EW-1)	150-190	193	59.7	DG
115-28	OU I South Boundary, Water Levels	202-212	217	59.7	DG
115-29	OU I South Boundary, Water Levels	200-210	215	55.8	DG
115-30	OU I South Boundary, Water Levels	158-168	173	53.7	DG
115-31	OU I South Boundary, Water Levels	167-177	182	61.6	DG
115-32	OU III North Street, Water Levels	80-90	95	65.5	SG
115-33	OU III North Street, Water Levels	179-189	194	65.6	DG
115-34	OU III North Street	110-120	125	65.2	MG
115-35	OU III North Street, Water Levels	150-160	165	64.8	DG
115-36	OU I South Boundary, Water Levels	129-134	139	52.9	DG
115-41	OU I South Boundary, Water Levels	98-118	123	53.3	SG
115-42	OU I South Boundary, Water Levels	158-178	183	53.2	DG
115-43	OU I South Boundary (EW-2)	104-124	129	60.0	DG
115-50	OU III Magothy, Water Levels	256-276	281	52.4	MAG
115-51	OU I South Boundary	125-145	150	62(a)	MG
116-05	OU I South Boundary	100-110	115	65.3	DG
116-06	OU I South Boundary, Water Levels	130-140	145	65.6	DG
116-14	Water Levels	65-75	75	69.0	SG
117-01	Wm. Floyd Well Field/Water Levels	75-85	90	113.8	SG
117-02	Wm. Floyd Well Field/Water Levels	74-84	89	109.9	SG
117-04	Wm. Floyd Well Field/Water Levels	130-140	145	110.5	MG
117-05	Wm. Floyd Well Field/Water Levels	130-140	145	109.6	MG
117-06	Wm. Floyd Well Field/Water Levels	130-140	145	109.4	MG
117-07	Water Levels	83-93	98	101.9	SG
118-01	Water Levels	70-90	95	81.9	SG
118-02	Water Levels	110-130	135	81.5	DG
118-04	Water Levels	88-98	103	109.6	SG
118-07	Current Firehouse PFAS	90-110	115	73.8	DG
119-01	Water Levels	44-54	59	79.8	SG
119-03	OU III Western South Boundary, Water Levels	40-50	55	80.5	SG
119-06	OU III Western South Boundary	125-135	140	80.9	DG
119-10	OU III Western South Boundary	195-205	210	77.5	DG
119-11	OU III Western South Boundary	175-185	190	78(a)	DG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
119-12	OU III Western South Boundary	174-184	189	81(a)	DG
119-13	OU III Western South Boundary (WSB-4)	170-190	193	80.0	DG
121-06	OU III South Boundary, Water Levels	40-50	55	67.6	SG
121-07	OU III South Boundary	89-99	104	67.8	MG
121-08	OU III South Boundary, Water Levels	180-190	195	68.0	DG
121-09	OU III South Boundary	90-100	105	73.6	MG
121-10	OU III South Boundary, Water Levels	160-170	175	73.5	DG
121-11	OU III South Boundary, Water Levels	200-210	215	72.5	DG
121-12	OU III South Boundary, Water Levels	45-55	60	71.7	SG
121-13	OU III South Boundary	120-130	135	71.8	MG
121-14	OU III South Boundary, Water Levels	190-200	205	71.6	DG
121-15	OU III South Boundary (EW-5)	160-200	203	68.8	DG
121-16	OU III South Boundary (EW-4)	160-200	205	71.8	DG
121-17	OU III South Boundary (EW-3)	150-190	193	70.9	DG
121-18	OU III South Boundary, Water Levels	60-80	85	72.0	SG
121-19	OU III South Boundary	90-110	115	72.3	MG
121-20	OU III South Boundary, Water Levels	180-200	205	72.1	DG
121-21	OU III South Boundary, Water Levels	60-80	85	68.1	SG
121-22	OU III South Boundary	120-140	145	68.3	MG
121-23	OU III South Boundary, Water Levels	180-200	205	67.8	DG
121-40	OU III Magothy, Water Levels	281-301	306	72.5	MAG
121-42	OU III Western South Boundary, Water Levels	150-160	165	67.4	DG
121-43	OU III South Boundary, Water Levels	185-205	210	68.3	DG
121-44	OU III Magothy, Water Levels	260-280	285	71.8	MAG
121-45	OU III Middle Road, South Boundary	189-209	214	69.7	DG
121-47	OU III South Boundary	224-234	239	71.0	DG
121-48	OU III South Boundary	223-233	238	68.2	DG
121-49	OU III South Boundary	210-220	225	73.6	DG
121-53	OU III Middle Road	224-234	239	76.7	DG
121-54	OU III Middle Road	215-225	230	72.6	DG
121-57	OU III South Boundary	212-222	227	NM	DG
122-01	Water Levels	46-66	71	59.3	SG
122-02	OU III South Boundary	85-105	110	59.4	DG
122-04	OU III South Boundary, Water Levels	200-205	210	58.5	DG
122-05	OU III South Boundary, Water Levels	269-274	279	61.8	MAG
122-09	OU III South Boundary	110-120	125	51.1	MG
122-10	OU III South Boundary, Water Levels	149-159	164	50.8	DG
122-12	OU III South Boundary (EW-8)	190-250	253	59.2	DG/MAG
122-13	OU III (South Boundary (EW-7)	170-210	213	55.2	DG
122-14	OU III South Boundary (EW-6)	160-200	203	55.1	DG
122-15	OU III South Boundary, Water Levels	50-70	75	54.0	SG
122-16	OU III South Boundary	140-160	165	53.5	DG
122-17	OU III South Boundary, Water Levels	200-220	225	53.4	DG
122-18	OU III South Boundary, Water Levels	130-150	155	61.9	SG
122-19	OU III South Boundary	190-210	215	61.8	DG
122-20	OU III South Boundary, Water Levels	250-270	275	61.9	DG
122-21	OU III South Boundary	180-190	195	58.6	DG

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Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
122-22	OU III South Boundary, Water Levels	200-210	215	58.9	DG
122-30	OU III South Boundary (EW-12)	180-220	220	52.5	DG
122-31	OU III South Boundary	150-160	165	53.3	DG
122-32	OU III South Boundary, Water Levels	200-210	215	54.1	DG
122-33	OU III South Boundary, Water Levels	165-195	200	56.1	DG
122-34	OU III South Boundary, Water Levels	190-210	215	61.8	DG
122-35	OU III South Boundary, Water Levels	190-210	215	59.7	DG
122-41	OU III Magothy, Water Levels	315-335	340	52.3	MAG
124-01	Water Levels	63-73	78	97.0	SG
124-02	OU III Western South Boundary, Water Levels	190-200	205	97.3	DG
124-04	Water Levels	80-90	85	114.5	SG
125-01	OU III Western South Boundary, Water Levels	40-50	55	82.0	SG
125-02	Water Levels	40-50	55	80.3	SG
125-04	Current Firehouse PFAS	105-115	120	81.8	MG
125-05	Current Firehouse PFAS	165-175	180	81.6	DG
126-01	OU III Western South Boundary, Water Levels	60-80	85	80.8	SG
126-11	OU III Western South Boundary, Water Levels	150-160	165	80.1	DG
126-12	OU III Western South Boundary (WSB-1)	140-160	165	79.5	DG
126-13	OU III Western South Boundary, Water Levels	150-160	165	80.7	DG
126-14	OU III Western South Boundary, Water Levels	150-160	165	81.4	DG
126-15	OU III Western South Boundary, Water Levels	150-160	165	66.2	DG
126-16	OU III Western South Boundary, Water Levels	130-140	145	76.0	DG
126-17	OU III Western South Boundary	135-145	150	83.4	DG
126-18	OU III Western South Boundary	160-170	175	83.4	DG
126-19	OU III Western South Boundary	190-200	205	84(a)	DG
126-20	OU III Western South Boundary	135-145	150	81(a)	DG
126-21	OU III Western South Boundary	199-209	214	80(a)	DG
126-22	OU III Western South Boundary	203-213	218	82(a)	DG
127-04	OU III Western South Boundary, Water Levels	150-160	165	69.5	DG
127-05	OU III Western South Boundary (WSB-2)	150-170	175	70.0	DG
127-06	OU III Western South Boundary, Water Levels	150-160	165	70.4	DG
127-07	OU III Western South Boundary, Water Levels	146-156	161	74.0	DG
127-08	OU III Industrial Park	235-245	250	70.9	MAG
127-09	OU III Industrial Park	220-230	235	70.9	MAG
130-02	OU III Western South Boundary	105-125	130	80.3	MG
130-03	OU III Western South Boundary, Water Levels	160-165	170	80.1	DG
130-04	OU III Western South Boundary, Water Levels	285-290	295	80.8	MAG
130-06	Water Levels (S-54883)	--	66	79.9	SG
130-08	OU III Western South Boundary, Water Levels	145-155	160	72.7	DG
130-09	OU III Western South Boundary	135-145	150	77(a)	DG
130-10	OU III Western South Boundary	150-160	165	77(a)	DG
130-11	OU III Western South Boundary	195-205	210	77(a)	DG
130-12	OU III Western South Boundary (WSB-5)	160-190	193	73(a)	DG
130-13	OU III Western South Boundary WSB-6	196-216	219	72.7	DG
300-06	Water Levels	50-60	65	84(a)	SG
600-02	Water Levels	91-101	103	41.8	DG
600-15	OU V, Water Levels	240-260	265	48(a)	DG

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Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
600-16	OU V, Water Levels	160-180	185	48(a)	MG
600-18	OU V, Water Levels	35-55	60	48.1	SG
600-19	OU V, Water Levels	50-70	75	43.6	SG
600-20	OU V, Water Levels	150-170	175	43.6	SG
600-21	OU V, Water Levels	240-260	265	43.7	MAG
600-22	OU V, Water Levels	60-80	85	50.0	SG
600-23	OU V, Water Levels	150-170	175	50.0	DG
600-24	OU V, Water Levels	228-248	253	50.0	MAG
600-25	OU V, Water Levels	52-72	77	44.0	SG
600-26	OU V, Water Levels	150-170	175	44.0	DG
600-27	OU V, Water Levels	240-260	265	43.7	MAG
600-28	Water Levels	--	45	50.0	SG
800-100	OU III Airport, Water Levels	204-224	227	83.5	DG
800-101	OU III Airport, Water Levels	270-290	293	83.6	MAG
800-102	OU III Airport	294-314	317	83.5	MAG
800-103	OU III Airport	215-235	238	86.0	MAG
800-104	OU III Airport, Water Levels	160-180	183	82.5	DG
800-105	OU III Airport, Water Levels	222-242	245	82.5	MAG
800-106	OU III Airport	207-227	230	90.7	DG
800-107	Water Levels	194-214	217	77.6	DG
800-108	OU III Airport, Water Levels	206-226	229	76.6	MAG
800-109	OU III LIPA (RTW-1A)	55-95/188-208	211	80.1	DG
800-110	OU III LIPA (RTW-2A)	55-95/188-208	211	79.2	DG
800-111	OU III LIPA (RTW-3A)	55-95/210-230	235	80.1	MAG
800-112	OU III LIPA (RTW-4A)	60-100/268-288	291	83.8	MAG
800-113	OU III LIPA (RTW-5A)	65-105/220-240	243	87.1	MAG
800-115	OU III North Street	210-220	225	92.4	MAG
800-126	OU III Airport	165-185	190	74.3	DG
800-127	OU III Airport	165-185	190	75.5	DG
800-128	OU III Airport	170-190	195	77.4	DG
800-129	OU III Airport	170-190	195	78.8	DG
800-130	OU III Airport	175-195	200	78.8	DG
800-131	OU III Airport	184-204	209	78.0	DG
800-132	OU III LIPA (RTW-6A)	165-185	188	78.8	DG
800-133	OU III Airport	215-235	240	79.3	DG/MAG
800-138	OU III Airport	245-255	260	90.4	MAG
800-14	Water Levels	83-93	95	95.5	SG
800-16	Water Levels	331-336	339	95(a)	MAG
800-21	OU III Off-site, Water Levels	202-222	227	35.6	MAG
800-22	OU III Off-site, Water Levels	105-125	130	35.5	DG
800-23	OU III Off-site, Water Levels	35.5-45.5	50.5	35.6	SD
800-24	Water Levels	230-240	245	44.1	MAG
800-25	Water Levels	165-175	180	44.7	DG
800-26	Water Levels	35-45	50	42.2	SG
800-27	Water Levels	170-180	185	56.7	DG
800-28	Water Levels	262-272	277	56.4	MAG
800-29	Water Levels	50-60	65	56.2	SG

Table 1-7
Summary of Monitoring Wells and Piezometers

2024 BNL Groundwater Status Report

Well ID	Project(s)	Screen Interval (Feet BLS)	Total Depth (Feet BLS)	Land Surface Elevation (Feet Above MSL)	Aquifer
800-30	Water Levels	20-30	35	24.7	SG
800-39	Water Levels	61.5-71.5	76.5	80.9	SG
800-40	OU III Off-site, Water Levels	166-186	191	81.2	DG
800-41	OU III Off-site, Water Levels	203-223	228	80.9	MAG
800-42	Water Levels	60-70	75	79.5	SG
800-43	OU III Airport, Water Levels	147-167	172	79.5	MG
800-44	OU III Airport, Water Levels	202-222	227	79.3	DG
800-50	OU III Airport, Water Levels	195-215	220	87.3	MAG
800-51	OU III Off-site, Water Levels	70-80	85	84.9	SG
800-52	OU III Off-site, Water Levels	140-160	165	85.2	DG
800-53	OU III Off-site, Water Levels	190-210	215	85.4	MG
800-54	OU III North Street East, Water Levels	145-165	170	83.3	DG
800-55	Water Levels	25-28	28	26.0	SG
800-56	Water Levels	--	8	18.0	SG
800-59	OU III Airport, Water Levels	198-218	223	90.1	DG
800-60	OU III Airport, Water Levels	200-220	225	91.3	DG
800-63	OU III Airport, North Street, Water Levels	196-216	221	96.3	DG
800-90	OU III Airport	250-260	265	95.4	MAG
800-90	OU III Magothy, Water Levels	250-260	265	95.4	MAG
800-92	OU III Airport, Water Levels	195-205	210	95.4	MAG
800-94	OU III Airport, Water Levels	175-195	198	85.2	DG
800-95	OU III Airport	177-197	200	85.1	DG
800-96	OU III Airport, Water Levels	179-199	202	78.7	DG
800-97	OU III Airport	189-209	212	79.4	DG
800-98	OU III Airport, Water Levels	174-194	197	91.4	DG
800-99	OU III Airport, Water Levels	236-256	261	91.3	MAG
127-08	OU3 EM-50	235-245	250	70.9	MAG
127-09	OU3 EM-50	220-230	235	70.8	MAG

a: Estimated land surface elevation

SG Shallow Glacial

SD Shallow-Deep Glacial

MG Mid Glacial

DG Deep Glacial

MAG Magothy

UG Upper Glacial

BLS Below Land Surface

MSL Mean Sea Level

Table 2-1
2024 Water Pumpage Report for Potable Supply Wells

2024 BNL Groundwater Status Report

Potable Water Supply Wells Groundwater Withdrawal (1,000 gallons per month)						
BNL Well No.	4	6	7	10	11	12
LI Well Permit No.	W-1656	W-2210	W-2210	W-3156	W-3156	W-3389
Well No.	S-17836	S-22151	S-22150	S-66944	S-72038	S-85965
Building No.	614	618	619	634	635	637
Screen Interval						
elevation (ft. msl)	-5 to -57	-8 to -60	-19 to -70	-6 to -55	-3 to -52	-7 to -52
depth (feet)	95 to 147	98 to 150	99 to 150	91 to 140	93 to 142	92 to 137
Capacity (kgal/month)*	52,000	52,000	52,000	52,000	52,000	52,000
Capacity (gpm)	1,200	1,200	1,200	1,200	1,200	1,200
January	0	0	1,030	2,459	7,047	13,722
February	0	0	651	3,265	6,967	15,632
March	0	0	1,409	2,615	4,359	17,025
April	0	0	2,338	4,420	8,860	18,748
May	0	0	2,610	6,330	5,639	26,406
June	0	0	1,076	5,320	9,537	26,039
July	0	0	2,498	5,674	11,238	28,463
August	0	0	1,996	7,089	11,784	24,293
September	0	0	1,879	5,255	7,617	28,326
October	0	0	1,626	3,376	6,832	21,320
November	0	0	833	2,949	2,561	19,244
December	0	0	655	2,098	2,400	15,212
Annual average (K gallons per month)	0	0	1,558	4,243	7,070	21,228

Notes:

Source: BNL Facility and Operations Directorate.

ft. msl = Elevation in feet referenced to mean sea level.

kgal/month = 1,000 gallons per month

* approximate

gpm = gallons per minute

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

	Operable Unit I			HFBR-Tritium Remediation Project				
	Groundwater Withdrawal (1,000 gallons per month)							
BNL Well No.	115-27	115-43	RA V	105-040	105-039	105-041	096-119	Tritium
Extraction Well	EW-1	EW-2		EW-9	EW-10	EW-11	EW-16	Remediation
Screen Int.								
elevation (ft. msl)	-90 to -130	-40 to -80		-61 to -81	-60 to -80	-60 to -80	-14 to -54	
depth (feet)	150 to 190	100 to 140	Monthly Total	130 to 150	130 to 150	130 to 150	80 to 120	Monthly Total
January	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
June	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
July	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
August	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
October	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
November	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual Average (K gal/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

HFBR = High Flux Beam Reactor

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat MIDDLE ROAD SYSTEM - Groundwater Withdrawal (1,000 gallons per month)								
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	113-23 RW-1 -17 to -57 90 to 130	113-24 RW-2 -99 to -129 170 to 200	113-25 RW-3 -159 to -199 228 to 268	113-26 RW-4 -98 to -128 150 to 180	113-27 RW-5 -91 to -121 150 to 180	106-66 RW-6 -124 to -154 188 to 218	113-33 RW-7 202 to 222	MIDDLE ROAD Monthly Total
January	0.00	6,244.25	5,654.74	0.00	0.00	0.00	5,889.24	17,788.23
February	0.00	4,936.73	5,133.11	0.00	0.00	0.00	5,797.05	15,866.89
March	0.00	6,201.74	6,424.88	0.00	0.00	0.00	6,709.45	19,336.07
April	0.00	5,114.10	5,662.46	0.00	0.00	0.00	5,944.89	16,721.45
May	0.00	5,016.10	4,834.18	0.00	0.00	0.00	5,863.45	15,713.73
June	0.00	5,600.26	5,865.20	0.00	0.00	0.00	6,376.68	17,842.14
July	0.00	372.04	391.84	0.00	0.00	0.00	429.08	1,192.96
August	0.00	4,936.70	5,600.65	0.00	0.00	0.00	5,764.49	16,301.84
September	0.00	5,347.01	4,836.32	0.00	0.00	0.00	5,733.21	15,916.54
October	0.00	5,696.81	6,072.26	0.00	0.00	0.00	5,920.44	17,689.51
November	0.00	5,804.02	6,166.89	0.00	0.00	0.00	6,043.79	18,014.70
December	0.00	4,125.86	4,488.33	0.00	0.00	0.00	4,731.99	13,346.18
Annual Average (K gal/month)	0.00	4,944.08	5,088.02	0.00	0.00	0.00	5,424.18	15,456.28

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat SOUTH BOUNDARY SYSTEM - Groundwater Withdrawal (1,000 gallons per month)								
BNL Well No.	121-17	121-16	121-15	122-14	122-13	122-12	121-46	SOUTH
Extraction Well	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-17	BOUNDARY
Screen Int.								
elevation	-79 to -119	-88 to -108	-91 to -131	-105 to -145	-115 to -155	-131 to -151		
(ft. msl)		-118 to -128				-171 to -191		
depth (feet)	150 to 190	160 to 180	160 to 200	160 to 200	170 to 210	190 to 210	207 to 237	Monthly
		190 to 200				230 to 250		Total
January	0.00	0.00	0.00	0.00	0.00	0.00	2,468.13	2,468.13
February	0.00	0.00	0.00	0.00	0.00	0.00	3,767.55	3,767.55
March	0.00	0.00	0.00	0.00	0.00	0.00	3,566.20	3,566.20
April	0.00	0.00	0.00	0.00	0.00	0.00	6,084.19	6,084.19
May	0.00	0.00	0.00	0.00	0.00	0.00	5,694.97	5,694.97
June	0.00	0.00	0.00	0.00	0.00	0.00	4,020.18	4,020.18
July	0.00	0.00	0.00	0.00	0.00	0.00	476.67	476.67
August	0.00	0.00	0.00	0.00	0.00	0.00	3,777.06	3,777.06
September	0.00	0.00	0.00	0.00	0.00	0.00	5,733.21	5,733.21
October	0.00	0.00	0.00	0.00	0.00	0.00	6,458.63	6,458.63
November	0.00	0.00	0.00	0.00	0.00	0.00	6,503.17	6,503.17
December	0.00	0.00	0.00	0.00	0.00	0.00	4,698.74	4,698.74
Annual Average (K gal/month)	0.00	0.00	0.00	0.00	0.00	0.00	4,430.32	4,430.32

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat OFFSITE INDUSTRIAL PARK SYSTEM - Groundwater Withdrawal (1,000 gallons per month)										
BNL Well No.	000-231	000-233	000-235	000-237	000-239	000-241	000-243	000-532	000-533	OFFSITE
Extraction Well	UVB-1	UVB-2	UVB-3	UVB-4	UVB-5	UVB-6	UVB-7	IP-EW-8	IP-EW-9	INDUSTRIAL
Screen Int.										PARK
Influent										
elevation	-137 to -157	-115.5 to -135.5	-123 to -143	-98 to -118	-109 to -129	-110 to -130	-123 to -143	-155 to -175	-148 to -168	
(ft. msl)										
depth (feet)	220 to 240	195 to 215	194 to 214	170 to 190	180 to 200	190 to 210	205 to 225	230 to 250	220 to 240	
Effluent										
elevation										
(ft. msl)	-82 to -102	-60.5 to -80.5	-68 to -88	-53 to -73	-54 to -74	-58 to -78	-68 to -88			Monthly
depth (feet)	165 to 185	140 to 160	139 to 159	125 to 145	125 to 145	140 to 160	150 to 170			Total
January	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
June	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
July	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
August	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
October	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
November	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual Average (K gal/month)	stand-by	stand-by	stand-by	stand-by	stand-by	stand-by	stand-by	stand-by	stand-by	stand-by

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat BUILDING 96 SYSTEM - Groundwater Withdrawal and Reinjection (1,000 gallons per month)					
BNL Well No.	095-151	095-153	095-155	095-157	BUILDING
Extraction Well	RTW-1	RTW-2	RTW-3	RTW-4	96
Screen Int.					
Influent					
elevation (ft. msl)	+34 to+24	+26 to +16	+26 to +16	+23 to +13	
depth (feet)	48 to 58	48 to 58	48 to 58	48 to 58	
Effluent					
elevation (ft. msl)	+57 to +47	+49 to +39	+49 to +39	+46 to +36	Monthly
depth (feet)	25 to 35	25 to 35	25 to 35	25 to 35	Total
January	0.00	0.00	0.00	0.00	0.00
February	2,462.40	0.00	0.00	0.00	2,462.40
March	0.00	0.00	0.00	0.00	0.00
April	2,462.40	0.00	0.00	0.00	2,462.40
May	0.00	0.00	0.00	0.00	0.00
June	1,588.00	0.00	0.00	0.00	1,588.00
July	0.00	0.00	0.00	0.00	0.00
August	0.00	0.00	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00	0.00
October	0.00	0.00	0.00	0.00	0.00
November	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00
Annual Average (K gal/month)	543	stand-by	stand-by	stand-by	543

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Annual average based on actual pumping durations

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat WESTERN SOUTH BOUNDARY SYSTEM (1,000 gallons per month)							
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	126-12 WSB-1 -60 to -80 140 to 160	127-05 WSB-2 -80 to -100 150 to 170	111-17 WSB-3 -97.2 to -117.2 168 to 188	119-13 WSB-4 -91.7 to 111.7 170 to 190	130-12 WSB-5 -84.5 to -114.50 160 to 190	130-13 WSB-6 -120.6 to 140.6 196 to 216	WESTERN SOUTH BOUNDARY Monthly Total
January	2,808.00	0.00	1,693.00	6.00	2,044.00	49.00	6,600.00
February	17.00	0.00	1.00	3,836.00	2.00	3,880.00	7,736.00
March	2,584.00	0.00	2,657.00	1.00	2,005.00	1.00	7,248.00
April	35.00	0.00	0.00	16.00	0.00	4,237.00	4,288.00
May	5,661.00	0.00	4,228.00	1.00	3,878.00	1.00	13,769.00
June	15.00	0.00	17.00	4,371.00	22.00	4,450.00	8,875.00
July	377.00	0.00	313.00	0.00	284.00	0.00	974.00
August	27.00	0.00	34.00	3,496.00	25.00	4,009.00	7,591.00
September	165.00	0.00	3,436.00	5.00	4,082.00	6.00	7,694.00
October	2.00	0.00	8.00	4,370.00	2.00	4,245.00	8,627.00
November	0.00	0.00	4,263.00	6.00	4,349.00	1.00	8,619.00
December	0.00	0.00	3.00	3,207.00	4.00	3,316.00	6,530.00
Annual Average (K gal/month)	992.21	0.00	1,393.22	1,596.87	1,394.93	1,999.21	7,376.43

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat CHEM HOLES STRONTIUM 90 SYSTEM (1,000 gallons per month)				
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	106-92 SR-90 EW-1 +40.5 to +25.5 23.5 to 38.5	106-23 SR-90 EW-2 +32.6 to 22.6 35 to 45	106-24 SR-90 EW-3 +27.6 to +17.6 35 to 45	Chem Holes Monthly Total
January	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	0.00
June	0.00	0.00	0.00	0.00
July	0.00	0.00	0.00	0.00
August	0.00	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00
October	0.00	0.00	0.00	0.00
November	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00
Annual Average (K gal/month)	stand-by	stand-by	stand-by	0.00

Notes:

Differences in averages due to rounding

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat LIPA SYSTEM - Groundwater Withdrawal (1,000 gallons per month)					
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	000-453 EW-1L -111 to -131 217 to 237	000-455 EW-2L -115 to -135 224 to 244	000-457 EW-3L -104 to -124 216 to 236	000-461 EW-4L -192 to -212 304 to 324	LIPA Monthly Total
January	0.00	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	0.00	0.00
June	0.00	0.00	0.00	0.00	0.00
July	0.00	0.00	0.00	0.00	0.00
August	0.00	0.00	0.00	0.00	0.00
September	0.00	0.00	0.00	0.00	0.00
October	0.00	0.00	0.00	0.00	0.00
November	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00
Annual Average (K gal/month)*	0.00	0.00	0.00	0.00	0.00

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

* Annual average is based on actual pumping timeframe

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat AIRPORT SYSTEM - Groundwater Withdrawal (1,000 gallons per month)							
BNL Well No.	800-109	800-110	800-111	800-112	800-113	800-132	AIRPORT
Extraction Well	RTW-1A	RTW-2A	RTW-3A	RTW-4A	RTW-5A	RW-6A	
Screen Int.							
Influent							
	-108 to -128	-109 to -129	-130 to -150	-184 to -204	-133 to -153		
depth (feet)	188 to 208	188 to 208	210 to 230	268 to 288	220 to 240	165 to 185	
Effluent							
elevation (ft. msl)	+25 to -15	+24 to -16	+25 to -15	+24 to -16	+22 to -18		Monthly
depth (feet)	55 to 95	55 to 95	55 to 95	60 to 100	65 to 105		Total
January	4,337.44	0.00	0.00	3,562.75	0.00	6,506.16	14,406.35
February	4,335.04	0.00	0.00	3,608.17	0.00	6,502.56	14,445.77
March	4,621.52	0.00	0.00	6,743.15	0.00	6,932.28	18,296.95
April	4,261.76	0.00	0.00	6,261.75	0.00	6,392.64	16,916.15
May	4,282.32	0.00	0.00	6,788.56	0.00	6,423.48	17,494.36
June	4,546.00	0.00	0.00	6,842.20	0.00	6,819.00	18,207.20
July	5,440.64	0.00	0.00	7,737.52	0.00	8,160.96	21,339.12
August	4,281.64	0.00	0.00	6,274.00	0.00	6,422.46	16,978.10
September	4,072.56	0.00	0.00	6,502.66	0.00	6,108.84	16,684.06
October	4,244.24	0.00	0.00	6,864.45	0.00	6,366.36	17,475.05
November	4,366.08	0.00	0.00	6,982.81	0.00	6,549.12	17,898.01
December	4,847.36	0.00	0.00	7,663.10	0.00	7,271.04	19,781.50
Annual Average (K gal/month)*	4,472.56	0.00	0.00	6,337.95	0.00	6,708.83	17,519.34

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

RTW-1A, RTW-6A and RTW-2A flow estimated. Wells share a common flow meter, individial well pumpage estimated of actual flow meter reading.

* Annual average is based on actual pumping timeframe

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat NORTH STREET SYSTEM - Groundwater Withdrawal (1,000 gallons per month)			
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	000-471 NS-1 -64 to-104 165 to 205	000-473 NS-2 -96 to -126 190 to 220	NORTH STREET Monthly Total
January	0.00	0.00	0.00
February	0.00	0.00	0.00
March	0.00	0.00	0.00
April	0.00	0.00	0.00
May	0.00	0.00	0.00
June	0.00	0.00	0.00
July	0.00	0.00	0.00
August	0.00	0.00	0.00
September	0.00	0.00	0.00
October	0.00	0.00	0.00
November	0.00	0.00	0.00
December	0.00	0.00	0.00
Annual Average (K gal/month)	0.00	0.00	0.00

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat NORTH STREET EAST SYSTEM - Groundwater Withdrawal (1,000 gallons per month)					
BNL Well No.	000-487	000-488	000-561	000-562	NORTH
Extraction Well	NSE-1	NSE-2	NSE-EDB-EW-3	NSE-EDB-EW-4	STREET
Screen Int.					EAST
elevation (ft. msl)	-71 to -101	-71 to -101	-111 to -131	-112 to -132	Monthly
depth (feet)	161 to 191	152 to 182	195 to 215	182 to 202	Total
January	0.00	0.00	4,581.00	4,751.00	9,332.00
February	0.00	0.00	4,724.00	4,878.00	9,602.00
March	0.00	0.00	4,860.00	5,200.00	10,060.00
April	0.00	0.00	4,448.00	4,740.00	9,188.00
May	0.00	0.00	1.00	1.00	2.00
June	0.00	0.00	5,047.00	1,565.00	6,612.00
July	0.00	0.00	0.00	0.00	0.00
August	0.00	0.00	4,390.00	4,827.00	9,217.00
September	0.00	0.00	3.00	3.00	6.00
October	0.00	0.00	4,761.00	5,046.00	9,807.00
November	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	4,972.00	5,858.00	10,830.00
Annual Average (K gal/month)	0.00	0.00	3,144.46	3,073.96	6,218.42

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

NSE system began pulse pumping (one month on, one month off) May 2024

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat BGRR/WCF STRONTIUM-90 SYSTEM - Groundwater Withdrawal (1,000 gallons per month)										
BNL Well No.	065-368	065-369	075-676	075-677	075-678	065-403	075-702	075-703	075-704	BGRR
Extraction Well	SR-1	SR-2	SR-3	SR-4	SR-5	SR-6	SR-7	SR-8	SR-9	
Screen Int.										
elevation (ft. msl)	51.5-31.5	51.5-31.5	50-30	46-6	46-6	38.7 to 18.7	13.2 to -6.8	15.1 to -4.9	24.6 to 4.6	Monthly
depth (feet)	33-53	33.5-53.5	51-71	35-75	35-75	85-105	82-102	77-97	67-87	Total
January	271.50	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	503.85
February	271.50	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	503.85
March	249.31	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.66
April	249.31	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.66
May	249.31	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.66
June	240.31	221.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	461.66
July	249.31	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.66
August	249.31	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.66
September	249.31	232.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.66
October	249.31	232.35	231.27	0.00	0.00	0.00	0.00	0.00	0.00	712.93
November	249.31	232.35	296.91	0.00	0.00	0.00	0.00	0.00	0.00	778.57
December	249.31	232.35	246.48	0.00	0.00	0.00	0.00	0.00	0.00	728.14
Annual Average (K gal/month)	252	231	65	stand-by	stand-by	stand-by	stand by	stand-by	0	548

Notes:

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Source: Groundwater Protection Group Field Engineer

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit VI - Pump and Treat EDB SYSTEM- Groundwater Withdrawal (1,000 gallons per month)					
BNL Well No.	000-503	000-504	000-578	000-579	OU VI EDB
Extraction Well	EW-1E	EW-2E	EW-3E	EW-4E	
Screen Int.					
elevation (ft. msl)	-41 to -61	-45 to -65	-100 to -120	-100 to -120	Monthly
depth (feet)	115 to 135	115 to 135	174 to 194	170 to 190	Total
January	0.00	0.00	366.50	354.70	721.20
February	0.00	0.00	6,367.10	5,565.30	11,932.40
March	0.00	0.00	6,858.00	6,758.00	13,616.00
April	0.00	0.00	6,724.50	6,825.30	13,549.80
May	0.00	0.00	6,385.00	6,524.00	12,909.00
June	0.00	0.00	5,286.00	2,541.00	7,827.00
July	0.00	0.00	6,250.60	4,246.30	10,496.90
August	0.00	0.00	6,350.00	6,500.00	12,850.00
September	0.00	0.00	6,350.50	6,552.20	12,902.70
October	0.00	0.00	5,258.60	5,528.70	10,787.30
November	0.00	0.00	6,180.00	6,581.00	12,761.00
December	0.00	0.00	6,569.00	6,615.00	13,184.00
Annual Average (K gal/month)	0	0	5,745	5,383	11,128

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

EW-3E and EW-4E began operations January of 2024

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat **BUILDING 452 FREON SYSTEM - Groundwater Withdrawal (1,000 gallons per month)**		
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	085-839 EW-18 55-65	Building 452 Freon Monthly Total
January	0.00	0.00
February	0.00	0.00
March	0.00	0.00
April	0.00	0.00
May	0.00	0.00
June	0.00	0.00
July	0.00	0.00
August	0.00	0.00
September	0.00	0.00
October	0.00	0.00
November	0.00	0.00
December	0.00	0.00
Annual Average (K gal/month)	stand-by	stand-by

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit X - Pump and Treat CURRENT FIREHOUSE SYSTEM - Groundwater Withdrawal (1,000 gallons per month)										
BNL Well No.	073-34	073-35	083-45	083-46	084-102	102-32	102-33	102-34	102-35	CURRENT
Extraction Well	CF-RW-A	CF-RW-B	CF-RW-C	CF-RW-D	CF-RW-E	CF-RW-F	CF-RW-G	CF-RW-H	CF-RW-I	FIREHOUSE
Screen Int. elevation (ft. msl)	38 to 18	30.9 to 10.9	-17.5 to -37.5	31 to 11.4	-31.2 to -51.2	-27.9 to -47.9	7.1 to -12.9	6.4 to -13.6	21.8 to 1.8	Monthly
depth (feet)	48 to 68	54 to 74	117 to 137	70 to 90	132 to 152	121 to 141	88 to 108	98 to 118	70 to 90	Total
January	2,517.30	2,458.12	13.02	1,912.26	3,867.58	13.08	2,420.27	2,694.58	4,582.76	20,478.97
February	2,366.31	2,355.88	6.43	1,926.22	4,050.68	6.63	2,351.12	2,572.76	4,554.43	20,190.47
March	1,490.36	2,376.79	4.50	2,579.67	2,885.05	4.64	2,339.42	2,682.91	4,041.60	18,404.94
April	2,710.68	2,156.85	8.55	2,399.90	1,249.47	8.77	2,205.06	2,357.98	3,384.94	16,482.20
May	2,630.65	2,206.43	147.97	2,570.06	3,235.80	153.02	2,247.35	1,992.88	3,481.65	18,665.82
June	2,413.76	2,015.28	32.32	2,456.41	3,190.51	35.83	1,875.45	2,513.96	3,329.50	17,863.04
July	2,413.34	2,060.28	32.96	2,455.23	3,407.57	32.97	1,964.05	2,989.62	3,329.90	18,685.92
August	2,264.36	2,089.12	8.78	2,229.17	3,665.33	30.91	1,971.71	2,777.03	3,469.61	18,506.02
September	2,249.02	2,381.82	5.69	1,449.57	4,242.87	5.94	2,269.88	1,913.92	3,974.55	18,493.26
October	2,149.61	2,284.40	26.75	1,388.37	4,082.63	27.36	2,175.29	1,225.04	3,188.56	16,548.01
November	2,307.18	2,403.10	5.53	796.59	4,332.87	5.72	2,330.79	370.90	1,801.53	14,354.21
December	1,894.52	2,023.48	24.79	686.43	3,446.65	25.08	1,920.25	2,286.18	3,906.22	16,213.60
Annual Average (K gal/month)	2,283.92	2,234.30	26.44	1,904.16	3,471.42	29.16	2,172.55	2,198.15	3,587.11	17,907.20

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

CFH began operating October 2022.

Table 2-2
2024 Remediation Well Pumpage Report

2024 BNL Groundwater Status Report

Operable Unit X - Pump and Treat FORMER FIREHOUSE SYSTEM - Groundwater Withdrawal (1,000 gallons per month)				
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	085-414 FF-RW-A 29.4 to 9.4 44 to 64	096-132 FF-RW-B -14.5 to -34.5 83 to 103	105-79 FF-RW-C -39.7 to -59.7 104 to 124	FORMER FIREHOUSE Monthly Total
January	2,328.85	3,387.53	4,620.69	10,337.07
February	2,196.07	3,078.81	4,378.43	9,653.31
March	2,263.46	3,204.78	4,615.77	10,084.01
April	1,972.64	2,372.71	4,043.76	8,389.11
May	2,266.58	3,074.10	4,590.45	9,931.13
June	2,602.44	2,757.00	2,741.52	8,100.96
July	862.12	2,122.00	1,511.78	4,495.90
August	1,690.54	2,186.62	4,113.88	7,991.04
September	2,746.14	1,392.66	4,459.95	8,598.75
October	1,849.92	3,220.05	4,043.44	9,113.41
November	2,331.12	3,344.10	4,219.87	9,895.09
December	1,507.08	3,208.71	4,007.88	8,723.67
Annual Average (K gal/month)	2,051.41	2,779.09	3,945.62	8,776.12

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

FFH began operating January 2023.

Table 2-3
2024 Recharge Basin Flow Report

2024 BNL Groundwater Status Report

Monthly Water Recharge (in 1,000 gallons/month)											
BNL Basin No.	HN	HO	HS	HT-W	HT-E	HX	RA V	OU III	HP	HZ	WSB
January	35,092	2,674	13,547	5,828	2,480	1,240	10,337	24,819	20,479	372	0
February	13,340	2,891	10,092	2,784	1,073	1,120	9,653	25,965	20,190	140	0
March	21,080	5,331	15,500	3,379	4,247	1,240	10,084	26,842	18,405	230	0
April	15,120	7,611	8,580	2,610	3,180	1,200	8,389	23,424	16,482	443	0
May	13,640	8,464	6,076	2,542	2,232	3,720	40,172	1,514	18,666	2,182	0
June	15,360	5,948	3,600	2,460	1,050	1,200	35,219	5,172	17,863	360	0
July	12,834	2,349	9,269	2,170	868	1,240	6,310	911	18,686	693	0
August	18,197	7,483	5,518	2,827	1,550	1,240	33,423	3,512	18,506	198	0
September	13,170	7,316	0	3,060	450	1,200	35,725	3,803	18,493	150	0
October	10,695	7,250	0	2,139	248	1,240	35,964	4,094	16,548	155	0
November	11,190	6,453	2,040	3,060	1,080	1,200	26,178	17,312	14,354	150	0
December	20,491	3,440	6,386	2,635	2,666	1,240	23,536	6,792	16,214	155	0
Basin Average	16,684	5,601	6,717	2,958	1,760	1,423	22,916	12,013	17,907	436	0

Notes:

- Sources: BNL Environmental Protection Division (HN, HO, HS, HT, HX, HZ)
  BNL Groundwater Protection Division (RA V, WSB, OU III, New HP pair)
- Monthly recharge values reported in 1,000s gallons per month.
- Values for basins HN, HO, HS, HT, HX are based on flow meter readings which include surface- water run-off, as applicable.
- Values for basin HZ were calculated and based on the average measured flow from readings collected on a weekly basis.
- Values for RA V basin and OU III basin estimated based on flow readings from corresponding RA V basin flow meter minus the total flow from the OU III SB, Middle Road and WSB systems. RAV began receiving water with Former Firehouse Groundwater Treatment System January 2023. The FFH value is included in the RAV total.
- HP basins became operational with the Current Firehouse Groundwater Treatment System in October 2022.
- WSB basin stopped receiving water during WSB system modification in November of 2018.

Table 2-4
BNL Monthly Precipitation Summary (1949–2024)

2024 BNL Groundwater Status Report

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1949	5.55	4.71	2.88	3.63	3.32	trace	3.07	5.21	3.49	1.74	2.96	3.36	39.92
1950	2.80	4.28	3.98	2.41	5.23	2.72	3.22	4.26	1.38	1.69	4.34	4.36	40.67
1951	3.75	4.99	5.02	3.42	3.68	2.64	2.08	4.50	1.06	5.48	6.01	6.17	48.80
1952	7.10	3.54	5.44	3.61	7.64	2.78	1.00	7.61	1.35	0.31	3.56	4.45	48.39
1953	6.73	4.16	10.36	5.59	3.34	1.66	2.76	2.40	0.90	3.17	5.03	6.43	52.53
1954	2.74	2.18	4.21	5.36	4.08	1.69	0.94	11.98	10.47	2.44	5.42	6.39	57.90
1955	0.62	3.26	4.79	4.28	0.95	2.53	1.65	9.04	3.96	11.43	7.19	0.82	50.52
1956	3.52	6.32	5.47	2.97	2.63	3.00	5.79	1.50	3.64	2.95	4.63	6.03	48.45
1957	2.36	2.53	3.20	4.44	1.46	0.42	2.84	4.25	3.57	3.86	4.41	8.45	41.79
1958	7.96	4.58	6.65	6.34	5.81	2.28	3.42	5.37	4.24	7.39	2.88	2.68	59.60
1959	2.60	2.06	6.71	3.93	1.75	5.35	6.85	3.72	1.36	3.13	4.46	5.12	47.04
1960	3.59	5.48	3.38	3.27	2.54	2.13	6.03	1.79	7.49	3.94	2.62	4.31	46.57
1961	3.56	4.10	4.60	5.70	6.17	2.30	5.61	4.23	6.23	3.06	2.89	3.70	52.15
1962	4.38	5.77	3.63	3.31	1.12	3.55	1.64	7.64	4.07	4.62	5.04	2.83	47.60
1963	3.27	3.88	4.27	2.56	3.08	5.51	2.65	2.10	3.66	0.18	6.89	2.78	40.83
1964	5.89	4.76	3.56	8.37	0.63	1.41	4.40	1.16	3.02	4.29	3.07	6.63	47.19
1965	4.88	3.03	2.74	4.20	1.63	1.69	3.43	5.15	1.51	2.15	1.83	2.11	34.35
1966	4.57	5.18	1.73	2.13	6.55	1.40	1.12	3.23	6.53	4.45	2.89	4.15	43.93
1967	1.65	3.98	8.18	4.14	7.98	5.30	6.01	5.43	2.24	2.11	4.00	7.60	58.62
1968	3.00	2.21	7.54	2.00	4.95	4.24	0.50	3.10	2.08	3.01	8.09	8.22	48.94
1969	1.04	4.03	3.62	5.15	2.44	2.06	8.62	5.51	3.60	3.69	4.48	7.83	52.07
1970	0.81	4.37	5.44	4.57	3.44	1.77	3.10	6.08	2.42	1.41	6.52	3.73	43.66
1971	2.95	6.45	3.55	3.30	3.80	0.92	5.03	3.86	2.12	3.41	6.86	2.57	44.82
1972	2.41	6.12	5.40	4.53	6.10	7.30	1.03	1.29	3.08	7.64	7.51	6.22	58.63
1973	4.44	4.36	4.38	7.77	5.46	3.25	4.45	3.11	2.51	2.79	2.22	8.00	52.74
1974	4.96	2.82	5.06	3.49	3.13	2.50	0.81	2.55	5.10	2.66	1.94	6.78	41.80
1975	6.50	4.06	4.27	3.89	3.45	5.37	3.33	2.01	5.58	3.61	5.89	4.92	52.88
1976	5.98	3.57	3.30	2.27	3.89	3.27	4.32	7.57	2.07	5.42	0.54	2.96	45.16
1977	3.09	2.46	5.47	4.28	2.04	4.31	1.51	5.49	5.73	6.12	6.39	6.93	53.82
1978	10.72	2.60	3.33	2.39	6.47	0.81	4.63	5.22	4.26	4.11	2.79	6.12	53.45
1979	13.01	5.27	3.53	4.96	4.09	2.15	0.61	7.76	3.20	4.57	3.95	3.02	56.12
1980	2.02	1.18	7.20	6.16	1.52	3.60	1.92	1.56	0.98	3.59	4.20	1.06	34.99
1981	1.15	5.16	1.80	4.59	2.17	3.14	2.69	0.96	5.17	4.49	3.16	5.55	40.03
1982	7.20	2.90	3.38	5.44	1.71	12.85	1.77	3.45	1.40	2.07	3.87	2.38	48.42
1983	4.07	4.36	8.68	11.09	4.22	2.63	4.20	4.48	2.09	3.67	8.68	5.67	63.84
1984	2.87	6.38	6.92	5.41	8.08	6.68	7.06	1.02	4.16	3.20	2.40	2.98	57.16
1985	1.07	1.82	2.62	1.56	4.87	6.38	2.30	4.89	1.54	1.53	6.85	1.10	36.53
1986	3.96	3.46	3.17	2.35	1.09	1.66	5.02	5.69	0.86	2.25	6.72	7.50	43.73
1987	6.74	1.21	5.95	4.32	1.83	1.86	1.48	4.38	4.05	2.22	3.55	3.20	40.79
1988	3.59	4.81	4.22	2.17	2.58	1.43	3.93	1.36	3.52	3.87	9.05	2.52	43.05
1989	2.23	4.09	5.20	4.66	10.47	7.24	5.84	9.17	4.45	8.90	5.16	1.25	68.66
1990	5.24	2.92	2.14	4.96	6.52	3.95	2.64	6.75	3.04	7.17	1.78	5.90	53.01
1991	4.41	1.86	5.45	4.30	2.78	1.87	2.11	9.19	4.45	2.61	1.80	4.30	45.13
1992	2.40	2.18	3.34	1.78	3.05	4.90	4.76	5.61	3.51	1.07	5.96	6.60	45.16
1993	2.47	4.10	7.11	3.81	1.71	1.37	1.84	1.61	4.36	4.69	3.72	6.11	42.90
1994	5.78	4.04	6.55	2.26	2.93	0.51	0.91	5.04	4.41	1.09	6.34	4.30	44.16
1995	2.93	3.74	1.53	2.52	2.79	3.12	1.78	0.54	4.91	5.97	5.83	3.74	39.40
1996	5.22	3.51	3.58	6.40	3.39	4.41	4.94	2.68	6.08	8.24	3.11	8.66	60.22
1997	3.82	2.64	5.10	4.21	2.67	2.16	2.21	3.33	1.27	2.55	5.42	4.66	40.04
1998	7.01	5.66	8.08	6.55	8.58	8.43	0.94	3.68	2.50	1.91	2.05	1.22	56.61
1999	8.85	4.81	5.32	2.35	2.41	1.04	2.12	8.71	5.90	4.78	2.58	2.85	51.72
2000	3.75	2.58	5.49	6.29	4.28	5.18	8.37	3.38	6.86	0.31	3.79	4.09	54.37
2001	3.28	2.63	10.37	2.03	4.22	6.46	3.47	4.68	4.04	1.04	0.74	2.59	45.55
2002	3.07	1.16	5.05	4.58	4.48	4.37	1.37	3.94	5.84	6.40	6.18	5.63	52.07
2003	2.48	5.74	5.99	5.11	6.07	12.28	2.38	5.19	5.22	4.80	3.63	4.22	63.11

Table 2-4
BNL Monthly Precipitation Summary (1949–2024)

2024 BNL Groundwater Status Report

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2004	2.15	3.14	3.47	4.94	2.59	1.34	3.05	4.30	5.14	1.62	2.16	1.96	35.86
2005	3.32	2.10	2.47	2.53	2.36	1.48	2.16	0.87	1.09	22.14	5.00	4.60	50.12
2006	5.52	2.87	0.89	7.17	6.73	6.73	5.73	6.44	3.21	7.22	6.61	2.47	61.59
2007	4.32	2.00	5.58	6.87	2.06	3.18	7.58	2.78	1.69	1.71	3.31	4.25	45.33
2008	2.36	5.57	4.67	4.01	3.61	2.28	1.97	3.07	9.31	4.02	3.82	4.37	49.06
2009	1.27	1.74	1.79	5.39	6.05	7.99	7.19	1.15	3.18	6.13	4.65	7.64	54.17
2010	2.15	6.01	11.98	0.74	3.88	1.64	6.7	2.21	4.56	3.08	2.91	4.08	49.94
2011	3.23	3.61	3	4.34	3.37	4.33	2.34	9.81	4.74	5.75	3.52	3.16	51.2
2012	3.01	1.27	1.11	3.81	4.53	7.74	8.26	4.57	3.49	3.24	2.49	7.3	50.82
2013	2.35	5.84	3.82	1.67	3.04	8.37	4.14	2.05	2.39	0.26	3.13	6.17	43.23
2014	2.9	5.63	6.73	4.86	4.82	2.35	2.58	3.67	2.66	5.23	5.79	7.03	54.25
2015	5.15	2.98	5.87	1.81	0.53	4.38	1.69	1.54	3.53	4.23	2.41	5.25	39.37
2016	3.08	5.4	3.41	2.65	3.84	1.17	3.42	2.19	3.35	3.42	3.3	3.7	38.93
2017	5.19	2.37	6.82	4.79	4.83	4.12	3.11	4.77	3.24	6.52	2.26	2.33	50.35
2018	4.25	6.71	8.04	4.39	3.73	2.43	3.74	7.67	4.81	6.5	9.16	7.1	68.53
2019	4.74	3.62	3.37	6.95	6.19	3.95	2.62	2.15	1.18	6.84	2.05	8.44	52.1
2020	1.95	3.33	3.97	5.62	1.52	1.39	5.33	3.64	2.49	5.22	5.66	5.29	45.41
2021	1.98	4.94	3.99	3.98	6.17	1.26	6.19	5.24	5.27	7.46	0.94	1.85	49.27
2022	4.08	4.51	4.26	3.41	4.35	3.45	2.27	1.9	4.29	5.38	2.81	5.53	46.24
2023	6.02	1.94	4.72	4.01	1.45	1.96	6.98	4.91	6.17	1.92	2.08	8.24	50.4
2024	8.01	3.08	10.78	4.84	5.38	3.26	2.43	7.49	0.34	0.09	3.31	7.07	56.08
Average*	4.07	3.80	4.88	4.24	3.87	3.58	3.53	4.31	3.67	4.12	4.23	4.76	49.05
Maximum	13.01	6.71	11.98	11.09	10.47	12.85	8.62	11.98	10.47	22.14	9.16	8.66	68.66
Minimum	0.62	1.16	0.89	0.74	0.53	0.42	0.50	0.54	0.34	0.09	0.54	0.82	34.35

Notes: Precipitation is given in inches. Source: BNL Meteorological Services, Environmental & Climate Sciences Department * Long Term Average

Table 3.1-1
OU I South Boundary
Summary of Strontium-90 Results From Vertical Profile Wells,
October 2024 Through January 2025

2024 BNL Groundwater Status Report

Sample Interval (bls)	Geoprobe ID: / Sample Date: / Analysis:	Units	OU1-SR-90-GP-69 01/03/25	OU1-SR-90-GP-70 12/31/24-1/2/2025	OU1-SR-90-GP-71 12/30/24	OU1-SR-90-GP-72 12/20/24	OU1-SR-90-GP-73 12/19/24	OU1-SR-90-GP-74 12/17-18/2024
24'-28'	Strontium-90	pCi/L	<MDC	1.14 N2	2.17	<MDC	<MDC	<MDC
28'-32'	Strontium-90	pCi/L	0.704J N2	<MDC	16.9	<MDC	<MDC	1.46
32'-36'	Strontium-90	pCi/L	2.07	3.35	9.59	5.13	2.11	4.34
36'-40'	Strontium-90	pCi/L	4.36	11.5	66.3	8.14	5.35	23.6
40'-44'	Strontium-90	pCi/L	2.8	11.6	130	12.9	7.06	15.3
44'-48'	Strontium-90	pCi/L	<MDC	4.87	62.2	9.68	6.7	14.6
48'-52'	Strontium-90	pCi/L	0.762J N2	1.94	38.2	1.48	5.29	4.07
52'-56'	Strontium-90	pCi/L	2.49	<MDC	1.57	1.83	3.45	2.4
56'-60'	Strontium-90	pCi/L	0.896 N2	0.963 N2	<MDC	0.955	<MDC	1.26
60'-64'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
64-68'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
68'-72'	Strontium-90	pCi/L	1.06 N2	1.47	<MDC	0.759J N2	<MDC	<MDC

<MDC: denotes the analyte was not detected above the Minimum Detectable Concentration

J: denotes analyte detected above MDC but below the reporting limit, result estimated.

N2: Not usable based on the results that are not distinguishable from background. The reported activity value is less than or equal to the sum of the MDC and the uncertainty.

NS: No sample

Table 3.1-1
OU I South Boundary
Summary of Strontium-90 Results From Vertical Profile Wells,
October 2024 Through January 2025

2024 BNL Groundwater Status Report

Sample Interval (bls)	Geoprobe ID: / Sample Date: / Analysis:	Units	OU1-SR-90-GP-88 12/27-28/2024	OU1-SR-90-GP-89 12/24-26/2024	OU1-SR-90-GP-90 12/12-13/2024
26'-30'	Strontium-90	pCi/L	0.820 N2	<MDC	<MDC
30'-34'	Strontium-90	pCi/L	<MDC	1.3	<MDC
34'-38'	Strontium-90	pCi/L	<MDC	<MDC	<MDC
38'-42'	Strontium-90	pCi/L	1.54	2.15	<MDC
42'-46'	Strontium-90	pCi/L	0.678J N2	<MDC	0.946 N2
46'-50'	Strontium-90	pCi/L	1.45	1.17 N2	<MDC
50'-54'	Strontium-90	pCi/L	1.92	2.54	2.48
54'-58'	Strontium-90	pCi/L	3.61	7.62	<MDC
58'-62'	Strontium-90	pCi/L	2.26	2.71	<MDC
62'-66'	Strontium-90	pCi/L	3.26	1.08 N2	0.763J N2
66'-70'	Strontium-90	pCi/L	1.6	2.19	<MDC
70'-74'	Strontium-90	pCi/L	2.02	2.12	1.94
74'-78'	Strontium-90	pCi/L	1.08 N2	2.62	2.06
78'-82'	Strontium-90	pCi/L	0.849 N2	1.03 N2	0.677J N2
82'-86'	Strontium-90	pCi/L	2.04	<MDC	1.03 N2
86'-90'	Strontium-90	pCi/L	1.65	1.08 N2	<MDC
90'-94'	Strontium-90	pCi/L	<MDC	1.35	<MDC
94'-98'	Strontium-90	pCi/L	<MDC	<MDC	<MDC
98'-102'	Strontium-90	pCi/L	<MDC	<MDC	<MDC
102'-106'	Strontium-90	pCi/L	<MDC	<MDC	<MDC
106'-110'	Strontium-90	pCi/L	<MDC	<MDC	<MDC

<MDC: denotes the analyte was not detected above the Minimum Detectable Concentration

J: denotes analyte detected above MDC but below the reporting limit, result estimated.

N2: Not usable based on the results that are not distinguishable from background. The reported activity value is less than or equal to the sum of the MDC and the uncertainty.

NS: No sample

Table 3.1-1
OU I South Boundary
Summary of Strontium-90 Results From Vertical Profile Wells,
October 2024 Through January 2025

2024 BNL Groundwater Status Report

Sample Interval (bls)	Analysis:	Units	Geoprobe ID: OU1-SR-90-GP-97 Sample Date: 10/26-31/2024	OU1-SR-90-GP-98 11/12-18/2024	OU1-SR-90-GP-99 11/14-18/2024	OU1-SR-90-GP-100 11/18-22/2024
24'-28'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	1.05 N2
28'-32'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
32'-36'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
36'-40'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
40'-44'	Strontium-90	pCi/L	0.787J N2	1.41	<MDC	2.69
44'-48'	Strontium-90	pCi/L	1.55	1.75	<MDC	2.09
48'-52'	Strontium-90	pCi/L	2.5	2.95	3.63	3.15
52'-56'	Strontium-90	pCi/L	2.44	1.26	<MDC	1.41
56'-60'	Strontium-90	pCi/L	<MDC	1.24	<MDC	<MDC
60'-64'	Strontium-90	pCi/L	<MDC	<MDC	1.99	0.834 N2
64'-68'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
68'-72'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
72'-76'	Strontium-90	pCi/L	1.00 N2	<MDC	0.788J N2	1.36
76'-80'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
80'-84'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
84'-88'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
88'-92'	Strontium-90	pCi/L	0.799J N2	<MDC	<MDC	<MDC
92'-96'	Strontium-90	pCi/L	<MDC	<MDC	<MDC	<MDC
96'-100'	Strontium-90	pCi/L	<MDC	<MDC	0.835 N2	<MDC

<MDC: denotes the analyte was not detected above the Minimum Detectable Concentration

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N2: Not usable based on the results that are not distinguishable from background. The reported activity value is less than or equal to the sum of the MDC and the uncertainty.

NS: No sample

Table 3.1-1
OU I South Boundary
Summary of Strontium-90 Results From Vertical Profile Wells,
October 2024 Through January 2025

2024 BNL Groundwater Status Report

Sample Interval (bls)	Analysis:	Units	Geoprobe ID: OU1-SR-90-GP-101 Sample Date: 10/21 - 25/2024	Geoprobe ID: OU1-SR-90-GP-102 Sample Date: 12/3-6/2024
24'-28'	Strontium-90	pCi/L	<MDC	<MDC
28'-32'	Strontium-90	pCi/L	<MDC	<MDC
32'-36'	Strontium-90	pCi/L	<MDC	<MDC
36'-40'	Strontium-90	pCi/L	<MDC	<MDC
40'-44'	Strontium-90	pCi/L	<MDC	<MDC
44'-48'	Strontium-90	pCi/L	1.39	1.01 N2
48'-52'	Strontium-90	pCi/L	1.64	3.07
52'-56'	Strontium-90	pCi/L	4.82	1.24 N2
56'-60'	Strontium-90	pCi/L	2.45	0.981 N2
60'-64'	Strontium-90	pCi/L	2.64	<MDC
64'-68'	Strontium-90	pCi/L	0.906 N2	<MDC
68'-72'	Strontium-90	pCi/L	<MDC	<MDC
72'-76'	Strontium-90	pCi/L	<MDC	<MDC
76'-80'	Strontium-90	pCi/L	<MDC	<MDC
80'-84'	Strontium-90	pCi/L	<MDC	<MDC
84'-88'	Strontium-90	pCi/L	<MDC	<MDC
88'-92'	Strontium-90	pCi/L	1.35	<MDC
92'-96'	Strontium-90	pCi/L	1.3 N2	<MDC
96'-100'	Strontium-90	pCi/L	<MDC	<MDC

<MDC: denotes the analyte was not detected above the Minimum Detectable Concentration

J: denotes analyte detected above MDC but below the reporting limit, result estimated.

N2: Not usable based on the results that are not distinguishable from background. The reported activity value is less than or equal to the sum of the MDC and the uncertainty.

NS: No sample

Table 3.1-1
OU I South Boundary
Summary of Strontium-90 Results From Vertical Profile Wells,
October 2024 Through January 2025

	Geoprobe ID:		OU1-SR-90-GP-103
	Sample Date:		10/14 - 15/2024
Sample Interval (bls)	Analysis:	Units	
22'-26'	Strontium-90	pCi/L	<MDC
26'-30'	Strontium-90	pCi/L	<MDC
30'-34'	Strontium-90	pCi/L	<MDC
34'-38'	Strontium-90	pCi/L	<MDC
38'-42'	Strontium-90	pCi/L	<MDC
42'-46'	Strontium-90	pCi/L	0.980N2
46'-50'	Strontium-90	pCi/L	1.57
44'-48'	Strontium-90	pCi/L	3.91
50'-54'	Strontium-90	pCi/L	5.8
54'-58'	Strontium-90	pCi/L	4.01
58'-62'	Strontium-90	pCi/L	1.5
62'-66'	Strontium-90	pCi/L	<MDC
66'-70'	Strontium-90	pCi/L	<MDC
70'-74'	Strontium-90	pCi/L	<MDC
74'-78'	Strontium-90	pCi/L	1.45
78'-82'	Strontium-90	pCi/L	<MDC
82'-86'	Strontium-90	pCi/L	<MDC
86'-90'	Strontium-90	pCi/L	<MDC
90'-94'	Strontium-90	pCi/L	<MDC
94'-98'	Strontium-90	pCi/L	<MDC
98'-102'	Strontium-90	pCi/L	<MDC
102'-106'	Strontium-90	pCi/L	<MDC
106'-110'	Strontium-90	pCi/L	<MDC

<MDC: denotes the analyte was not detected above the Minimum Detectable Concentration

J: denotes analyte detected above MDC but below the reporting limit, result estimated.

N2: Not usable based on the results that are not distinguishable from background. The reported activity value is less than or equal to the sum of the MDC and the uncertainty.

NS: No sample

Table 3.2.1-3
OU III Building 96 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat BUILDING 96 SYSTEM - Groundwater Withdrawal and Reinjection (gpm)					
BNL Well No. Extraction Well Screen Int. Influent elevation (ft. msl) depth (feet) Effluent elevation (ft. msl) depth (feet)	095-151 RTW-1 +34 to+24 48 to 58 +57 to +47 * 25 to 35	095-153 RTW-2 +26 to +16 48 to 58 +49 to +39 25 to 35	095-155 RTW-3 +26 to +16 48 to 58 +49 to +39 25 to 35	095-157 RTW-4 +23 to +13 48 to 58 +46 to +36 25 to 35	BUILDING 96 Monthly Total
January	0	0	0	0	0
February	57	0	0	0	57
March	0	0	0	0	0
April	57	0	0	0	57
May	0	0	0	0	0
June	37	0	0	0	37
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Annual Average (gpm)	13	0	0	0	13

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

* - The upper screen on RTW-1 has not been used since 2008

Table 3.2.2-3
OU III Middle Road 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat MIDDLE ROAD SYSTEM - Groundwater Withdrawal (GPM)								
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	113-23 RW-1 -17 to -57 90 to 130	113-24 RW-2 -99 to -129 170 to 200	113-25 RW-3 -159 to -199 228 to 268	113-26 RW-4 -98 to -128 150 to 180	113-27 RW-5 -91 to -121 150 to 180	106-66 RW-6 -124 to -154 188 to 218	113-33 RW-7 202 to 222	MIDDLE ROAD Monthly Total
January	0	145	131	0	0	0	136	412
February	0	114	119	0	0	0	134	367
March	0	144	149	0	0	0	155	448
April	0	118	131	0	0	0	138	387
May	0	116	112	0	0	0	136	364
June	0	130	136	0	0	0	148	413
July	0	9	9	0	0	0	10	28
August	0	114	130	0	0	0	133	377
September	0	124	112	0	0	0	133	368
October	0	132	141	0	0	0	137	409
November	0	134	143	0	0	0	140	417
December	0	96	104	0	0	0	110	309
Annual Average (gpm)	0	115	118	0	0	0	126	358

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 3.2.3-3
OU III South Boundary 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat SOUTH BOUNDARY SYSTEM - Groundwater Withdrawal (gpm)								
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	121-017 EW-3 -79 to -119 150 to 190	121-016 EW-4 -88 to -108 -118 to -128 160 to 180 190 to 200	121-015 EW-5 -91 to -131 160 to 200	122-014 EW-6 -105 to -145 160 to 200	122-013 EW-7 -115 to -155 170 to 210	122-012 EW-8 -131 to -151 -171 to -191 190 to 210 230 to 250	121-46 EW-17 207 to 237	SOUTH BOUNDARY Monthly Total
January	0	0	0	0	0	0	57	57
February	0	0	0	0	0	0	87	87
March	0	0	0	0	0	0	83	83
April	0	0	0	0	0	0	141	141
May	0	0	0	0	0	0	132	132
June	0	0	0	0	0	0	93	93
July	0	0	0	0	0	0	11	11
August	0	0	0	0	0	0	87	87
September	0	0	0	0	0	0	133	133
October	0	0	0	0	0	0	150	150
November	0	0	0	0	0	0	151	151
December	0	0	0	0	0	0	109	109
Annual Average (gpm)	0	0	0	0	0	0	103	103

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

Table 3.2.4-2
OU III Western South Boundary 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat WESTERN SOUTH BOUNDARY System (gpm)							
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	126-12 WSB-1 -60 to -80 140 to 160	127-05 WSB-2 -80 to -100 150 to 170	111-17 WSB-3 -97.2 to -117.2 168 to 188	119-13 WSB-4 -91.7 to 111.7 170 to 190	130-12 WSB-5 -84.5 to -114.50 160 to 190	130-13 WSB-6 -120.6 to 140.6 196 to 216	Western South Boundary Monthly Total
January	65	0	39	0	47	1	153
February	0	0	0	89	0	90	179
March	60	0	62	0	46	0	168
April	1	0	0	0	0	98	99
May	131	0	98	0	90	0	319
June	0	0	0	101	1	103	205
July	9	0	7	0	7	0	23
August	1	0	1	81	1	93	176
September	4	0	80	0	94	0	178
October	0	0	0	101	0	98	200
November	0	0	99	0	101	0	200
December	0	0	0	74	0	77	151
Annual Average (gpm)	23	0	32	37	32	47	171

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

WSB-1 in stand-by beginning Septermber 2024

Table 3.2.5-1
OU III Industrial Park 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat OFFSITE INDUSTRIAL PARK SYSTEM - Groundwater Withdrawal (gpm)										
BNL Well No.	000-231	000-233	000-235	000-237	000-239	000-241	000-243	000-532	000-533	OFFSITE
Extraction Well	UVB-1	UVB-2	UVB-3	UVB-4	UVB-5	UVB-6	UVB-7	IP-EW-8	IP-EW-9	INDUSTRIAL
Screen Int.										PARK
Influent										
elevation	-137 to -157	-115.5 to -135.5	-123 to -143	-98 to -118	-109 to -129	-110 to -130	-123 to -143	-155 to -175	-148 to -168	
(ft. msl)										
depth (feet)	220 to 240	195 to 215	194 to 214	170 to 190	180 to 200	190 to 210	205 to 225	230 to 250	220 to 240	
Effluent										
elevation										
(ft. msl)	-82 to -102	-60.5 to -80.5	-68 to -88	-53 to -73	-54 to -74	-58 to -78	-68 to -88			Monthly
depth (feet)	165 to 185	140 to 160	139 to 159	125 to 145	125 to 145	140 to 160	150 to 170			Total
January	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0
Annual Average (gpm)	0	0	0	0	0	0	0	0	0	0

Notes:

System was in standby mode

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.2.7-2
OU III North Street East 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat NORTH STREET EAST- Groundwater Withdrawal (gpm)					
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	000-487 NSE-1 -71 to -101 161 to 191	000-488 NSE-2 -71 to -101 152 to 182	000-561 NSE-EDB-EW-3 -111 to -131 195 to 215	000-562 NSE-EDB-EW-4 -112 to -132 182 to 202	NORTH STREET EAST Monthly Total
January	0	0	106	110	216
February	0	0	109	113	222
March	0	0	113	120	233
April	0	0	103	110	213
May	0	0	0	0	0
June	0	0	117	36	153
July	0	0	0	0	0
August	0	0	102	112	213
September	0	0	0	0	0
October	0	0	110	117	227
November	0	0	0	0	0
December	0	0	115	136	251
Annual Average (gpm)	0	0	73	71	144

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.2.8-2
OU III LIPA/Airport 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat LIPA SYSTEM - Groundwater Withdrawal (gpm)					
Extraction Well	000-453 EW-1L	000-455 EW-2L	000-457 EW-3L	000-461 EW-4L	LIPA
Screen Int.					
elevation (ft. msl)	-111 to -131	-115 to -135	-104 to -124	-192 to -212	Monthly
depth (feet)	217 to 237	224 to 244	216 to 236	304 to 324	Total
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
Annual Average (gpm)	0	0	0	0	0

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.2.8-2
OU III LIPA/Airport 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat AIRPORT SYSTEM - Groundwater Withdrawal (gpm)							
BNL Well No.	800-109	800-110	800-111	800-112	800-113	800-132	Airport
Extraction Well	RTW-1A	RTW-2A	RTW-3A	RTW-4A	RTW-5A	RW-6A	
Screen Int.							
Influent							
elevation (ft. msl)	-108 to -128	-109 to -129	-130 to -150	-184 to -204	-133 to -153		Monthly
depth (feet)	188 to 208	188 to 208	210 to 230	268 to 288	220 to 240	165 to 185	Total
Effluent							
elevation (ft. msl)	+25 to -15	+24 to -16	+25 to -15	+24 to -16	+22 to -18		Monthly
depth (feet)	55 to 95	55 to 95	55 to 95	60 to 100	65 to 105		Total
January	100	0	0	82	0	151	333
February	100	0	0	84	0	151	334
March	107	0	0	156	0	160	424
April	99	0	0	145	0	148	392
May	99	0	0	157	0	149	405
June	105	0	0	158	0	158	421
July	126	0	0	179	0	189	494
August	99	0	0	145	0	149	393
September	94	0	0	151	0	141	386
October	98	0	0	159	0	147	405
November	101	0	0	162	0	152	414
December	112	0	0	177	0	168	458
Annual Average (gpm)	104	0	0	147	0	155	405

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

RTW-1A, RTW-6A and RTW-2A flow estimated. All three wells share a common flow meter, individial well pumpage estimated of actual flow meter reading.

gpm - gallons per minute

Table 3.2.11-2
OU III BGRR Sr-90 Treatment System 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat										
BGRR/WCF Strontium-90 - Groundwater Withdrawal (gpm)										
BNL Well No.	065-368	065-369	075-676	075-677	075-678	065-403	075-702	075-703	075-704	BGRR
Extraction Well	SR-1	SR-2	SR-3	SR-4	SR-5	SR-6	SR-7	SR-8	SR-9	
Screen Int.										
elevation (ft. msl)	51.5 to 31.5	51.5 to 31.5	50 to 30	46 to 6	46 to 6	38.7 to 18.7	13.2 to -6.8	15.1 to -4.9	24.6 to 4.6	Monthly
depth (feet)	33-53	33.5-53.5	51-71	35-75	35-75	85-105	82-102	77-97	67-87	Total
January	6.3	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
February	6.3	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
March	5.8	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
April	5.8	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
May	5.8	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
June	5.6	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7
July	5.8	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
August	5.8	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
September	5.8	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
October	5.8	5.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1
November	5.8	5.4	7.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1
December	5.8	5.4	6.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1
Annual Average (gpm)	5.8	5.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	12.7

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.2.12-2
OU III Chemical/Animal Holes Sr-90 Remediation System 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat Chem/Animal Holes Strontium-90 Remediation System (gpm)				
BNL Well No. Extraction Well Screen Int. elevation (ft. msl) depth (feet)	106-92 SR-90 EW-1 +40.5 to +25.5 23.5 to 38.5	106-123 SR-90 EW-2 +32.6 to +22.6 35 to 45	106-124 SR-90 EW-3 +27.6 to +17.6 35 to 45	Chemical/Animal Holes Monthly Total
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Annual Average (gpm)	0	0	0	0

Notes: System in stand-by mode 2024

Differences in averages due to rounding

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.4-2
OU VI EDB Pump & Treat System 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit VI - Pump and Treat EDB SYSTEM- Groundwater Withdrawal (gpm)					
BNL Well No.	000-503	000-504	000-578	000-579	OU VI EDB
Extraction Well	EW-1E	EW-2E	EW-3E	EW-4E	
Screen Int.					
elevation (ft. msl)	-41 to -61	-45 to -65	-100 to -120	-100 to -120	Monthly
depth (feet)	115 to 135	115 to 135	174 to 194	170 to 190	Total
January	0	0	8	8	17
February	0	0	147	129	276
March	0	0	159	156	315
April	0	0	156	158	314
May	0	0	148	151	299
June	0	0	122	59	181
July	0	0	145	98	243
August	0	0	147	150	297
September	0	0	147	152	299
October	0	0	122	128	250
November	0	0	143	152	295
December	0	0	152	153	305
Annual Average (gpm)	0	0	133	125	258

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.5.1-2

OU X Current Firehouse Treatment System 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat Current Firehouse - Groundwater Withdrawal (gpm)										
BNL Well No.	073-34	073-35	083-45	083-46	084-102	102-32	102-33	102-34	102-35	CFH
Extraction Well	CF-RW-A	CF-RW-B	CF-RW-C	CF-RW-D	CF-RW-E	CF-RW-F	CF-RW-G	CF-RW-H	CF-RW-I	
Screen Int.										
elevation (ft. msl)	38 to 18	30.9 to 10.9	-17.5 to -37.5	31 to 11.4	-31.2 to -51.2	-27.9 to -47.9	7.1 to -12.9	6.4 to -13.6	21.8 to 1.8	Monthly
depth (feet)	48-68	54-74	117-137	70-90	132-152	121-141	88-108	98-118	70-90	Total
January	58	57	0	44	90	0	56	62	106	474
February	55	55	0	45	94	0	54	60	105	467
March	34	55	0	60	67	0	54	62	94	426
April	63	50	0	56	29	0	51	55	78	382
May	61	51	3	59	75	4	52	46	81	432
June	56	47	1	57	74	1	43	58	77	413
July	56	48	1	57	79	1	45	69	77	433
August	52	48	0	52	85	1	46	64	80	428
September	52	55	0	34	98	0	53	44	92	428
October	50	53	1	32	95	1	50	28	74	383
November	53	56	0	18	100	0	54	9	42	332
December	44	47	1	16	80	1	44	53	90	375
Annual Average (gpm)	53	52	1	44	80	1	50	51	83	415

Notes:

Source: Groundwater Protection Group Field Engineer

ft. msl = Elevation in feet referenced to mean sea level.

Elevations rounded to nearest foot

gpm - gallons per minute

Table 3.5.1-3

OU X PFAS Soil and Groundwater Characterization
Current Firehouse Source Area - Test Borings 1-4
Sampled: July and August 2024
Partial Results

2024 BNL Groundwater Status Report

Location ID	Depth (BLS)	Sample Date	TOC	PFOS	PFOA	PFHxS
Soil Samples			**mg/kg**	**ng/g (ppb)**		
OU10-CFH-SS-TB1	0-6 in	07/15/24	NA	**14**	**1.1J**	2.7
OU10-CFH-SS-TB2	0-6 in	07/15/24	NA	**21**	**0.97J**	2.7
OU10-CFH-SS-TB3	0-6 in	07/15/24	NA	**8.2**	**0.94J**	2.7
OU10-CFH-SS-TB4	0-6 in	07/15/24	NA	**26**	**2.1**	3
OU10-CFH-SS-TB2	0-2.5 ft	08/08/24	**7,200**	**19**	**0.91**	2
OU10-CFH-SS-TB2	2.5-5.0 ft	08/08/24	4,000U	**140**	3.3U	3.1J
OU10-CFH-SS-TB2	5.0-7.5 ft	08/08/24	4,000U	**230**	2.4U	1.4J
OU10-CFH-SS-TB2	7.5-10 ft	08/08/24	4,000U	**200**	**2J**	6.2
OU10-CFH-SS-TB2	10-15 ft	08/08/24	4,000U	**15**	0.17J	0.67
" " BD	" "	" "	4,000U	**15**	0.18J	0.64
OU10-CFH-SS-TB2	15-20 ft	08/08/24	4,000U	**24**	0.17J	0.56
OU10-CFH-SS-TB2	20-25 ft	08/08/24	4,000U	**31**	0.2	1.1
OU10-CFH-SS-TB2	25-30 ft	08/08/24	4,000U	**34**	0.25	0.99
OU10-CFH-SS-TB2	30-35 ft	08/08/24	4,000U	**22**	0.28	0.84
OU10-CFH-SS-TB2	35-37.5 ft	08/08/24	4,000U	**11**	0.11J	0.35
OU10-CFH-SS-TB2	37.5-40 ft	08/08/24	4,000U	**88**	3.6U	2.5J
OU10-CFH-SS-TB4	0-2.5 ft	08/01/24	**10,000**	**150**	**5.4**	3.1J
OU10-CFH-SS-TB4	2.5-5.0 ft	08/01/24	4,000U	**98**	4.0U	2.6J
OU10-CFH-SS-TB4	5.0-7.5 ft	08/01/24	4,000U	**210**	4.0U	2.2J
OU10-CFH-SS-TB4	7.5-10 ft	08/01/24	4,000U	4.0U	4.0U	4.0U
OU10-CFH-SS-TB4	10-15 ft	08/01/24	4,000U	3.6U	3.6U	3.6U
" " BD	" "	" "	4,000U	3.3U	3.3U	3.3U
OU10-CFH-SS-TB4	15-20 ft	08/01/24	4,000U	**5.7**	4.0U	1.9J
OU10-CFH-SS-TB4	20-25 ft	08/01/24	4,000U	3.3U	3.3U	2.3J
OU10-CFH-SS-TB4	25-30 ft	08/01/24	4,000U	3.3U	3.3U	7.5
OU10-CFH-SS-TB4	30-35 ft	08/01/24	4,000U	**9.1**	**2.8J**	23
OU10-CFH-SS-TB4	35-37.5 ft	08/01/24	4,000U	3.3U	**2.7J**	34
OU10-CFH-SS-TB4	37.5-40 ft	08/01/24	4,000U	**5.8**	3.1U	4.6
NYS Soil Guidance Value for GW Protection			**--**	**1.0**	**0.8**	--
Groundwater Samples				**ng/L (ppt)**		
OU10-CFH-GW-TB2	40-44 ft	08/08/24	--	**16,000**	**100J**	**150J**
OU10-CFH-GW-TB4	40-44 ft	08/02/24	--	**8,100**	**1,200**	**5,500**
Federal MCLs			--	**4**	**4**	**10**

U: Analyte not detected
J: Estimated concentration
TOC: Total Organic Carbon
TB: Test Boring
SS: Soil sample
GW: Groundwater
BD: Blind Duplicate Sample
NA: Not analyzed for this chemical
ng/g: Nanogram per gram
mg/kg: Milligram per kilogram
ng/L: nanogram per liter
ppt: part per trillion
ppb: part per billion

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-194
Installed: May 17-20, 2024

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
60-64	37.1U	**48.3**	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
70-74	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
80-84	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
90-94	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
100-104	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
110-114	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
120-124	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
130-134	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
140-144	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-195
Installed: May 24, 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
55-59	**626**	66.7U	59.1U	267U	63.5U	66.7U	232	66.7U	66.7U	66.7U	62.7U	66.7U	253U
65-69	**134**	66.7U	59.1	267U	63.5U	66.7U	60.9U	66.7U	66.7U	66.7U	62.7U	66.7U	253U
75-79	61.9U	66.7U	59.1U	267U	63.5U	66.7U	60.9U	66.7U	66.7U	66.7U	62.7U	66.7U	253U
85-89	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
95-99	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
105-109	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
115-119	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
125-129	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-196
Installed: May 29-June 3, 2024

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
60-64	**1060**	40U	35.5U	160U	38.1U	40U	291	40U	40U	40U	37.6U	40U	152U
70-74	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
80-84	37.1U	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
90-94	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
100-104	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
110-114	61.9U	66.7U	59.1U	267U	63.5U	66.7U	60.9U	66.7U	66.7U	66.7U	62.7U	66.7U	380U
120-124	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
130-134	61.9U	66.7U	59.1U	267U	63.5U	66.7U	60.9U	66.7U	66.7U	66.7U	62.7U	66.7U	253U
""BD	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
140-144	186U	200U	177U	800U	200U	200U	183U	200U	200U	200U	188U	200U	760U
150-154	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-197
Installed: June 13, 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
70-74	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
80-84	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
90-94	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
100-104	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
110-114	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
120-124	**364**	100U	88.7U	400U	95.3U	100U	203	100U	100U	100U	94.1U	100U	380U
130-134	**202**	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
140-144	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-198
Installed: June 21-24, 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
60-64	928U	1000U	887U	4000U	953U	1000U	914U	1000U	1000U	1000U	941U	1000U	3800U
70-74	371U	400U	355U	1600U	381U	400U	366U	400U	400U	400U	376U	400U	1520U
80-84	371U	400U	355U	1600U	381U	400U	366U	400U	400U	400U	376U	400U	1520U
90-94	371U	400U	355U	1600U	381U	400U	366U	400U	400U	400U	376U	400U	1520U
100-104	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
110-114	186U	200U	177U	800U	191U	200U	183U	40U	40U	40U	37.6U	40U	253U
""BD	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
120-124	**41.8**	40U	35.5U	160U	38.1U	40U	36.6U	40U	40U	40U	37.6U	40U	152U
130-134	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
140-144	928U	1000U	887U	4000U	953U	1000U	914U	1000U	1000U	1000U	941U	1000U	3800U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-199
Installed: June 26-27, 2024

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
60-64	928U	1000U	887U	4000U	953U	1000U	914U	1000U	1000U	1000U	941U	1000U	3800U
70-74	371U	400U	355U	1600U	381U	400U	366U	400U	400U	400U	376U	400U	1520U
80-84	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
90-94	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
100-104	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
110-114	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
120-124	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
130-134	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
140-144	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-200
Installed: June 29, 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
70-74	**1360**	40U	35.5U	160U	38.1U	40U	365	92.2	40U	40U	37.6U	49.9	152U
80-84	**1390**	66.7U	59.1U	267U	63.5U	66.7U	326	87.1	66.7U	66.7U	62.7U	66.7U	253U
90-94	**469**	66.7U	59.1U	267U	63.5U	66.7U	64.6	66.7U	66.7U	66.7U	62.7U	66.7U	253U
100-104	**104**	50U	44.4U	200U	47.7U	50U	45.7U	50U	50U	50U	47.1U	50U	190U
""BD	**78.2**	25U	22.2U	100U	23.8U	25U	22.9U	25U	25U	25U	23.5U	25U	95U
110-114	**90.3**	50U	44.4U	200U	47.7U	50U	45.7U	50U	50U	50U	47.1U	50U	190U
120-124	46.4U	50U	44.4U	200U	47.7U	50U	45.7U	50U	50U	50U	47.1U	50U	190U
130-134	61.9U	66.7U	59.1U	267U	63.5U	66.7U	60.9U	66.7U	66.7U	66.7U	62.7U	66.7U	253U
140-144	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-4

OU X PFAS Groundwater Characterization
Current Firehouse Geoprobe Vertical Profile Location PFC-GP-201
Installed: July 1-2, 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
70-74	186U	200U	177U	800U	191U	200U	183U	200U	200U	200U	188U	200U	760U
80-84	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
90-94	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
100-104	**95.6**	100U	88.7U	400U	95.3U	100U	220	100U	100U	100U	94.1U	100U	380U
110-114	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
120-124	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
130-134	92.8U	100U	88.7U	400U	100U	100U	91.4U	100U	100U	100U	94.1U	100U	380U
140-144	92.8U	100U	88.7U	400U	95.3U	100U	91.4U	100U	100U	100U	94.1U	100U	380U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-011
Installed: October 3- 8, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
75-80	0.20U	**5.6**	2.2	1.4U	0.49J	1.4U	0.66J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
85-90	0.20U	**21**	**8.7**	2	2.9	1.4U	3	1.9	3	1.4U	1.4U	1.4U	4.2	2.8U
95-100	0.20U	1.8	3.4	1.4U	2.4J	1.4U	0.93J	1.4U	1.0J	1.4U	1.4U	1.4U	1.0J	2.8U
"" BD	0.20U	1.2J	3.6	1.4U	2.4J	1.4U	0.98J	0.87J	1.2J	1.4U	1.4U	1.4U	1.0J	2.9U
105-110	0.20U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
115-120	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
125-130	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
135-140	0.20U	1.8U	1.8U	1.8U	3.6U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
145-150	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
155-160	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
165-170	0.27	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
175-180	0.31	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
185-190	0.34	1.6U	1.6U*	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
195-200	0.26	1.6U	2.9U*	1.6U	3.3U	1.6U	1.6U*	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
205-210	0.21U	1.7U	1.7U*	1.7U	20U**	1.7U	1.6U*	1.7U	1.7U	1.7U	1.7U	1.7U	9.9U**	3.3U
FB-1	0.20U	1.6U	0.52J	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
FB-2	0.20U	1.7U	1.7U	1.7U	3.5U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.5U
FB-3	0.20U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
FB-4	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
EB-1	0.21U	1.7U	0.83J	1.7U	3.3U	1.7U	0.84J	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qulaified based on Data Usability Summary Report.
**= elevated reporting limit due to re-extract from Lab QC issues of sample
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-012
Installed: September 26-October 2, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
55-60	0.20U	2.4	1.8	1.4U	2.9U	1.4U	0.51J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
65-70	0.20U	**12**	**9.6**	1.5J	1.4J	1.6U	1.9	2.5	1.3J	1.6U	1.6U	1.6U	0.85J	3.2U
75-80	0.20U	**6.3**	5.3	8.5	1.4J	1.5U	1.6	2.2	1.6	1.5U	1.5U	1.5U	0.98J	3.0U
85-90	0.20U	1.6J	2.9	1.5J	1.4J	1.7U	1.0J	1.4J	1.3J	1.7U	1.7U	1.7U	0.68J	3.3U
95-100	0.20U	1.6U	0.52J	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
105-110	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
115-120	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
"" BD	0.20U	1.4U	0.43J	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
125-130	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
135-140	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
145-150	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
155-160	0.20U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
165-170	0.20U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
175-180	0.10J	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
185-190	0.16J	1.9U	0.57J	1.9U	3.8U	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	3.8U
205-210	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
215-220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FB-1	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
FB-2	0.20U	1.5U	1.5U	1.5U	2.9U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
FB-3	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-4	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
FB-5	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
EB-1	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qulaified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-013
Installed: September 17-20, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
65-70	0.20U	1.4U	2.8	1.4U	0.26J	1.4U	0.48J	1.4U	0.71J	1.4U	1.4U	1.4U	1.4U	2.9U
75-80	0.20U	1.5U	0.70J	1.5U	3.0U	1.5U	1.5U	1.2J	0.41J	1.5U	1.5U	1.5U	1.5U	3.0U
85-90	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
95-100	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
105-110	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
115-120	0.20U	1.4U	1.4U	1.4U	2.7U	1.4U	1.4U	2.6	1.4U	1.4U	1.4U	1.4U	1.4U	2.7U
"" BD	0.20U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.5	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
125-130	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.4J	1.5J	1.5U	1.5U	1.5U	1.5U	3.0U
135-140	0.20U	1.4U	1.4U	1.5U	3.0U	1.5U	1.5U	1.4J	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
145-150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
155-160	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
165-170	0.20U*	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
175-180	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
185-190	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
205-210	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
215-220	0.20U	1.4U	1.4U	1.4U	0.25J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
FB-1	0.20U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
FB-2	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	2.8U
FB-3	0.20U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
FB-4	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
EB-1	0.10J	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-014
Installed: September 11-16, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
45-50	0.20U	1.8BU*	1.5U	1.5U	2.9U	1.5U	1.5U	0.73J	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
55-60	0.20U	1.5U	0.88J	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
65-70	0.20U	3.0BUJ*	0.91J	1.5U	2.9U	1.5U	1.5U	4.3	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
75-80	0.20U	4.8BUJ*	0.79J	1.5U	2.9U	1.5U	1.5U	11	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
85-90	0.20U	**3.8**	1.4U	1.4U	2.8U	1.4U	1.4U	6.9	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
95-100	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	2.6	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
105-110	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
115-120	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.8	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
125-130	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
135-140	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
145-150	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	0.81J	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
155-160	0.20U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	0.77J	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
165-170	0.20U	1.4U	1.4U	1.9	2.8U	1.4U	1.4U	4.8	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
"" BD	0.20U	1.4U	1.4U	1.7	2.8U	1.4U	1.4U	5.2	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
175-180	0.20U	1.4U	0.65J	3.6	0.75J	1.4U	1.4U	19	1.4U	1.4U	1.4U	3.3	1.4U	2.8U
185-190	0.20U	**10**	3.1	4.7	1.6J	1.5U	1.5U	49	2.4	1.5U	1.5U	6	1.1J	2.9U
195-200	0.20U	**47**	3.2	4	0.83J	1.5U	1.5U	48	3.5	1.5U	0.60J	6.4	1.6	3.0U
205-210	0.20U	1.2J	1.5U	1.5U	2.9U	1.5U	1.5U	1.7	1.5U	1.5U	0.51J	1.5U	1.5U	2.9U
FB-1	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
FB-2	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
FB-3	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
FB-4	0.20U	1.8B	1.5U	1.5U	2.9U	1.5U	1.5U	0.73J	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
EB-1	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected. U*= Qualified based in Data Useabiulity Report.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
B: Blank contamination. The analyte was detected above one-half the reporting limit in the associated blank.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-015
Installed: August 22-26, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
45-50	0.20U	**9.3**	2.9	1.4	1.8J	1.7U	0.55J	2.1	1.1J	1.7U	1.7U	1.7U	1.7U	3.3U
55-60	0.20U	**110**	**7.5**	23	3.4	1.6U	1.9	82	7.2	1.5J	1.6U	11	2.1	3.1U
65-70	0.20U	**48**	5.3	24	2.8J	1.6U	1.5J	21	8.2	1.1J	1.6U	2.9	1.9	3.2U
75-80	0.20U	**160**	**9.1**	21	3.1	1.5U	2.2	77	10	1.1J	1.5U	9.3	4.4	3.1U
85-90	0.20U	**190**	**7.6**	19	3.2	4	2.2	92	9.2	1.1J	1.6U	12	4.3	3.1U
95-100	0.20U	**180**	**9.2**	20	3.2	3.4	2.3	86	9.5	1.5U	1.5U	9.8	3.9	2.9U
105-110	0.13J	**290**	**14**	23	4.3	7.4	3.3	150	16	1.5	1.4U	20	7.9	2.8U
115-120	**0.40**	**52**	4.7	7.2	1.4J	1.4U	1.1J	35	6.4	1.4U	1.4U	6	1.9	2.9U
125-130	0.24	**2.9**	0.78J	3.2	3.0U	1.5U	1.5U	8.9	2.3	1.5U	1.5U	2.5	0.72J	3.0U
"" BD	0.23	**2.9**	0.58J	3.5	2.9U	1.4U	0.36J	10	1.4U	1.4U	1.4U	2.3	1.4U	2.9U
135-140	**0.47**	**2.5**	0.99J	3.8	2.9U	1.4U	1.4U	6.2	2.5	1.4U	1.4U	2.1	0.82J	2.9U
145-150	0.20U	1.7U	1.7U	2	3.4U	1.7U	1.7U	3.9	1.7U	1.7U	1.7U	1.4J	1.7U	3.4U
155-160	0.15J	2.1	1.2J	1.9	3.8U	1.9U	1.9U	6.8	1.5J	1.9U	1.9U	1.1J	1.9U	3.8U
165-170	0.13J	**8.4**	2.7	4.8	3.3U	1.6U	0.81J	39	4.3	1.6U	1.6U	7.1	1.3J	3.3U
175-180	0.15J	**24**	6.3	10	1.7J	2.4	2	96	8.7	1.7U	1.7U	14	2.8	3.4U
185-190	**0.42**	**55**	6	7.4	2.7J	3.4	1.7	88	9.1	1.6U	1.6U	12	3.3	3.2U
195-200	**0.8**	**4.3**	1.4U	0.68J	2.8U	1.4U	1.4U	6.5	0.87J	1.4U	1.4U	0.89J	1.4U	2.8U
205-210	0.13J	1.5U	1.5U	1.5U	0.32J	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
FB-1	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-2	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
FB-3	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
EB-1	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-016
Installed: August 29-30, September 3-4, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
45-50	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
55-60	0.20U	**10**	2.8	1.7	1.5J	1.4U	1.4U	12	1.4U	1.4U	1.4U	1.6	1.4U	2.8U
65-70	0.33	**18**	3.9	3.6	2.2J	1.4U	1.2J	21	1.4	1.4U	1.4U	3	0.63J	2.8U
75-80	0.23	**19**	4.1	2.5	2.2J	1.7U	1.2J	19	4	1.7U	1.7U	2.5	1.7U	3.4U
85-90	0.30	**18**	4.6	3.3	3.2	1.5U	1.4J	16	3.2	1.5U	1.5U	2.1	1.3J	3.0U
95-100	**0.37**	**19**	5.6	3.9	2.9	1.4U	1.2J	22	2.5	0.56J	1.4U	3.3	1.4U	2.8U
105-110	**0.41**	**16**	5.7	3.9	3.1	1.4U	1.1J	21	3.9	0.56J	1.4U	3.1	1.2J	2.9U
115-120	**0.44**	**15**	3.5	4.7	3.1J	1.9U	1.9U	23	2.2	1.9U	1.9U	3.1	0.87J	3.8U
125-130	0.28	**14**	3	5.3	3.2	1.4U	0.70J	21	3	1.4U	1.4U	3.3	0.87J	2.8U
135-140	0.27	**22**	2.9	4.8	2.2J	2.1U	1.1J	23	2.1U	0.76J	2.1U	3	1.3J	4.3U
145-150	**0.48**	**66**	**7.6**	9.9	3	1.4U	1.8	49	10	1.4U	1.4U	10	2.1	2.9
155-160	**0.64**	**160**	**18**	16	5	1.8U	3.6	77	24	1.8U	1.8U	17	4.2	3.6U
165-170	**3**	**160**	**13**	23	3.6	1.7U	2.9	92	18	1.7U	1.7U	21	3.3	3.4U
"" BD	**2.9**	**160**	**12**	23	3.2	1.6U	3	93	18	1.6U	1.6U	20	3.3	3.2U
175-180	**1.5**	**150**	**19**	31	4.9	8.3	4.5	130	24	1.6U	1.6U	29	3.2	3.3U
185-190	**2.9**	**29**	3.6	7	2.0J	1.6U	0.90J	36	5.3	1.6U	1.6U	5.5	0.56J	3.2U
195-200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205-210	0.66	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
215-220	0.64	1.6U	0.59J	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
FB-1	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-2	0.20U	1.4U	1.4U	1.4U	2.8U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
FB-3	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-4	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
EB-1	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-017
Installed: August 14-19, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
45-50	0.20U	1.5U	1.5U	1.5U	0.70J	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
55-60	0.20U	1.4U	1.4U	1.4U	1.4J	1.4U	1.4U	1.8	1.4U	1.4U	0.36J	1.4U	1.4U	2.9U
65-70	0.20U	**4.4**	1.3J	1.4U	2.8	1.4U	1.4U	2.4	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
75-80	0.20U	**7.4**	1.3J	1.5U	2.7J	1.5U	1.5U	5.4	1.5U	1.5U	1.0J	1.5U	1.5U	3.0U
85-90	0.12J	**15**	4.3	3.8	4	1.4U	0.84J	10	1.9	1.4U	1.4U	1.4U	1.4	2.7U
95-100	0.12J	**15**	4.4	4.8	3.3J	1.7U	1.7U	9.9	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
105-110	0.20	**18**	6.5	2.8	3.4	1.7U	0.95J	11	1.7U	1.7U	1.7U	1.7U	1.4J	3.4U
115-120	**0.69**	**14**	5	2.4	3.0J	1.7U	1.1J	15	1.7U	1.7U	1.7U	2	1.7U	3.4U
125-130	**0.59**	**15**	4.9	2.7	3.3J	1.9U	1.3J	17	1.9U	1.9U	1.9U	1.9	1.9U	3.7U
135-140	**0.40**	**12**	5.9	2.7	3.9	1.7U	1.8	13	1.7U	1.7U	1.7U	1.8	0.78J	3.4U
"" BD	**0.40**	**15**	4.6	2.5	4.1	1.8U	2.1	12	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
145-150	**0.86**	**14**	6.2	2.8	3.9	1.8U	1.5J	15	1.8U	1.8U	1.8U	1.8	1.8U	3.6U
155-160	**0.86**	**14**	5.9	3.6	3.7	1.7U	1.7U	17	1.7U	1.7U	0.94J	2.8	1.7U	3.4U
165-170	**1.6**	**5.2**	2	1.6J	2.1J	1.7U	1.7U	9.9	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
175-180	**2.7**	**4.6**	3.3	1.8U	3.2J	1.8U	1.8U	5.8	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
185-190	**2.8**	**5.3**	2.4	1.7U	2.3J	1.7U	1.7U	12	1.7U	1.7U	1.7U	1.7U	1.7U	3.5U
195-200	**9.4**	1.8U	1.8U	1.8U	7.5	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
205-210	**1.7**	1.7U	1.7U	1.7U	1.2J	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
215-220	**0.78**	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
FB-1	0.20U	1.8U	1.8U	1.8U	3.6U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
FB-2	0.20U	1.8U	1.8U	1.8U	3.5U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.5U
FB-3	0.20U	1.8U	1.8U	1.8U	3.6U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
FB-4	0.20U	1.5U	1.5U	1.5U	2.9U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
EB-1	0.20U	1.8U	1.8U	1.8U	3.5U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.5U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-020
Installed: July 25-29, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
55-60	0.20U	**2.9**	0.69J	1.4U	2.8U	1.4U	1.4U	2.1	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
65-70	0.20U	**2.7**	0.46J	1.5U	0.41J	1.5U	1.5U	2	1.5U	1.5U	1.5U	1.5U	1.5U	2.8U
75-80	0.20U	**13**	1.5	1.9	2.9U	1.4U	1.4U	12	1.4U	1.4U	1.4U	1.7	1.4U	2.9U
85-90	0.19J	**340**	**24**	24	5.2	8.1	3.9	200	21	1.5U	1.5U	32	5.7	3.1U
95-100	**0.36**	**430**	**31**	32	5.5	9.7	3.7	240	34	1.5U	0.65J	37	7.8	2.9U
105-110	**0.45**	**710D**	**47**	35	7.5	16	5.3	360	45	1.5U	0.50J	46	10	2.9U
115-120	**0.48**	**490**	**62**	44	8.1	15	6.4	360	49	2.1	1.5U	50	13	3.1U
125-130	**1**	**170**	**23**	26	6.4	1.6U	4.1	140	31	4.5	1.6U	30	6.6	3.1U
135-140	**0.35**	**130**	**23**	20	4.4	1.5U	3.1	150	20	1.9	1.1J	28	5	3.0U
" " BD	0.33	**130**	**22**	21	4.7	1.5U	3.1	150	19	1.5U	1.1J	25	5.1	3.0U
145-150	**0.52**	**100**	**11**	19	4	1.4U	2.3	100	15	3.9	1.4U	19	3.2	2.9U
155-160	**4**	**120**	**8.1**	1.4U	4.5	1.4U	1.8	10	13	1.7	1.4U	1.4U	8.1	2.9U
165-170	**5**	**240**	**7.7**	1.4U	3.5	1.4U	1.0J	10	4.6	8	1.4U	1.4U	2.4	2.8U
175-180	**10**	**56**	1.7	1.5U	1.6J	1.5U	1.5U	3	1.5U	5.5	1.5U	1.5U	1.5U	3.0U
185-190	**4.6**	4.0U	4.0U	4.0U	1.6J	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	8.0U
195-200	**2.5**	4.0U	4.0U	4.0U	1.2J	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	8.0U
205-210	**2.5**	4.0U	4.0U	4.0U	7.9U	4.0U	4.0U	4.0U	4.0U	4.0U	1.3J	4.0U	4.0U	7.9U
215-220	**2.9**	4.0U	4.0U	4.0U	2.5J	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	4.0U	7.9U
FB-1	0.20U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
FB-2	0.20U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
FB-3	0.20U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
EB-1	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-021
Installed: September 5-10, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
55-60	0.20U	1.7U	1.7U	1.7U	3.5U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.5U
65-70	0.20U	2.3	0.62J	1.9U	3.7U	1.9U	1.9U	2	1.9U	1.9U	1.9U	1.9U	1.9U	3.7U
75-80	0.20U	**4.1**	1.9U	1.9U	3.9U	1.9U	1.9U	4.6	1.9U	1.9U	1.9U	1.9U	1.9U	3.9U
85-90	0.13J	**5.1**	1.2J	2	1.5J	1.8U	1.8U	12	1.8U	1.8U	1.8U	1.8U	1.8U	3.5U
95-100	0.22	**8.6**	3.2	2.7	2.9J	1.8U	1.8U	15	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
105-110	0.15J	**8.1**	2.9	3.2	2.6J	1.8U	1.8U	15	1.8U	1.8U	1.8U	2.3U	1.8U	3.5U
115-120	0.12J	**4.9**	1.8	2.7	1.9J	1.8U	1.8U	14	1.8U	1.8U	1.8U	1.8U	1.8U	3.5U
125-130	0.20U	**4.6**	2.2	1.8U	1.7J	1.8U	1.8U	5.8	1.8U	1.8U	1.8U	1.8U	1.8U	3.5U
135-140	0.26	**26**	2.5	6.1	3.1J	1.7U	1.7U	29	3.1	1.7U	1.7U	5.5	1.7U	3.4U
145-150	**1.7**	1.9U	1.9U	1.4J	4.7	1.9U	1.9U	6.7	1.9U	1.9U	1.9U	1.9U	1.9U	3.7U
"" BD	**1.7**	1.8U	0.60J	1.8U	3.6	1.8U	1.8U	7.1	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
155-160	**5.3**	2.1U	0.60J	2.1U	9.6	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	2.1U	4.1U
165-170	**6.8**	2.0U	2.0U	2.0U	10	2.0U	2.0U	2.7	2.0U	2.0U	2.0U	2.0U	2.0U	4.0U
175-180	**8.1**	1.4U	0.52J	1.4U	7.4	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
185-190	**7.5**	1.4U	1.4U	1.4U	3.5	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
195-200	**12**	1.4U	1.4U	1.4U	9.4	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
205-210	**4.7**	1.5U	1.5U	1.5U	2.7J	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
215-220	**1.5**	1.4U	0.69J	1.4U	0.93J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
FB-1	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
FB-2	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
FB-3	0.20U	1.8U	1.8U	1.8U	3.5U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.5U
FB-4	0.20U	1.7U	1.7U	1.7U	3.5U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.5U
EB-1	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-022
Installed: August 5-7, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
55-60	0.20U	1.5U	1.5U	1.5U	0.63J	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
65-70	0.20U	1.5U	1.4J	2.5	1.9J	1.5U	1.5U	3.9	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
75-80	0.12J	1.4U	0.45J	1.4U	1.3J	1.4U	1.4U	1.4U	1.4U	1.14U	1.4U	1.4U	1.4U	2.9U
85-90	0.20U	1.5U	1.5U	1.5U	0.79J	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
95-100	0.20U	1.5U	1.5U	0.74J	2.4J	1.5U	1.5U	1.9	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
105-110	0.20U	2.1	1.1J	2.4	4.7	1.6U	1.6U	6.7	0.56J	1.6U	1.6U	1.2J	1.6U	3.2U
115-120	0.22	**6.1**	1.6	4.4	4.6	1.5U	1.5U	15	0.59J	1.5U	1.5U	1.6	1.5U	3.1U
125-130	0.16J	**2.9**	1.2J	1.6	4	1.5U	1.5U	6.6	1.5U	1.5U	1.5U	1.1J	1.5U	3.0U
135-140	**0.44**	**3.8**	1.8	1.2J	4.2	1.5U	1.5U	6.4	1.0J	1.5U	1.5U	1.1J	1.5U	3.0U
145-150	**1.9**	**3.9**	1.4J	1.3J	2.4J	1.5U	1.5U	7	1.5U	1.5U	1.5U	1.1J	1.5U	2.9U
155-160	**1**	**4.1**	1.2J	2.1	2.1J	1.5U	1.5U	11	0.95J	1.5U	0.55J	1.6	1.5U	3.0U
" " BD	**1**	**4**	1.1J	2.2	2.1J	1.4U	0.27J	9.5	0.75J	1.4U	1.4U	1.5	1.4U	2.8U
165-170	**1.7**	**2.8**	1.5	1.3J	2.0J	1.5U	1.5U	8.6	1.5U	1.5U	0.99J	1.0J	1.5U	2.9U
175-180	**0.93**	2	1.4U	1.4U	8	1.4U	1.4U	15	2.5	1.4U	1.4U	1.2J	1.4U	2.9U
185-190	**4.4**	1.4U	0.73J	1.4	7.3	1.4U	1.4U	7.9	1.4U	1.4U	1.4U	1.0J	1.4U	2.8U
195-200	**8.7**	1.4U	0.40J	0.90J	8.3	1.4U	1.4U	0.74J	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
205-210	**9.5**	1.4U	1.4U	1.4U	9.1	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.7U
215-220	**2.6**	1.4U	0.53J	1.4U	1.6J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
FB-1	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
FB-2	0.20U	1.5U	1.5U	1.5U	2.9U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
FB-3	0.20U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
EB-1	0.21U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-030
Installed: October 10-15 , 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
65-70	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
75-80	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
85-90	0.20U	1.6U	1.6	1.6U	3.2U	1.6U	1.6U	2.1	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
95-100	0.20U	2	4.3	1.6U	0.52J	1.6U	0.99J	2.4	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
"" BD	0.20U	1.6U	3.9	1.6U	3.2U	1.6U	0.86J	2.2	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
105-110	0.20U	1.6U	0.49J	1.6U	3.2U	1.6U	1.6U	6.4	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
115-120	0.20U	1.7U	0.53J	1.7U	3.5U	1.7U	1.7U	3.2	1.7U	1.7U	1.7U	1.7U	1.7U	3.5U
125-130	0.20U	1.7U	0.73J	1.7U	0.23J	1.7U	1.7U	2.9	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
135-140	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	4.6	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
145-150	0.20U	1.5U	1.5U	0.76J	3.0U	1.5U	1.5U	5.4	1.5U	1.5U	1.5U	0.69J	1.5U	3.0U
155-160	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	4.7	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
165-170	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
175-180	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
185-190	0.22U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
195-200	0.20U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
205-210	0.20U	1.5U	1.5U	0.79J	2.9U	1.5U	1.5U	1.4J	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
215-220	0.20U	1.6U	1.6U	1.6U	0.40J	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-1	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
FB-2	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
FB-3	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
FB-4	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
EB-1	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	2.2	3.4U

Bold: Denotes exceeds NYSDEC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
**= elevated reporting limit due to re-extract from Lab QC issues of sample
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-031
Installed: December 5- December 9, 2024

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
65-70	0.23U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
75-80	0.24U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	0.51J	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
85-90	0.24U	1.4U	0.99J	1.4U	2.8U	1.4U	1.4U	0.69J	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
95-100	0.24U	1.5U	2.1	0.61J	0.38J	1.5U	0.37J	1.4J	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
105-110	0.25U	1.2J	1.6	5.8	1.4J	1.4U	1.4U	16	1.4U	1.4U	1.4U	5.4	1.4U	2.9U
115-120	0.25U	**3.4**	4.9	11	2.4J	1.5U	0.90J	28.0	1.5U	1.5U	1.5U	10	1.5U	2.9U
125-130	0.24U	2.0	2.9	15	3.6	1.5U	0.52J	25	1.5U	1.5U	1.5U	13	1.5U	2.9U
135-140	0.24U	1.5U	0.66J	9.7	0.40J	1.5U	1.5U	11	1.5U	1.5U	1.5U	3	1.5U	2.9U
145-150	0.25U	0.62J	1.5U	1.6	2.9U	1.5U	1.5U	5.9	1.5U	1.5U	1.5U	1.0J	1.5U	2.9U
155-160	0.25U	1.5U	1.5U	1.3J	2.9U	1.5U	1.5U	3.8	1.5U	1.5U	1.5U	0.87J	1.5U	2.9U
165-170	0.24U	1.5U	1.5U	1.5U	2.9U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
175-180	0.25U	1.5U	1.5U	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
185-190	0.25U	1.8U	0.55J	1.8U	3.6U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U
195-200	0.24U	1.5U	1.5U	1.5U	2.9U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
FB-1	0.25U	1.5U	1.5U	1.5U	2.9U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	2.9U
FB-2	0.26U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-3	0.27U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
FB-4	0.26U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
EB-1	0.25U	1.6U	1.6U	1.6U	0.71J	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.1J	3.2U

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FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-032
Installed: November 21- December 2, 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
55-60	0.26U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
65-70	0.26U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
75-80	0.26U	1.3J	1.4J	1.5U	1.1J	1.5U	1.5U	2.1	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
85-90	**2.1**	2.9	2.1	0.80J	3.0J	1.7U	1.7U	4.9	1.7U	1.7U	1.7U	0.55J	1.7U	3.4U
95-100	**1.6**	2.5	1.3J	0.55J	2.5J	1.5U	0.20J	4.5	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
105-110	**1.3**	**14**	2.4	4.1	4.2	1.7U	0.38J	28	1.7U	1.7U	1.7U	3.9	1.7U	3.5U
115-120	**2.7**	2.8	1.8	0.79J	3.5	1.5U	0.32J	7.1	1.5U	1.5U	1.5U	0.76J	1.5U	3.0U
125-130	**2.6**	2.4	1.7	0.64J	3.1J	1.6U	0.28J	4.9	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
135-140	**3.8**	2.1	1.9	1.7U	3.6	1.7U	1.7U	4.4	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
145-150	**4.3**	2.6	1.8	0.70J	3.8	1.6U	1.6U	4.5	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
155-160	**4.0**	1.7U	1.7U	1.7U	4.5	1.7U	1.7U	4	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
165-170	**5.2**	1.7U	1.7U	1.7U	6.6	1.7U	1.7U	3.5	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
175-180	**6.0**	1.7U	1.7U	1.7U	6.6	1.7U	1.7U	3.5	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
185-190	**5.7**	1.7U	1.7U	1.7U	6.4	1.7U	1.7U	3.8	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
195-200	**5.2**	1.7U	1.7U	1.7U	6	1.7U	1.7U	3.7	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
205-210	**4.1**	1.7U	1.1J	0.65J	2.6J	1.7U	1.7U	3.6	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
215-220	**3.8**	**3.5**	1.0J	0.70J	2.4J	1.6U	0.21J	4.5	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
225-230	**3.5**	2.4J	9.7U	9.7U	3.5J	9.7U	9.7U	4.1J	9.7U	9.7U	9.7U	9.7U	9.7U	19U
FB-1	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-2	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
FB-3	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-4	0.25U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
EB-1	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U

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NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-033
Installed: November 14-19 , 2024

2024 BNL Groundwater Status Report

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
45-50	0.10J	2.5	1.8U	1.8U	3.5U	1.8U	1.8U	1.4J	1.8J	1.8U	1.8U	1.8U	1.8U	3.5U
55-60	0.20U	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
65-70	0.20U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
75-80	0.20U	1.4J	1.5U	1.5U	3.0U	1.5U	1.5U	0.84J	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
85-90	0.20U	1.7	0.75J	1.6U	13	1.6U	0.26J	0.64J	1.6U	1.6U	1.6U	1.6U	0.57J	3.3U
95-100	0.20U	2.4	1.7U	0.69J	3.3U	1.7U	1.7U	3.4	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
105-110	0.20U	**3**	1.4J	0.82J	0.59J	1.6U	0.29J	3.2	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
115-120	0.20U	**4**	0.97J	0.77J	0.49J	1.6U	0.29J	5.5	1.6U	1.6U	1.6U	1.6U	1.6U	3.1U
125-130	0.20U	**16**	2.5	1.7	1.1J	1.5U	0.64J	11	3.6	1.5U	1.5U	1.9	0.48J	3.1U
135-140	0.31	**130**	**10**	19	4.3	4.2	2.9	71	20	1.7U	1.7U	17	4.2	3.4U
145-150	0.32	**130**	**9.5**	17	4.4	2.8	2.4	76	18	1.3J	1.6U	14	4	3.2U
"" BD	0.31	**140**	**8.3**	16	4.6	2.7	2.5	85	19	1.4J	1.6U	16	4.1	3.2U
155-160	0.21	**91**	**7.5**	18	5.1	2	2	81	13	1.4J	1.6U	16	3	3.3U
165-170	0.23	**180**	**15**	32	6	4.3	5.4	150	36	1.9U	1.9U	30	8.2	3.9U
175-180	**0.45**	**79**	**6.9**	12	3.9	1.8	3	82	7.9	1.6U	1.6U	12	3.3	3.2U
185-190	**0.35**	1.7U	**6.7**	6.8	5.1	1.7U	1.5J	50	1.7U	1.7U	1.7U	7.3	1.7U	3.4U
195-200	**0.93**	1.8U	3.9	3.4	3.0J	1.8U	0.34J	23	1.8U	1.8U	1.8U	2.8	1.8U	3.5U
205-210	**6.2**	1.6U	1.6U	1.4J	6	1.6U	1.6U	9.5	1.6U	1.6U	1.6U	1.3J	1.6U	3.3U
215-220	**8.2**	1.5U	1.5U	0.65J	2.8J	1.5U	1.5U	3.7	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
225-230	**6.9**	1.7U	1.7U	1.7U	0.57U*	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
FB-1	0.20U	1.7U	1.7U	1.7U	3.4U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
FB-2	0.20U	1.7U	1.7U	1.7U	0.29J	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U
FB-3	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
FB-4	0.20U	1.6U	1.6U	1.6U	3.3U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.3U
EB-1	0.23U	1.8U	1.8U	1.8U	0.42J	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	1.8U	3.6U

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J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
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D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after decon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter

Table 3.5.1-5

OU X PFAS and 1,4- Dioxane Groundwater Characterization
Current Firehouse Vertical Profile Well OU10-VP-034
Installed: March 6 -7, 2025

2024 BNL Groundwater Status Report

Sample Depth (BLS)	1,4-D (µg/L)	PFOS (ng/L)	PFOA (ng/L)	PFBS (ng/L)	PFBA (ng/L)	PFHpS (ng/L)	PFHpA (ng/L)	PFHxS (ng/L)	PFHxA (ng/L)	PFNA (ng/L)	PFOSAm (ng/L)	PFPeS (ng/L)	PFPeA (ng/L)	6:2 FTS (ng/L)
45-55	0.29	1.4U	1.4U	1.4U	0.80J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.8U
55-65	0.24U*	10U J	10U J	10U J	20U J	10U J	10U J	10U J	10U J	10U J	10U J	10U J	10U J	20U J
65-75	0.24U*	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
75-85	0.23U*	1.6U	1.6U	1.6U	2.4J	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
85-95	0.59U*	**3.2**	1.4J	1.6U	4.3	1.6U	1.6U	7.2	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
95-105	0.65U*	**3.9**	2U*	0.91J	6.1	1.5U	1.5U	10	1.5U	1.5U	1.5U	1.1J	1.5U	2.9U
105-115	**1.7**	**3.3**	3.2	1.3J	5.1	1.5U	0.43J	12	1.5U	1.5U	1.5U	1.1J	1.5U	2.9U
115-125	**1.4**	10U J	2.8J*	10U J	20U J	10U J	10U J	9.3J	10U J	10U J	10U J	10U J	10U J	20U J
125-135	0.6U*	**7.8**	1.5U*	1.7	2.8J	1.5U	1.5U	13	1.5U	1.5U	1.5U	1.8	1.5U	3.0U
135-145	**0.98**	10U J	3.3J*	10U J	20U	10U J	10U J	9.3J*	10U J	10U J	10U J	10U J	10U J	32 J*
145-155	**1.8**	25U J	25U J	25U J	50U J	25U J	25U J	11J J	25U J	25U J	25U J	25U J	25U J	76 J*
155-165	**1.9**	10U J	10U J	10U J	6.5J J	10U J	10U J	10 DJ	10U J	10U J	10U J	10U J	10U J	20U J
""BD	**2**	10U J	10U J	10U J	6.4J J	10U J	10U J	7.4J J	10U J	10U J	10U J	10U J	10U J	20U J
165-175	**5.2**	1.6U	1.6U*	2.5	9.1	1.6U	1.6U	5.8	1.6U	1.6U	1.6U	1.7U	1.6U	3.2U
175-185	**9.6**	10U J	10U J	10U J	12J*	10U J	10U J	10U J	8.5J	10U J	10U J	10U J	10U J	47 J*
185-195	**9.2**	1.7U	1.7U	1.7U	7.3	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.4U
195-205	**7.7**	1.4U	1.4U	1.4U	1.9J	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
205-215	**8.9**	1.9U	1.9U*	1.9U	4.7	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	1.9U	3.7U
215-225	**1.5**	500U J	**120J***	250U J	500U J	250U J	250U J	250U J	250U J	250U J	250U J	250U J	250U J	500U J
FB-1	0.24U	1.5U	1.5U	1.5U	3.0U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.0U
FB-2	0.19J	1.6U	1.6U	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
FB-3	0.25U	1.6U	1.6U	1.6U	3.1U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.7J
FB-4	0.24U	1.5U	0.41J	1.5U	3.1U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	3.1U
FB-5	0.25U	1.4U	1.4U	1.4U	2.9U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	1.4U	2.9U
EB-1	0.25U	1.6U	0.41J	1.6U	3.2U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	1.6U	3.2U
EB-2	0.25U	1.7U	1.7U	1.7U	3.3U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	3.3U

Bold: denotes exceeds NYSJC Ambient Water Quality Guidance Values
U: Analyte not detected.
J: Estimated concentration. J* = Qualified based on Data Usability Summary Report.
**= elevated reporting limit due to re-extract from Lab QC issues of sample
D: Dilution
BD: Blind Duplicate
FB: Field Blank
EB: Equipment Blank (sample pump/tubing and stainless steel well screen). Collected after Jcon of equipment pre well installation
NA: Samples not analyzed for this chemical.
BLS: Depth below land surface
µg/L: Micrograms per liter
ng/L: Nanograms per liter
DJ: Samples required reduced volume for extraction.

Table 3.5.2-2
OU X Former Firehouse Treatment System 2024 Extraction Well Pumping Rates

2024 BNL Groundwater Status Report

Operable Unit III - Pump and Treat Former Firehouse - Groundwater Withdrawal (gpm)				
BNL Well No.	085-414	096-132	105-79	FFH
Extraction Well	FF-RW-A	FF-RW-B	FF-RW-C	
Screen Int.				
elevation (ft. msl)	38 to 18	30.9 to 10.9	-17.5 to -37.5	Monthly
depth (feet)	44-64	83-103	104-124	Total
January	54	78	107	239
February	51	71	101	223
March	52	74	107	233
April	46	55	94	194
May	52	71	106	230
June	60	64	63	188
July	20	49	35	104
August	39	51	95	185
September	64	32	103	199
October	43	75	94	211
November	54	77	98	229
December	35	74	93	202
Annual Average (gpm)	47	64	91	203

Notes:
Source: Groundwater Protection Group Field Engineer
ft. msl = Elevation in feet referenced to mean sea level.
Elevations rounded to nearest foot
gpm - gallons per minute

Table 3.5-1
OU X Treatment System Monitoring for PFAS and 1,4-Dioxane
2017 through 2024

2024 Groundwater Status Report

Well/Sample ID	Screen Interval (ft. bls.)	Aquifer Seqment	Treatment System Extraction Well/Influent/Effluent	2017-2020			June - July 2023			October 2023		
				1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA
				0.35 µg/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L
OU III Western South Boundary, Middle Road, and South Boundary Treatment Systems (Status: Active)												
Western South Boundary												
126-12	140-160	DG	WSB-1	2.99	5.66	3.17	3.9	3.58	2.64	NS	NS	NS
127-05	150-170	DG	WSB-2	5.38	1.53J	1.76U	3.9	2.37	2.07	NS	NS	NS
111-17	168-188	DG	WSB-3	3.81	1.1J	1.48	2	8.7	3.57	NS	NS	NS
119-13	170-190	DG	WSB-4	7.64	1.80U	1.80U	3.9	3.9	2.7	NS	NS	NS
130-12	160-190	DG	WSB-5	6.04	1.77U	1.77U	3.4	3.38	2.53	NS	NS	NS
130-13	196-216	DG	WSB-6	4.05	1.80U	1.80U	5.9	1.79U	1.93U	NS	NS	NS
121-55	---	---	WSB Influent to System	NA	NA	NA	4.4	2.27	1.63J	4.4	4.38	1.74J
Middle Road												
113-23	90-130	MG	Middle Road RW-1	NA	10.3	9.6	0.2U	10.2	4.47	NS	NS	NS
113-24	170-200	DG	Middle Road RW-2	NA	11.2	10.9	0.6B J+	11.6	6.68	NS	NS	NS
113-25	228-268	MAG	Middle Road RW-3	NA	3	5.82	1.4B J+	2.18	2.67	NS	NS	NS
113-26	150-180	DG	Middle Road RW-4	NA	7.14	8.79	2.2B J+	4.89	4.49	NS	NS	NS
113-27	150-180	DG	Middle Road RW-5	NA	7.19	5.83	1.4B J+	4.43	3.14J	NS	NS	NS
106-66	188-218	DG	Middle Road RW-6	NA	4.48	1.65J	3.3B J+	4.51	2.29	NS	NS	NS
113-33	202-222	DG	Middle Road RW-7	NA	2.15	5.35	2B J+	3.27	4.36	NS	NS	NS
113-34	---	---	Middle Road Influent to System	NA	5.93	7.01	1.2B J+	5.82	4.54	1.7	2.55	4.35
South Boundary												
121-17	150-190	DG	OU III South Boundary EW-3	NA	3.51	2.46	0.59	2.8	2.6	NS	NS	NS
121-16	160-200	DG	OU III South Boundary EW-4	NA	17.6	10.9	0.35	13	6.5	NS	NS	NS
121-15	160-200	DG	OU III South Boundary EW-5	NA	18.9	12.5	1.1	8.1	4.9	NS	NS	NS
122-14	160-200	DG	OU III South Boundary EW-6	NA	11.7	5.37	0.6	14	5.6	NS	NS	NS
122-13	170-210	DG	OU III South Boundary EW-7	NA	11.8	16.4	1.1	16	4.5	NS	NS	NS
122-12	190-250	DG/MAG	OU III South Boundary EW-8	NA	3.73	3.51	0.19J	21	6.1	NS	NS	NS
121-46	207-237	DG	OU III South Boundary EW-17	NA	10	5.55	1.2	8.2	6.9	NS	NS	NS
121-41	---	---	South Boundary Influent to System	NA	14.4	10.3	0.82	8.4	5.7	1.7	8.29	7.15
WSB/MR/SB Combined System Effluent*												
095-270	---	---	OUIII Combined System Effluent	NA	NA	NA	2.1B J+	5.24	4.11	2.8	2.76	2.13
095-126	---	---	OUIII Combined System Effluent	4.33	4.83	5.82	NS	NS	NS	NS	NS	NS
OU III LIPA/Airport VOC Treatment System (Status: LIPA in Standby, AP Active)												
000-453	217-237	DG	LIPA EW-1L	3.27	4.78	2.31	2.7	3.97	1.64J	NS	NS	NS
000-455	224-244	DG	LIPA EW-2L	2.7	6.32	3.74	0.36	2.4	0.898J	NS	NS	NS
000-457	216-236	DG	LIPA EW-3L	0.43	9.43	9.45	0.2U	3.48	1.03J	NS	NS	NS
000-461	304-324	MAG	LIPA EW-4L	0.26	1.82U	1.3J	0.18J	2.1	1.81J	NS	NS	NS
800-109	188-208	DG	AP RTW-1A	0.28	1.59J	3.59	0.36	1.30J	2.8	NS	NS	NS
800-110	188-208	DG	AP RTW-2A	0.51	1.80U	1.80U	0.89	1.64U	1.77U	NS	NS	NS
800-111	210-230	MAG	AP RTW-3A	0.12J	1.98	3.79	0.45	0.872J	2.43	NS	NS	NS
800-112	268-288	MAG	AP RTW-4A	2.12	1.81U	0.7J	2.4	1.72U	0.641J	NS	NS	NS
800-113	220-240	MAG	AP RTW-5A	3.15	1.80U	1.80U	3	1.86U	2.01U	NS	NS	NS
800-132	165-185	DG	AP RTW-6A	0.82	1.47	3.24	0.85	1.84	3.36	NS	NS	NS
800-122	---	---	LIPA/AP System Influent	1.39	1.79U	1.47J	0.62	1.61J	3.3	1.2	1.28J	2.47
800-124	---	---	LIPA/AP System Effluent	1.61	NA	NA	1.3D	1.68U	1.81U	1.2	1.69U	1.82U

Table 3.5-1
OU X Treatment System Monitoring for PFAS and 1,4-Dioxane
2017 through 2024

2024 Groundwater Status Report

Well/Sample ID	Screen Interval (ft. bls.)	Aquifer Seqment	Treatment System Extraction Well/Influent/Effluent	2017-2020			June - July 2023			October 2023		
				1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA
				0.35 µg/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L
OU III North Street East VOC/EDB Treatment System (Status: Active)												
000-561	195-215	DG	NSE-EDB-EW3	3.88	1.84U	4.32	1.2	0.615J	1.88J	NS	NS	NS
000-562	182-202	DG	NSE-EDB-EW4	0.86	0.681J	7.56	0.52	1.34J	2.13	NS	NS	NS
000-441	---	---	NSE System Influent	2.52	1.71U	4.71	0.81	0.967J	1.84J	0.76 HJ	1.04J	1.84J
000-444	---	---	NSE System Effluent	0.2U	1.78U	1.78U	0.92	1.73U	1.87U	0.68 HJ	1.87U	2.02U
OU VI EDB Treatment System (Status: Active)												
000-503	115-135	DG	EW-1E	0.15J	1.84U	1.84U	0.2U	NS	NS	NS	NS	NS
000-504	115-135	DG	EW-2E	0.13J	1.82U	1.82U	0.2U	NS	NS	NS	NS	NS
000-578	174-194	DG	EW-3E	--	--	--	--	--	--	--	--	--
000-579	170-190	DG	EW-4E	--	--	--	--	--	--	--	--	--
000-512	---	---	EDB System Influent	0.12J	1.75U	1.75U	0.2U	NS	NS	0.17 HJ	NS	NS
000-510	---	---	EDB System Effluent	0.17J	1.80U	1.80U	0.2U	NS	NS	0.18 HJ	NS	NS
BGRR/WCF Sr-90 Treatment System (Status: Active)												
065-368	33-53	SG	BGRR/WCF SR-1	0.2U	5.32	5.45	0.2U	11.9	4.98	NS	NS	NS
065-369	33-53	SG	BGRR/WCF SR-2	0.2U	3.6	2.57	0.2U	10.1	3.12	NS	NS	NS
075-676	51-71	SG	BGRR/WCF SR-3**	0.2U	2.44	6.22	0.2U	5.51	3.65	NS	NS	NS
075-677	35-75	SG	BGRR/WCF SR-4	0.2U	8.74	5.53	0.2U	6.82	3.25	NS	NS	NS
075-678	35-75	SG	BGRR/WCF SR-5	0.2U	7.02	3.27	0.2U	5.45	3.17	NS	NS	NS
065-403	85-105	SG	BGRR/WCF SR-6	0.2U	12.3	4.12	0.2U	6.28	3.84	NS	NS	NS
075-702	82-102	SG	BGRR/WCF SR-7	0.21	10.8	4.33	0.2U	7.33	4.17	NS	NS	NS
075-703	77-97	SG	BGRR/WCF SR-8	0.12J	8.12	3.72	0.2U	5.74	3.86	NS	NS	NS
075-704	67-87	SG	BGRR/WCF SR-9	0.11J	7.01	3.1	0.2U	4.79	2.03	NS	NS	NS
066-216	---	---	BGRR/WCF System Influent	NA	6.46	3.75	0.2U	10.4	3.73	0.12J	11.9	4.12
Carbon Midpoint	--	--	BGRR/WCF System Midpoint	NA	NA	NA	0.2U	4.43	3.83	NS	NS	NS
066-219	---	---	BGRR/WCF System Effluent	NA	3.69	4.22	0.2U	0.94J	2.43	0.13J	0.815J	3.24

Notes:

Active extraction well
Standby/Off extraction well
System Influent/Midpoint (sampled during current operation)
System Effluent (sampled during current operation)
Denotes 1,4-dioxane result exceeds NYSDEC AWQGV
Denotes PFOS/PFOA result exceeds NYSDEC AWQGV

PFOS and PFOA analyzed by EPA Method 1633. The results are reported in ng/L.
1,4-dioxane analyzed by EPA Method 8270 SIM. The results are reported in µg/L.

U - Analyte not detected above the method detection limit (MDL).
J - Analyte detected above MDL but below reporting limit, result estimated.
+ - Denotes an estimated result is biased high.
B - Analyte detected in laboratory QA/QC blank sample.
D - Results are reported from a sample that required a dilution.
H - Sample analyzed outside of method holding time.
BNL review qualifers, where present, are separated by a space.

NA - Not Analyzed
NS - Not Sampled
* - OUIII running on Bldg 517 air stripper only, effluent sample point 095-270.
** - BGRR/WCF SR-3 operated as needed
SG=Shallow Upper Glacial, MG=Middle Upper Glacial, DG=Deep Upper Glacial
Mag=Magothy
The EPA Risk Based Screening Levels (RSLs) are included below to provide perspective to the values presented in Table 1.

Table 3.5-1
OU X Treatment System Monitoring for PFAS and 1,4-Dioxane
2017 through 2024

2024 Groundwater Status Report

Well/Sample ID	Screen Interval (ft. bls.)	Aquifer Seqment	Treatment System Extraction Well/Influent/Effluent	January 2024			April 2024			Q4 2024		
				1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA
				0.35 ug/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L
OU III Western South Boundary, Middle Road, and South Boundary Tr												
Western South Boundary												
126-12	140-160	DG	WSB-1	3.3	3.84	3.5	NS	NS	NS	NS	NS	NS
127-05	150-170	DG	WSB-2	4	2.46	1.99	NS	NS	NS	NS	NS	NS
111-17	168-188	DG	WSB-3	2.2	9.91	3.88	NS	NS	NS	NS	NS	NS
119-13	170-190	DG	WSB-4	2.3	8.57	3.75	NS	NS	NS	NS	NS	NS
130-12	160-190	DG	WSB-5	4.4	3.33	2.94	NS	NS	NS	NS	NS	NS
130-13	196-216	DG	WSB-6	6.5	3.71U	4	NS	NS	NS	NS	NS	NS
121-55	---	---	WSB Influent to System	3	5.4	3.43	6.3B	1.83U	1.98U	3.7	5.44	3.22
Middle Road												
113-23	90-130	MG	Middle Road RW-1	0.21U	10.3	3.53	NS	NS	NS	NS	NS	NS
113-24	170-200	DG	Middle Road RW-2	0.52	13.5	7.11	NS	NS	NS	NS	NS	NS
113-25	228-268	MAG	Middle Road RW-3	1.3	1.87	2.33	NS	NS	NS	NS	NS	NS
113-26	150-180	DG	Middle Road RW-4	1.8	4.33	5.35	NS	NS	NS	NS	NS	NS
113-27	150-180	DG	Middle Road RW-5	2.1	2.56	1.44J	NS	NS	NS	NS	NS	NS
106-66	188-218	DG	Middle Road RW-6	2.8	6.87	2.48	NS	NS	NS	NS	NS	NS
113-33	202-222	DG	Middle Road RW-7	1.6	7.16	5.16	NS	NS	NS	NS	NS	NS
113-34	---	---	Middle Road Influent to System	1	6.74	5	1.1B	8.43	6.1	0.93	7.34	4.83
South Boundary												
121-17	150-190	DG	OU III South Boundary EW-3	0.54	2.93	2.6	NS	NS	NS	NS	NS	NS
121-16	160-200	DG	OU III South Boundary EW-4	0.16J	16.5	6.48	NS	NS	NS	NS	NS	NS
121-15	160-200	DG	OU III South Boundary EW-5	0.9	10.1	4.82	NS	NS	NS	NS	NS	NS
122-14	160-200	DG	OU III South Boundary EW-6	1.1	12.7	4.97	NS	NS	NS	NS	NS	NS
122-13	170-210	DG	OU III South Boundary EW-7	0.59	14.2	4.09	NS	NS	NS	NS	NS	NS
122-12	190-250	DG/MAG	OU III South Boundary EW-8	0.17J	28.1	7.86	NS	NS	NS	NS	NS	NS
121-46	207-237	DG	OU III South Boundary EW-17	1.1	8.8	6.17	NS	NS	NS	NS	NS	NS
121-41	---	---	South Boundary Influent to System	1.2	7.07	6.05	1.1B	8.3	6.97	1	7.28	7.27
WSB/MR/SB Combined System Effluent*												
095-270	---	---	OUIII Combined System Effluent	1.9	7.53	5.63	1.6B	6.2	4.68	NS	NS	NS
095-126	---	---	OUIII Combined System Effluent	NS	NS	NS	NS	NS	NS	1.6	5.29	4.4
OU III LIPA/Airport VOC Treatment System (Status: LIPA in Standby,												
000-453	217-237	DG	LIPA EW-1L	3.3	4.68	1.26J	NS	NS	NS	NS	NS	NS
000-455	224-244	DG	LIPA EW-2L	0.17J	4.15	2.01U	NS	NS	NS	NS	NS	NS
000-457	216-236	DG	LIPA EW-3L	0.2U	2.04	1.9U	NS	NS	NS	NS	NS	NS
000-461	304-324	MAG	LIPA EW-4L	0.14J	1.64J	1.2J	NS	NS	NS	NS	NS	NS
800-109	188-208	DG	AP RTW-1A	0.41	1.65U	1.21J	NS	NS	NS	NS	NS	NS
800-110	188-208	DG	AP RTW-2A	1	1.8U	1.94U	NS	NS	NS	NS	NS	NS
800-111	210-230	MAG	AP RTW-3A	0.59	1.08J	2.58	NS	NS	NS	NS	NS	NS
800-112	268-288	MAG	AP RTW-4A	2.1	1.71U	0.937J	NS	NS	NS	NS	NS	NS
800-113	220-240	MAG	AP RTW-5A	2.7	1.72U	1.86U	NS	NS	NS	NS	NS	NS
800-132	165-185	DG	AP RTW-6A	0.65	1.91	4.68	NS	NS	NS	NS	NS	NS
800-122	---	---	LIPA/AP System Influent	1.2	1.32J	3.04	1	1.86U	3.5	1.1	1.81U	3.11
800-124	---	---	LIPA/AP System Effluent	1.2	1.7U	1.84U	1.1	1.69U	1.82U	1.1	1.8U	1.9U

Table 3.5-1
OU X Treatment System Monitoring for PFAS and 1,4-Dioxane
2017 through 2024

2024 Groundwater Status Report

Well/Sample ID	Screen Interval (ft. bls.)	Aquifer Seqment	Treatment System Extraction Well/Influent/Effluent	January 2024			April 2024			Q4 2024		
				1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA	1,4-Dioxane	PFOS	PFOA
				0.35 ug/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L	0.35 ug/L	2.7 ng/L	6.7 ng/L
OU III North Street East VOC/EDB Treatment System (Status: Active)												
000-561	195-215	DG	NSE-EDB-EW3	0.77	1.85U	1.38J	NS	NS	NS	NS	NS	NS
000-562	182-202	DG	NSE-EDB-EW4	0.39	1.8J	1.73J	NS	NS	NS	NS	NS	NS
000-441	---	---	NSE System Influent	0.57	0.75J	1.5J	0.52	1.72U	2.02	0.47	1.76U	3.01
000-444	---	---	NSE System Effluent	0.59	1.8U	1.93U	0.51	1.73U	1.86	0.45	1.84U	1.98U
OU VI EDB Treatment System (Status: Active)												
000-503	115-135	DG	EW-1E	0.2U	NS	NS	NS	NS	NS	NS	NS	NS
000-504	115-135	DG	EW-2E	0.2U	NS	NS	NS	NS	NS	NS	NS	NS
000-578	174-194	DG	EW-3E	0.36	2.05U	2.2U	NS	NS	NS	NS	NS	NS
000-579	170-190	DG	EW-4E	0.19J	1.94U	2.09U	NS	NS	NS	NS	NS	NS
000-512	---	---	EDB System Influent	0.27	NS	NS	0.23	NS	NS	0.2	NS	NS
000-510	---	---	EDB System Effluent	0.27	NS	NS	0.24	NS	NS	0.2	NS	NS
BGRR/WCF Sr-90 Treatment System (Status: Active)												
065-368	33-53	SG	BGRR/WCF SR-1	0.2U	12.9	6.39	NS	NS	NS	NS	NS	NS
065-369	33-53	SG	BGRR/WCF SR-2	0.2U	10.5	3.76	NS	NS	NS	NS	NS	NS
075-676	51-71	SG	BGRR/WCF SR-3**	0.2U	2.48	2.7	NS	NS	NS	NS	NS	NS
075-677	35-75	SG	BGRR/WCF SR-4	0.2U	6.72	3.11	NS	NS	NS	NS	NS	NS
075-678	35-75	SG	BGRR/WCF SR-5	0.2U	5.47	3.82	NS	NS	NS	NS	NS	NS
065-403	85-105	SG	BGRR/WCF SR-6	0.2U	1.92	3.34	NS	NS	NS	NS	NS	NS
075-702	82-102	SG	BGRR/WCF SR-7	0.2U	4.61	6.48	NS	NS	NS	NS	NS	NS
075-703	77-97	SG	BGRR/WCF SR-8	0.21U	4.98	5.56	NS	NS	NS	NS	NS	NS
075-704	67-87	SG	BGRR/WCF SR-9	0.2U	6.42	5.78	NS	NS	NS	NS	NS	NS
066-216	---	---	BGRR/WCF System Influent	0.21U	10.5	4.02	0.2U	13.5	4.64	0.2U	10.2	4.21
Carbon Midpoint	--	--	BGRR/WCF System Midpoint	NS	NS	NS	NS	NS	NS	NS	NS	NS
066-219	---	---	BGRR/WCF System Effluent	0.2U	2.65	3.82	0.2U	5.22	5.35	0.2U	7.07	4.87

Notes:

Active extraction well
Standby/Off extraction well
System Influent/Midpoint (sampled during current operation)
System Effluent (sampled during current operation)
Denotes 1,4-dioxane result exceeds NYSDEC AWQGV
Denotes PFOS/PFOA result exceeds NYSDEC AWQGV

PFOS and PFOA analyzed by EPA Method 1633. The results are reported in ng/L.
1,4-dioxane analyzed by EPA Method 8270 SIM. The results are reported in µg/L.

U - Analyte not detected above the method detection limit (MDL).
J - Analyte detected above MDL but below reporting limit, result estimated.
+ - Denotes an estimated result is biased high.
B - Analyte detected in laboratory QA/QC blank sample.
D - Results are reported from a sample that required a dilution.
H - Sample analyzed outside of method holding time.
BNL review qualifers, where present, are separated by a space.

NA - Not Analyzed
NS - Not Sampled
* - OUIII running on Bldg 517 air stripper only, effluent sample point 095-270.
** - BGRR/WCF SR-3 operated as needed
SG=Shallow Upper Glacial, MG=Middle Upper Glacial, DG=Deep Upper Glacial
Mag=Magothy
The EPA Risk Based Screening Levels (RSLs) are included below to provide perspective to the values presented in Table 1.

Table 5-1

Proposed Groundwater Monitoring Well Sampling Frequency Changes

2024 Groundwater Status Report

Well ID	Current Project	Current Frequency	Proposed Frequency	Affected Parameters
000-130 000-131 000-425 000-448 000-449 000-452	LIPA/Airport	Semi-Annual	Annual	EPA 8260 Low Level VOCs
085-382 085-383 085-386	Building 96	Semi-Annual	Annual	EPA 8260 Low Level VOCs
075-701 075-664	BGRR	Monthly	Quarterly	EPA 905 Sr-90
075-11 075-288 075-40 075-802 075-803 075-804 075-805 075-806 075-807 075-808	HFBR	Quarterly	Semi-Annual	EPA 906 Tritium
073-26 073-27 073-28 073-29 073-30 073-31 073-32 073-33 074-135 093-04 093-93 093-94 093-95	Current Firehouse	Quarterly	Semi-Annual	EPA 1633 PFAS

Table 5-1

Proposed Groundwater Monitoring Well Sampling Frequency Changes

2024 Groundwater Status Report

Well ID	Current Project	Current Frequency	Proposed Frequency	Affected Parameters
075-809 075-810 075-811 085-404 085-405 085-406 085-407 085-408 085-409 085-410	Former Firehouse	Quarterly	Semi-Annual	EPA 1633 PFAS
054-65	g-2	Semi-Annual	None	EPA 906 Tritium
054-69 055-14 055-29 055-30 055-31 055-32 065-192 065-193 065-194 065-195 054-127	AGS	Annual	None	EPA 906 Tritium
025-03 025-04 025-05 025-06 025-07 025-08 034-05 034-06 043-01 043-02 044-13 044-14 044-29	RHIC	Semi-Annual	Annual	EPA 906 Tritium

Table 1-5B OUIII (Building 96) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
085-293	OU III (Building 96)		Plume Core		A				10/2/24
085-335	OU III (Building 96)		Plume Core		F		4/10/24		10/8/24
085-347	OU III (Building 96)		Plume Core		F		4/12/24		10/4/24
085-348	OU III (Building 96)		Plume Core	4	4	2/9/24	4/12/24	9/4/24	10/4/24
085-349	OU III (Building 96)		Plume Core		F		4/11/24		10/2/24
085-350	OU III (Building 96)	OU X Fomer Firehouse MW	Plume Core		F		4/11/24		10/2/24
085-351	OU III (Building 96)		Plume Core		F		4/10/24		10/2/24
085-352	OU III (Building 96)		Plume Core		F		4/10/24		10/2/24
085-354	OU III (Building 96)		Plume Core		F		4/11/24		10/7/24
085-378	OU III (Building 96)		Background		4	2/9/24	4/10/24	9/4/24	10/3/24
085-379	OU III (Building 96)		Plume Core	4	4	2/9/24	4/11/24	9/4/24	10/7/24
085-382	OU III (Building 96)		None		F		4/12/24		10/7/24
085-383	OU III (Building 96)		None		F		4/12/24		10/8/24
085-386	OU III (Building 96)		None		F		4/10/24		10/8/24
095-159	OU III (Building 96)		Plume Core		4	2/12/24	4/10/24	9/4/24	10/3/24
095-162	OU III (Building 96)		Plume Core		4	2/9/24	4/10/24	9/4/24	10/2/24
095-163	OU III (Building 96)		Bypass Detection		4	2/9/24	4/10/24	9/3/24	10/1/24
095-165	OU III (Building 96)		Bypass Detection		A				10/1/24
095-166	OU III (Building 96)		Bypass Detection		A				10/1/24
095-168	OU III (Building 96)		Bypass Detection		A				10/1/24
095-169	OU III (Building 96)		Bypass Detection		A				10/1/24
095-170	OU III (Building 96)	OU X Fomer Firehouse MW	Bypass Detection		A				10/1/24
095-172	OU III (Building 96)		Plume Core		4	2/9/24	4/10/24	9/3/24	10/3/24
095-294	OU III (Building 96)		Plume Core		F		4/10/24		10/3/24
095-305	OU III (Building 96)		Plume Core		4	2/9/24	4/11/24	9/3/24	10/4/24
095-306	OU III (Building 96)		Plume Core		4	2/9/24	4/11/24	9/3/24	10/4/24
095-307	OU III (Building 96)		Plume Core		F		4/10/24		10/3/24
095-308	OU III (Building 96)		Plume Core		F		4/10/24		10/3/24
095-312	OU III (Building 96)		Plume Core		4	2/9/24	4/10/24	9/3/24	10/3/24
095-313	OU III (Building 96)		Plume Core		F		4/11/24		10/3/24
095-318	OU III (Building 96)		Sentinel		A				10/8/24
095-325	OU III (Building 96)		None	4	4	2/12/24	4/11/24	9/3/24	10/8/24
095-84	OU III (Building 96)		Plume Core		4	2/12/24	4/12/24	9/4/24	10/2/24
095-85	OU III (Building 96)		Plume Perimeter		A				10/2/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5C OUIII (Middle Rd) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
095-322	OU III (Middle Rd)		Plume Core		4		2/21/24	5/3/24	8/22/24	10/10/24
095-323	OU III (Middle Rd)		Plume Core		4		2/21/24	5/3/24	9/5/24	10/10/24
095-92	OU III (Middle Rd)		Sentinel		F			5/3/24		10/10/24
104-11	OU III (Middle Rd)		Plume Perimeter		F			4/29/24		10/14/24
104-36	OU III (Middle Rd)		Plume Perimeter		F			4/30/24		10/14/24
104-37	OU III (Middle Rd)		Plume Core	4	4	C	2/21/24	4/30/24	8/28/24	10/15/24
104-38	OU III (Middle Rd)		Plume Perimeter		F	C		4/29/24		10/14/24
105-23	OU III (Middle Rd)		Plume Core		4		3/1/24	5/6/24	8/28/24	10/15/24
105-25	OU III (Middle Rd)		Plume Core		F			5/2/24		10/21/24
105-42	OU III (Middle Rd)		Plume Perimeter		F			5/6/24		10/15/24
105-44	OU III (Middle Rd)	OU X Fomer Firehouse MW	Plume Core		F			5/2/24		10/21/24
105-53	OU III (Middle Rd)		Plume Core		F			5/21/24		10/15/24
105-66	OU III (Middle Rd)		Plume Core		4	C	2/21/24	5/1/24	8/23/24	10/15/24
105-67	OU III (Middle Rd)		Plume Core		4	C	3/1/24	5/1/24	8/23/24	10/15/24
105-68	OU III (Middle Rd)		Plume Core		4	C	2/21/24	4/23/24	9/5/24	10/16/24
105-80	OU III (Middle Rd)		Plume Core		4		SLUG TEST	5/2/24	9/5/24	10/16/24
105-81	OU III (Middle Rd)		Plume Core		4		SLUG TEST	5/2/24	9/5/24	10/17/24
106-56	OU III (Middle Rd)		Plume Core			C				10/16/24
106-58	OU III (Middle Rd)		Plume Core		F	C		5/14/24		10/16/24
106-62	OU III (Middle Rd)		Plume Perimeter		F			5/14/24		10/21/24
113-07	OU III (Middle Rd)		Plume Core		A					10/11/24
113-08	OU III (Middle Rd)		Plume Core		F			5/3/24		10/11/24
113-09	OU III (Middle Rd)	OU III (Magothy) Sampling Program	Plume Core		F			5/2/24		10/11/24
113-11	OU III (Middle Rd)		Plume Core		F			5/6/24		10/14/24
113-17	OU III (Middle Rd)		Bypass Detection		4	C	2/20/24	5/21/24	8/27/24	10/17/24
113-18	OU III (Middle Rd)		Bypass Detection		A					10/17/24
113-19	OU III (Middle Rd)	OU III (Magothy) Sampling Program	Bypass Detection		4	C	2/20/24	5/22/24	8/26/24	10/17/24
113-22	OU III (Middle Rd)	OU III (Magothy) Sampling Program	Plume Core		F			5/21/24		10/23/24
113-29	OU III (Middle Rd)		Plume Core		4		2/21/24	5/3/24	8/23/24	10/14/24
113-30	OU III (Middle Rd)		Plume Perimeter		4	C	2/21/24	5/6/24	8/27/24	10/15/24
113-31	OU III (Middle Rd)		Plume Perimeter		4		2/21/24	4/30/24	8/28/24	10/23/24
114-12	OU III (Middle Rd)		Bypass Detection	4	4		2/21/24	5/21/24	8/27/24	10/16/24
121-45	OU III (Middle Rd)	OU III (South Boundary)	Bypass Detection	4	4	C	2/23/24	5/22/24	8/26/24	10/23/24
121-53	OU III (Middle Rd)	OU III (South Boundary)	Plume Core		4		2/23/24	5/14/24	8/26/24	10/22/24
121-54	OU III (Middle Rd)	OU III (South Boundary)	Plume Core		4	C	2/23/24	5/14/24	8/26/24	10/22/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5D OUIII (South Boundary) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
114-07	OU III (South Boundary)		Plume Core		A					10/16/24
121-06	OU III (South Boundary)		Plume Perimeter		B				9/3/24	
121-08	OU III (South Boundary)		Plume Perimeter		F/B			5/6/24	9/3/24	10/18/24
121-10	OU III (South Boundary)		Plume Core		F	C		4/25/24		10/15/24
121-11	OU III (South Boundary)		Plume Core		F	C		4/25/24		10/15/24
121-12	OU III (South Boundary)		Plume Perimeter		B				9/4/24	
121-14	OU III (South Boundary)		Plume Core		F			5/6/24		10/21/24
121-20	OU III (South Boundary)		Plume Core		A					10/21/24
121-23	OU III (South Boundary)		Plume Core		A	C				10/18/24
121-43	OU III (South Boundary)		Bypass Detection		F			5/20/24		11/7/24
121-45	OU III (South Boundary)	OU III (Middle Rd)	Plume Core	4	4	C	2/23/24	5/22/24	8/26/24	10/23/24
121-47	OU III (South Boundary)	OU III (Middle Rd)	Plume Core		F			5/6/24		10/18/24
121-48	OU III (South Boundary)	OU III (Middle Rd)	None		F			5/20/24		10/18/24
121-49	OU III (South Boundary)	OU III (Middle Rd)	Plume Perimeter	4	4	C	2/28/24	5/6/24	9/4/24	10/21/24
121-53	OU III (South Boundary)	OU III (Middle Rd)	Plume Core		4		2/23/24	4/25/24	8/26/24	10/22/24
121-54	OU III (South Boundary)	OU III (Middle Rd)	Plume Core	4	4	C	2/23/24	4/25/24	8/26/24	10/22/24
121-57	OU III (South Boundary)		Plume Core		4		SLUG TEST	5/13/24	9/23/24	10/18/24
122-04	OU III (South Boundary)		Plume Core		A	C				10/15/24
122-05	OU III (South Boundary)	OU III (Magothy) Sampling Program	Plume Core		F	C		5/23/24		10/15/24
122-10	OU III (South Boundary)		Plume Perimeter			C				10/16/24
122-17	OU III (South Boundary)		Plume Core		F			5/24/24		11/19/24
122-18	OU III (South Boundary)		Plume Perimeter			C				10/17/24
122-19	OU III (South Boundary)		Plume Perimeter		A					10/17/24
122-20	OU III (South Boundary)	OU III (Magothy) Sampling Program	Plume Core		A					10/17/24
122-21	OU III (South Boundary)		Plume Core		A					10/16/24
122-22	OU III (South Boundary)		Plume Core		A					10/16/24
122-31	OU III (South Boundary)		Plume Perimeter			C				10/15/24
122-32	OU III (South Boundary)		Plume Core		A	C				10/15/24
122-33	OU III (South Boundary)		Plume Perimeter		A					10/16/24
122-34	OU III (South Boundary)		Bypass Detection		A					11/8/24
122-35	OU III (South Boundary)		Plume Core		A					11/8/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5E OUIII (Western South Boundary) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-558	OU III (Western South Boundary)		Plume Core		4	3/1/24	5/22/24	7/11/24	11/7/24
000-559	OU III (Western South Boundary)		Plume Core		4	3/1/24	5/22/24	7/11/24	11/7/24
000-560	OU III (Western South Boundary)		Plume Core		4	3/4/24	5/22/24	7/11/24	11/19/24
103-15	OU III (Western South Boundary)		Plume Core		4	3/1/24	5/28/24	9/9/24	10/29/24
103-18	OU III (Western South Boundary)		Plume Core		4	3/19/24	5/31/24	7/15/24	10/29/24
103-19	OU III (Western South Boundary)		Plume Core		4	3/15/24	5/31/24	9/9/24	10/29/24
111-15	OU III (Western South Boundary)		Plume Core		4	3/4/24	5/29/24	9/4/24	10/23/24
111-16	OU III (Western South Boundary)		Plume Core		4	3/4/24	6/5/24	9/4/24	10/23/24
119-06	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/23/24	9/4/24	10/24/24
119-10	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/23/24	9/4/24	10/24/24
119-11	OU III (Western South Boundary)		Plume Core		4	3/15/24	5/23/24	9/4/24	10/30/24
119-12	OU III (Western South Boundary)		Plume Core	4	4	3/5/24	5/23/24	9/9/24	10/30/24
121-42	OU III (Western South Boundary)		Plume Core		F		5/24/24		10/30/24
126-01	OU III (Western South Boundary)		Plume Perimeter		A				10/30/24
126-11	OU III (Western South Boundary)		Plume Core		F		5/31/24		10/30/24
126-13	OU III (Western South Boundary)		Plume Core		F		5/31/24		10/29/24
126-14	OU III (Western South Boundary)		Plume Core	4	4	3/8/24	6/4/24	9/10/24	10/29/24
126-15	OU III (Western South Boundary)		Plume Core		F		6/4/24		10/30/24
126-16	OU III (Western South Boundary)		Bypass Detection		4	3/4/24	5/20/24	7/16/24	11/7/24
126-17	OU III (Western South Boundary)		Plume Core		4	3/15/24	6/4/24	9/10/24	10/29/24
126-18	OU III (Western South Boundary)		Plume Core		4	3/8/24	6/3/24	9/10/24	10/29/24
126-19	OU III (Western South Boundary)		Plume Core		4	3/5/24	6/3/24	9/5/24	10/30/24
126-20	OU III (Western South Boundary)		Plume Core		4	3/15/24	6/4/24	9/10/24	10/29/24
126-21	OU III (Western South Boundary)		Plume Core		4	3/15/24	6/4/24	9/10/24	10/29/24
127-04	OU III (Western South Boundary)		Plume Core		F		5/24/24		10/30/24
127-06	OU III (Western South Boundary)		Plume Core		F		5/24/24		10/30/24
127-07	OU III (Western South Boundary)		Bypass Detection		4	3/4/24	5/20/24	7/16/24	11/7/24
130-02	OU III (Western South Boundary)		Plume Perimeter		F		6/3/24		10/25/24
130-03	OU III (Western South Boundary)		Plume Perimeter		F		6/3/24		10/25/24
130-04	OU III (Western South Boundary)	OU III (Magothy) Sampling Program	Plume Perimeter		A				10/25/24
130-08	OU III (Western South Boundary)		Bypass Detection	4	4	3/4/24	5/20/24	7/16/24	11/7/24
130-09	OU III (Western South Boundary)		Plume Perimeter		4	3/5/24	5/21/24	7/15/24	11/12/24
130-10	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/21/24	7/15/24	11/12/24
130-11	OU III (Western South Boundary)		Plume Core		4	3/5/24	5/21/24	7/15/24	11/12/24
130-14	OU III (Western South Boundary)		Plume Core		4	3/5/24	6/3/24	9/11/24	10/30/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5F OUIII (Industrial Park) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-112	OU III (Industrial Park)		Plume Core		F			4/29/24		10/22/24
000-114	OU III (Industrial Park)		Plume Perimeter		A					10/22/24
000-245	OU III (Industrial Park)		Plume Perimeter		A					11/5/24
000-248	OU III (Industrial Park)		Plume Perimeter		A					10/28/24
000-249	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core	F	F			4/18/24		10/17/24
000-250	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Perimeter		A					10/17/24
000-252	OU III (Industrial Park)		Plume Perimeter		A					10/18/24
000-253	OU III (Industrial Park)		Plume Core	F	F			4/18/24		10/18/24
000-255	OU III (Industrial Park)		Plume Perimeter		A					10/28/24
000-256	OU III (Industrial Park)		Plume Core	F	F			4/19*/24		10/28/24
000-259	OU III (Industrial Park)		Plume Core		F			4/19/24		10/17/24
000-261	OU III (Industrial Park)		Plume Perimeter		A					10/25/24
000-262	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/25/24
000-265	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/24/24
000-267	OU III (Industrial Park)		Plume Perimeter		A	C				10/8/24
000-268	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/8/24
000-271	OU III (Industrial Park)		Plume Core		F	C		4/17/24		10/8/24
000-272	OU III (Industrial Park)		Plume Perimeter		A					10/7/24
000-273	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/4/24
000-274	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/4/24
000-275	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/1/24
000-276	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/1/24
000-277	OU III (Industrial Park)		Bypass Detection		F			4/29/24		11/5/24
000-278	OU III (Industrial Park)		Bypass Detection		F			4/29/24		11/5/24
000-279	OU III (Industrial Park)		Plume Core	F	F			4/16/24		10/24/24
000-431	OU III (Industrial Park)		Bypass Detection		F			4/29/24		10/28/24
000-432	OU III (Industrial Park)		Bypass Detection		F			4/30/24		11/1/24
000-490	OU III (Industrial Park)		Background			C				10/24/24
000-528	OU III (Industrial Park)		Plume Core		F	C		4/16/24		10/24/24
000-529	OU III (Industrial Park)		Plume Core		4	C	2/22/24	4/19/24	7/8/24	11/4/24
000-530	OU III (Industrial Park)		Plume Core		4		2/22/24	4/26/24	7/10/24	10/18/24
000-531	OU III (Industrial Park)		Plume Core		4		2/22/24	4/17/24	7/10/24	10/25/24
000-537	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		4	C	2/8/24	4/16/24	7/8/24	10/7/24
000-538	OU III (Industrial Park)		Plume Core	4	4	C	2/8/24	4/16/24	7/8/24	10/7/24
000-541	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		4		2/22/24	4/29/24	7/15/24	11/4/24
000-542	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Perimeter		F			4/26/24		10/22/24
000-543	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Perimeter		F			4/17/24		10/25/24
000-544	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Bypass Detection		F			4/29/24		11/5/24
000-548	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Bypass Detection		4	C	2/22/24	4/16/24	7/8/24	10/17/24

Table 1-5F OUIII (Industrial Park) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
127-08	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		4		2/22/24	4/15/24	7/8/24	10/7/24
127-09	OU III (Industrial Park)	OU III (Magothy) Sampling Program	Plume Core		F			4/15/24		10/7/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5G OUIII (North Street) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-108	OU III (North Street)		Plume Core	A	A				12/16/24
000-154	OU III (North Street)		Plume Core		A				12/11/24
000-212	OU III (North Street)		Plume Core		A				12/18/24
000-343	OU III (North Street)	OU III (Magothy) Sampling Program	Plume Core		A				12/18/24
000-465	OU III (North Street)		Plume Core		A				12/11/24
000-472	OU III (North Street)		Plume Core		A				1/10/25
000-474	OU III (North Street)		Plume Core		A				12/16/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5H OUIII (North Street East-EDB) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 504 EDB/EPA 8011	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-138	OU III (North Street East-EDB)		Plume Core	4			3/5/24	6/3/24	7/23/24	12/18/24
000-394	OU III (North Street East-EDB)		Plume Core	4		A	3/11/24	6/12/24	7/23/24	12/17/24
000-551	OU III (North Street East-EDB)		Plume Core	4	4	A	3/7/24	6/3/24	7/23/24	12/18/24
000-552	OU III (North Street East-EDB)		Plume Core	4		A	3/8/24	5/27/24	7/22/24	12/17/24
000-553	OU III (North Street East-EDB)		Plume Core	4		A	3/8/24	5/27/24	7/22/24	12/17/24
000-554	OU III (North Street East-EDB)		Plume Core	4		A	3/11/24	6/13/24	7/23/24	12/17/24
000-555	OU III (North Street East-EDB)		Sentinel	4		A	3/6/24	6/13/24	7/23/24	12/17/24
000-563	OU III (North Street East-EDB)		Plume Core	4		A	3/7/24	6/13/24	7/23/24	12/17/24
000-564	OU III (North Street East-EDB)		Plume Perimeter	4		A	3/7/24	6/12/24	7/23/24	12/17/24
000-565	OU III (North Street East-EDB)		Bypass Detection	4		A	3/6/24	6/7/24	7/22/24	12/17/24
000-566	OU III (North Street East-EDB)		Bypass Detection	4		A	3/6/24	6/7/24	7/22/24	12/17/24
115-42	OU III (North Street East-EDB)		Plume Perimeter	F				6/17/24		12/20/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5I OUIII (LIPA) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-101	OU III (LIPA)		Plume Perimeter		F		5/1/24		12/30/24
000-102	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/3/24		12/30/24
000-104	OU III (LIPA)		Plume Core	F	F		5/7/24		11/22/24
000-105	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/7/24		11/22/24
000-130	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Core		F		5/9/24		12/4/24
000-131	OU III (LIPA)		Bypass Detection		F		5/2/24		11/19/24
000-425	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Core		F		5/3/24		12/2/24
000-445	OU III (LIPA)		Plume Perimeter		F		5/3/24		12/2/24
000-446	OU III (LIPA)		Plume Perimeter		F		5/3/24		12/4/24
000-447	OU III (LIPA)		Plume Core		F		5/8/24		12/3/24
000-448	OU III (LIPA)		Plume Core		F		5/7/24		11/22/24
000-449	OU III (LIPA)		Plume Core		F		5/2/24		12/13/24
000-450	OU III (LIPA)		Plume Perimeter		F		5/7/24		12/4/24
000-451	OU III (LIPA)		Bypass Detection		F		5/2/24		11/19/24
000-452	OU III (LIPA)		Bypass Detection		F		5/1/24		12/4/24
000-458	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/8/24		12/3/24
000-459	OU III (LIPA)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/8/24		12/3/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5J OUIII (Airport) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-428	OU III (Airport)		Plume Perimeter		F		5/21/24		12/13/24
800-100	OU III (Airport)		Plume Core		F		5/17/24		12/13/24
800-101	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/16/24		12/12/24
800-102	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/16/24		12/12/24
800-103	OU III (Airport)		Plume Core	F	F		5/16/24		12/12/24
800-104	OU III (Airport)		Plume Perimeter		F		5/16/24		12/12/24
800-105	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Perimeter		F		5/16/24		12/12/24
800-106	OU III (Airport)		Plume Core		F		5/21/24		12/11/24
800-108	OU III (Airport)		Bypass Detection		4	2/29/24	5/21/24	7/18/24	12/12/24
800-126	OU III (Airport)		Bypass Detection		4	2/28/24	5/15/24	7/18/24	12/12/24
800-127	OU III (Airport)		Bypass Detection		4	2/28/24	5/15/24	7/18/24	12/13/24
800-128	OU III (Airport)		Bypass Detection		4	2/29/24	5/14/24	7/17/24	12/5/24
800-129	OU III (Airport)		Plume Perimeter		F		5/14/24		12/5/24
800-130	OU III (Airport)		Plume Perimeter		F		5/14/24		12/5/24
800-131	OU III (Airport)		Bypass Detection	4	4	2/28/24	5/14/24	7/16/24	12/5/24
800-133	OU III (Airport)		Bypass Detection		4	2/29/24	5/17/24	7/18/24	12/13/24
800-138	OU III (Airport)		Plume Core		F		5/10/24		12/4/24
800-43	OU III (Airport)		Plume Core		F		5/13/24		12/9/24
800-44	OU III (Airport)		Plume Core		F		5/13/24		12/9/24
800-50	OU III (Airport)		Plume Perimeter		F		5/13/24		12/9/24
800-59	OU III (Airport)		Plume Core		F		5/10/24		12/4/24
800-60	OU III (Airport)		Sentinel		4	2/29/24	5/13/24	7/18/24	12/9/24
800-63	OU III (Airport)		Plume Core		F		5/9/24		12/11/24
800-90	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/9/24		12/3/24
800-92	OU III (Airport)		Plume Core		F		5/9/24		12/3/24
800-94	OU III (Airport)		Plume Core		F		5/10/24		12/12/24
800-95	OU III (Airport)		Plume Core	F	F		5/10/24		12/11/24
800-96	OU III (Airport)		Plume Perimeter		F		5/14/24		12/5/24
800-97	OU III (Airport)		Plume Core		F		5/15/24		12/5/24
800-98	OU III (Airport)		Plume Core		F		5/13/24		12/3/24
800-99	OU III (Airport)	OU III (Magothy) Sampling Program	Plume Core		F		5/13/24		12/3/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5K OUIII (Magothy) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-102	OU III (Magothy) Sampling Program	OU III (LIPA)	None		F		5/3/24		12/30/24
000-105	OU III (Magothy) Sampling Program	OU III (LIPA)	None		A				11/22/24
000-130	OU III (Magothy) Sampling Program	OU III (LIPA)	Magothy		F		5/9/24		12/4/24
000-249	OU III (Magothy) Sampling Program	OU III (Industrial Park)	Magothy	F	F		4/18/24		10/17/24
000-250	OU III (Magothy) Sampling Program	OU III (Industrial Park)	Magothy		A				10/17/24
000-343	OU III (Magothy) Sampling Program	OU III (North Street)	None		F		6/12/24		12/18/24
000-425	OU III (Magothy) Sampling Program	OU III (LIPA)	None		F		5/3/24		12/2/24
000-458	OU III (Magothy) Sampling Program	OU III (LIPA)	None		A				12/3/24
000-459	OU III (Magothy) Sampling Program	OU III (LIPA)	None		A				12/3/24
113-09	OU III (Magothy) Sampling Program	OU III (Middle Rd)	None		F		5/2/24		10/11/24
113-19	OU III (Magothy) Sampling Program	OU III (Middle Rd)	None		4	2/20/24	5/22/24	8/26/24	10/17/24
113-22	OU III (Magothy) Sampling Program	OU III (Middle Rd)	None		F		5/21/24		10/23/24
122-05	OU III (Magothy) Sampling Program	OU III (South Boundary)	None		F		5/23/24		10/15/24
122-20	OU III (Magothy) Sampling Program	OU III (South Boundary)	None		A				10/17/24
130-04	OU III (Magothy) Sampling Program	OU III (Western South Boundary)	None		A				10/25/24
800-101	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/16/24		12/12/24
800-102	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/16/24		12/12/24
800-105	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/16/24		12/12/24
800-90	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/9/24		12/3/24
800-99	OU III (Magothy) Sampling Program	OU III (Airport)	None		F		5/13/24		12/3/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5L William Floyd Wellfield Sentinel Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 901 Gamma Spec	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
109-03	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-01	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-02	William Floyd Wellfield Sentinel		Sentinel	A	A	A	4	4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-04	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-05	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24
117-06	William Floyd Wellfield Sentinel		Sentinel	A	A	A		4	4	4	3/25/24	6/10/24	9/17/24	12/9/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5M OUIII (BGRR/WCF Sr-90) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Isotopic Cs-137	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
065-06	OU III (BGRR/WCF Sr-90)		Background			A	A	A				12/2/24
065-160	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/27/24		11/15/24
065-162	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/1/24
065-163	OU III (BGRR/WCF Sr-90)		Background			A						11/18/24
065-164	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
065-169	OU III (BGRR/WCF Sr-90)		Plume Perimeter	F		F				6/12/24		11/26/24
065-170	OU III (BGRR/WCF Sr-90)		Plume Perimeter	A		A	A					12/27/24
065-174	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
065-175	OU III (BGRR/WCF Sr-90)		Plume Core			F	F			6/18/24		11/18/24
065-176	OU III (BGRR/WCF Sr-90)		Background			A						11/1/24
065-178	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/18/24
065-325	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/14/24		11/26/24
065-360	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/1/24
065-361	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/1/24
065-362	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/1/24
065-363	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/15/24
065-364	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/15/24
065-365	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/15/24
065-367	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/26/24
065-37	OU III (BGRR/WCF Sr-90)		Plume Perimeter	F	F	F	F			6/27/24		12/27/24
065-38	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/11/24		11/1/24
065-39	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/11/24		11/1/24
065-401	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/18/24		12/23/24
065-402	OU III (BGRR/WCF Sr-90)		Background			F				6/27/24		11/6/24
065-404	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/28/24		11/18/24
065-405	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/14/24		11/26/24
075-189	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						10/31/24
075-193	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/7/24
075-194	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-201	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/27/24
075-210	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F	F			6/11/24		11/15/24
075-39	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/18/24
075-40	OU III (BGRR/WCF Sr-90)	OU III (AOC 29/HFBR Tritium)	Plume Perimeter		A							10/1/24
075-41	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						10/30/24
075-46	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-47	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/11/24		11/6/24
075-48	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/11/24		11/13/24
075-664	OU III (BGRR/WCF Sr-90)		Plume Core			M			2/27/24	5/23/24	7/31/24	10/31/24
075-665	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/20/24
075-666	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
075-669	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/19/24

Table 1-5M OUIII (BGRR/WCF Sr-90) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Isotopic Cs-137	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
075-670	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/6/24		11/6/24
075-671	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/6/24		11/6/24
075-672	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-673	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/18/24
075-674	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/7/24
075-675	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/7/24
075-681	OU III (BGRR/WCF Sr-90)		Sentinel			A						11/15/24
075-682	OU III (BGRR/WCF Sr-90)		Plume Core			F	F			6/11/24		10/31/24
075-683	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/15/24
075-684	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/11/24		11/13/24
075-699	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/28/24		11/20/24
075-700	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/28/24		11/20/24
075-701	OU III (BGRR/WCF Sr-90)		Plume Core			M			2/27/24	5/23/24	7/31/24	10/31/24
075-705	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/27/24		11/20/24
075-706	OU III (BGRR/WCF Sr-90)		Plume Perimeter			F				6/11/24		11/7/24
075-707	OU III (BGRR/WCF Sr-90)		Plume Core			F				6/11/24		11/15/24
075-85	OU III (BGRR/WCF Sr-90)		Plume Core			A						11/26/24
075-86	OU III (BGRR/WCF Sr-90)		Plume Perimeter			A						11/7/24
075-87	OU III (BGRR/WCF Sr-90)	OU X Fomer Firehouse MW	Sentinel			F				6/11/24		11/13/24
085-398	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/13/24		12/10/24
085-399	OU III (BGRR/WCF Sr-90)		Sentinel			F	F			6/11/24		11/6/24
085-402	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/6/24		11/6/24
085-403	OU III (BGRR/WCF Sr-90)		Sentinel			F				6/13/24		11/18/24
085-415	OU III (BGRR/WCF Sr-90)		Background			F				6/11/24		11/6/24
095-326	OU III (BGRR/WCF Sr-90)		None			F				6/13/24		11/18/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5N Chemical/Animal Holes Sr-90 Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
097-313	Chemical/Animal Holes Sr-90		Plume Core	D	D	3/8/24		9/30/24	
097-314	Chemical/Animal Holes Sr-90		Plume Core	D		3/8/24		9/30/24	
097-315	Chemical/Animal Holes Sr-90		Plume Core	D		3/8/24		9/30/24	
106-100	Chemical/Animal Holes Sr-90		Plume Core	B				9/13/24	
106-101	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-103	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-104	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-105	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-119	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-125	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-136	Chemical/Animal Holes Sr-90		Plume Core	B				9/16/24	
106-16	Chemical/Animal Holes Sr-90		Plume Core	B				9/19/24	
106-49	Chemical/Animal Holes Sr-90		Plume Core	B	B			9/19/24	
106-94	Chemical/Animal Holes Sr-90		Plume Core	B				9/19/24	
106-95	Chemical/Animal Holes Sr-90		Plume Core	B				9/19/24	
106-98	Chemical/Animal Holes Sr-90		Plume Core	B				9/12/24	
106-99	Chemical/Animal Holes Sr-90		Plume Core	B				9/13/24	

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5O OUIII (AOC 29/HFBR Tritium) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 906 Tritium	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
075-11	OU III (AOC 29/HFBR Tritium)		Plume Perimeter	4		2/15/24	4/15/24	7/1/24	9/30/24
075-288	OU III (AOC 29/HFBR Tritium)		Plume Perimeter	4		2/16/24	4/15/24	7/1/24	10/1/24
075-40	OU III (AOC 29/HFBR Tritium)	OU III (BGRR/WCF Sr-90)	Plume Perimeter	4		2/12/24	4/9/24	7/9/24	10/1/24
075-802	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/12/24	4/16/24	7/2/24	10/1/24
075-803	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/16/24	4/16/24	7/2/24	10/1/24
075-804	OU III (AOC 29/HFBR Tritium)		Plume Core	4	4	2/15/24	4/9/24	7/3/24	9/30/24
075-805	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/15/24	4/15/24	7/3/24	10/1/24
075-806	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/16/24	4/15/24	7/3/24	9/30/24
075-807	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/15/24	4/15/24	7/3/24	9/30/24
075-808	OU III (AOC 29/HFBR Tritium)		Plume Core	4		2/16/24	4/15/24	7/3/24	9/30/24

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5P OUIV (AOC 6 Sr-90) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
066-189	OU IV (AOC 6 Sr-90)		Background	A			4/4/24		
076-04	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/9/24		
076-06	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-07	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-13	OU IV (AOC 6 Sr-90)		Plume Perimeter	A	A		4/2/24		
076-168	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-169	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-181	OU IV (AOC 6 Sr-90)		Sentinel	A			4/5/24		
076-182	OU IV (AOC 6 Sr-90)		Sentinel	A			4/5/24		
076-184	OU IV (AOC 6 Sr-90)		Plume Core	A			4/9/24		
076-20	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-22	OU IV (AOC 6 Sr-90)		Plume Core	A			4/9/24		
076-24	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/3/24		
076-25	OU IV (AOC 6 Sr-90)		Plume Core	A			4/16/24		
076-262	OU IV (AOC 6 Sr-90)		Plume Core	A			4/4/24		
076-28	OU IV (AOC 6 Sr-90)		Plume Core	A			4/4/24		
076-317	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-373	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-415	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/4/24		
076-416	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/5/24		
076-418	OU IV (AOC 6 Sr-90)		Plume Core	A			4/3/24		
076-419	OU IV (AOC 6 Sr-90)		Plume Core	A			4/3/24		
076-420	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		
076-421	OU IV (AOC 6 Sr-90)		Plume Perimeter	A			4/2/24		

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5Q OUVI (EDB) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 504 EDB/EPA 8011	Blind Duplicate/MS/MSD	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
000-173	OU VI EDB		Plume Core	A					12/30/24
000-175	OU VI EDB		Plume Core	A					12/30/24
000-178	OU VI EDB		Plume Core	F			6/26/24		12/27/24
000-209	OU VI EDB		Plume Core	A					12/30/24
000-283	OU VI EDB		Plume Core	F			6/25/24		12/27/24
000-284	OU VI EDB		Plume Core	F			6/25/24		12/27/24
000-498	OU VI EDB		Plume Perimeter	F			6/25/24		12/20/24
000-499	OU VI EDB		Plume Core	F			6/20/24		12/20/24
000-500	OU VI EDB		Plume Core	4	4	3/11/24	6/20/24	8/21/24	12/20/24
000-501	OU VI EDB		Plume Perimeter	F			6/17/24		12/19/24
000-507	OU VI EDB		Plume Core	F			6/25/24		12/20/24
000-508	OU VI EDB		Bypass Detection	4		3/13/24	6/17/24	7/31/24	12/19/24
000-519	OU VI EDB		Bypass Detection	4		3/13/24	6/20/24	7/30/24	12/19/24
000-520	OU VI EDB		Plume Core	F			6/17/24		12/19/24
000-524	OU VI EDB		Plume Perimeter	F			6/26/24		12/26/24
000-527	OU VI EDB		Bypass Detection	4		3/13/24	6/21/24	7/30/24	12/19/24
000-549	OU VI EDB		Plume Core	4		3/21/24	6/26/24	8/21/24	12/26/24
000-550	OU VI EDB		Plume Core	4		3/21/24	6/26/24	8/21/24	12/26/24
000-567	OU VI EDB		Plume Core	4		3/19/24	6/20/24	8/21/24	12/19/24
000-568	OU VI EDB		Plume Core	4		3/19/24	6/20/24	8/21/24	12/19/24
000-570	OU VI EDB		Plume Core	4		3/11/24	6/25/24	8/22/24	12/26/24
000-571	OU VI EDB		Plume Core	4		3/14/24	6/24/24	7/31/24	12/20/24
000-572	OU VI EDB		Plume Core	4		3/14/24	6/24/24	8/22/24	12/19/24
000-580	OU VI EDB		Background	4		3/22/24	6/24/24	7/31/24	12/19/24
000-581	OU VI EDB		Background	4		3/14/24	6/21/24	7/30/24	12/19/24
000-582	OU VI EDB		Background	4		3/22/24	6/24/24	8/22/24	12/19/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5R OUX (Former Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
075-809	OU X Fomer Firehouse MW		Plume Core	B			4	2/1/24	6/04/24	7/1/24	10/11/24
075-810	OU X Fomer Firehouse MW		Plume Core	B			4	2/1/24	6/4/24	7/2/24	10/10/24
075-811	OU X Fomer Firehouse MW		Plume Core	B	4		4	2/1/24	6/4/24	7/1/24	10/10/24
075-87	OU X Fomer Firehouse MW	OU III (BGRR/WCF Sr-90)	Plume Core				D	2/5/24		7/10/24	
085-350	OU X Fomer Firehouse MW	OU III (Building 96)	Plume Core				D	2/5/24		7/24/24	
085-384	OU X Fomer Firehouse MW		Plume Core				D	2/7/24		7/10/24	
085-404	OU X Fomer Firehouse MW		Plume Core		4		4	1/29/24	6/4/24	7/9/24	10/10/24
085-405	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/4/24	7/9/24	10/9/2024
085-406	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/5/24	7/2/24	10/10/24
085-407	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/5/24	7/2/24	10/9/24
085-408	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/5/24	7/2/24	10/9/24
085-409	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/4/24	7/9/24	10/10/24
085-410	OU X Fomer Firehouse MW		Plume Core				4	1/29/24	6/4/24	7/9/24	10/10/24
085-411	OU X Fomer Firehouse MW		Plume Core				D	2/1/24		7/26/24	
085-412	OU X Fomer Firehouse MW		Plume Core				D	2/1/24		7/26/24	
085-43	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/19/24	
086-123	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/29/24	
095-170	OU X Fomer Firehouse MW	OU III (Building 96)	Plume Core				D	2/5/24		7/19/24	
095-171	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/29/24	
096-115	OU X Fomer Firehouse MW		Plume Core		D	D	D	2/6/24		7/25/24	
096-117	OU X Fomer Firehouse MW		Plume Core			D	D	2/6/24		7/25/24	
096-118	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/25/24	
096-122	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/29/24	
096-123	OU X Fomer Firehouse MW		Plume Core				D	1/29/24		7/12/24	
096-124	OU X Fomer Firehouse MW		Plume Core				D	1/30/24		7/19/24	
096-125	OU X Fomer Firehouse MW		Plume Core				D	1/30/24		7/19/24	
096-126	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/19/24	
096-127	OU X Fomer Firehouse MW		Plume Core			D	D	2/6/24		7/29/24	
096-128	OU X Fomer Firehouse MW		Plume Core				D	2/6/24		7/19/24	
096-129	OU X Fomer Firehouse MW		Plume Core			D	D	2/6/24		7/26/24	
096-130	OU X Fomer Firehouse MW		Plume Core				D	1/31/24		7/16/24	
096-131	OU X Fomer Firehouse MW		Plume Core			D	D	1/31/24		7/16/24	
096-84	OU X Fomer Firehouse MW		Plume Core				D	2/2/24		7/17/24	
105-43	OU X Fomer Firehouse MW		Plume Core			D	D	1/26/24		7/26/24	
105-44	OU X Fomer Firehouse MW	OU III (Middle Rd)	Plume Core				D	1/24/24		7/17/24	
105-72	OU X Fomer Firehouse MW		Bypass Detection			D	D	1/26/24		7/16/24	
105-73	OU X Fomer Firehouse MW		Bypass Detection			D	D	1/26/24		7/16/24	
105-74	OU X Fomer Firehouse MW		Plume Core			D	D	1/30/24		7/29/24	
105-75	OU X Fomer Firehouse MW		Plume Core			D	D	1/30/24		7/12/24	

Table 1-5R OUX (Former Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
105-76	OU X Fomer Firehouse MW		Plume Core			D	D	1/30/24		7/12/24	
105-77	OU X Fomer Firehouse MW		Bypass Detection			D	D	2/7/24		7/17/24	
105-78	OU X Fomer Firehouse MW		Bypass Detection			D	D	2/7/24		7/17/24	
000-262	OU X Fomer Firehouse MW		Plume Core				A				10/25/24
000-265	OU X Fomer Firehouse MW		Plume Core				A				10/24/24
000-267	OU X Fomer Firehouse MW		Background				CA				10/8/24
000-268	OU X Fomer Firehouse MW		Background				AC				10/8/24
000-271	OU X Fomer Firehouse MW		Background				AC				10/8/24
000-490	OU X Fomer Firehouse MW		Background				A				10/24/24
000-528	OU X Fomer Firehouse MW		Plume Core				A				10/24/24
000-529	OU X Fomer Firehouse MW		Plume Core				A				11/4/24
000-537	OU X Fomer Firehouse MW		Background				CA				10/7/24
000-538	OU X Fomer Firehouse MW		Background				CA				1/10/25
000-548	OU X Fomer Firehouse MW		Plume Core				A				10/17/24
105-66	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
105-67	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
105-68	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
106-56	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
106-58	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
113-17	OU X Fomer Firehouse MW		Plume Core				A				10/17/24
113-19	OU X Fomer Firehouse MW		Plume Core				A				NS
113-30	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
121-10	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
121-11	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
121-23	OU X Fomer Firehouse MW		Plume Core				A				10/18/24
121-45	OU X Fomer Firehouse MW		Plume Core				A				10/23/24
121-49	OU X Fomer Firehouse MW		Plume Core				A				10/21/24
121-54	OU X Fomer Firehouse MW		Plume Core				A				10/22/24
122-04	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
122-05	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
122-10	OU X Fomer Firehouse MW		Plume Core				A				10/16/24
122-18	OU X Fomer Firehouse MW		Plume Core				A				10/17/24
122-31	OU X Fomer Firehouse MW		Plume Core				A				10/15/24
122-32	OU X Fomer Firehouse MW		Plume Core				A				10/15/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

NS No Sample

Table 1-5S OUX (Current Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
073-01	OU X Current Firehouse MW		Plume Core			D	1/23/24		8/30/24	
073-26	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/23/24	8/20/24	10/3/24
073-27	OU X Current Firehouse MW		Plume Core			4	1/3/24	4/19/24	8/29/24	10/4/24
073-28	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/16/24	8/29/24	10/3/24
073-29	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/16/24	8/29/24	10/3/24
073-30	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/22/24	8/20/24	10/3/24
073-31	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/19/24	8/29/24	10/2/24
073-32	OU X Current Firehouse MW		Plume Core			4	1/4/24	4/19/24	8/29/24	10/2/24
073-33	OU X Current Firehouse MW		Plume Core			4	1/2/24	4/19/24	8/21/24	10/3/24
074-135	OU X Current Firehouse MW		Plume Core	4		4	1/18/24	4/16/24	8/21/24	10/4/24
083-01	OU X Current Firehouse MW		Plume Core			D	1/24/24		8/22/24	
083-02	OU X Current Firehouse MW		Plume Core			D	1/24/24		8/30/24	
083-05	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/30/24	
083-33	OU X Current Firehouse MW		Plume Core			D	1/8/24		8/19/24	
083-34	OU X Current Firehouse MW		Plume Core			D	1/8/24		8/19/24	
083-35	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
083-36	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
083-37	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
083-38	OU X Current Firehouse MW		Plume Core			D	1/4/24		8/20/24	
083-39	OU X Current Firehouse MW		Plume Core			D	1/18/24		9/3/24	
083-40	OU X Current Firehouse MW		Plume Core			D	1/18/24		8/26/24	
083-41	OU X Current Firehouse MW		Plume Core	D	D	D	1/18/24		8/23/24	
083-42	OU X Current Firehouse MW		Plume Core		D	D	1/18/24		8/28/24	
083-43	OU X Current Firehouse MW		Plume Core		D	D	1/19/24		8/28/24	
083-44	OU X Current Firehouse MW		Plume Core			D	1/4/24		8/23/24	
083-47	OU X Current Firehouse MW		Plume Core			D	1/4/24		8/2/24	
084-03	OU X Current Firehouse MW		Plume Core			D	1/23/24		9/3/24	
084-04	OU X Current Firehouse MW		Plume Core			D	1/23/24		9/3/24	
084-28	OU X Current Firehouse MW		Plume Core			D	1/24/24		9/11/24	
084-86	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/26/24	
084-87	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/26/24	
084-88	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
084-89	OU X Current Firehouse MW		Plume Core			D	1/16/24		8/20/24	
084-90	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/21/24	
084-91	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/22/24	
084-92	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/21/24	
084-93	OU X Current Firehouse MW		Plume Core			D	1/10/24		9/3/24	
084-94	OU X Current Firehouse MW		Plume Core	D	D	D	1/12/24		7/25/24	
084-95	OU X Current Firehouse MW		Plume Core		D	D	1/12/24		8/29/24	
084-96	OU X Current Firehouse MW		Plume Core			D	1/8/24		7/25/24	
084-97	OU X Current Firehouse MW		Plume Core		D	D	1/10/24		7/25/24	

Table 1-5S OUX (Current Firehouse MW) Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	Blind Duplicate/MS/MSD	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
084-98	OU X Current Firehouse MW		Plume Core		D	D	1/10/24		7/25/24	
093-04	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/19/24	8/5/24	10/2/24
093-88	OU X Current Firehouse MW		Plume Core			D	1/8/24		8/5/24	
093-89	OU X Current Firehouse MW		Plume Core			D	1/9/24		7/26/24	
093-90	OU X Current Firehouse MW		Plume Core		D	D	1/12/24		7/26/24	
093-91	OU X Current Firehouse MW		Plume Core			D	1/9/24		7/29/24	
093-92	OU X Current Firehouse MW		Plume Core		D	D	1/23/24		7/26/24	
093-93	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/19/24	8/2/24	10/2/24
093-94	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/22/24	8/5/24	10/2/24
093-95	OU X Current Firehouse MW		Plume Core			4	1/5/24	4/22/24	8/5/24	10/2/24
093-96	OU X Current Firehouse MW		Plume Core	D		D	1/9/24		8/22/24	
093-97	OU X Current Firehouse MW		Plume Core			D	1/24/24		9/6/24	
093-98	OU X Current Firehouse MW		Plume Core			D	1/24/24		9/6/24	
094-275	OU X Current Firehouse MW		Plume Core			D	1/10/24		8/2/24	
094-276	OU X Current Firehouse MW		Plume Core		D	D	1/10/24		8/2/24	
094-277	OU X Current Firehouse MW		Plume Core			D	1/12/24		8/2/24	
094-278	OU X Current Firehouse MW		Plume Core		D	D	1/12/24		8/6/24	
102-12	OU X Current Firehouse MW		Plume Core			D	1/24/24		8/30/24	
102-26	OU X Current Firehouse MW		Plume Core			D	1/11/24		8/27/24	
102-27	OU X Current Firehouse MW		Plume Core			D	1/11/24		8/26/24	
102-28	OU X Current Firehouse MW		Plume Core			D	1/11/24		8/26/24	
102-29	OU X Current Firehouse MW		Bypass Detection			D	1/11/24		7/25/24	
102-30	OU X Current Firehouse MW		Bypass Detection		D	D	1/11/24		7/24/24	
102-31	OU X Current Firehouse MW		Bypass Detection		D	D	1/11/24		7/24/24	
102-36	OU X Current Firehouse MW		Plume Core			D	1/22/24		8/27/24	
102-37	OU X Current Firehouse MW		Plume Core	D		D	1/22/24		8/27/24	
102-38	OU X Current Firehouse MW		Bypass Detection			D	1/22/24		8/30/24	
102-39	OU X Current Firehouse MW		Bypass Detection			D	1/22/24		8/30/24	
102-40	OU X Current Firehouse MW		Bypass Detection		D	D	1/11/24		7/24/24	
103-02	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		NO SAMPLE	
103-10	OU X Current Firehouse MW		Plume Core		D	D	1/23/24		8/29/24	
103-30	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/5/24	
103-31	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/6/24	
103-32	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/6/24	
103-33	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/27/24	
103-34	OU X Current Firehouse MW		Plume Core		D	D	1/11/24		8/27/24	
111-20	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/5/24	
118-07	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/6/24	
125-04	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/5/24	
125-05	OU X Current Firehouse MW		Plume Core		D	D	2/7/24		11/5/24	

Definitionss

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5T Site Background Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	8260 Low Level	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
017-01	Site Background		Background	B			9/10/24	
017-03	Site Background		Background	B			9/10/24	
017-04	Site Background		Background	B			9/10/24	
018-01	Site Background		Background	B			9/10/24	
018-02	Site Background		Background	B			9/10/24	
018-04	Site Background		Background	B			9/10/24	
018-05	Site Background		Background	B			9/10/24	
034-02	Site Background		Background	B			9/10/24	
034-03	Site Background		Background	B			9/10/24	

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters

Table 1-5U Current Landfill Schedule 2024

Well ID	Project 1	Project 2	Decision Subunit	TSS/TDS	Sulfates/Chloride/Alkalinity	TK Nitrogen	Total Nitrogen	Nitrates	Nitrites	Ammonia	TAL Metals	Cyanide	EPA 901 Gamma Spec	EPA 906 Tritium	EPA 905 Sr-90	Blind Duplicate/MS/MSD	8260 Low Level	8270 SIM 1,4-dioxane	EPA 1633 PFAS/PFOA	Date Sampled Q1	Date Sampled Q2	Date Sampled Q3	Date Sampled Q4
087-09	Current Landfill		Background	F	F	F	F	F	F	F	F	F					F	A	A		5/28/24		11/12/24
087-11	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					F	A	A		5/30/24		11/14/24
087-23	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A		F	A	A		5/30/24		11/14/24
087-24	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					A	A	A		5/30/24		11/14/24
087-26	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					F	A	A		5/29/24		11/13/24
087-27	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A		F	A	A		5/29/24		11/13/24
088-109	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A	4	4	A	A	3/15/24	5/28/24	9/6/24	11/12/24
088-110	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F					F	A	A		5/29/24		11/13/24
088-21	Current Landfill		Downgradient	F	F	F	F	F	F	F	F	F	A	A	A		F	A	A		5/30/24		11/14/24
088-22	Current Landfill		Downgradient	A	A	A	A	A	A	A	A	A					A	A	A				11/14/24
088-23	Current Landfill		Downgradient	A	A	A	A	A	A	A	A	A					A	A	A				11/14/24
098-99	Current Landfill	OU I South Boundary VOCs	Downgradient														4	A	A	3/12/24	5/29/24	9/6/24	11/14/24

Definitions

a	Sample in 4th Quarter only
b	Sample in 3rd Quarter Only
c	Sample in 1st Quarter Only
d	Sample in 1st And 3rd Quarter
f	Sample in 2nd And 4th Quarters
g	Sample during 4th quarter in in even numbered years
m	Sample monthly
4	Sample all 4 quarters