



Department of Energy

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October 28, 2024

Ms. April Webb
Interim Federal Facility Agreement Manager
Hazardous Waste Branch Manager
Division of Waste Management
Kentucky Department for Environmental Protection
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-10029923-25

Mr. Victor Weeks
Federal Facility Agreement Manager
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Dear Ms. Webb and Mr. Weeks:

**U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT
FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE
SECOND HALF OF FISCAL YEAR 2024 PADUCAH, KENTUCKY,
DOE/LX/07-2500/V2**

References:

1. Email from L. Williamson to V. Weeks, A. Ladd, et al., "RE: EPA Region 4 and Kentucky DWM Acknowledgement of Receipt and Review for the Semiannual Progress Report for the First Half of Fiscal Year 2024 (DOE/LX/07-2500/V1)," dated April 30, 2024
2. Letter from V. Weeks, to A. Ladd, "EPA Region 4 acknowledgement of receipt and review for the V1 Semiannual Progress Report for the First Half of Fiscal Year 2024, DOE/LX/07-2500/V1," dated April 26, 2024

Enclosed is the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2024 Paducah, Kentucky*, DOE/LX/07-2500/V2, and the associated certification page. This report is required by Sections XXIII and XXXII.F of the Federal Facility Agreement (FFA) and Part IV (Corrective Action) of the Hazardous Waste Management Facility Permit.

The comment received from the U.S. Environmental Protection Agency (EPA) on April 26, 2024, (Reference 2) has been incorporated. A comment response summary reflecting the associated change is included with this transmittal.

In accordance with Section XX of the Paducah FFA, EPA and the Kentucky Department for Environmental Protection have a 90-day review period. If the FFA parties have no substantive comments, then the U.S. Department of Energy requests a letter of concurrence.

If you have any questions or require additional information, please contact me at (270) 217-2029.

Sincerely,

APRIL LADD

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April Ladd
Federal Facility Agreement Manager
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. FFA Semiannual Progress Report for the Second Half of Fiscal Year 2024
3. Comment Response Summary—EPA Comment

General Reference Compendium

cc w/enclosures:

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CERTIFICATION

Document Identification: *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2024 Paducah, Kentucky, DOE/LX/07-2500/V2, October 2024*

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

Four Rivers Nuclear Partnership, LLC

MYRNA REDFIELD
(Affiliate)

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Myrna E. Redfield, Program Manager
Four Rivers Nuclear Partnership, LLC

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

U.S. Department of Energy

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April Ladd, Paducah Site Lead
Portsmouth/Paducah Project Office
U.S. Department of Energy

DOE/LX/07-2500/V2
Secondary Document

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2024
Paducah, Kentucky**



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**DOE/LX/07-2500/V2
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2024
Paducah, Kentucky**

Date Issued—October 2024

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FOUR RIVERS NUCLEAR PARTNERSHIP, LLC,
managing the
Deactivation and Remediation Project at the
Paducah Gaseous Diffusion Plant
under Contract DE-EM0004895

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ACRONYMS

AR	Administrative Record
BGOU	Burial Grounds Operable Unit
CAB	Citizens Advisory Board
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRP	community relations plan
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EIC	Environmental Information Center
EPA	U.S. Environmental Protection Agency
EW	extraction well
FFA	Federal Facility Agreement
FRNP	Four Rivers Nuclear Partnership, LLC
GRC	general reference compendium
GWOU	Groundwater Operable Unit
IRA	interim remedial action
KDEP	Kentucky Department for Environmental Protection
LUCIP	land use control implementation plan
MCL	maximum contaminant level
MW	monitoring well
MWG	modeling working group
NEPCS	Northeast Plume Containment System
NTCRA	non-time-critical removal action
NTU	nephelometric turbidity unit
NWPGS	Northwest Plume Groundwater System
O&M	operation and maintenance
OSWDF	on-site waste disposal facility
OU	operable unit
PD	post-decision
PEGASIS	PPPO Environmental Geographic Analytical Spatial Information System
PPPO	Portsmouth/Paducah Project Office
PVA	property valuation administrator
RMD	risk methods document
ROD	Record of Decision
SMP	site management plan
SST	Swift & Staley Team
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
VOC	volatile organic compound
WAG	waste area grouping
WDA	waste disposal alternatives

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FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT SECOND HALF OF FISCAL YEAR 2024

Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024

INTRODUCTION

The Paducah Gaseous Diffusion Plant was placed on the National Priorities List on May 31, 1994. In accordance with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the U.S. Department of Energy (DOE) entered into a Federal Facility Agreement (FFA) with the U.S. Environmental Protection Agency (EPA) and Kentucky Department for Environmental Protection (KDEP) on February 13, 1998. The FFA established one set of consistent requirements for achieving comprehensive site remediation in accordance with the Resource Conservation and Recovery Act and CERCLA, including stakeholder involvement.

Site cleanup activities are integrated into the following operable units (OUs).

- C-400 Complex OU
- Groundwater OU (GWOU)
- Surface Water OU (SWOU)
- Soils OU
- Burial Grounds OU (BGOU)
- Facility Decontamination and Decommissioning (D&D) OU
- Lagoons OU
- Depleted Uranium Hexafluoride (DUF₆) Footprint Underlying Soils OU
- Soils and Slabs OU
- CERCLA Waste Disposal Alternatives (WDA) OU
- Comprehensive Site OU

Section XXIII of the FFA requires that DOE prepare a regulatory semiannual progress report that describes the actions that DOE has taken during the previous six months to implement FFA requirements, as well as the schedules of activities to be taken during the upcoming six months.¹ Activities that have taken place after the reporting period end date are not included in this report, but will be included in the reporting period in which they occur. Projects and activities reported in this update are grouped by the OUs listed in Table 1.

¹ Schedules are included for information and planning purposes only; enforceable schedules are established in the site management plan (SMP).

Table 1. Operable Units and Corresponding Report Topics

Operable Unit	Project/Activities
C-400 Complex Operable Unit	<ul style="list-style-type: none">• C-400 D&D• C-400 Final Remedial Action
Groundwater Operable Unit	<ul style="list-style-type: none">• C-400 Interim Remedial Action (IRA)• Southwest Plume Sources Remedial Action• Dissolved-Phase Plumes Remedial Action• Northeast Plume IRA• Northwest Plume IRA
Burial Grounds Operable Unit	<ul style="list-style-type: none">• C-749 Uranium Burial Ground Solid Waste Management Unit (SWMU) 2
Surface Water Operable Unit	<ul style="list-style-type: none">• Remedial Action
CERCLA WDA Operable Unit	<ul style="list-style-type: none">• CERCLA WDA Evaluation
Water Policy	<ul style="list-style-type: none">• Removal Action
Additional Reporting	<ul style="list-style-type: none">• Waste Area Groupings (WAGs) 1 and 7• Community Relations Plan (CRP)• SMP• CERCLA Five-Year Review• Plant Industrial Area Vapor Intrusion Assessment

Each section of this update has been divided into nine sections as follows.

- I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan)
- II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction)
- III. Identity and assigned tasks of DOE contractors for work to be performed for this project
- IV. Statement of the manner and extent to which the requirements and time schedules are being met
- V. Primary/Secondary Document Tracking System
 - A) Documents under review and/or preparation for this reporting period
 - B) Due dates for completion of review/modification tasks
- VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay)
- VII. Summary of all contacts with local community, public interest groups, or state government
- VIII. Changes in relevant personnel
- IX. Actual cost for operation and maintenance (O&M), if appropriate

Each section satisfies a reporting requirement for the FFA Semiannual Progress Report or the Hazardous Waste Management Facility Permit and has been formatted in accordance with the template found in Appendix D of the FFA.

To account for sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This is in accordance with agreements made among the FFA parties during the July 14, 2022, FFA managers meeting.

This report includes five appendices as follows.

- Appendix A contains Northeast and Northwest Plumes Water Withdrawal Reports for the January 1, 2024, through June 30, 2024, reporting period.
- Appendix B contains Figures B.1 through B.30, as referenced in the Northeast and Northwest Plumes updates. All groundwater data are available in the Portsmouth/Paducah Project Office (PPPO) Environmental Geographic Analytical Spatial Information System (PEGASIS) and, therefore, have not been summarized in this semiannual report.
- Appendix C contains a map depicting monitoring well (MW) locations for the C-746-K Landfill and graphical presentations of trichloroethene (TCE) concentrations in these wells over time. These data are currently collected semiannually. All groundwater data are available in PEGASIS and, therefore, have not been summarized in this semiannual report.
- Appendix D contains updates to the Administrative Record (AR) index since the last progress report. This is required by the Paducah FFA (Section XXXII.F). In October 2018, DOE began a comprehensive review of the Paducah Environmental Information Center (EIC) to ensure that the project document files were complete. As part of this effort, DOE reorganized the Paducah EIC to include the original three categories: 1) AR File, 2) Post-Decision (PD) File, and 3) General Reference Compendium (GRC); and added 4) AR Reference File and 5) AR Archive File. The AR Reference File contains programmatic documents that support the AR [e.g., SMP, Risk Methods Document (RMD)]. As a result of this reorganization of the EIC, Appendix D has been expanded to include updates to the AR index that include the AR File, PD File, and AR Reference File.

The AR Archive File contains documents for projects that originally were expected to have a decision document [i.e., Record of Decision (ROD) or Action Memorandum], but had been resequenced prior to a final decision. These documents have been archived within the AR Archive File to establish future AR files for projects and, as a result, are not included in Appendix D. The AR Archive File can be viewed on the EIC website.

The GRC, which supplements the Paducah AR, contains technical documents associated with the Paducah Site that do not meet the CERCLA criteria of an AR File or a PD File (e.g., CRP, CERCLA Five-Year Review, Annual Site Environmental Report); but are deemed important in understanding the Paducah Site environmental remedial efforts. Because the GRC is not part of the AR, it is not included as part of the update to Appendix D. The GRC can be viewed on the EIC website.

- Appendix E contains figures depicting the C-749 Uranium Burial Ground (SWMU 2) groundwater MW network and a summary of the SWMU 2 trends for TCE and technetium-99 (Tc-99) for a period of five years. All groundwater data are available in PEGASIS and, therefore, have not been summarized in this semiannual report.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

C-400 COMPLEX OPERABLE UNIT

The C-400 Complex OU was established in a *Memorandum of Agreement on the C-400 Complex under the Federal Facility Agreement for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky* (C-400 Complex OU MOA), signed August 8, 2017; the agreement then was incorporated into the SMP. The following two projects are included in the C-400 Complex OU.

- C-400 D&D
- C-400 Final Remedial Action

On September 16, 2022, the FFA parties executed an FFA milestone modification, which incorporated the C-400 D&D into the C-400 Final Remedial Action. Because the demolition of the C-400 Cleaning Building will be incorporated into the C-400 Final Remedial Action, milestones associated with the C-400 D&D, which was intended to be a non-time-critical removal action (NTCRA), will not be necessary. Per the Memorandum, *Suspension of D1 and D2 Comprehensive Environmental Response, Compensation, and Liability Act Documents Associated with the C-400 Cleaning Building Non-Time-Critical Removal Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky* (C-400 Building D&D MOA), dated October 2, 2019, the original NTCRA documents were not approved, and the NTCRA was suspended. With the FFA parties' execution of the FFA milestone modification, the C-400 Building D&D MOA is superseded, and the planning documents associated with the NTCRA and their associated milestones are no longer required because the C-400 Cleaning Building will be demolished as part of the remedial action. Additionally, under the FFA parties' FFA milestone modification, the milestone dates in the C-400 Complex OU MOA, which provided for enforceable milestones and planning dates and was later extended due to the force majeure related to COVID-19, are also superseded.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

C-400 COMPLEX OPERABLE UNIT: C-400 Final Remedial Action

The C-400 Final Remedial Action will investigate the C-400 Complex OU and associated SWMUs, evaluate potential remedial alternatives, develop decision documents selecting an alternative(s), and design and implement the remedial alternative(s).

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Received EPA and KDEP comments on the *Addendum to the Remedial Investigation/Feasibility Study Work Plan for the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2433&D2/R1/A1, on April 18, 2024, and April 19, 2024, respectively.
- Finalized and submitted the *Addendum to the Remedial Investigation/Feasibility Study Work Plan for the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2433&D2/R1/A1/R1, to EPA and KDEP on June 17, 2024.
- Received EPA and KDEP concurrence of the *Addendum to the Remedial Investigation/Feasibility Study Work Plan for the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2433&D2/R1/A1/R1, on June 21, 2024.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Initiate remedial field activities in accordance with the *Addendum to the Remedial Investigation/Feasibility Study Work Plan for the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2433&D2/R1/A1/R1. Budget remaining from any unused contingency borings that are associated with this project will be used to fund sampling near the SWMU 100 Fire Training Area for per- and polyfluoroalkyl substances parameters.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the C-400 Complex OU belongs to Four Rivers Nuclear Partnership, LLC (FRNP). FRNP also provides programmatic and technical support, analytical services, and business management services. Swift & Staley Team (SST) manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

Requirements for the C-400 Complex Remedial Action are being met consistent with the following documents:

- *Memorandum of Agreement on the C-400 Complex under the Federal Facility Agreement for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, signed August 8, 2017;
- *Memorandum of Agreement for Resolution of Formal Dispute Regarding the Non-Concurrence by EPA and KDEP on the DOE Milestone Modification Request for Submittal of the Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-2407&D1)*, signed September 28, 2017;
- *Memorandum of Agreement for Resolution of Formal Disputes on EPA Conditional Concurrence on the Removal Notification for Demolition of the C-400 Cleaning Building in the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2420&D2 and the Engineering Evaluation/Cost Analysis for Demolition of the C-400 Cleaning Building in the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2425&D2*, signed August 1, 2019; and
- *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2024, DOE/LX/07-2495&D1*.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *Addendum to the Remedial Investigation/Feasibility Study Work Plan for the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2433&D2/R1/A1*, was under review by EPA and KDEP during this reporting period.
- *Addendum to the Remedial Investigation/Feasibility Study Work Plan for the C-400 Complex Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2433&D2/R1/A1/R1*, was under development, and the document was under review by EPA and KDEP during this reporting period.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site Citizens Advisory Board (CAB), FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024²**

GROUNDWATER OPERABLE UNIT

The scope of the GWOU includes performing investigations, conducting baseline risk assessments, evaluating removal/remedial alternatives, and selecting and implementing actions necessary to achieve protection of human health and the environment from exposure to groundwater contamination that could result in an unacceptable risk.

Within the GWOU are these projects: C-400 IRA, Southwest Plume Sources Remediation, Dissolved-Phase Plumes, Northeast Plume IRA, and Northwest Plume IRA.

The overall objective of the GWOU is to remove/mitigate ongoing sources and to remediate the groundwater to target contaminant concentrations. The predominant contaminant of concern in the groundwater plumes is TCE. Table 2 provides an overall picture of the TCE mass removed [TCE values may contain other volatile organic compounds (VOCs)] by various actions.

Table 2. Cumulative TCE* Removed at Paducah

Source Area	Cumulative TCE Removed (gal)*
Northwest Plume Pump-and-Treat	4,057**
Northeast Plume Pump-and-Treat	379**
C-400 Six-Phase Treatability Study	1,900
C-400 Phase I	535
C-400 Phase IIa	1,137
Southwest Plume (SWMU 1)	24***
Other sources (i.e., SWMU 91–LASAGNA™)	246
Total	8,278

*TCE values may contain other VOCs.

**Cumulative through June 30, 2024.

***Removed during deep soil mixing operations.

² The analytical data included in this report lags operational data by three months due to sample analysis time and the data assessment process.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

GROUNDWATER OPERABLE UNIT PROJECT: C-400 IRA

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Continued long-term monitoring of the C-400 IRA groundwater monitoring network as required by the *Record of Decision for Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-2150&D2/R2.
- Conducted annual inspections in accordance with the *Land Use Control Implementation Plan: Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-2151&D2/R2.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Continue long-term monitoring for the C-400 IRA. Data from long-term monitoring for the C-400 IRA are available in PEGASIS.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the C-400 IRA belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

The requirements for the C-400 IRA are being met consistent with the following documents:

- *Memorandum of Agreement on the C-400 Complex under the Federal Facility Agreement for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, signed August 8, 2017;
- *Memorandum of Agreement for Resolution of Formal Dispute Regarding the Non-Concurrence by EPA and KDEP on the DOE Milestone Modification Request for Submittal of the Revised Proposed Plan for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-2407&D1)*, signed September 28, 2017;

- *Record of Decision for Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2150&D2/R2; and*
- *Land Use Control Implementation Plan: Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2151&D2/R2.*

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- None.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- Sampling of the C-400 IRA wells has been incorporated into the Environmental Monitoring Program. O&M cost for sampling for the C-400 IRA Project is not tracked separately.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

GROUNDWATER OPERABLE UNIT PROJECT: Southwest Plume Sources

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

SWMU 1

- Continued long-term monitoring of the SWMU 1 MW network as required by the *Remedial Action Work Plan for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1287&D2/A1/R1*.
- Conducted inspections of land use control implementation plan (LUCIP) warning signs at SWMU 1 and verified the Excavation/Penetration Permit program for the Southwest Plume area as required by the *Record of Decision for Solid Waste Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0365&D2/R1*.
- Finalized and submitted the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D1*, to EPA and KDEP on April 3, 2024.
- Received EPA and KDEP comments on the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D1*, on April 4, 2024, and April 10, 2024, respectively.
- Developed and submitted the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*, to EPA and KDEP on May 7, 2024.
- Received EPA and KDEP concurrence on the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*, on May 8, 2024, and May 17, 2024, respectively. With the concurrence of the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the*

Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2, future monitoring of SWMU 1 is transferred from the Remedial Action Work Plan for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1287&D2/A1/R1.

SWMUs 211-A and 211-B

- Finalized and submitted the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D1*, to EPA and KDEP on April 3, 2024.
- Received EPA and KDEP comments on the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D1*, on April 4, 2024, and April 10, 2024, respectively.
- Developed and submitted the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*, to EPA and KDEP on May 7, 2024.
- Received EPA and KDEP concurrence on the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*, on May 8, 2024, and May 17, 2024, respectively. With the concurrence of the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*, future monitoring of SWMU 211-A is transferred from the *Certified for Construction Remedial Design Report for SWMU 211-A for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2435&D2*.
- Collected samples from performance MWs and long-term MWs as prescribed in the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*.
- Completed development of a summary for performance MW results collected through March 2024 as prescribed in the *Certified for Construction Remedial Design Report for SWMU 211-A for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2435&D2*, and submitted to EPA and KDEP for review on September 26, 2024.
- Conducted inspections of LUCIP warning signs at SWMU 211-A and SWMU 211-B and verified the Excavation/Penetration Permit Program for the Southwest Plume areas as required

by the *Record of Decision for Solid Waste Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0365&D2/R1.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

SWMU 1

- Continue long-term monitoring of the SWMU 1 MW network as required by the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2501&D2.
- Conduct inspections of LUCIP warning signs at SWMU 1 and verify the Excavation/Penetration Permit Program for the Southwest Plume area as required by the *Record of Decision for Solid Waste Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0365&D2/R1.

SWMUs 211-A and 211-B

- Continue performance and long-term MW network sample collection at SWMU 211-A, as prescribed in the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2501&D2.
- Conduct inspections of LUCIP warning signs at SWMU 211-A and SWMU 211-B and verify the Excavation/Penetration Permit Program for the Southwest Plume areas as required by the *Record of Decision for Solid Waste Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0365&D2/R1.
- Initiate development of a summary of preliminary performance MW results collected through September 2024 as prescribed in the *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2501&D2.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the Southwest Plume Sources belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements for the SWMU 1 portion of the Southwest Plume sources remedial action subproject are being met consistent with the SMP, the FFA, and as agreed to by the FFA parties.
- The requirements for the SWMU 211-A portion of the Southwest Plume subproject are being met consistent with the SMP, the FFA, and as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D1*, was under review by EPA and KDEP during this reporting period.
- *Operation and Maintenance and Environmental Monitoring Plan for Solid Waste Management Units 1 and 211-A Remedial Actions for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2501&D2*, was under development, and the document was under review by EPA and KDEP during this reporting period.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- Sampling of SWMU 1 and SWMU 211-A has been incorporated into the Environmental Monitoring Program. O&M cost for this project is not tracked separately.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

GROUNDWATER OPERABLE UNIT PROJECT: Dissolved-Phase Plumes

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Met quarterly with the Modeling Working Group (MWG) during this reporting period on April 3, 2024, and July 17, 2024.
- Completed the *2023 Update of the Paducah Gaseous Diffusion Plant Sitewide Groundwater Flow Model*, DOE/LX/07-2488&D1, including third-party review by the DOE Low-Level Waste Disposal Facility Federal Review Group and a subject matter expert from the DOE Portsmouth project team.
- Finalized and submitted the *2023 Update of the Paducah Gaseous Diffusion Plant Sitewide Groundwater Flow Model*, DOE/LX/07-2488&D1, to EPA and KDEP on May 22, 2024.
- Received EPA notification on June 20, 2024, that the performance measure of Human Exposure Under Control had been updated from “insufficient data” to “yes.” This revision was based on multiple lines of evidence, including: Paducah Site groundwater monitoring results that indicate the groundwater plumes no longer extend to the Ohio River; results in Little Bayou Creek seep sampling indicating both TCE and Tc-99 have been below their maximum contaminant levels (MCLs) since 2016 and that sediment is not anticipated to be impacted; and the results of the *DOE Plant Industrial Area Vapor Intrusion Preliminary Risk Assessment Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky* (DOE/LX/07-2471&D2), which determined that there is no current unacceptable risk to workers from the vapor intrusion pathway preliminary investigation buildings and that risk for current DOE workers from the potentially complete vapor intrusion pathway at the C-310 Purge and Product Building is mitigated by the existing health and safety requirements.
- Received EPA and KDEP acceptance of the *2023 Update of the Paducah Gaseous Diffusion Plant Sitewide Groundwater Flow Model*, DOE/LX/07-2488&D1, on July 25, 2024, and July 12, 2024, respectively. The EPA acceptance letter included comments for consideration during future modeling efforts.
- Received EPA supplemental comments for consideration during future modeling efforts on the *2023 Update of the Paducah Gaseous Diffusion Plant Sitewide Groundwater Flow Model*, DOE/LX/07-2488&D1, on July 26, 2024.

II. Schedule of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Conduct quarterly meeting with the MWG, which is currently planned for October 9, 2024.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the Dissolved-Phase Plume belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met. The MWG will continue to support Paducah Site projects.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *2023 Update of the Paducah Gaseous Diffusion Plant Sitewide Groundwater Flow Model, DOE/LX/07-2488&D1/R1*, was under development, and the document was reviewed and accepted by EPA and KDEP during this reporting period.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024³**

GROUNDWATER OPERABLE UNIT PROJECT: Northeast Plume IRA

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Treated 45,348,850 gal of contaminated groundwater, with an average system treatment rate of 173 gal per minute during this reporting period. The system is designed so that continuous operation of the Northeast Plume Containment System (NEPCS) is possible when only one of the two extraction wells (EWs) is functional. The NEPCS achieved an average operational efficiency, as a whole, of 99.4%. Operational online efficiencies for the reporting period for C-765 were as follows: January 2024, 99.4%; February 2024, 99.9%; March 2024, 99.9%; April 2024, 100%; May 2024, 97.9%; and June 2024, 99.6%. The C-765-A operational online efficiencies for the reporting period were as follows: January 2024, 99.3%; February 2024, 99.6%; March 2024, 99.6%; April 2024, 99.4%; May 2024, 97.9%; and June 2024, 99.9%.

A) Process Operations:

The NEPCS consists of two EWs (EW234 and EW235), transfer piping, two treatment units for air stripping and suspended solids removal, and MW network. The old EWs, EW331 and EW332, equalization tank, and old transfer piping have been placed in standby mode.

B) Process Testing:

Operation of the NEPCS began February 28, 1997. As of June 30, 2024, the NEPCS has processed a total of approximately 2,311,900,431 gal of water. The monthly withdrawal volumes for this reporting period are presented in Appendix A, Table A.1, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

C) NEPCS Influent, Effluent, and Extraction Well Testing:

Due to sample analysis time and the data assessment process, there is a three-month lag in the analytical data and operational data. Graphs in this report present analytical data through June 30, 2024. Data are available in PEGASIS.

Influent TCE analytical data from 2019 through the end of June 2024 are presented in Appendix B. Environmental samples were collected monthly from the treatment system influent and weekly from the treatment system effluent for the period of January 1, 2024, through June 30, 2024. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 3.

³ The analytical data included in this report lags operational data by three months due to sample analysis time and the data assessment process.

Table 3. TCE Concentrations for Northeast Plume

	TCE (µg/L)		
	High	Low	Average
Influent C-765 (EW234)	57.3	21.3	30.7
Influent C-765-A (EW235)	65.5	54.4	59.9
Effluent from C-765	< 1	< 1	< 1
Effluent from C-765-A	< 1	< 1	< 1
Effluent (CERCLA Outfall C001)	< 1	< 1*	< 1*

NOTE: Data rejected by validation or assessment are not included on the table.

*The values denoted are below the detection limit.

As presented in Table 3, the NEPCS continued to remove TCE effectively. The systems operated with an average removal efficiency of 96.7% for EW234 and 98.3% for EW235 for TCE.

The EWs were sampled monthly during this reporting period. For the period of January 1, 2024, through June 30, 2024, EW234 had an average TCE concentration of 30.7 µg/L, while EW235 had an average concentration of 59.9 µg/L.

Treated groundwater for the Northeast Plume is discharged to a CERCLA outfall, and data associated with the CERCLA outfall are included as part of Appendix B of this report.

D) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Northwest/Northeast Plume Daily Operational Data Collection and Maintenance*, CP4-ER-0017.

- C-765 system was shut down for 11.25 hours for planned maintenance during this reporting period.
- C-765-A system was shut down for 10.25 hours for planned maintenance during this reporting period.

Non-routine Maintenance Activities:

- C-765 system was shut down for a total of 12 hours during this reporting period due to unexpected repairs and power disruptions.
- C-765-A system was shut down for a total of 20.25 hours during this reporting period due to unexpected repairs and power disruptions.

E) Effectiveness Monitoring—Monitoring Well Results:

Figure B.1, included in Appendix B, shows locations of the MWs and EWs. Figure B.2 shows system influent TCE concentrations, and Figure B.3 includes a summary of the Tc-99 activities in the Northeast Plume EWs. Figure B.4 shows the estimated cumulative amount of TCE removed since the NEPCS began operations in 1997. Figures B.5 through B.14, presented in Appendix B, show TCE concentrations and Tc-99 activities in upgradient transect wells, MWs near the EWs, downgradient wells, distal downgradient wells, and wells near the C-400 Complex. The EWs are working well to increase TCE mass removal and to enhance control of the plume. This is shown in Figure B.4 in Appendix B with an increase in mass removal beginning in October 2017, with initiation of pumping from the optimized EWs.

During this reporting period, the FFA parties reviewed and assessed the Northeast Plume TCE and Tc-99 transect well results on a quarterly basis. The analytical results can be found in Appendix B, along with analytical results for other NEPCS MWs. This information is used by the FFA parties when considering if additional adjustments are needed to minimize undesirable expansion of high concentrations of Tc-99 and TCE within the Northeast Plume. As agreed to by the FFA parties, 100 gal per minute and 75 gal per minute are the target flowrates for EW234 and EW235, respectively. The NEPCS continues to operate under Condition #3 of the *Memorandum of Agreement for Resolution of Formal Dispute of the Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-1291&D2)*, and *Remedial Action Work Plan for Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-1280&D2)*.

F) Modification of the NEPCS Operations or Configuration:

- None.

G) See Section V for work related to document preparation and review.

II. Schedule of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Continue to conduct and document the necessary tasks required for equipment maintenance, calibration, and operation as specified in the *Operation and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2470&D1*.
- Provide TCE and Tc-99 transect MW sampling results to EPA and KDEP on a quarterly basis.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the Northeast Plume IRA belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

- IV. Statement of the manner and extent to which the requirements and time schedules are being met:**
- The effluent concentration goal of 30 µg/L for TCE was met during the reporting period. The NEPCS remained operational 99.4% of the time during this reporting period.
- V. Primary/Secondary Document Tracking System:**
- A) Documents under review and/or preparation for this reporting period:**
- None.
- B) Due dates for completion of review/modification tasks:**
- None.
- VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):**
- None.
- VII. Summary of all contacts with local community, public interest groups, or state government:**
- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.
- VIII. Changes in relevant personnel:**
- None.
- IX. Actual cost for O&M, if appropriate:**
- Actual costs for O&M of the Northwest and Northeast Plume facilities are tracked jointly. The total operating cost for the reporting period was approximately \$539,000.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024⁴**

GROUNDWATER OPERABLE UNIT PROJECT: Northwest Plume IRA

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Treated 50,740,473 gal of contaminated groundwater, with an average monthly operational efficiency of 99.7% during this reporting period. The average system treatment rate for the reporting period was approximately 194 gal per minute. Operational efficiencies for the reporting period were as follows: January 2024, 99.6%; February 2024, 99.8%; March 2024, 99.7%; April 2024, 99.6%; May 2024, 99.9%; and June 2024, 99.8%.
- Submitted a 30-day extension notification for the submittal of the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, to April 28, 2024.
- Submitted a 30-day extension notification for the submittal of the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, to May 28, 2024.
- Submitted a 30-day extension notification for the submittal of the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, to June 27, 2024.
- Submitted a 30-day extension notification for the submittal of the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, to July 27, 2024.
- Submitted a 30-day extension notification for the submittal of the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, to August 26, 2024.
- Finalized and submitted the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, to EPA and KDEP on August 26, 2024.
- Received EPA and KDEP approval on the *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant*,

⁴ The analytical data included in this report lags operational data by three months due to sample analysis time and the data assessment process.

Paducah, Kentucky, memorandum to file, on August 28, 2024, and September 12, 2024, respectively.

- Continued development of the *Remedial Action Work Plan for the 2024 Optimization of the Northwest Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2509&D1.

A) Process Operations:

The Northwest Plume Groundwater System (NWPGS) consists of two EWs (EW232 and EW233), located just north of the Paducah Site, and underground transfer pipeline for moving comingled groundwater from the EWs to the C-612 treatment facility. The treatment facility has an operational capacity of 220 gal per minute and utilizes air stripping for removal of TCE in groundwater, ion exchange for removal of Tc-99 in groundwater, and vapor phase carbon for capturing TCE from the exhaust of the air stripper. Treated groundwater is released to a tributary that flows to Kentucky Pollutant Discharge Elimination System Outfall 001. A MW network is used to evaluate performance and effectiveness of the optimized EWs.

B) Process Testing:

Operation of the NWPGS began on August 28, 1995. As of June 30, 2024, the NWPGS has processed a total of approximately 2,881,058,737 gal of water. The monthly withdrawal volumes for the reporting period are presented in Appendix A, Table A.2, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

C) NWPGS Influent, Effluent, and Extraction Well Testing:

Due to sample analysis time and the data assessment process, there is a three-month lag in the analytical data and operational data. Graphs in this report present data through June 2024. Data are available in PEGASIS.

Figure B.15, included in Appendix B, shows locations of the Northwest Plume MWs. Influent TCE and Tc-99 analytical data are presented in Appendix B on Figures B.16 and B.17. Figures B.18 and B.19 include a summary of the TCE and Tc-99 concentrations of the effluent versus time at the NWPGS. Figure B.20 shows the cumulative estimated amount of TCE removed since the NWPGS began operations in 1995. The influent sample results, compared to the NWPGS effluent results, indicated that the NWPGS continues to remove TCE and Tc-99 effectively.

A NWPGS effluent sample collected on April 22, 2024, had a concentration of 3,140 pCi/L for Tc-99. Reanalysis was requested on June 4, 2024, which returned a concentration of 5,500 pCi/L for Tc-99. Both results are in excess of the 900 pCi/L operational goal for Tc-99. Tc-99 data from April 22, 2024, were rejected as the results were not representative of groundwater conditions due to the interference of mobilized resin. On April 29, 2024, and May 7, 2024, sample results were slightly elevated at 57.2 pCi/L and 207 pCi/L, respectively. For reference, NWPGS had an average effluent value of 14.5 pCi/L for Tc-99 in the previous reporting period. In response to these results, Northwest Plume operations conducted a walkdown to evaluate the system on July 8, 2024. Resin was found downstream of the ion exchange vessels inside the sample ports. Upon examination, Vessel D, the lag vessel, was determined to have resin bypassing the resin retention lateral and allowing resin to flow downstream. Vessel D was reconfigured to become the lead vessel with Vessel C becoming

the lag vessel. The resin loss from Vessel D to Vessel C currently only occurs during system shutdown/startup. Vessel C now captures any resin released from Vessel D, stabilizing the exchange system and allowing continued treatment of groundwater until Vessel D can be repaired. A maintenance evolution to empty Vessel D and repair the lateral has been scheduled for the next reporting period. Based on follow-up information received during the July 2024 event, it is assumed that the elevated Tc-99 results from April 22, 2024, at the downstream sampling port in the treatment system were caused by the resin.

For radionuclides, all reported values, including negative values, are used to derive averages. Negative Tc-99 results may be reported due to a statistical determination of the counts seen by a detector, minus a background count. High, low, and average treatment facility influent and effluent TCE and Tc-99 concentrations from January 1, 2024, through June 30, 2024, are presented in Table 4.

Table 4. TCE and Tc-99 Concentrations at the C-612 Treatment Facility for Northwest Plume (January 1, 2024, through June 30, 2024)

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
Influent from EW232 and EW233 (combined)	613	422	515	316	239	276
Effluent from C-612 NW Plume treatment facility	1	< 1*	< 1*	207	-4.60*	22.1

*The values denoted are below the detection limit.

The treatment system influent was sampled monthly. The effluent was sampled weekly. These sampling frequencies were conducted in accordance with the *Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2469&D2. As presented in Table 4, the NWPGS continued to remove TCE and Tc-99 effectively. The system operated with an average removal efficiency of 99.9% for TCE and 92.0% for Tc-99.

The average TCE effluent concentration for this reporting period was less than 1 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 218 pCi/L, which is less than the operational goal of 900 pCi/L, during the reporting period.

High, low, and average sample results for this reporting period at the EWs are shown in Table 5. EW232 and EW233 were sampled quarterly in accordance with the *Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2469&D2.

Table 5. TCE and Tc-99 Concentrations for Northwest Plume Extraction Wells (January 1, 2024, through June 30, 2024)

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
EW232	327	213	270	113	79.5	96.2
EW233	960	806	904	449	339	420

D) Treatment Media:

Ion Exchange Resins:

The NWPGS is equipped with four ion exchange columns used for Tc-99 removal. Purolite® A520E resin is used in the columns, which are arranged in a lead/lag configuration in a trailer.

Activated Carbon Media:

The NWPGS is equipped with two carbon columns that contain granular activated carbon for absorption of VOCs from the vapor-phase effluent of the air stripper unit. The *Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2469&D2, requires that spent carbon be replaced every 6 months. The last carbon changeout was completed on September 25, 2024. The next carbon changeout is projected for March 2025.

E) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Northwest/Northeast Plume Daily Operational Data Collection and Maintenance*, CP4-ER-0017, and *Monthly, Quarterly, and Annual Maintenance at the C-612 Northwest Plume Groundwater System*, CP4-ER-0016.

- The NWPGS was shut down for a total of 5.5 hours for planned maintenance activities.

Non-routine Maintenance Activities:

- The NWPGS was shut down for a total of 6.75 hours for the repair of failed components and unexpected power disruptions.

Effectiveness Monitoring—Monitoring Well Results:

Figures B.21 through B.30 presented in Appendix B, show TCE and Tc-99 concentrations in EWs and nearby MWs from 2019 through June 2024.

G) Modification of the NWPGS Operations or Configuration:

- None.

H) See Section V for work related to document preparation and review.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Continue to conduct and document the necessary tasks required for equipment maintenance, calibration, and operation, as specified in the *Operation and Maintenance Plan for the*

Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2469&D2.

- Finalize and submit the *Remedial Action Work Plan for the 2024 Optimization of the Northwest Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2509&D1.*

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the Northwest Plume IRA belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The average NWPGS water effluent concentrations met the operational goals of 5 µg/L for TCE and 900 pCi/L for Tc-99 during the reporting period. The NWPGS has maintained an average monthly operational efficiency of 99.7% during this reporting period.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *Remedial Action Work Plan for the 2024 Optimization of the Northwest Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2509&D1* was under development during this reporting period.
- *Nonsignificant Change for the Record of Decision for Interim Remedial Action of the Northwest Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, memorandum to file, was under development, and the document was under review by EPA and KDEP during this reporting period.

B) Due dates for completion of review/modification tasks:

- *Remedial Action Work Plan for the 2024 Optimization of the Northwest Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2509&D1* is due to EPA and KDEP on November 29, 2024.

VI. Anticipated problems/delays (provide summary of problems, schedule, and reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- Actual costs for O&M of the Northwest and Northeast Plume facilities are tracked jointly. The total operating cost for the reporting period was approximately \$539,000.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

BURIAL GROUNDS OPERABLE UNIT

The scope of the BGOU includes a remedial investigation, baseline human health risk assessment, evaluation of remedial alternatives, remedy selection, and implementation of actions, as necessary, for protection of human health and the environment for the following burial grounds: C-749 (SWMU 2); C-404 (SWMU 3); C-747/C-748-B (SWMU 4); C-746-F (SWMU 5); C-747-B (SWMU 6); C-747-A (SWMUs 7 and 30), which includes the area beneath C-747-A (SWMU 12); the residential/inert borrow area (SWMU 145); and the C-746-S&T Landfills (SWMUs 9 and 10, respectively).

This section also includes information on the sampling activities being conducted at the C-749 Uranium Burial Ground, as required in the *Record of Decision for Interim Remedial Action at Solid Waste Management Units 2 and 3 of Waste Area Group 22 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/06-1351&D1, signed in 1995.

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**FEDERAL FACILITY AGREEMENT
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SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024⁵**

BURIAL GROUNDS OPERABLE UNIT PROJECT: C-749 Uranium Burial Ground (SWMU 2)

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Continued groundwater monitoring at the C-749 Uranium Burial Ground (SWMU 2), as required by the *Record of Decision for Interim Remedial Action at Solid Waste Management Unit 2 and 3 of Waste Area Group 22 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/06-1351&D1. Appendix E contains figures depicting the C-749 Uranium Burial Ground (SWMU 2) groundwater MW locations and a summary of the SWMU 2 trends for TCE and Tc-99 for a period of five years. All groundwater data are available in PEGASIS and, therefore, have not been summarized in this report.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Continue groundwater monitoring at the C-749 Uranium Burial Ground, as required by the *Record of Decision for Interim Remedial Action at Solid Waste Management Unit 2 and 3 of Waste Area Group 22 at the Paducah Gaseous Diffusion Plant Paducah, Kentucky*, DOE/OR/06-1351&D1.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the C-749 Uranium Burial Ground belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE and maintains existing burial ground cover.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation during this reporting period:

- None.

⁵ The analytical data included in this report lags operational data by three months due to sample analysis time and the data assessment process.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- Sampling of the C-749 Uranium Burial Ground has been incorporated into the Environmental Monitoring Program. O&M cost for this project is not tracked separately.

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**Facility: Paducah Gaseous Diffusion Plant
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Reporting Period: 4/1/2024–9/30/2024**

SURFACE WATER OPERABLE UNIT

The SWOU includes the Surface Water Removal Action and Surface Water Remedial Action projects. O&M is performed on North-South Diversion Ditch Sections 1 and 2 and institutional controls, as required by the *Operation and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2484&D2*, and *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-1904&D1/R2*; and O&M activities for the C-613 Sedimentation Basin are maintained in accordance with the *Operation and Maintenance Plan for the Northwest Storm Water Control Facility at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2044&D1/R4*, respectively.

Per the *Operation and Maintenance Plan for the Northwest Storm Water Control Facility at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2044&D1/R4*, the relationship of turbidity to total suspended solids is compared on a quarterly basis. An update to the existing linear regression model was performed in September 2024, and the current maximum discharge limit for turbidity is 91 nephelometric turbidity units (NTUs), with a 30-day average not to exceed 42 NTUs.

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Reporting Period: 4/1/2024–9/30/2024**

SURFACE WATER OPERABLE UNIT PROJECT: Remedial Action

I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan):

- Conducted inspections in accordance with the *Land Use Control Implementation Plan for the North-South Diversion Ditch at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1949&D2/R2.
- Conducted inspections for Environmental Indicator signs and Institutional Control measures in April 2024 in accordance with the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1904&D1/R2.
- Finalized and submitted the *Operation and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2484&D2 (previously DOE/OR/07-2057&D2) on May 6, 2024.
- Received EPA and KDEP concurrence to the *Operation and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2484&D2, on May 6, 2024, and May 7, 2024, respectively.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Conduct inspections in accordance with the *Land Use Control Implementation Plan for the North-South Diversion Ditch at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1949&D2/R2.
- Conduct inspections for Environmental Indicator signs and Institutional Control measures in accordance with the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1904&D1/R2.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the SWOU Remedial Action belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

- IV. Statement of the manner and extent to which the requirements and time schedules are being met:**
- The requirements and time schedules are being met for the SWOU consistent with the SMP and as agreed to by the FFA parties.
- V. Primary/Secondary Document Tracking System:**
- A) Documents under review and/or preparation for this reporting period:**
- *Operation and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2484&D2, was under development, and the document was under review by EPA and KDEP during this reporting period.
- B) Due dates for completion of review/modification tasks:**
- None.
- VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):**
- None.
- VII. Summary of all contacts with local community, public interest groups, or state government:**
- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.
- VIII. Changes in relevant personnel:**
- None.
- IX. Actual cost for O&M, if appropriate:**
- O&M activities have been incorporated into the Environmental Monitoring Program. O&M cost for this project is not tracked separately.

**FEDERAL FACILITY AGREEMENT
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**Facility: Paducah Gaseous Diffusion Plant
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Reporting Period: 4/1/2024–9/30/2024**

CERCLA WASTE DISPOSAL ALTERNATIVES OPERABLE UNIT

The scope of the WDA OU includes a remedial investigation, evaluation of remedial alternatives, development of a decision document, and the design and implementation of an on-site waste disposal facility (OSWDF) for disposal options of CERCLA waste generated by removal and remedial actions. Accordingly, the scope of the remedial investigation/feasibility study will be focused and tailored to the nature of this project; potential releases will not be investigated, evaluated, and/or remediated. The decision about whether to implement an OSWDF will be documented in a ROD.

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Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

**CERCLA WASTE DISPOSAL ALTERNATIVES OPERABLE UNIT PROJECT:
CERCLA Waste Disposal Alternatives Evaluation**

- I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):**
- Finalized and submitted the *Geotechnical Sampling and Analysis Plan for the Waste Disposal Alternatives Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2507&D1, to EPA and KDEP on September 4, 2024.
 - Initiated development of an update to the *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2511&D1.⁶
- II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):**
- Continue development of the *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2511&D1.⁷
 - Initiate collection of geotechnical and geophysical data in accordance with the *Geotechnical Sampling and Analysis Plan for the Waste Disposal Alternatives Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2507&D1.
- III. Identity and assigned tasks of DOE contractors for work to be performed for this project:**
- Reporting responsibility for the work to be performed in support of the CERCLA WDA evaluation belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.
- IV. Statement of the manner and extent to which the requirements and time schedules are being met:**
- The requirements and time schedules are being met.

⁶ This document was previously DOE/LX/07-0244&D2/R2 and approved by EPA and KDEP in 2018.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *Geotechnical Sampling and Analysis Plan for the Waste Disposal Alternatives Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2507&D1*, was under development, and the document was under review by EPA and KDEP during this reporting period.

B) Due dates for completion of review/modification tasks:

- EPA and KDEP concurrence of the *Geotechnical Sampling and Analysis Plan for the Waste Disposal Alternatives Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2507&D1*, is due within 90 days of document issuance or December 3, 2024.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

**FEDERAL FACILITY AGREEMENT
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**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

WATER POLICY

Pursuant to the June 1994 *Action Memorandum for the Water Policy at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/06-1201&D2, that was approved by EPA in August 1994, municipal water service was offered at no cost to all existing private residences and businesses within the Water Policy-affected area. The affected area is defined as follows:

The affected area is generally bounded by the Ohio River to the north, DOE property boundary to the south, Metropolis Lake Road to the east, and Bethel Church Road to the west. Specifically, on the west side, the boundary follows the DOE property boundary northwest to the intersection with Big Bayou Creek. At that point, it moves west to the intersection of Bethel Church Road and the centerline of a powerline easement just south of Bobo Lane. Property fronting the north end of Bethel Church Road is included in the affected area north of the intersection with the powerline easement to the Ohio River. Specifically, on the east side, the boundary follows the DOE property boundary northwest to the southern point of private property that fronts Ogden Landing Road (identified in McCracken County Property Valuation Office records as #20-27-1A). At that point, it moves east along the southern edge of properties that front the south side of Ogden Landing Road to the intersection of Ogden Landing Road with Metropolis Lake Road. Property fronting on both sides of Metropolis Lake Road is included in the affected area north of this intersection of the roads to the Ohio River.

There are 680.5 acres within the Water Policy-affected area (i.e., excluding DOE property) that lie over the 2020 TCE groundwater plume above the 5 µg/L MCL; 522.5 acres are owned by either West Kentucky Wildlife Management Area or the Tennessee Valley Authority, and 158 acres are owned by private residents or businesses. DOE has implemented various water policy activities that ensure proper management of the Water Policy and assist in DOE's long-term protectiveness of residents and businesses located within the Water Policy-affected area. These activities include the following: (1) update water policy area information by maintaining an annual subscription to the online McCracken County Property Valuation Administrator (PVA) office and verifying land ownership with the PVA office; (2) review the monthly billing register, ensuring water bill payments and assessing trends; (3) manage license agreements; (4) provide sampling results; (5) provide an annual water policy educational fact sheet to all residents and businesses within the affected area; (6) perform annual cap and lock inspections; and (7) demonstrate, on an annual basis, that residents and businesses located over the groundwater plume are not utilizing the groundwater.

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**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024⁷**

PROJECT: Water Policy

I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):

License Agreements:

- Offered 13 license agreements during this reporting period. Eleven license agreements have been signed by the landowners. One license agreement that was sent during the previous reporting period was signed by the landowner during this reporting period. As of September 30, 2024, 112 of 124 parcels within the Water Policy-affected area are inhabitable (i.e., house or mobile/manufactured home with active municipal water). A total of 90% of the inhabitable parcels are covered by a license agreement. There are 10 parcels that overlie the groundwater plumes. Ninety percent of these parcels are under a license agreement, and the one unlicensed parcel is vacant.
- All parcel owners have been offered license agreements.

Water Bills:

- Reviewed all water bills for properties that DOE pays and noted no significant trends during this reporting period.

Water Policy Educational Fact Sheet Mailer:

- Finalized and issued to EPA and KDEP the *Water Policy Educational Fact Sheet* mailer on April 18, 2024.
- Received EPA and KDEP approval of the *Water Policy Educational Fact Sheet* mailer on April 18, 2024, and April 22, 2024, respectively.
- Issued the *Water Policy Educational Fact Sheet* mailer to area residents and published the fact sheet to the public on the Paducah EIC website on May 1, 2024.

⁷ The analytical data included in this report lags operational data by three months due to sample analysis time and the data assessment process.

Demonstration that Residents in the Water Policy-Affected Area Are Protected:

- Continued work on annual demonstration that residents, including parcels located over the contaminated groundwater plume, are not accessing groundwater from any residential well located within the Water Policy area. This demonstration included the following:
 - Continued monthly review of the Water Policy-affected area water bills and ensure no downward trends in usage that could indicate that property owners are using groundwater instead of municipal water. This review includes the 10 parcels that lie over the 5 µg/L or greater portion of the TCE groundwater plumes. No issues were identified during this review.
 - Reviewed the Kentucky Geological Survey water well database and ensured that no additional groundwater wells have been installed in the Water Policy-affected area, which included the area over the 5 µg/L or greater portion of the TCE groundwater plumes, as delineated for 2022. No issues were identified during this review.
 - Received and reviewed the Kentucky Division of Water well notification report, which includes scans for newly submitted drilling logs for any water wells drilled within the Water Policy area. No issues were identified during this review.
 - Conducted visual assessments (i.e., drive-bys, Google Earth images) of parcels overlying or immediately adjacent to the 5 µg/L or greater portion of the TCE groundwater plumes, as delineated for 2022. No issues were identified during these assessments.
 - Performed semiannual verification of land ownership by reviewing the PVA website in June 2024. No issues were identified during this assessment. Updated ownership list emailed to KDEP on September 12, 2024.

Monitoring:

- Routine monitoring was conducted in accordance with the following documents:
 - *Operation and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2470&D1*; and
 - *Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2469&D2*.
- Data collected in support of water policy monitoring will be made available in PEGASIS once data have been reported to the landowners.

Northeast:

- Nine MWs and seven residential wells are monitored routinely in accordance with the *Operation and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2470&D1*.

- Sampled four MWs in May 2024 and September 2024, during this reporting period. Analytical data for two MWs sampled in March 2024, during the previous reporting period, have been included in this report. All MWs sampled in March 2024 and May 2024 did not exhibit detections greater than the MCL for TCE (5 µg/L). Analytical data are pending for the samples collected in September 2024.

Northwest:

- Thirteen MWs and five residential wells are monitored routinely in accordance with the *Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2469&D2*. (Note: Tc-99 was added as a result of the *Memorandum of Agreement for Resolution of Informal Dispute Concerning U.S. Environmental Protection Agency and Kentucky Department for Environmental Protection Requirements for Additional Actions or Modifications Regarding the CY 2018 Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2426&D2*, dated June 22, 2020.)
- Sampled 13 MWs and five residential wells in May and August 2024, during this reporting period, in accordance with the Water Policy Boundary Monitoring Program per the Environmental Monitoring Plan. Analytical data for MWs and residential wells sampled in February 2024 were not available for reporting in the previous reporting period; the analytical data have been included in this report. All MWs and residential wells sampled in February 2024, during the previous reporting period, and in May 2024 were below the MCL for TCE (5 µg/L). None of the MWs or residential wells sampled in February 2024 or May 2024 exhibited detections of Tc-99. Analytical data are pending for samples collected in August 2024.
- Sampled residential well R40 in May and August 2024 during this reporting period. Analytical data for R40 sampled in February 2024 was not available for reporting in the previous reporting period; the February analytical data are summarized in this report. The samples collected in February 2024 and May 2024 had results less than the MCL for vinyl chloride and TCE. Analytical data are pending for the samples collected in August 2024.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

Demonstration that Residents in the Water Policy-Affected Area Are Protected:

- Continue monthly review of the Water Policy-affected area water bills and ensure no downward trends in usage that could indicate that property owners are using groundwater instead of municipal water. This review includes the 10 parcels that lie over the 5 µg/L or greater portion of the TCE groundwater plumes.
- Perform semiannual verification of land ownership by reviewing the PVA website in December 2024.
- Receive and review the Kentucky Division of Water well notification report, which includes scans for newly submitted drilling logs for any water wells drilled within the Water Policy-affected area.

- Conduct visual assessments (i.e., drive-bys, Google Earth images) of properties overlying or immediately adjacent to the 5 µg/L or greater TCE groundwater plumes, as delineated for 2022.

Cap and Lock Inspection:

- Complete the annual inspection of the caps and locks installed on the residential wells located on properties with current license agreements.

Water Policy Educational Fact Sheet Mailer:

- Develop the *Water Policy Educational Fact Sheet* mailer and submit to EPA and KDEP for review and approval.
- Issue *Water Policy Educational Fact Sheet* mailer to area residents and publish the fact sheet to the public on the Paducah EIC website.

Monitoring:

- Continue routine monitoring and reporting in accordance with the *Operation and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2470&D1; and the *Operation and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2469&D2.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the Water Policy belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *Water Policy Educational Fact Sheet* mailer was developed, and the document was under EPA and KDEP review during this reporting period.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- Water bill payments are included in DOE's annual operating budget for the Paducah Site.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

ADDITIONAL REPORTING

Presented in this Additional Reporting section are updates for the following:

- WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites, Underground Storage Tanks, and Kentucky Ordnance Works sites);
- CRP;
- SMP;
- CERCLA Five-Year Review; and
- Plant Industrial Area Vapor Intrusion Assessment.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024⁸**

**PROJECT: WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites,
Underground Storage Tanks, and Kentucky Ordnance Works Sites)**

I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):

- Continued monitoring around the C-746-K Landfill, as required by the *Record of Decision for Waste Area Groups 1 and 7 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/06-1470&D3. Appendix C contains a map depicting MW locations for the C-746-K Landfill and graphical presentations of TCE concentrations in these wells over time.
- Conducted inspections of warning signs, riprap, and deed notice/restrictions at the C-746-K Landfill, as required by the *Record of Decision for Waste Area Groups 1 and 7 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/06-1470&D3.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Monitoring will continue around C-746-K Landfill, as required by the ROD. This monitoring is conducted and reported in accordance with other site programs, such as the Environmental Monitoring Program.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of WAGs 1 and 7 belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- None.

⁸ The analytical data included in this report lags operational data by three months due to sample analysis time and the data assessment process.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- Sampling activities for the C-746-K Landfill have been incorporated into the Environmental Monitoring Program. O&M cost for this project is not tracked separately.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

PROJECT: Community Relations Plan

- I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):**
- Finalized and submitted the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/LX/07-2503&D1, to EPA and KDEP on June 18, 2024.
 - Received EPA and KDEP approval on the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/LX/07-2503&D1, on July 12, 2024, and July 18, 2024, respectively.
- II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):**
- No activities are scheduled for this project during the upcoming reporting period.
- III. Identity and assigned tasks of DOE contractors for work to be performed for this project:**
- Reporting responsibility for the work to be performed in support of the CRP belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.
- IV. Statement of the manner and extent to which the requirements and time schedules are being met:**
- The requirements and time schedules are being met.
- V. Primary/Secondary Document Tracking System:**
- A) Documents under review and/or preparation for this reporting period:**
- *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/LX/07-2503&D1, was under development, and the document was under EPA and KDEP review during this reporting period.
- B) Due dates for completion of review/modification tasks:**
- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

PROJECT: Site Management Plan

I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):

- Developed and submitted the *Site Evaluation Report for the C-721 Gas Manifold Storage Slab and Underlying Soils (Area of Concern 575) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2505&D1, to EPA and KDEP on July 26, 2024.
- Received EPA concurrence and KDEP approval on the *Site Evaluation Report for the C-721 Gas Manifold Storage Slab and Underlying Soils (Area of Concern 575) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2505&D1, on July 27, 2024, and July 30, 2024, respectively.
- Developed and submitted the *Site Evaluation Report for the C-611-P Building—Pump House at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2463&D2/R1, to EPA and KDEP on August 26, 2024.
- Developed and submitted the *Site Evaluation Report for the C-611-T Booster Pump Station Plant Water at the Paducah Gaseous Diffusion Plant, Paducah Kentucky*, DOE/LX/07-2464&D2/R1, to EPA and KDEP on August 26, 2024.
- Received EPA and KDEP concurrence on the *Site Evaluation Report for the C-611-P Building—Pump House at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2463&D2/R1, on August 27, 2024, and September 3, 2024, respectively.
- Received EPA and KDEP concurrence on the *Site Evaluation Report for the C-611-T Booster Pump Station Plant Water at the Paducah Gaseous Diffusion Plant, Paducah Kentucky*, DOE/LX/07-2464&D2/R1, on August 27, 2024, and September 3, 2024, respectively.
- Held scoping meetings with EPA and KDEP for the *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2025*, DOE/LX/07-2508&D1, in August 2024 and September 2024.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- Finalize and submit the *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2025*, DOE/LX/07-2508&D1, by November 15, 2024.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the SMP belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *Site Evaluation Report for the C-721 Gas Manifold Storage Slab and Underlying Soils (Area of Concern 575) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2505&D1*, was under development, and the document was under EPA and KDEP review during this reporting period.
- *Site Evaluation Report for the C-611-P Building—Pump House at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2463&D2/R1*, was under development, and the document was under EPA and KDEP review during this reporting period.
- *Site Evaluation Report for the C-611-T Booster Pump Station Plant Water at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2464&D2/R1*, was under development, and the document was under EPA and KDEP review during this reporting period.
- *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2025, DOE/LX/07-2508&D1*, was under development during this reporting period.

B) Due dates for completion of review/modification tasks:

- *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2025, DOE/LX/07-2508&D1*, is due to EPA and KDEP no later than November 15, 2024.
- Comments on the *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2025, DOE/LX/07-2508&D1*, are due within 30 days of document issuance or December 15, 2024.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

PROJECT: CERCLA Five-Year Review

I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):

- Received EPA concurrence on the *CY 2023 Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2492&D2/R1, on April 3, 2024.
- Finalized the public notice announcing the completion of the *CY 2023 Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2492&D2/R1, and published the public notice in *The Paducah Sun*, on April 20, 2024.

II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):

- No activities are scheduled for this project during the upcoming reporting period.

III. Identity and assigned tasks of DOE contractors for work to be performed for this project:

- Reporting responsibility for the work to be performed in support of the Five-Year Review belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.

IV. Statement of the manner and extent to which the requirements and time schedules are being met:

- The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

A) Documents under review and/or preparation for this reporting period:

- *CY 2023 Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2492&D2/R1, was reviewed and accepted by EPA during this reporting period.
- Public notice announcing the completion of the *CY 2023 Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2492&D2/R1, was developed, and the document was under review by EPA and KDEP during this reporting period.

B) Due dates for completion of review/modification tasks:

- None.

VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):

- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL PROGRESS REPORT
SECOND HALF OF FISCAL YEAR 2024**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2024–9/30/2024**

PROJECT: Plant Industrial Area Vapor Intrusion Assessment

- I. Work performed during this reporting period (including summaries of findings and any deviations from the work plan):**
- No activities were scheduled for this project during this reporting period.
- II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):**
- Evaluate the vapor intrusion pathway to a building or proposed building if or when the use of an occupiable building at the Paducah Site changes, a new building is constructed, or a parcel of land is transferred for a different use, consistent with the requirements in the RMD.
- III. Identity and assigned tasks of DOE contractors for work to be performed for this project:**
- Reporting responsibility for the work to be performed in support of the Plant Industrial Area Vapor Intrusion Assessment subproject belongs to FRNP. FRNP also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC for DOE.
- IV. Statement of the manner and extent to which the requirements and time schedules are being met:**
- The requirements and time schedules related to the Plant Industrial Area Vapor Intrusion subproject are being met.
- V. Primary/Secondary Document Tracking System:**
- A) Documents under review and/or preparation for this reporting period:**
- None.
- B) Due dates for completion of review/modification tasks:**
- None.
- VI. Anticipated problems/delays (provide summary of problems, schedule, reason for delay, and actions taken to prevent or mitigate delay):**
- None.

VII. Summary of all contacts with local community, public interest groups, or state government:

- DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and/or congressional staff.

VIII. Changes in relevant personnel:

- None.

IX. Actual cost for O&M, if appropriate:

- None.

APPENDIX A

NORTHEAST AND NORTHWEST PLUME WATER WITHDRAWAL REPORTS

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**Table A.1. Northeast Plume Containment System Water Withdrawal Reporting Form
(Gal of Water Pumped)**

Day	January 2024	February 2024	March 2024	April 2024	May 2024	June 2024
1	247,876	252,929	246,438	248,210	224,269	241,305
2	247,879	245,475	246,438	238,928	297,437	241,305
3	245,484	245,475	246,438	258,993	256,823	241,303
4	252,421	245,475	246,439	247,347	256,823	223,358
5	252,427	245,474	244,128	248,795	256,823	240,698
6	252,427	240,802	229,370	248,795	256,822	253,628
7	252,427	249,031	274,248	248,795	262,365	249,875
8	252,425	248,689	243,425	248,793	250,800	249,875
9	237,737	245,828	243,425	226,099	250,125	249,875
10	255,554	245,828	243,425	266,733	259,782	249,875
11	240,909	245,828	243,426	249,356	259,782	247,830
12	239,278	245,827	245,849	247,661	259,782	237,924
13	239,278	246,563	266,788	247,661	259,778	261,441
14	239,278	251,643	229,707	247,661	269,668	253,290
15	239,278	241,172	247,639	247,662	236,852	253,290
16	239,280	246,665	247,639	259,937	257,095	253,290
17	243,144	246,665	247,639	251,353	260,274	253,290
18	246,247	246,665	247,639	232,398	260,274	264,117
19	240,211	246,661	249,357	243,234	260,274	244,376
20	240,211	231,493	244,231	243,234	260,273	244,376
21	240,211	255,056	253,563	243,234	263,948	252,282
22	240,210	243,409	248,844	243,232	256,981	252,282
23	287,303	247,717	248,844	257,539	250,295	252,282
24	254,374	247,717	248,844	255,501	249,435	252,282
25	236,667	247,717	248,843	261,870	249,435	254,022
26	247,040	247,716	242,914	258,423	249,435	244,253
27	247,040	245,350	250,917	258,423	249,435	258,641
28	247,040	250,874	248,208	258,423	249,434	251,522
29	247,039	247,065	248,208	258,424	246,288	251,522
30	234,924		248,208	255,887	258,950	251,522
31	248,539		248,208		241,305	
Monthly Total	7,634,158	7,146,809	7,669,289	7,502,601	7,921,062	7,474,931
Daily Average	246,263	246,442	247,396	250,087	255,518	249,164

Total (January 2024–June 2024) = 45,348,850 gal
Average (January 2024–June 2024) = 249,170 gal
per day (gpd)

**Table A.2. Northwest Plume Groundwater System Water Withdrawal Reporting Form
(Gal of Water Pumped)**

Day	January 2024	February 2024	March 2024	April 2024	May 2024	June 2024
1	281,630	284,306	283,101	283,404	280,876	277,348
2	271,224	145,479	283,101	284,006	286,056	283,294
3	270,146	145,479	283,101	280,576	282,671	283,292
4	283,016	145,479	283,101	282,826	282,671	279,936
5	281,871	145,477	278,026	283,111	282,671	292,206
6	281,871	278,446	283,496	283,111	282,671	274,426
7	281,871	273,507	284,916	283,111	280,046	284,811
8	281,871	275,976	278,566	283,111	281,076	284,811
9	279,596	281,896	271,133	287,416	280,413	284,811
10	286,806	281,896	278,566	258,418	282,406	284,811
11	279,196	281,896	278,566	267,886	282,406	277,066
12	278,037	281,896	281,166	282,566	282,406	282,913
13	281,010	282,776	293,676	282,566	282,406	275,126
14	281,010	282,606	272,066	282,566	287,256	284,081
15	281,010	281,306	282,259	282,566	277,616	284,081
16	281,010	284,899	282,259	289,886	282,186	284,081
17	280,646	284,899	282,259	275,376	283,166	284,081
18	280,776	284,899	282,257	282,776	283,166	291,246
19	280,051	284,897	283,146	285,364	283,166	278,886
20	283,024	270,776	280,846	285,364	283,166	278,886
21	283,024	287,136	277,093	285,364	287,776	283,906
22	283,022	280,206	280,991	285,362	282,526	283,906
23	273,270	282,409	280,991	284,886	279,406	283,906
24	276,506	282,409	280,991	281,656	281,574	283,906
25	280,426	282,409	280,991	280,646	281,574	284,066
26	279,498	282,407	282,586	283,481	281,574	279,876
27	282,471	281,036	284,086	283,481	281,574	287,876
28	282,471	284,626	283,404	283,481	281,574	283,399
29	282,471	281,526	283,404	283,481	282,026	283,399
30	275,206		283,404	282,596	283,036	283,399
31	283,826		283,404		283,294	
Monthly Total	8,687,863	7,622,955	8,726,952	8,460,440	8,754,431	8,487,832
Daily Average	280,254	262,861	281,515	282,015	282,401	282,928

Total (January 2024–June 2024) = 50,740,473 gal
Average (January 2024–June 2024) = 278,794 gpd

APPENDIX B

NORTHEAST PLUME AND NORTHWEST PLUME GRAPHS, DATA, AND MAPS (FIGURES B.1 THROUGH B.30)

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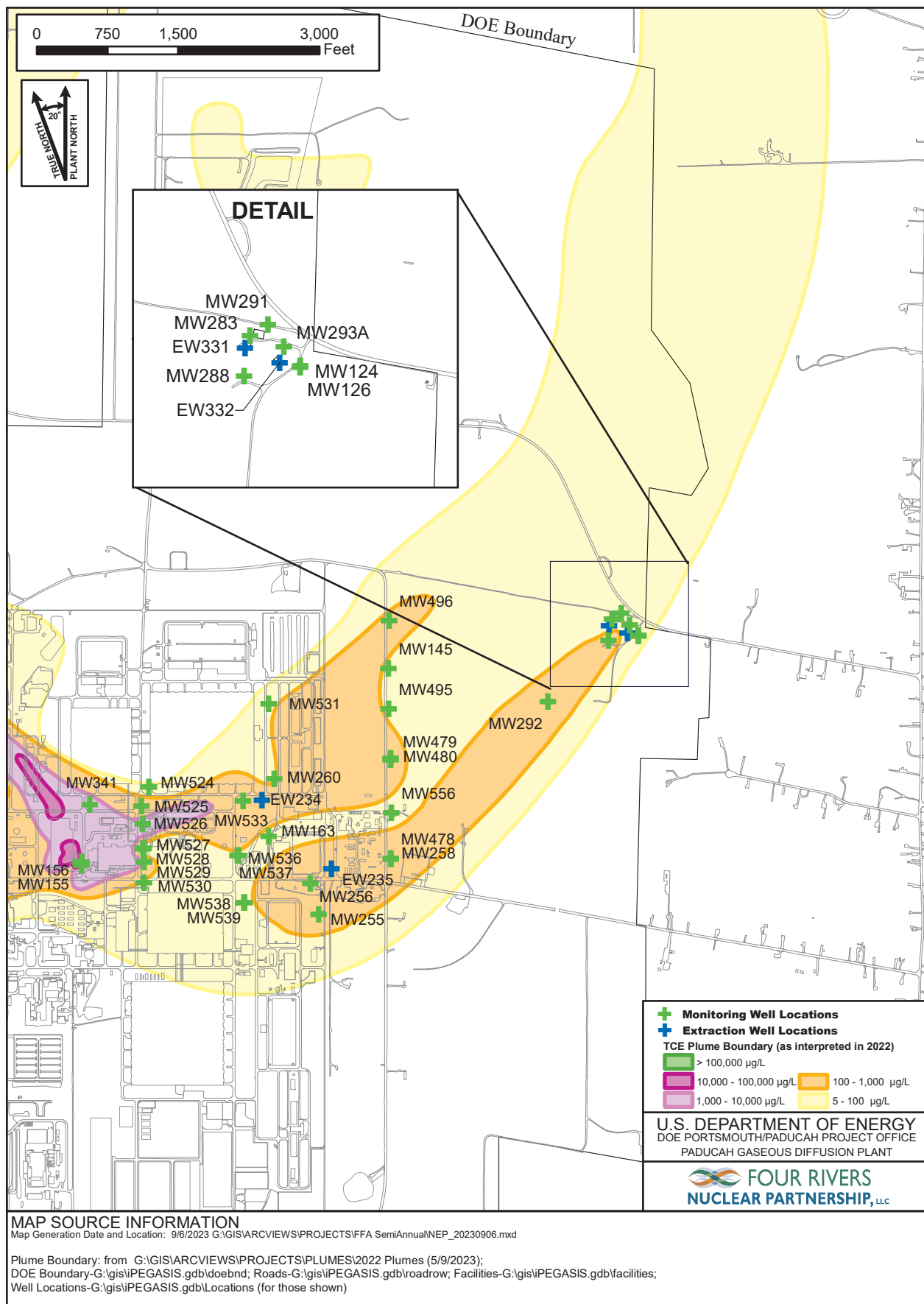
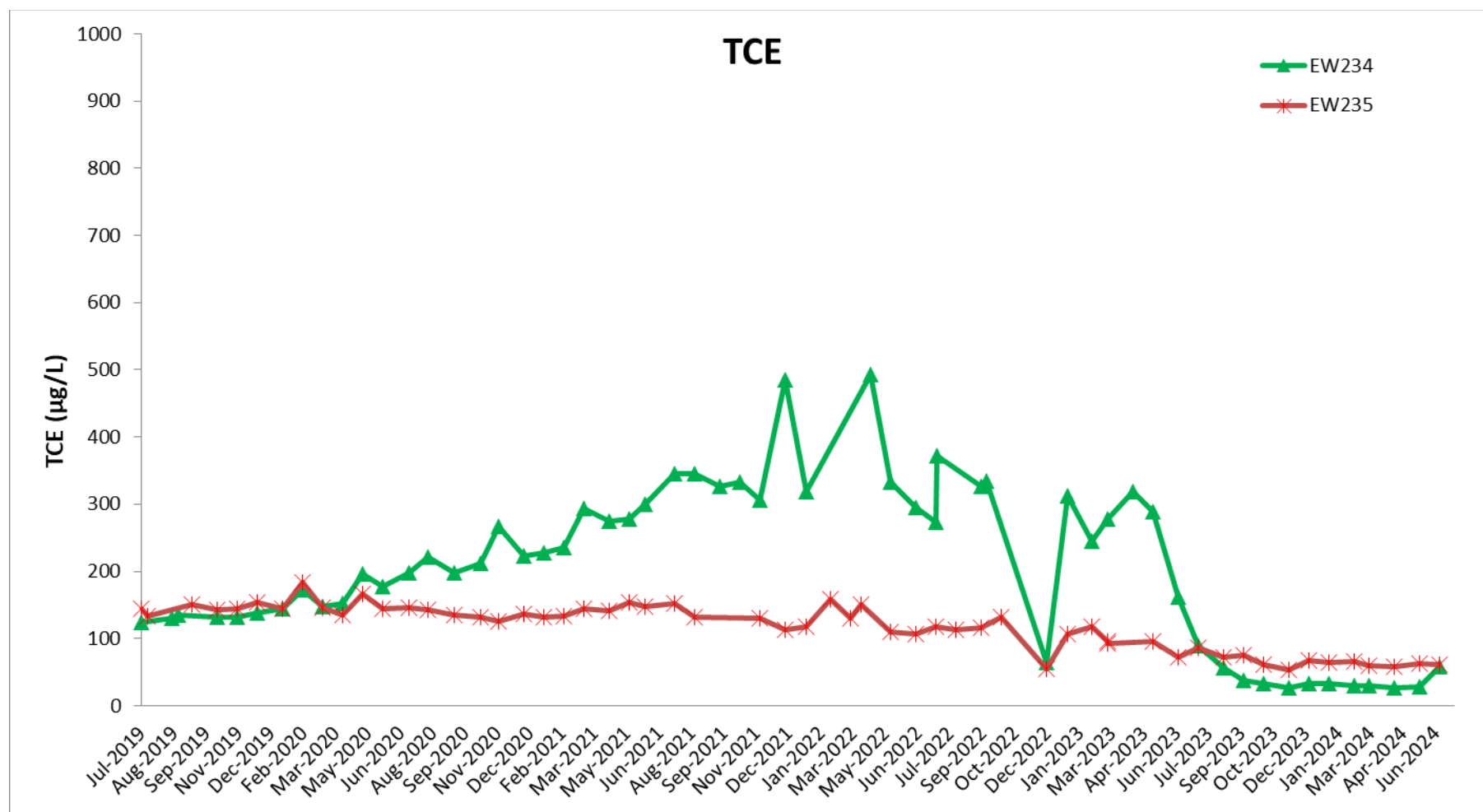


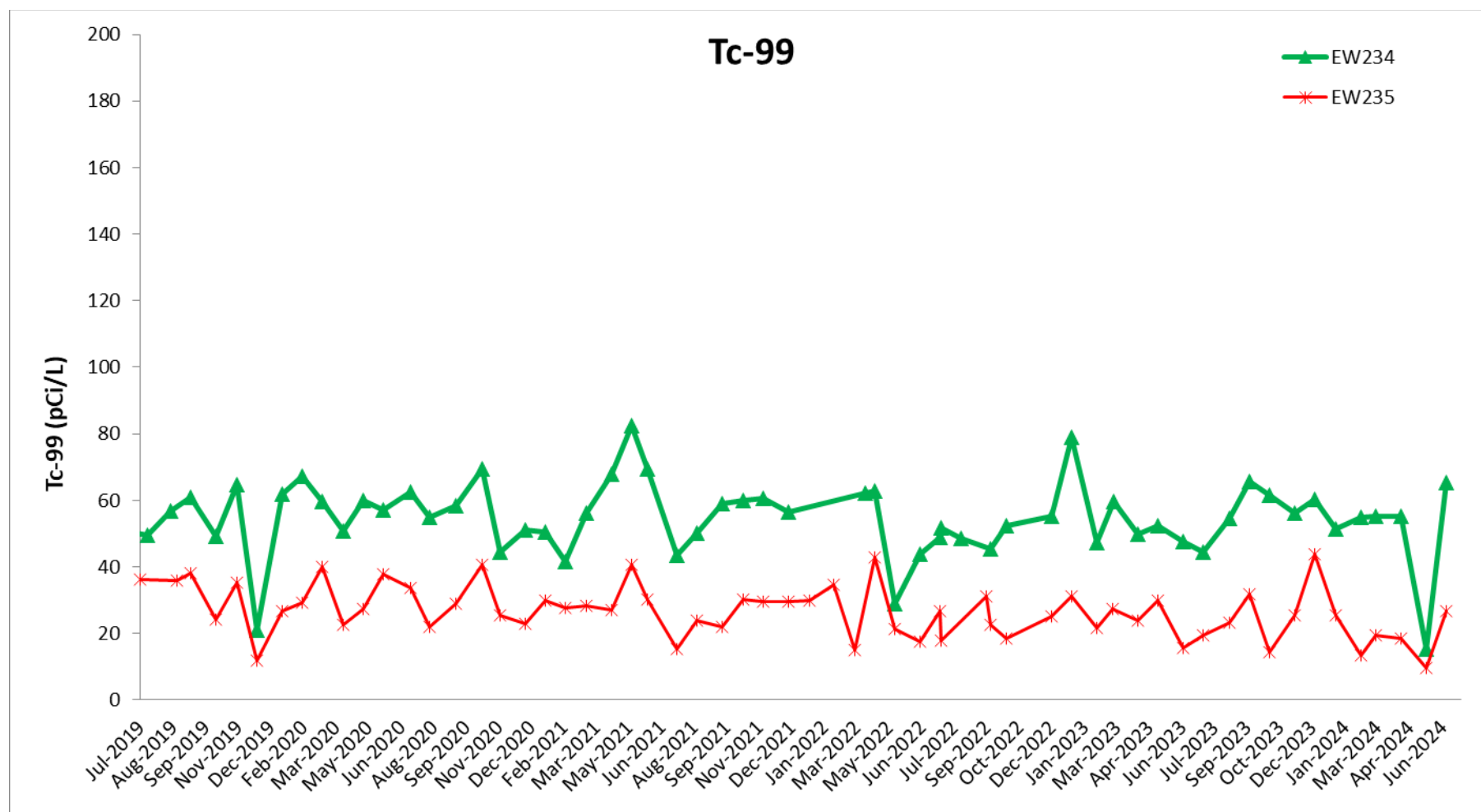
Figure B.1. Northeast Plume Groundwater Wells and Extraction Wells



NOTE: Data rejected by validation or assessment have not been graphed.

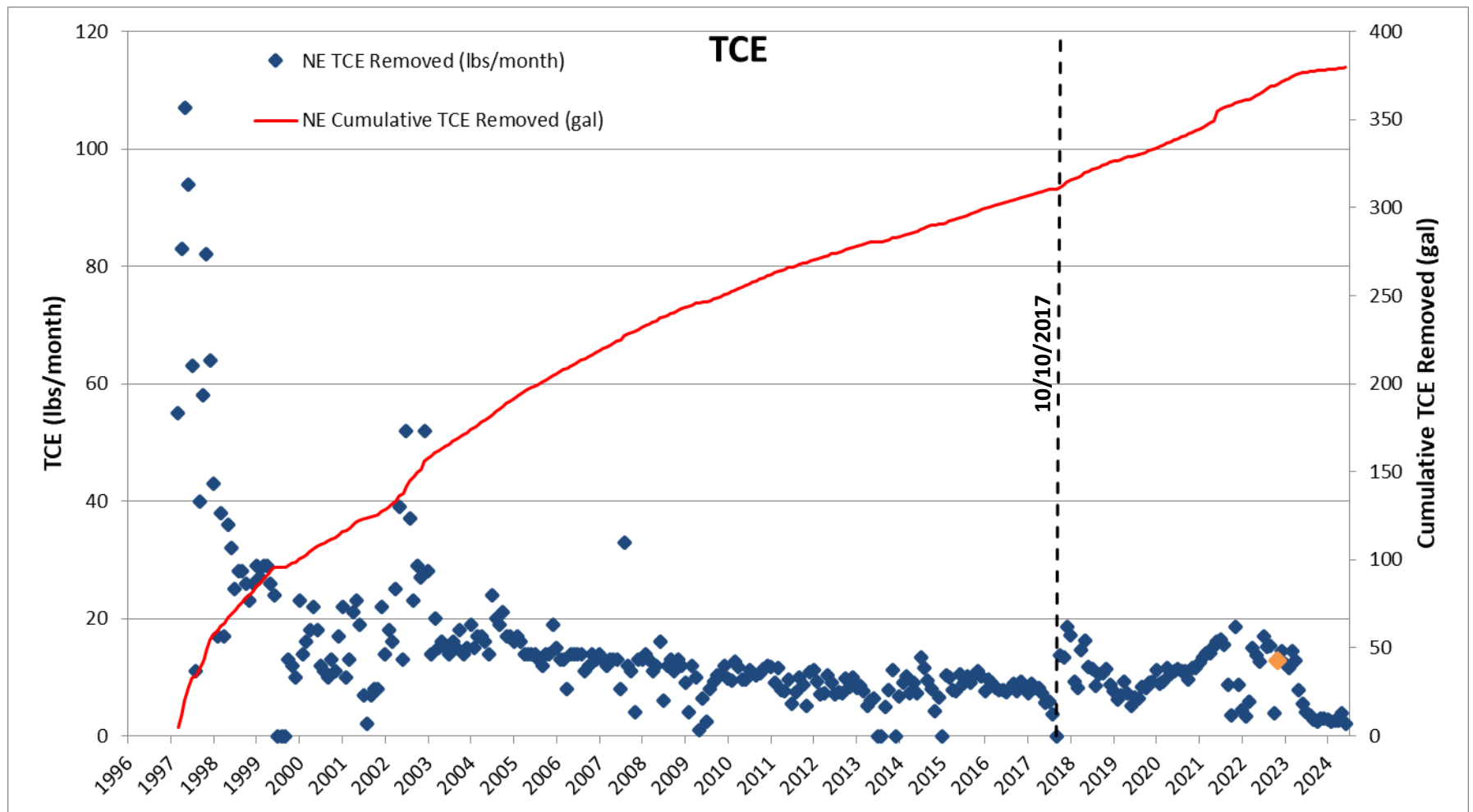
*TCE influent data was not collected from EW234 and EW235 for November 2022.

Figure B.2. Northeast Plume Containment System Influent TCE Concentrations



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.3. Northeast Plume—Tc-99 Activities in Extraction Wells



NOTE: Data rejected by validation or assessment have not been graphed.

◆ TCE influent data was not collected from EW234 and EW235 for November 2022. The average useable data for the rest of the reporting period [July 2022 – December 2022 (282 µg/L)] was used to calculate lbs of TCE removed.

Figure B.4. Northeast Plume Containment System TCE Removed

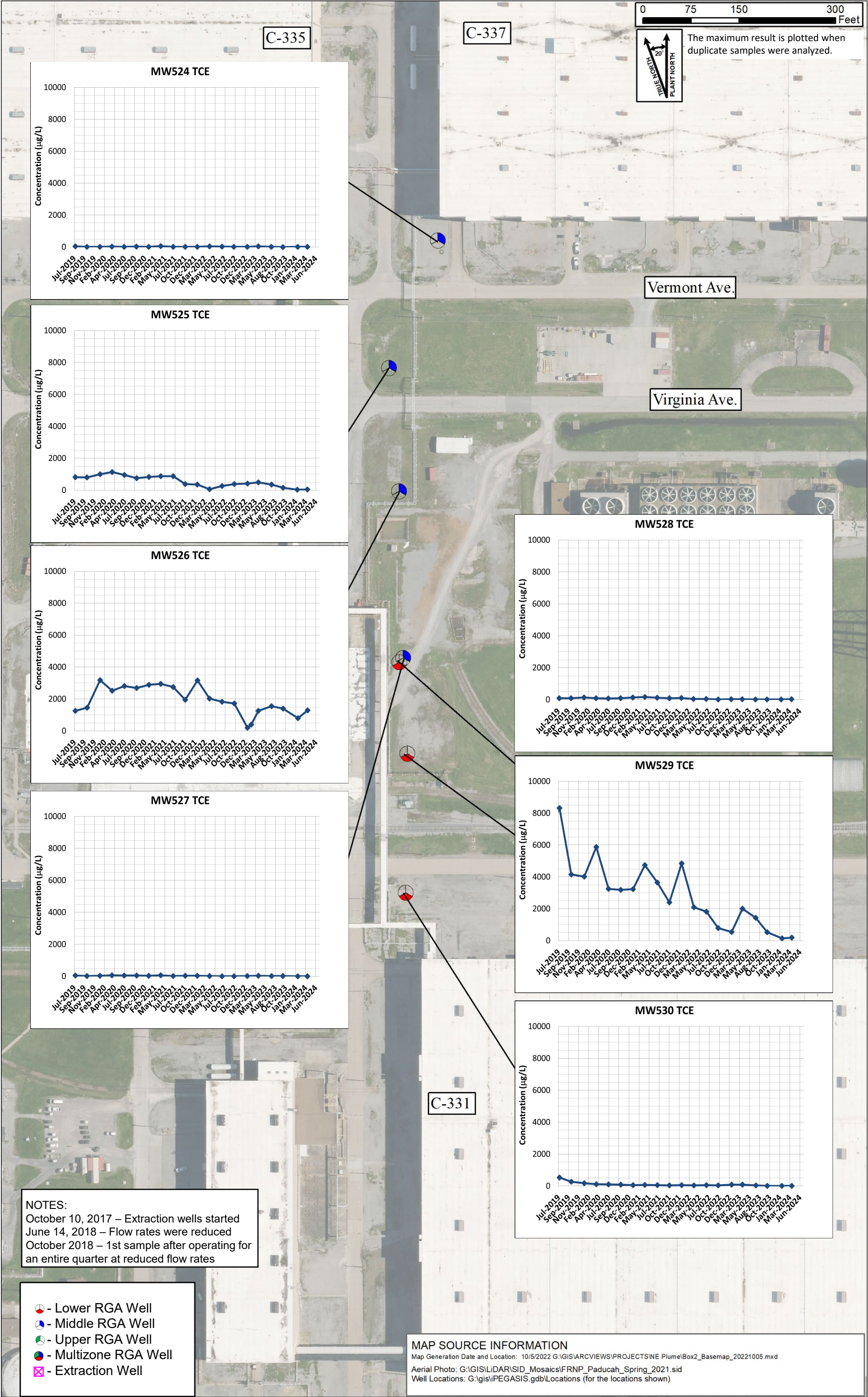


Figure B.5. Northeast Plume—Upgradient Transect Wells - TCE Trends

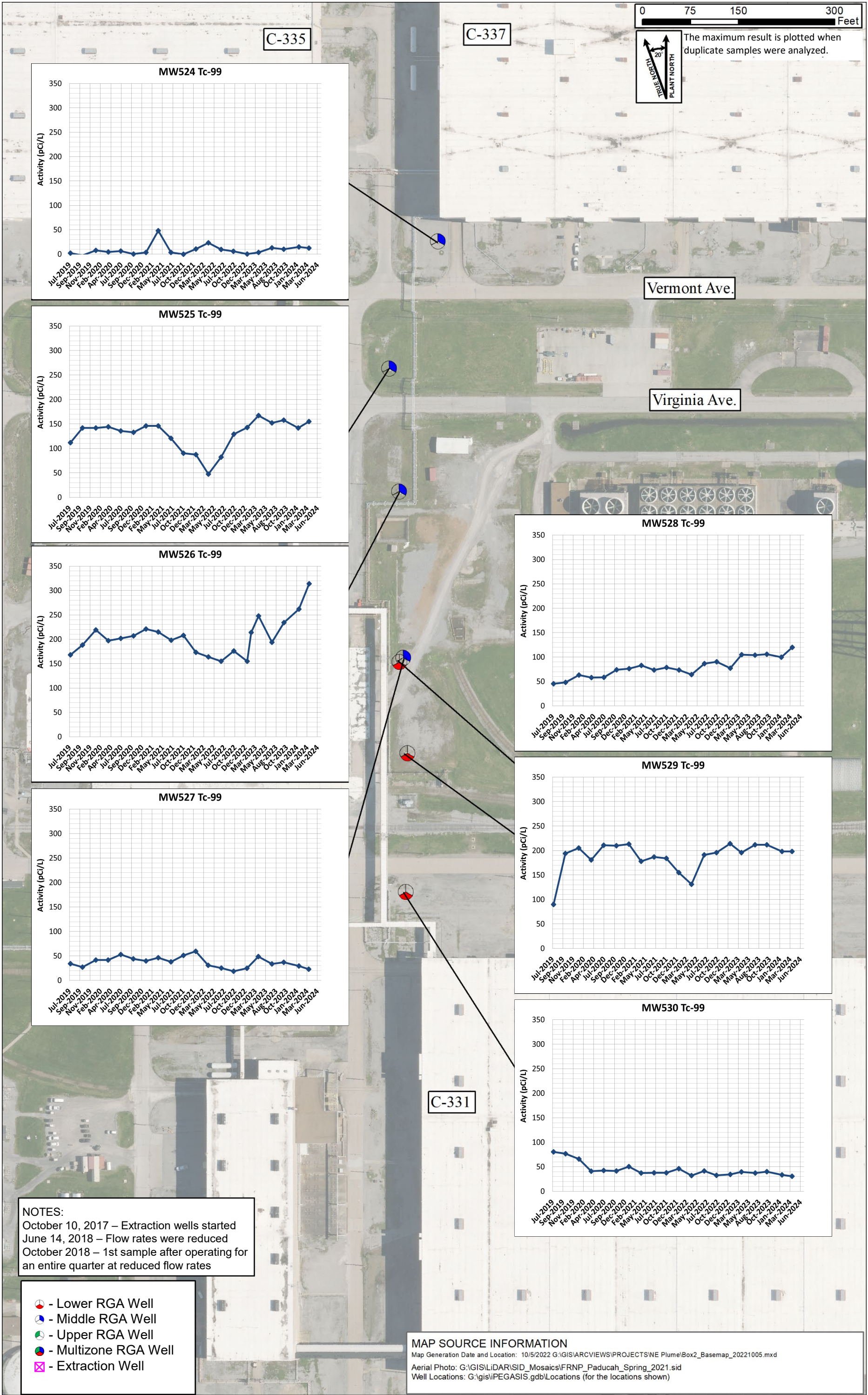


Figure B.6. Northeast Plume—Upgradient Transect Wells – Tc-99 Trends

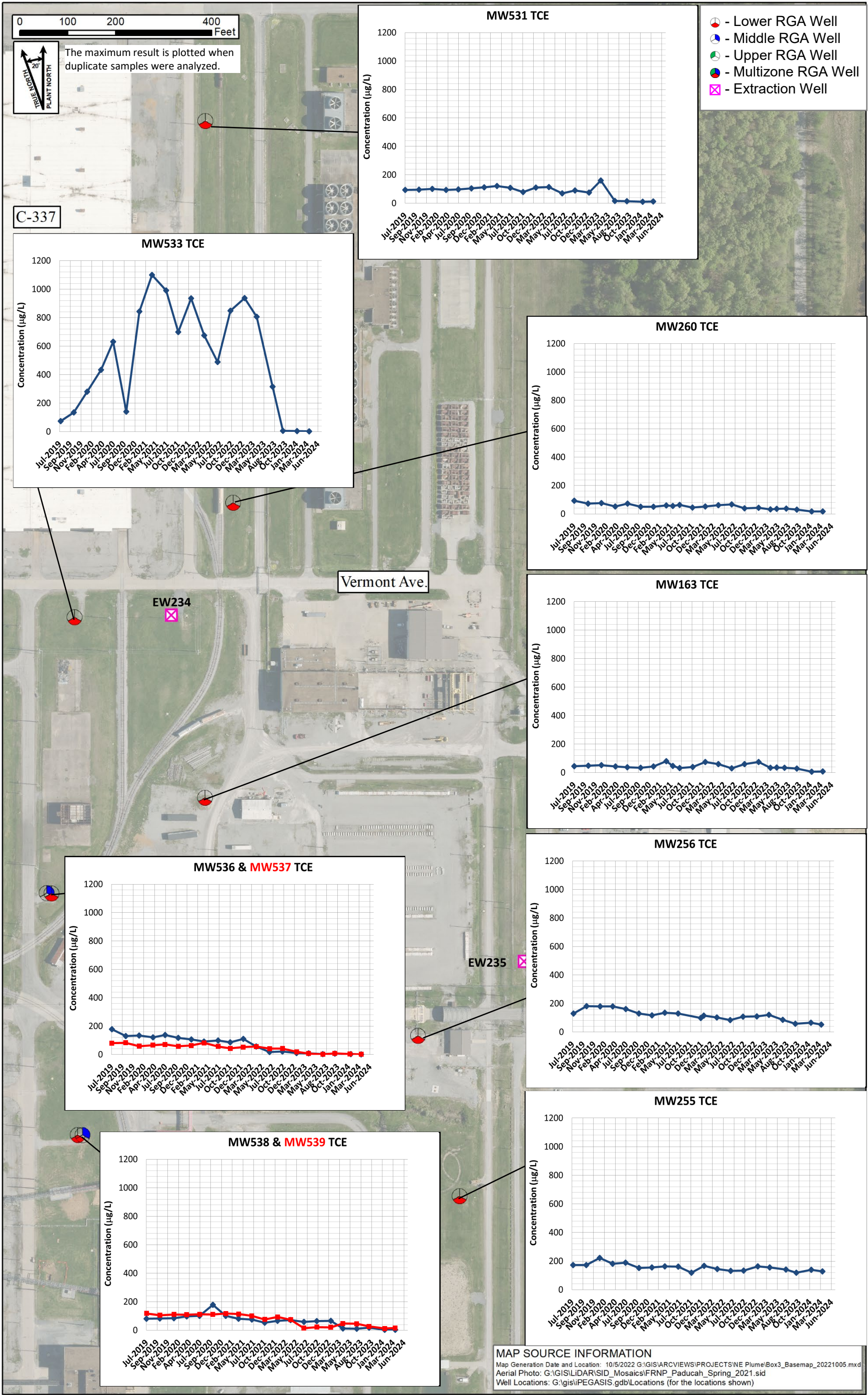


Figure B.7. Northeast Plume—Monitoring Wells near Extraction Wells—TCE Trends

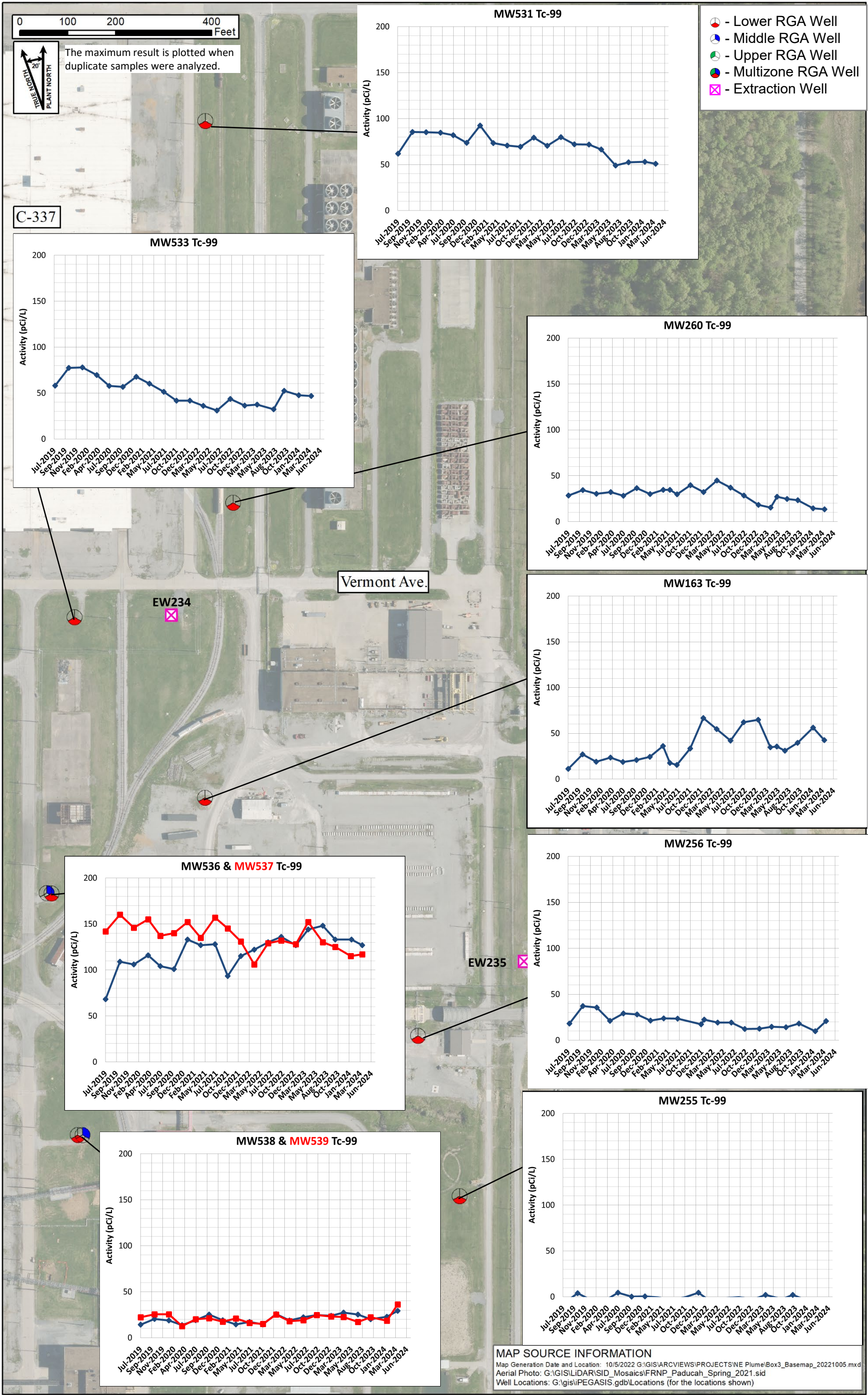


Figure B.8. Northeast Plume—Monitoring Wells near Extraction Wells—Tc-99 Trends

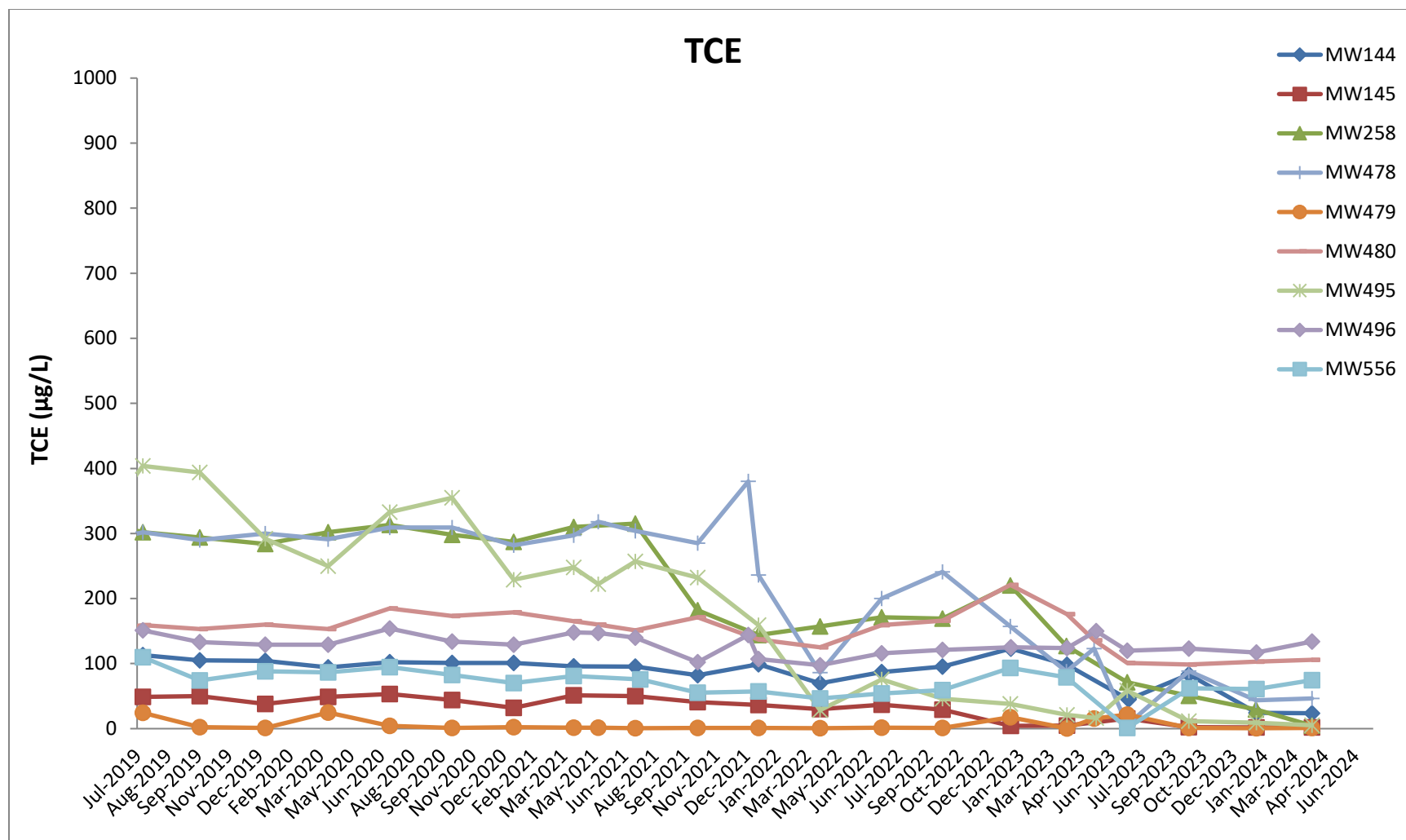


Figure B.9. Northeast Plume—TCE Concentrations in Downgradient Wells

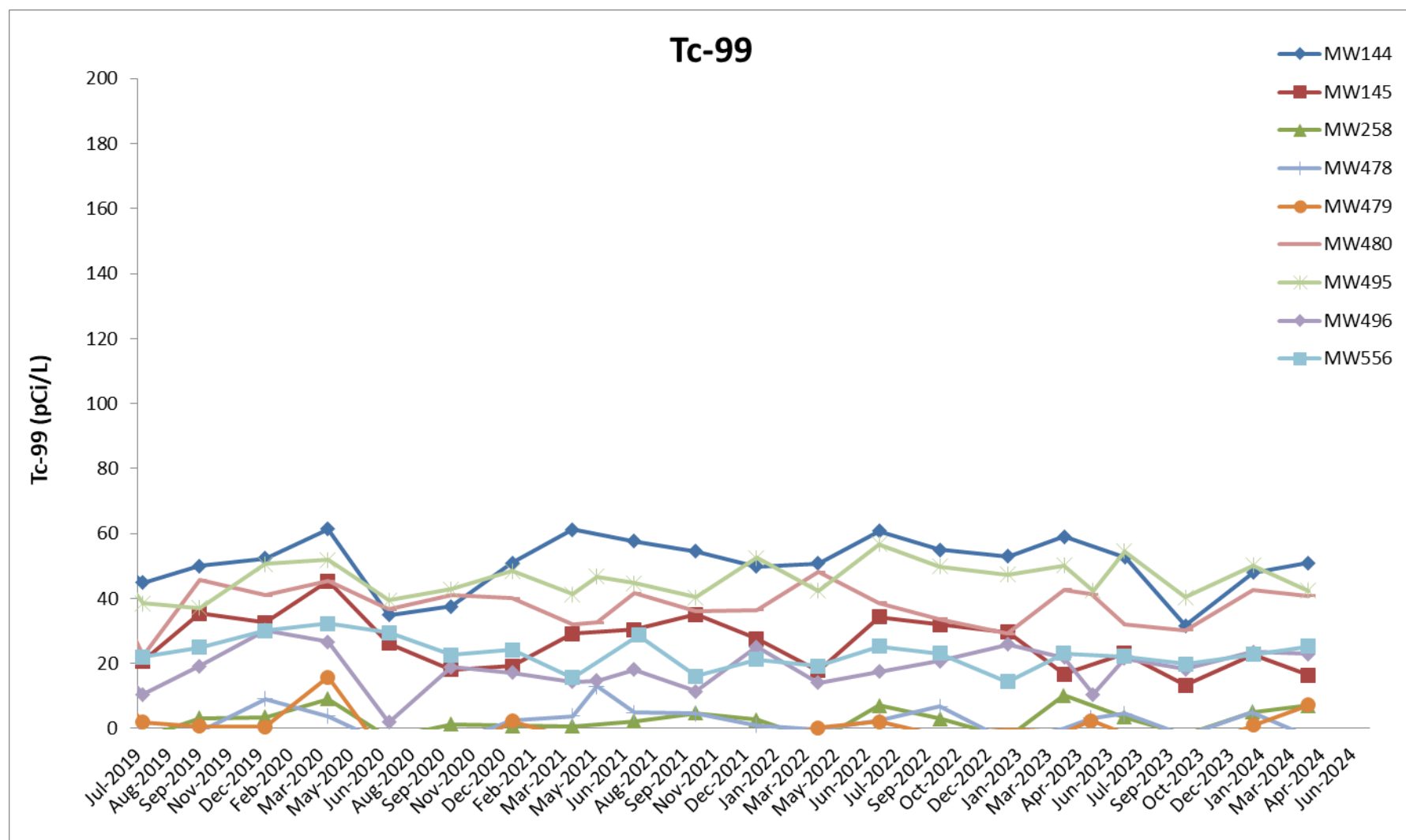


Figure B.10. Northeast Plume—Tc-99 Activities in Downgradient Wells

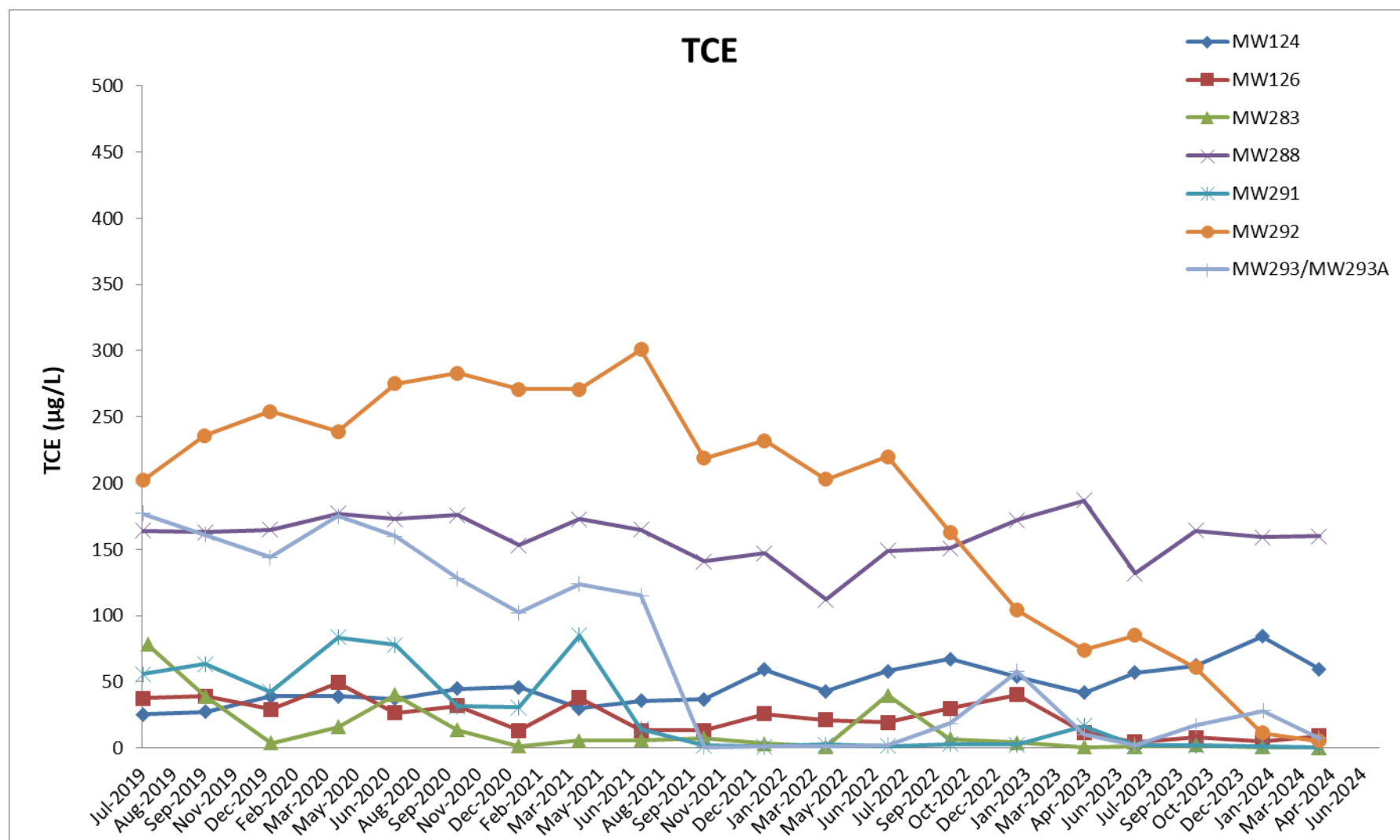
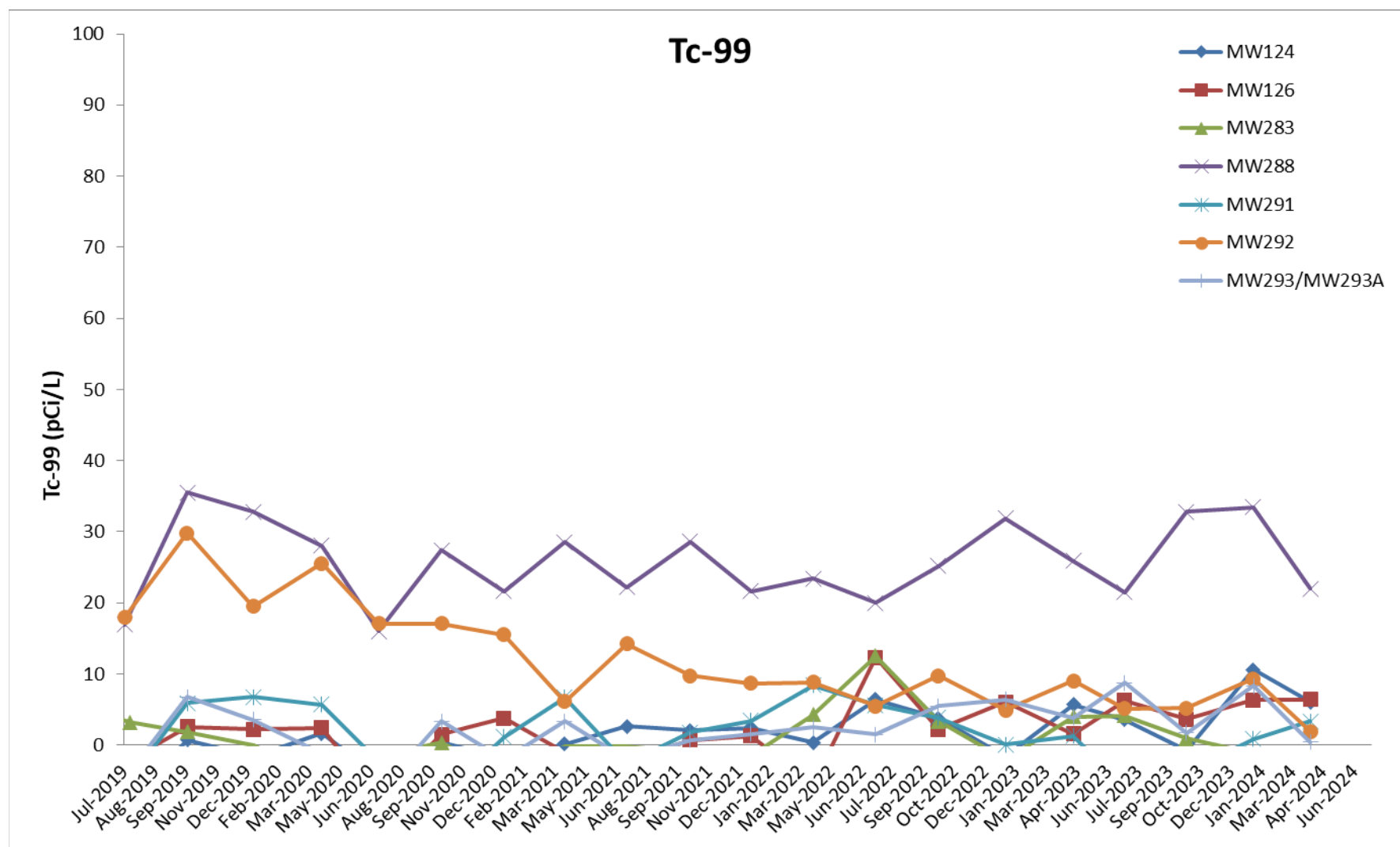
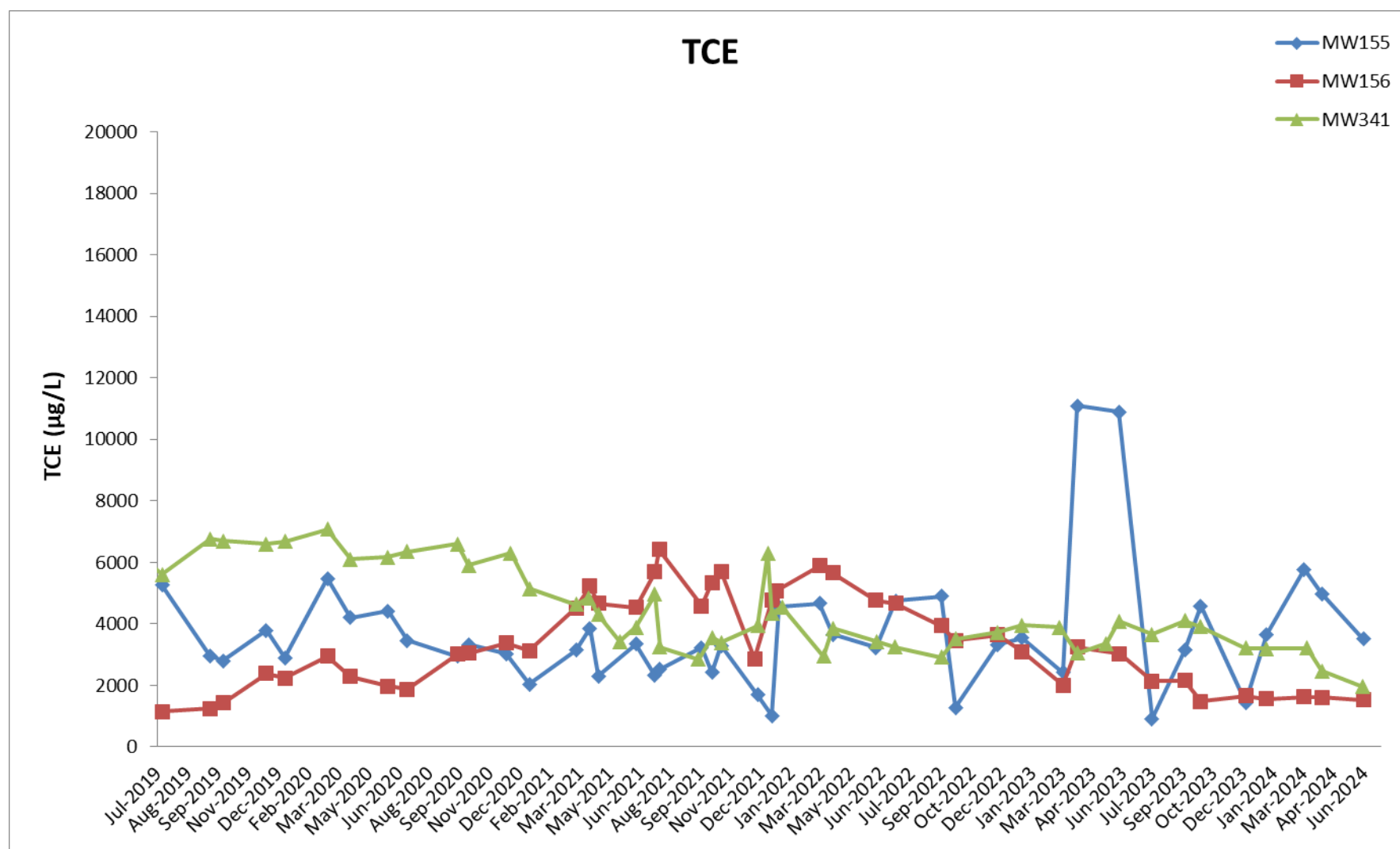


Figure B.11. Northeast Plume—TCE Concentrations in Distal Downgradient Wells



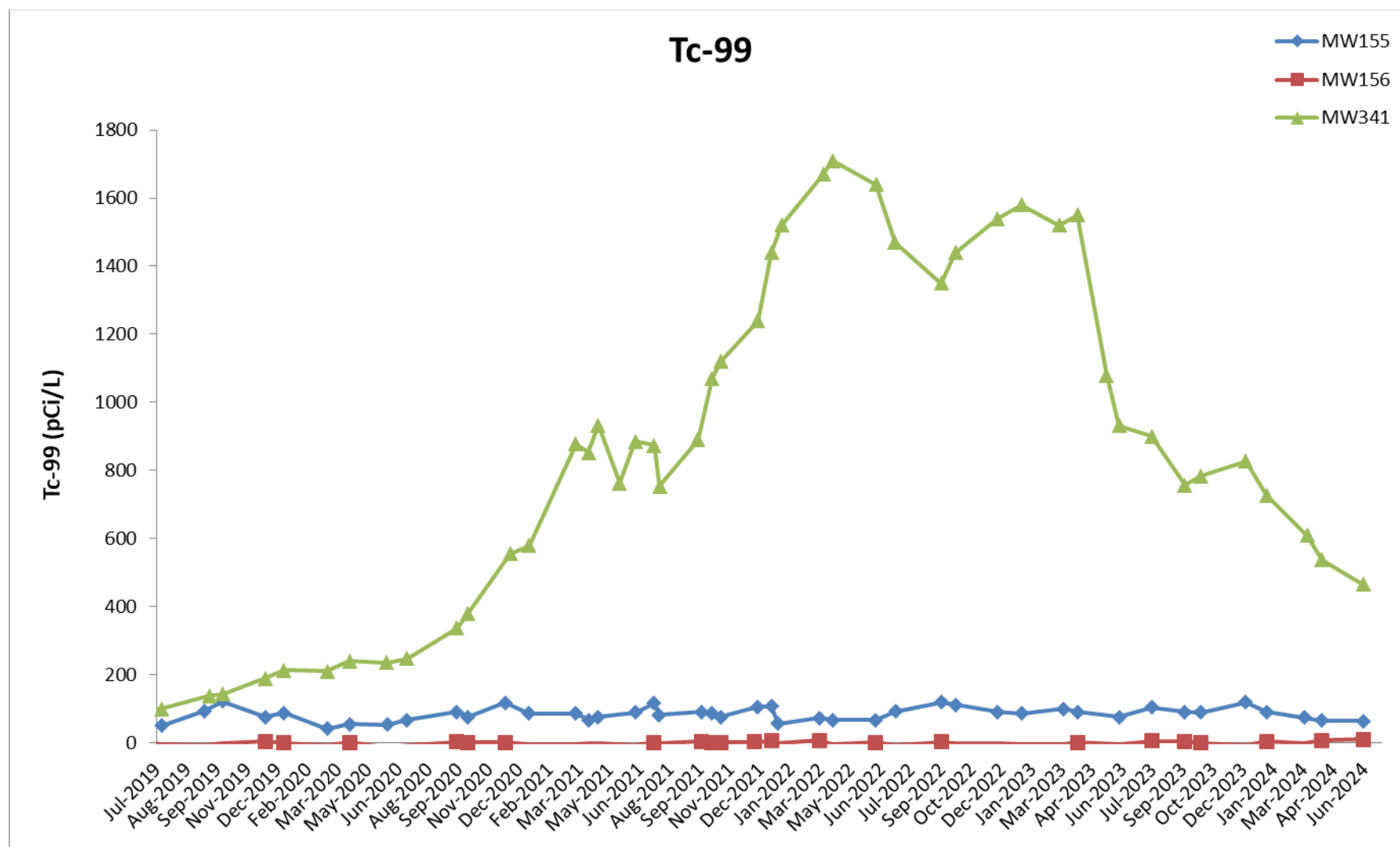
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.12. Northeast Plume—Tc-99 Activities in Distal Downgradient Wells



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.13. Northeast Plume—TCE Activities in Wells near C-400 Complex



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.14. Northeast Plume—Tc-99 Activities in Wells near C-400 Complex

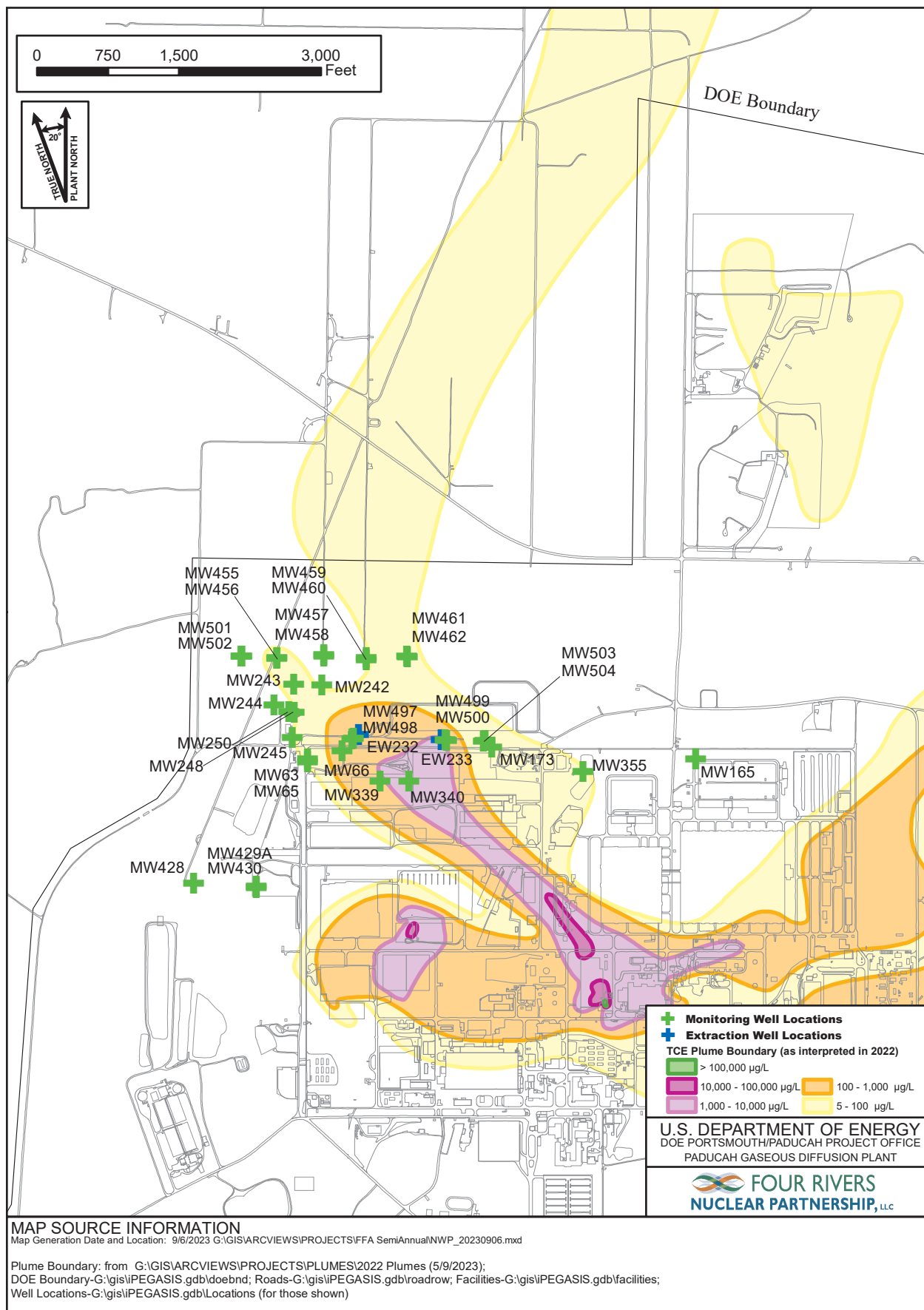
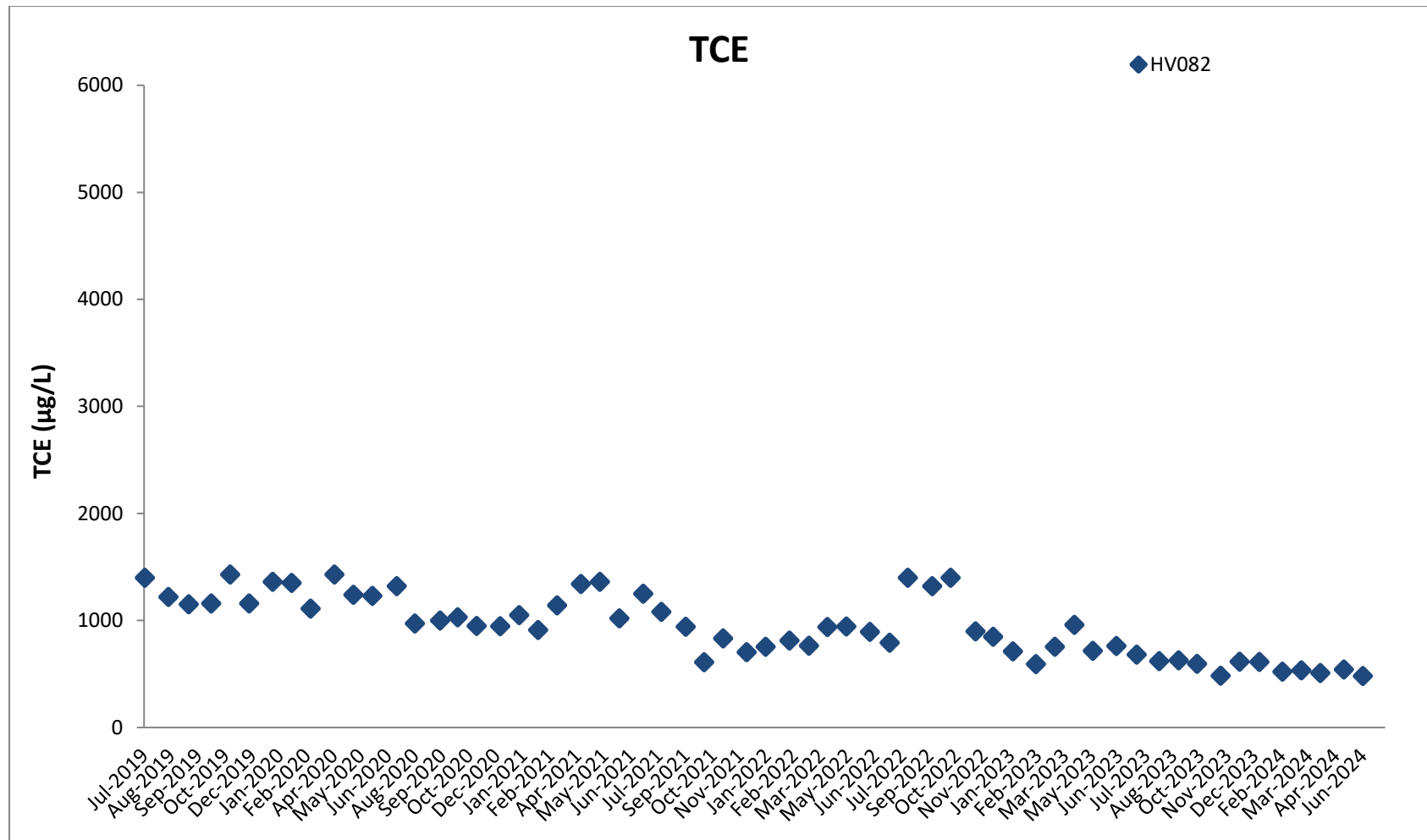
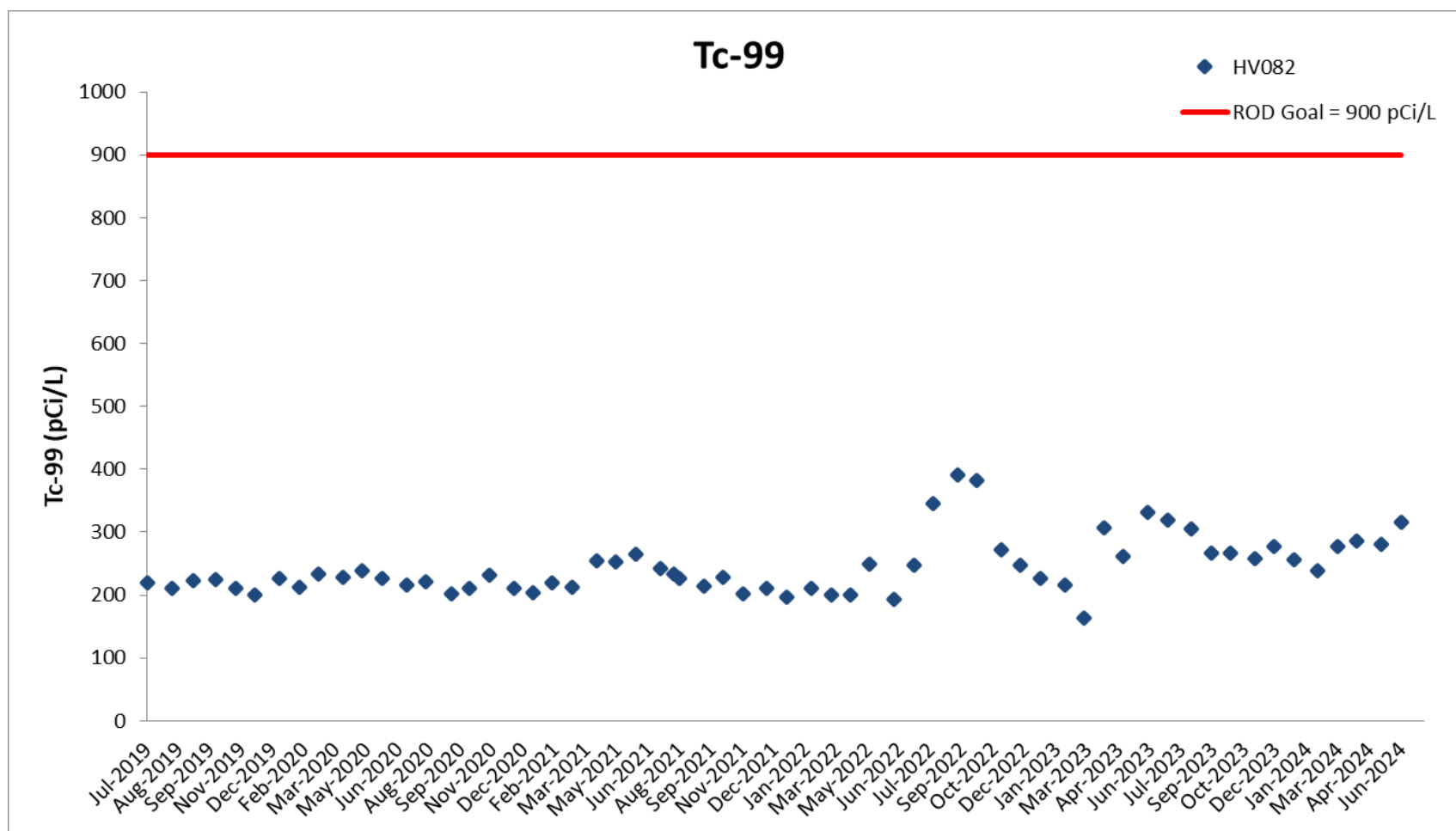


Figure B.15. Northwest Plume Groundwater Wells



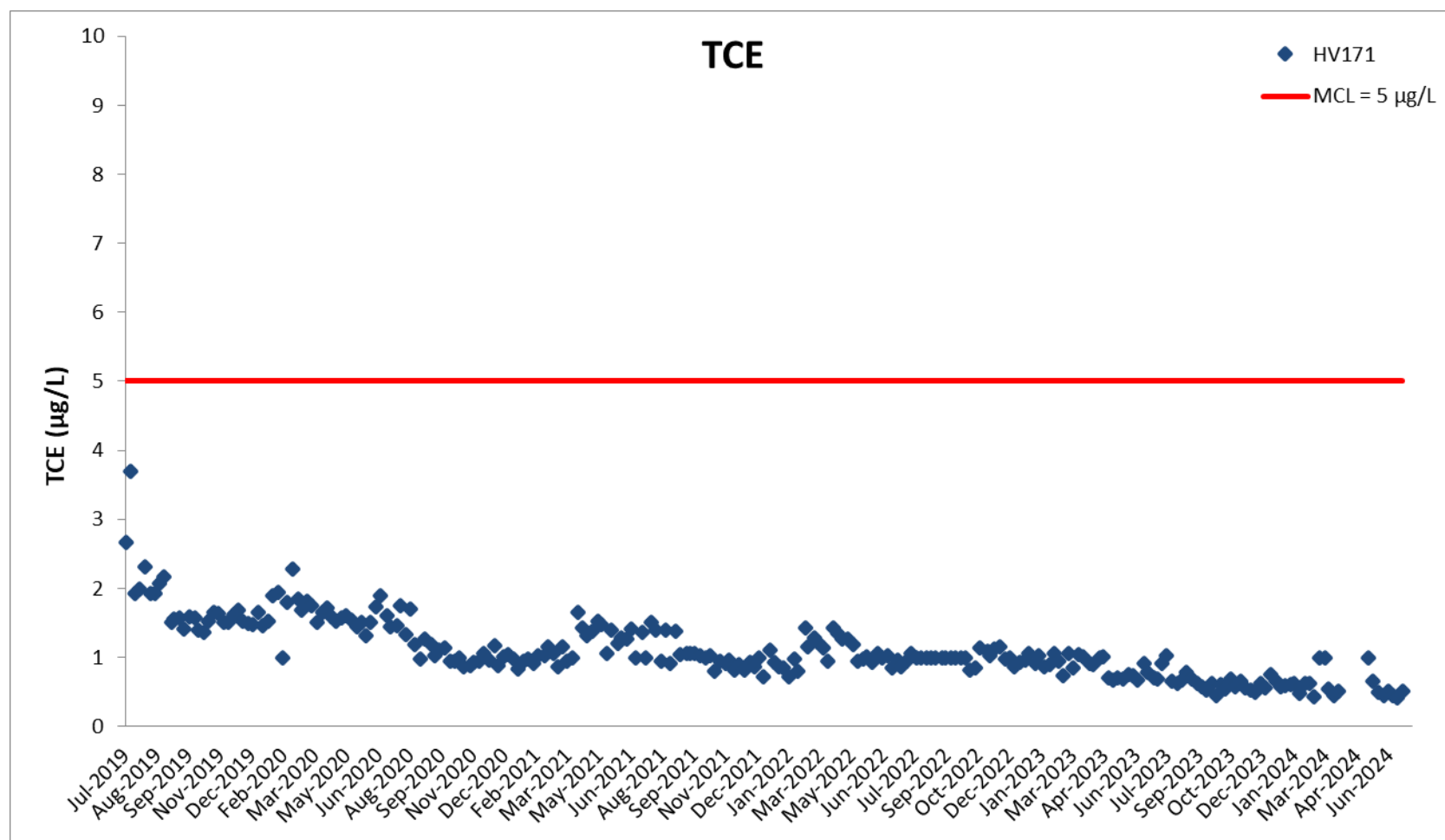
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.16. Northwest Plume Groundwater System Influent TCE Concentrations



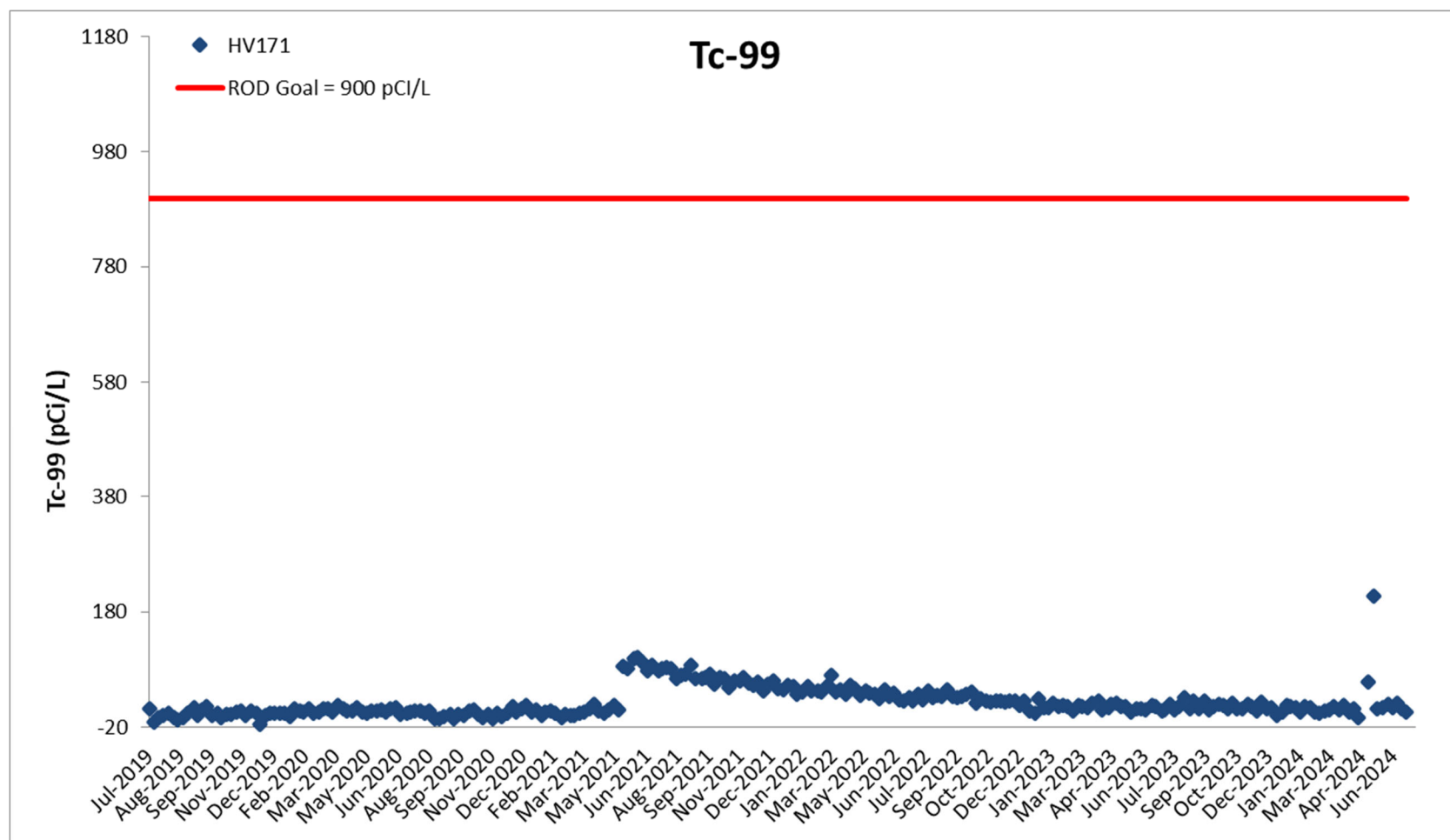
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.17. Northwest Plume Groundwater System Influent Tc-99 Activities



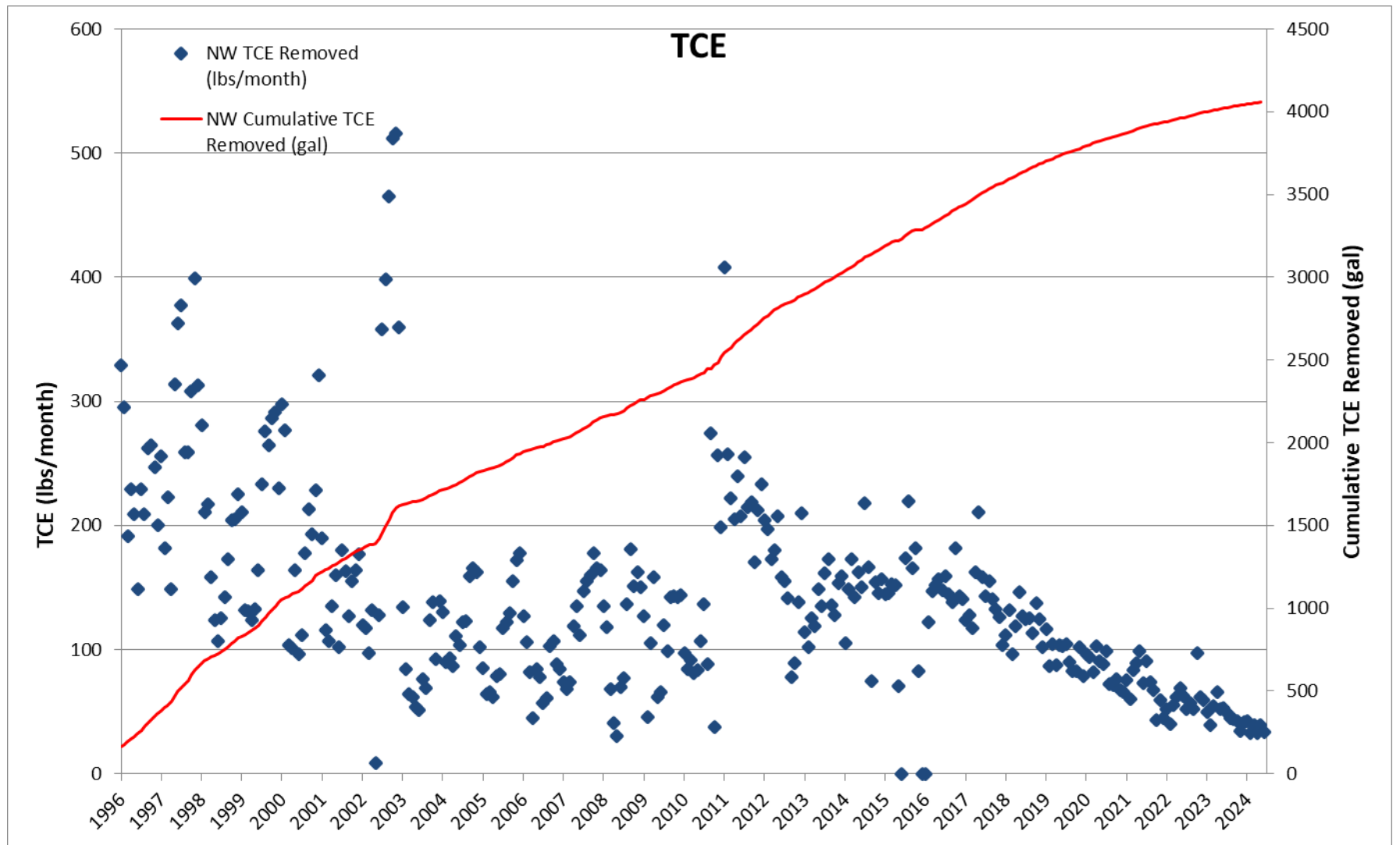
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.18. Northwest Plume Groundwater System Effluent TCE Concentrations



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.19. Northwest Plume Groundwater System Effluent Tc-99 Activities



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.20. Northwest Plume Groundwater System TCE Removed

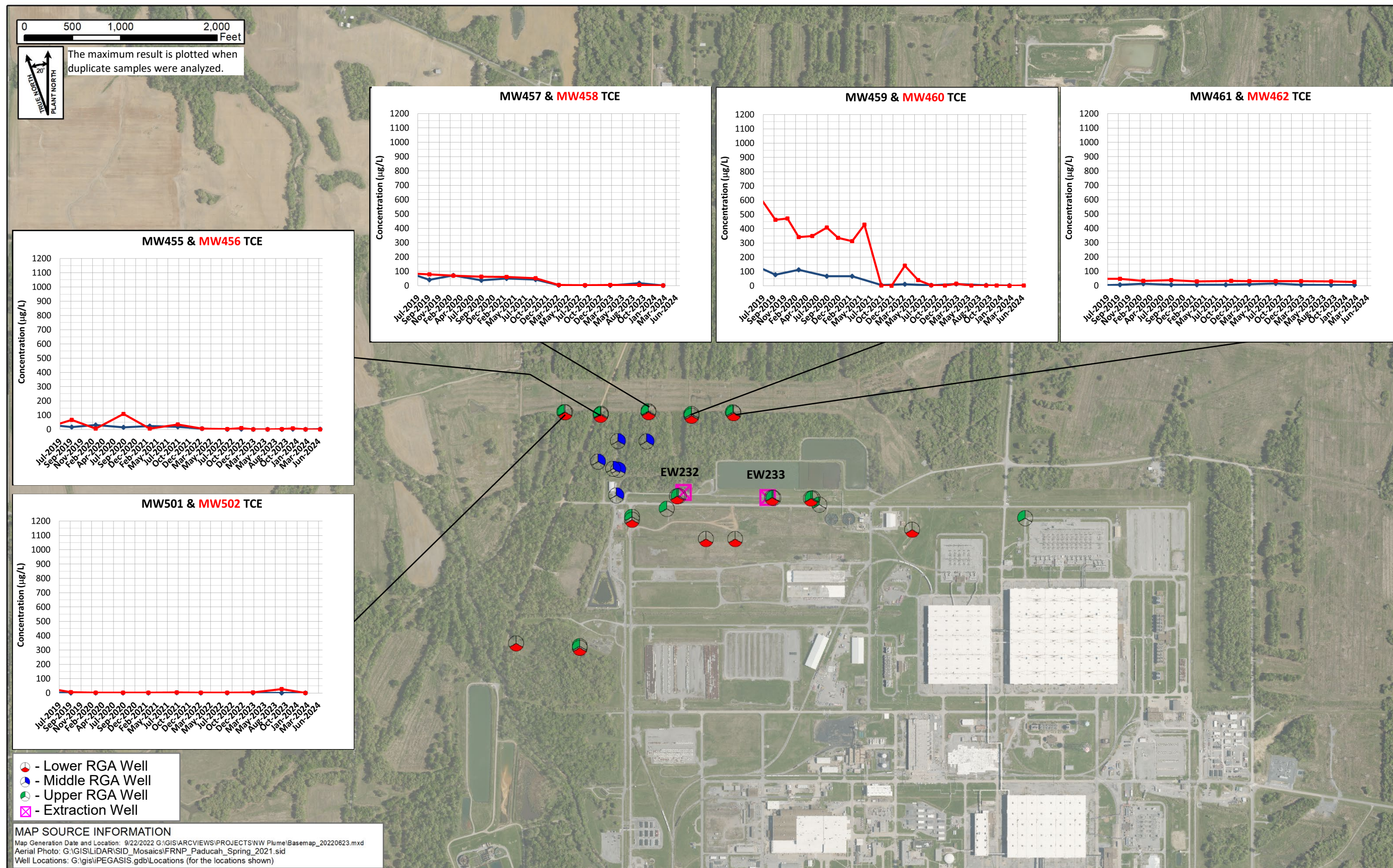


Figure B.21. Northwest Plume—Downgradient of New Well Field—TCE Trends

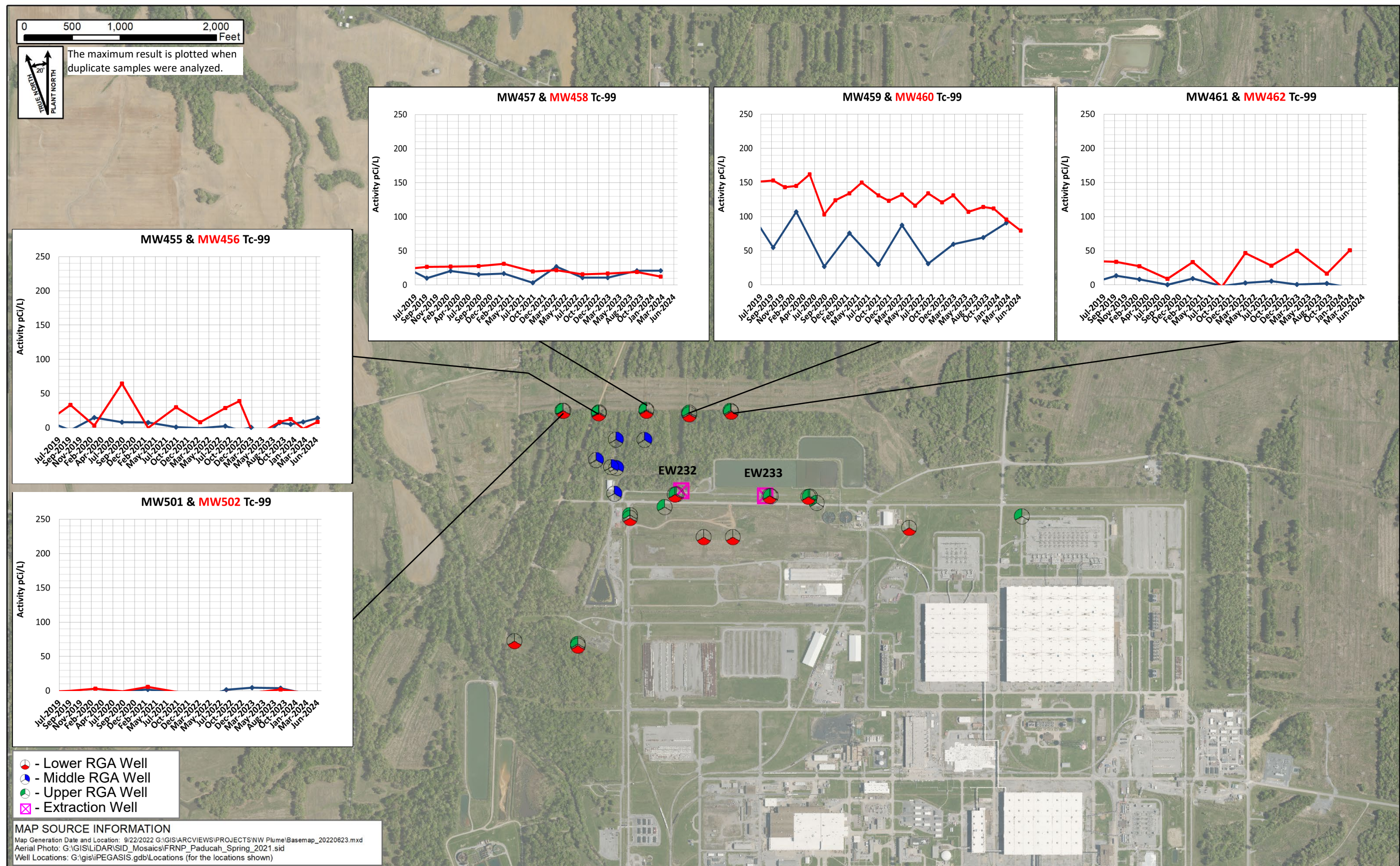


Figure B.22. Northwest Plume—Downgradient of New Well Field—Tc-99 Trends

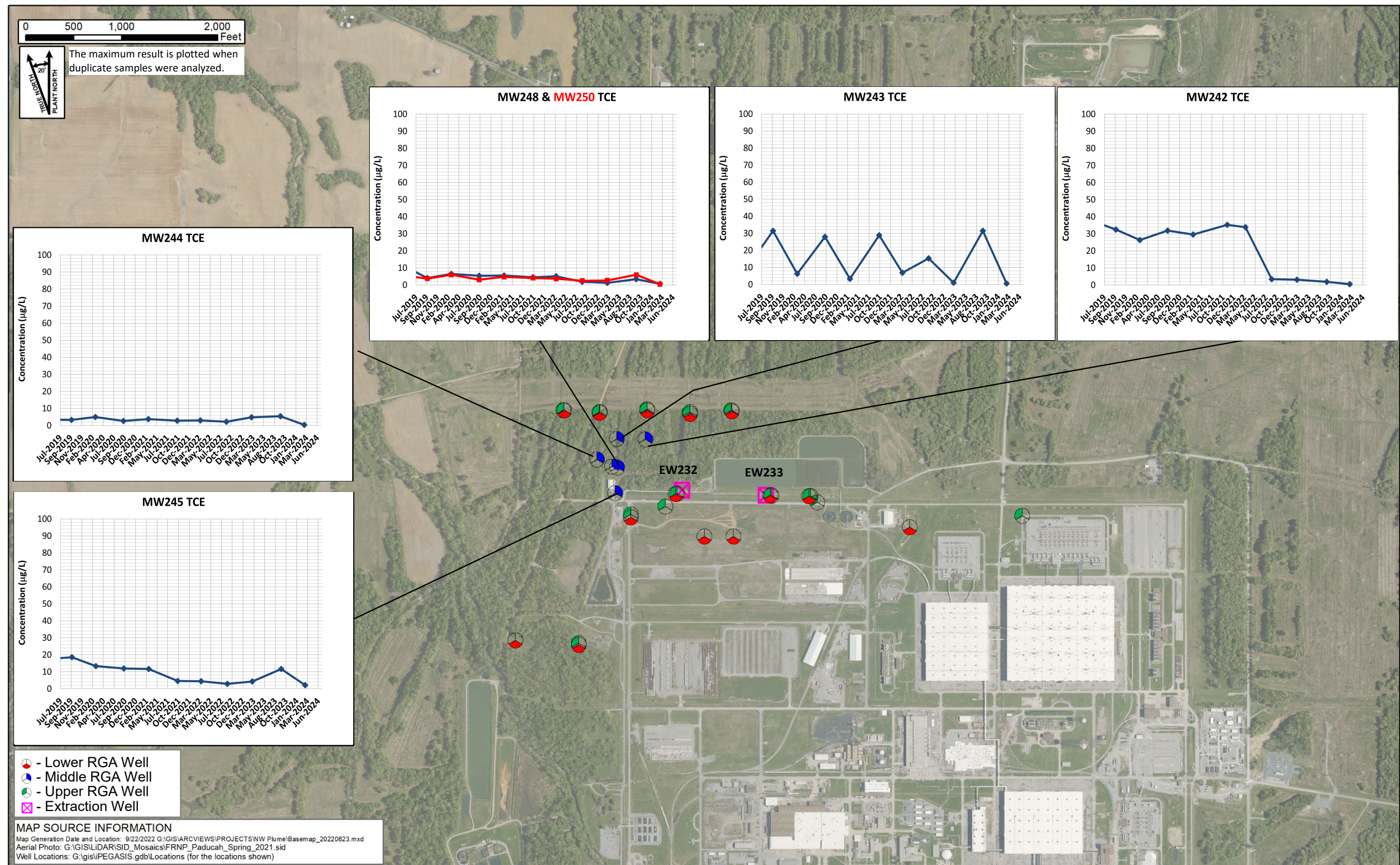


Figure B.23. Northwest Plume—South Well Field TCE Trends

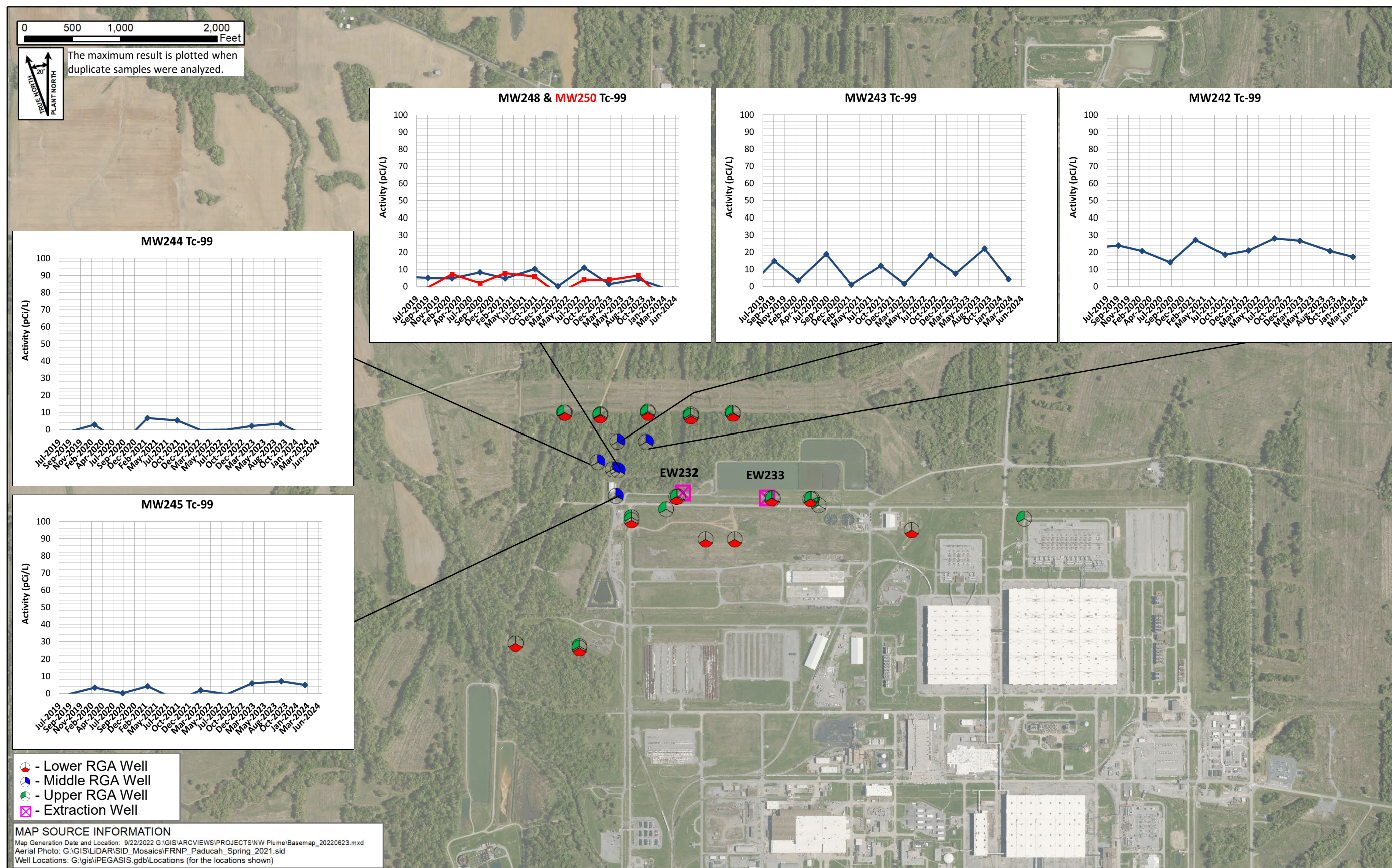


Figure B.24. Northwest Plume—South Well Field—Tc-99 Trends

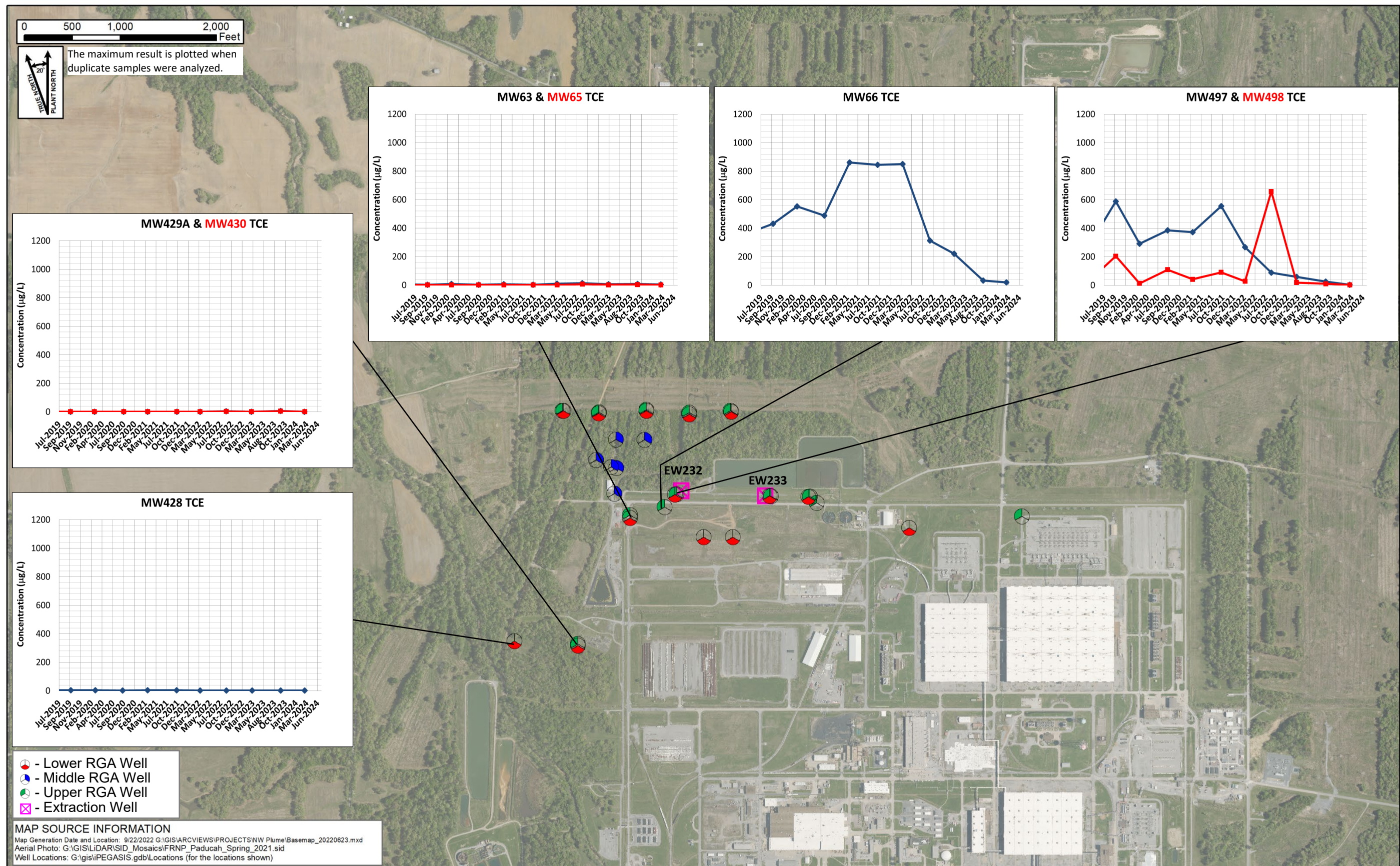


Figure B.25. Northwest Plume—New Well Field—TCE Trends

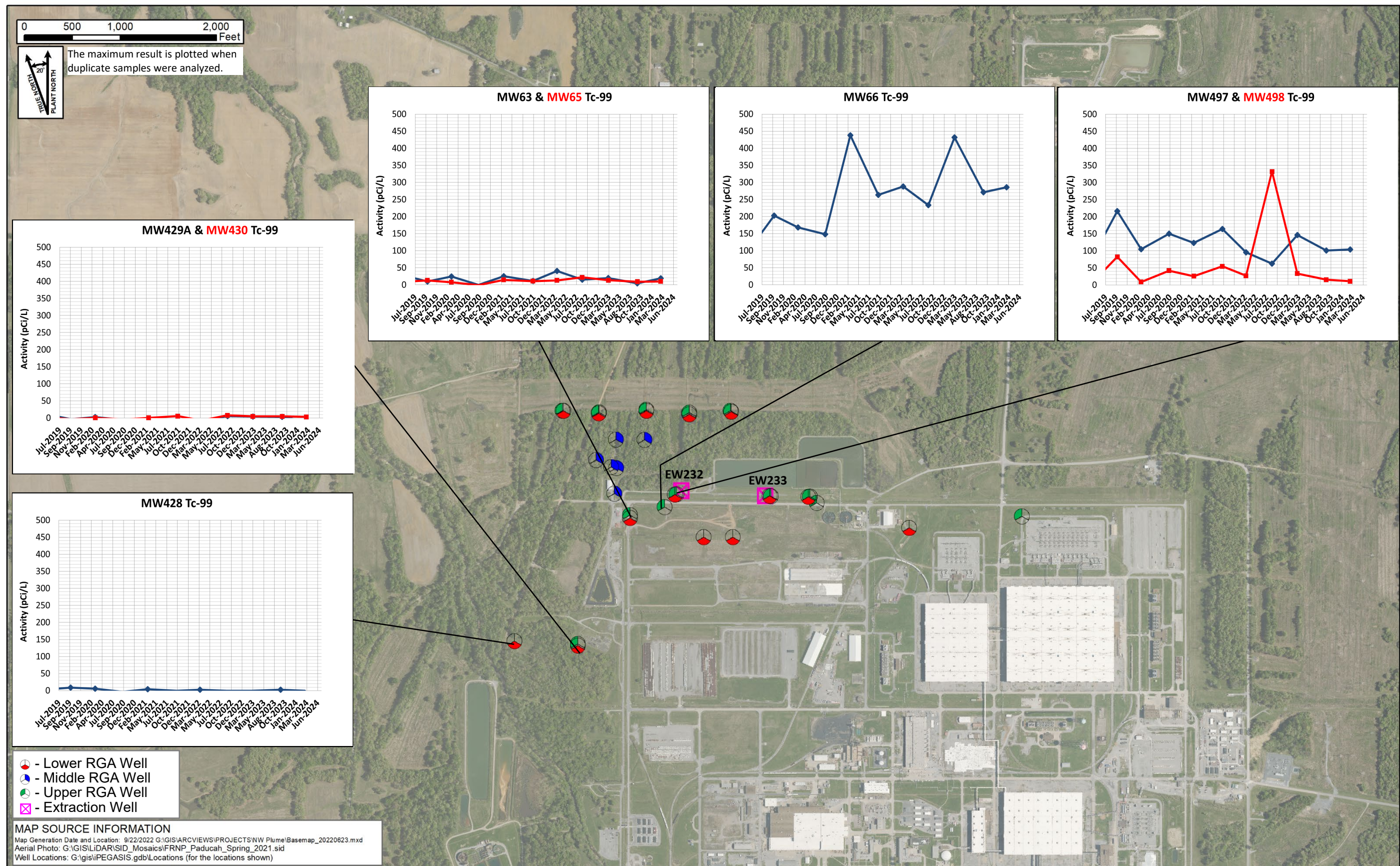


Figure B.26. Northwest Plume—New Well Field—Tc-99 Trends

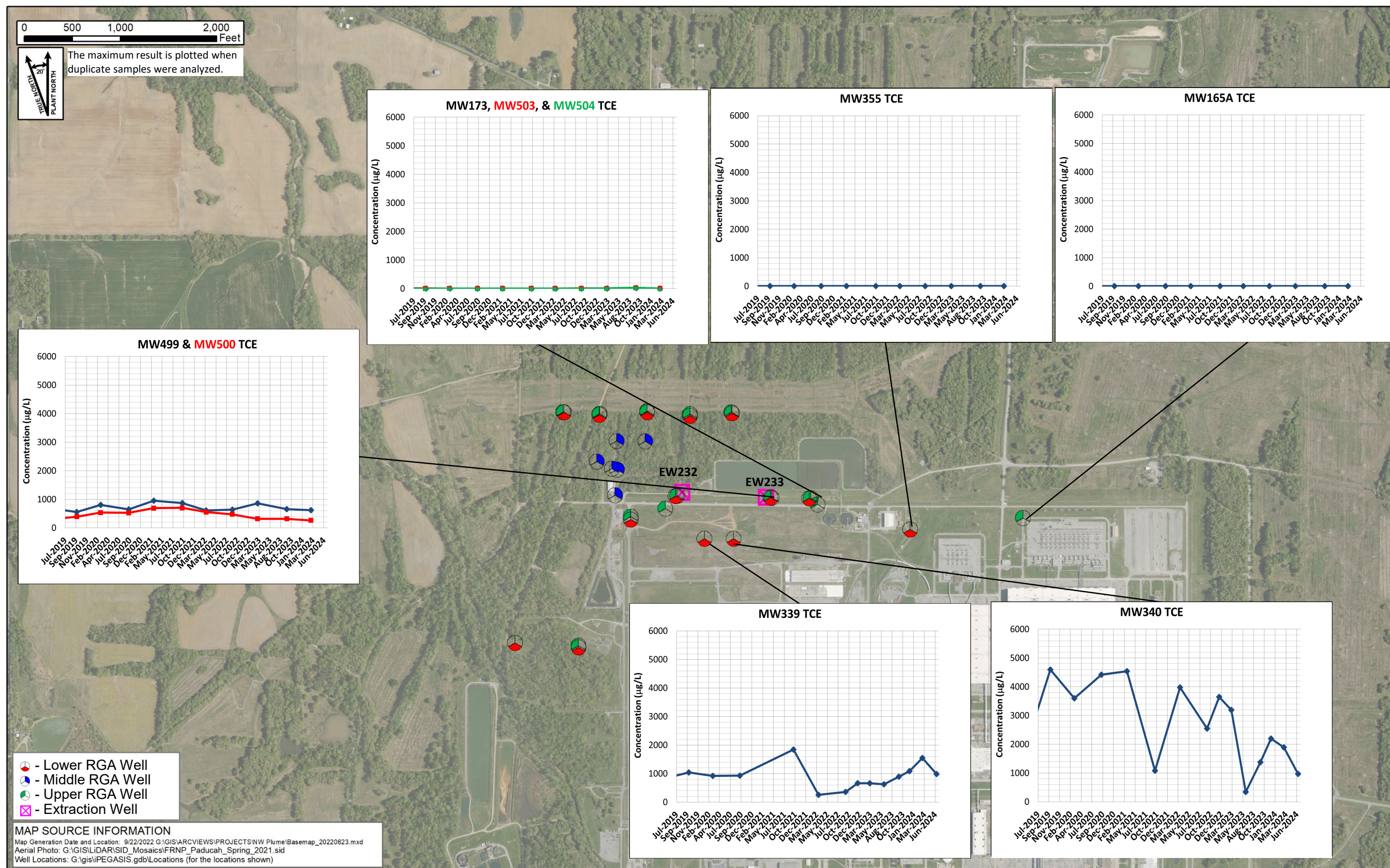


Figure B.27. Northwest Plume—Upgradient of Extraction Wells—TCE Trends

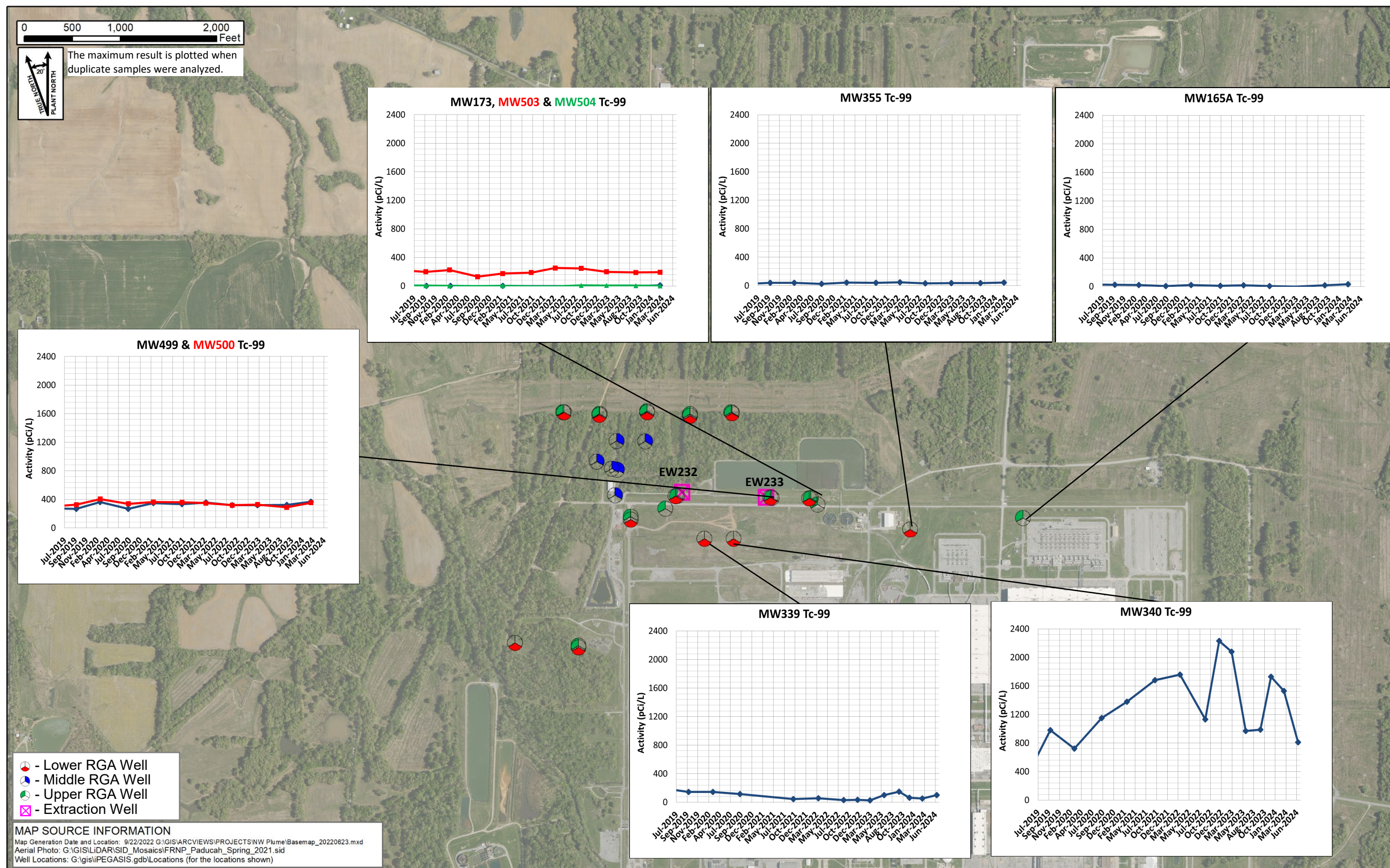
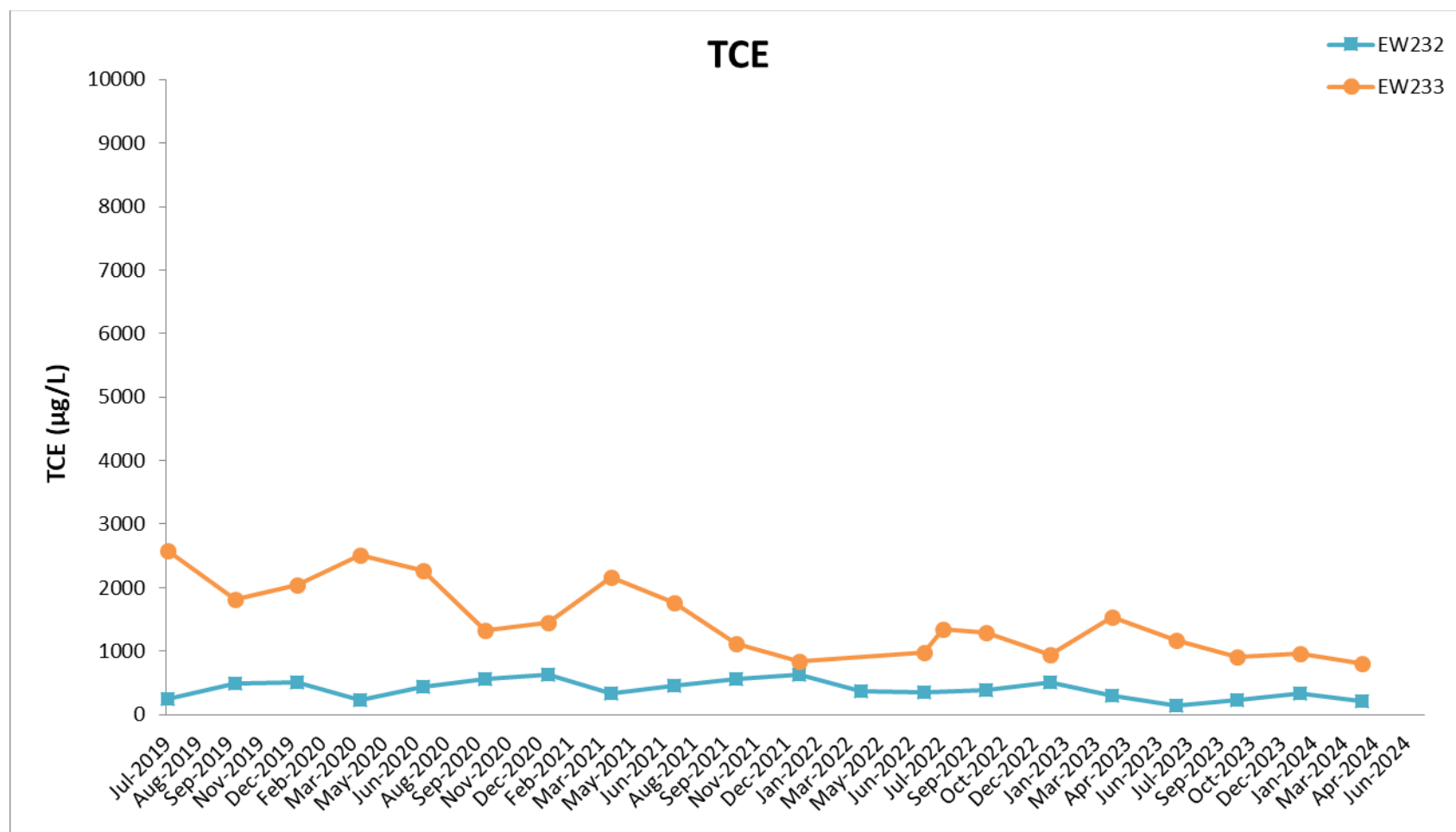
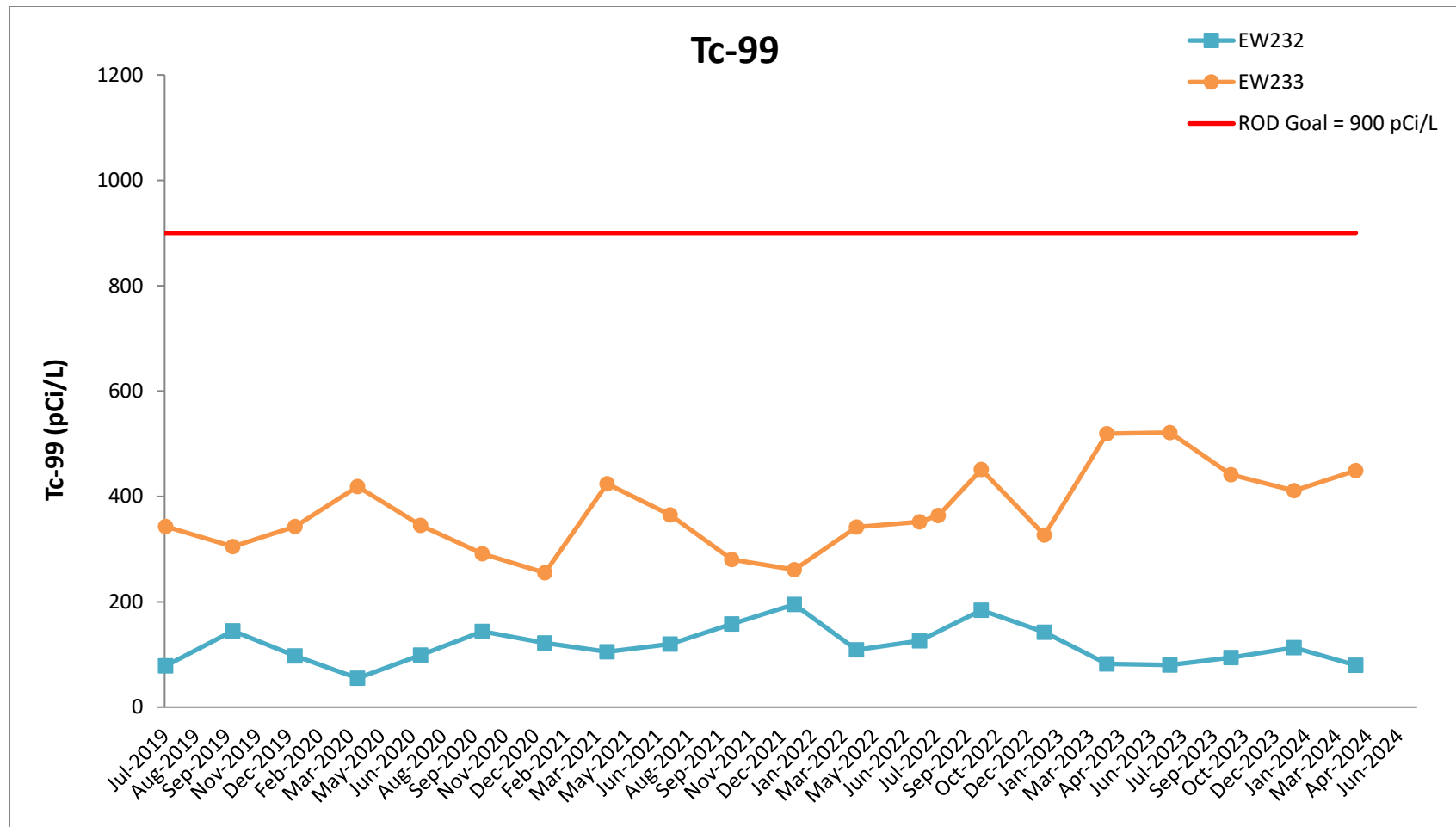


Figure B.28. Northwest Plume—Upgradient of Extraction Wells—Tc-99 Trends



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.29. Northwest Plume—TCE Concentrations in Extraction Wells



NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.30. Northwest Plume—Tc-99 Activities in Extraction Wells

APPENDIX C

C-746-K LANDFILL (SWMU 8) DATA

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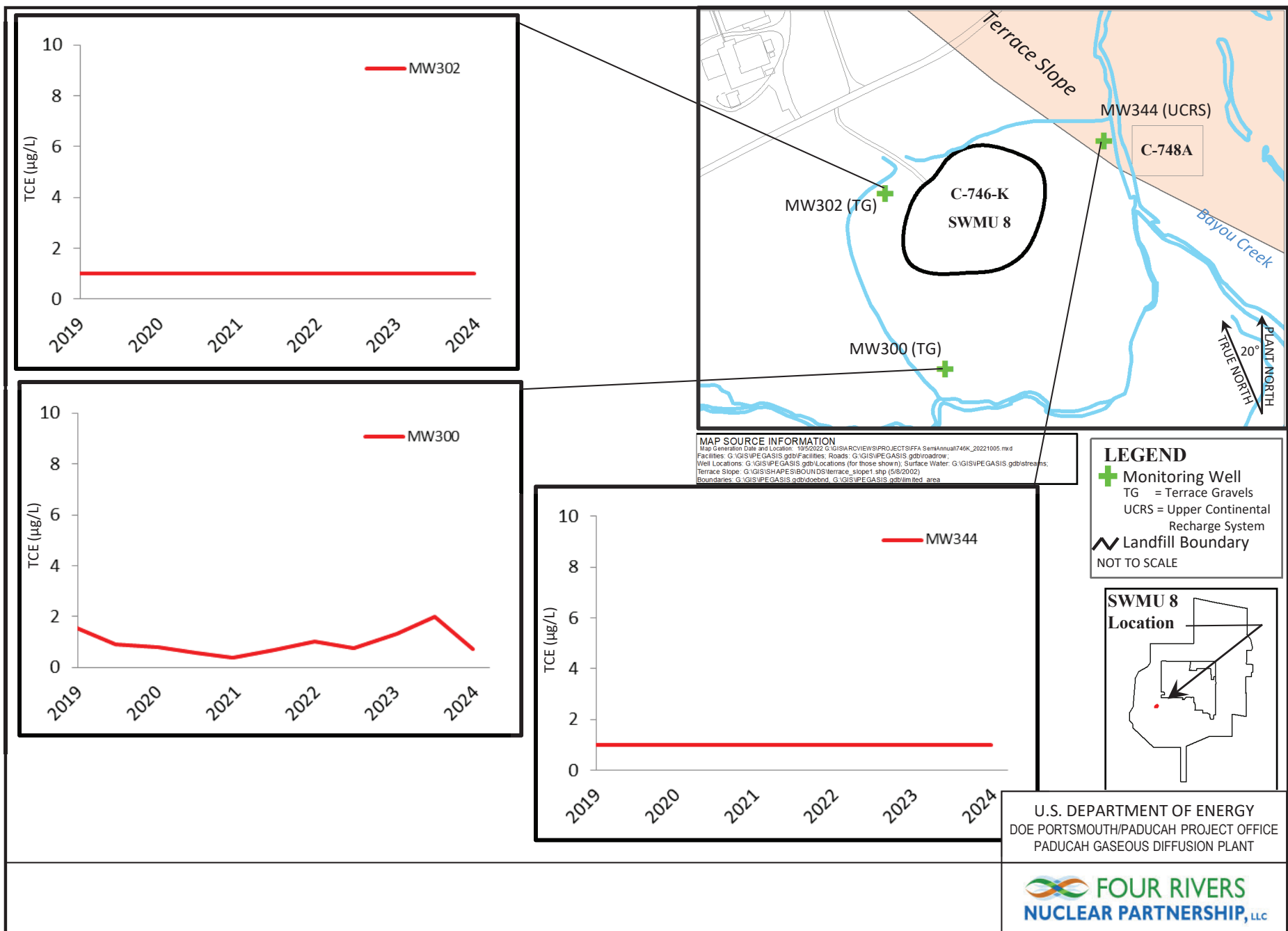


Figure C.1. TCE Trends in SWMU 8 Wells

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APPENDIX D

ADMINISTRATIVE RECORD, POST-DECISION RECORD, AND ADMINISTRATIVE RECORD REFERENCE INDICES

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Paducah Documents Added to the Administrative Record Files-Second Quarter CY 2024

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
ARF 400OUREME DIAL	3/19/2024	PPPO-02-10027002-24C, DOE/LX/07- 2433&D2/R1/A1	TRANSMITTAL OF THE ADDENDUM TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN FOR THE C-400 COMPLEX OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2433&D2/R1/A1	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027002-24C-ADDEN RIFS FOR C400-2024-03-19	4/18/2024
ARF 400OUREME DIAL	4/18/2024	FR-24-0971, DOE/LX/07- 2433&D2/R1/A1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND REVIEW FOR THE D1 ADDENDUM TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN FOR THE C-400 COMPLEX OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2433&D2/R1/A1, TRANSMITTAL DATE OF MARCH 19, 2024	USEPA-4	DOE	INF-RECMGMT-FR-24-0971-EPA REVIEW C400 RIFS-2024-04-18	5/21/2024
ARF 400OUREME DIAL	4/19/2024	FR-24-0972, DOE/LX/07- 2433&D2/R1/A1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT RECEIPT AND REVIEW OF THE ADDENDUM TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN FOR THE C-400 COMPLEX OPERABLE UNIT (DOE/LX/07-2433&D2/R1/A1) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0972-KDWM REVIEW RIFS-2024-04-19	5/21/2024
ARF 400OUREME DIAL	9/18/2019	PPPO-02-5575312-19B, DOE/LX/07-2433&D2	TRANSMITTAL OF THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN FOR THE C-400 COMPLEX OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2433&D2)	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-5575312-19B-C400 RIFS-2019-09-18	5/21/2024

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Paducah Documents Added to the Post-Decision Files-Second Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
1/7-PD	12/27/2023	CP4-ES-0041-F14	CP4-ES-0041-F14 - WALKTHROUGH CHECKLIST-C-746-K LANDFILL - DECEMBER 2023	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F14-C746K CHKLST-2023-12-27	5/21/2024
1/7-PD	12/14/2023	CP4-ES-0041-F22	CP4-ES-0041-F22 - WALKTHROUGH CHECKLIST - SOLID WASTE MANAGEMENT UNIT (SWMU) 100 - DECEMBER 2023	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F22-SWMU 100 CKHLST DEC-2023-12-14	5/21/2024
NSDD-PD	3/26/2024	CP4-ES-0041-F03	CP4-ES-0041-F03 - WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (WEEKLY) - MARCH 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F03 -C400L WEEKLY CHKLST-2024-03-26	4/18/2024
NSDD-PD	3/26/2024	CP4-ES-0041-F07	CP4-ES-0041-F07 - WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (STORM EVENT) - MARCH 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F07-C400L STORM EVENT-2024-03-26	4/18/2024
NSDD-PD	3/27/2024	CP4-ES-0041-F20	CP4-ES-0041-F20 - WINTERIZATION CHECKLIST - NORTH-SOUTH DIVERSION DITCH (WEEKLY) - MARCH 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F20-C400L WINTER CHKLST-2024-03-27	4/18/2024
NSDD-PD	3/23/2024	FR-24-0961, DOE/LX/07-2484&D1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND COMMENT FOR THE D1 NORTH-SOUTH DIVERSION DITCH OPERATIONS AND MAINTENANCE PLAN, DOE/LX/07-2484&D1	USEPA-4	DOE	INF-RECMGMT-FR-24-0961-EPA COMMENT NS OM PLAN-2024-03-23	4/18/2024
NSDD-PD	3/25/2024	FR-24-0962, DOE/LX/07-2484&D1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT SUBMITTAL OF COMMENTS TO THE OPERATION AND MAINTENANCE PLAN FOR SECTIONS 1 AND 2 OF THE NORTH-SOUTH DIVERSION DITCH AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-2484&D1) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0962-KY COMMENT NS OM PLAN-2024-03-25	4/18/2024
NSDD-PD	3/19/2024	PPPO-02-10026989-24C, DOE/LX/07-2484&D1	TRANSMITTAL OF THE OPERATION AND MAINTENANCE PLAN FOR SECTIONS 1 AND 2 OF THE NORTH-SOUTH DIVERSION DITCH AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2484&D1	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10026989-24C-OM PLAN SECT 1 AND 2-2024-03-19	4/18/2024

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Paducah Documents Added to the Post-Decision Files-Second Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
NSDD-PD	4/25/2024	CP4-ES-0041-F03	CP4-ES-0041-F03 - WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (WEEKLY) - APRIL 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F03-C400L WKLY CHKLST APRIL-2024-04-25	5/21/2024
NSDD-PD	4/30/2024	CP4-ES-0041-F07	CP4-ES-0041-F07 - WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (STORM EVENT) - APRIL 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F07-C400L STORM EVENT APRIL-2024-04-30	5/21/2024
NSDD-PD	5/6/2024	FR-24-0974, DOE/LX/07-2484&D2	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE ON THE D2 NORTH-SOUTH DIVERSION DITCH OPERATIONS AND MAINTENANCE PLAN, DOE/LX/07-2484&D2	USEPA-4	DOE	INF-RECMGMT-FR-24-0974-EPA CONCUR NS DIV DITCH OM PLAN-2024-05-06	5/21/2024
NSDD-PD	5/7/2024	FR-24-0975, DOE/LX/07-2484&D2	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT ACKNOWLEDGMENT OF RECEIPT AND CONCURRENCE WITH THE OPERATION AND MAINTENANCE PLAN FOR SECTIONS 1 AND 2 OF THE NORTH-SOUTH DIVERSION DITCH AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-2484&D2) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0975-KY CONCUR NS DIV DITCH OM PLAN-2024-05-07	5/21/2024
NSDD-PD	5/6/2024	PPPO-02-10027364-24, DOE/LX/07-2484&D2	TRANSMITTAL OF THE OPERATION AND MAINTENANCE PLAN FOR SECTIONS 1 AND 2 OF THE NORTH-SOUTH DIVERSION DITCH AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2484&D2	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027364-24-OM PLAN NS DIV DITCH-2024-05-06	5/21/2024
NSDD-PD	5/28/2024	CP4-ES-0041-F03	CP4-ES-0041-F03 WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (WEEKLY) MAY 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F03-C400L WEEKLY CHECKLIST-2024-05-28	6/24/2024
NSDD-PD	5/16/2024	CP4-ES-0041-F04	CP4-ES-0041-F04 WALKTHROUGH CHECKLIST- NORTH-SOUTH DIVERSION DITCH (QUARTERLY) COMPLETED MAY 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F04-C400L QUARTERLY CHKLST-2024-05-16	6/24/2024
NSDD-PD	5/6/2024	CP4-ES-0041-F07	CP4-ES-0041-F07 WALKTHROUGH CHECKLIST NORTH-SOUTH DIVERSION DITCH (STORM EVENT) - MAY 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F07-C400L STORM EVENT CHKLST-2024-05-06	6/24/2024

Paducah Documents Added to the Post-Decision Files-Second Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
NWP PT-PD	3/25/2024	PPPO-02-10027366-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027366-24-EXT REQ NW PLUME-2024-03-25	4/18/2024
NWP PT-PD	4/4/2024	PPPO-02-10027444-24	PADUCAH FEDERAL FACILITY AGREEMENT-SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027444-24-FFA SIGNED MOD NW PLUME-2024-04-04	4/18/2024
NWP PT-PD	5/2/2024	PPPO-02-10027636-24	PADUCAH FEDERAL FACILITY AGREEMENT-SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027636-24-SIGNED MOD NW PLUME-2024-05-02	5/21/2024
NWP PT-PD	4/25/2024	PPPO-02-10027598-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027598-24-EXT REQ NW PLUME-2024-04-25	5/21/2024
NWP PT-PD	5/22/2024	PPPO-02-10027830-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027830-24-EXT REQ NW PLUME TECH MEMO-2024-05-22	6/24/2024
NWP PT-PD	5/29/2024	PPPO-02-10027886-24	PADUCAH FEDERAL FACILITY AGREEMENT SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027886-24-SIGNED MOD NW PLUME-2024-05-29	6/24/2024
SWP-PD	4/4/2024	FR-24-0967, DOE/LX/07-2501&D1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND REVIEW FOR THE D1 SOLID WASTE MANAGEMENT UNITS 1 AND 211-A OPERATIONS AND MAINTENANCE, AND ENVIRONMENTAL MONITORING PLAN, DOE/LX/07-2501&D1	USEPA-4	DOE	INF-RECMGMT-FR-24-0967-EPA ACK OM AND ENV MONIT-2024-04-04	4/18/2024

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Paducah Documents Added to the Post-Decision Files-Second Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
SWP-PD	4/10/2024	FR-24-0970, DOE/LX/07-2501&D1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT SUBMITTAL OF COMMENTS TO THE OPERATION AND MAINTENANCE AND ENVIRONMENTAL MONITORING PLAN FOR SOLID WASTE MANAGEMENT UNITS 1 AND 211-A REMEDIAL ACTIONS FOR VOLATILE ORGANIC COMPOUND SOURCES TO THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-2501&D1) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0970-KY COMMENTS OM AND EMP-2024-04-10	4/18/2024
SWP-PD	4/3/2024	PPPO-02-10027349-24, DOE/LX/07-2501&D1	"TRANSMITTAL OF THE OPERATION AND MAINTENANCE AND ENVIRONMENTAL MONITORING PLAN FOR SOLID WASTE MANAGEMENT UNITS 1 AND 211-A REMEDIAL ACTIONS FOR VOLATILE ORGANIC COMPOUND SOURCES TO THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2501&D1	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027349-24-TRANSMITTAL OM AND EMP-2024-04-03	4/18/2024
SWP-PD	5/8/2024	FR-24-0976, DOE/LX/07-2501&D2	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE ON THE D2 SWMUS 1 AND 211-A OPERATIONS & MAINTENANCE AND ENVIRONMENTAL MONITORING PLAN, DOE/LX/07-2501&D2	USEPA-4	DOE	INF-RECMGMT-FR-24-0976-EPA CONCUR SWMUS 1 AND 211A EMP-2024-05-08	5/21/2024
SWP-PD	5/7/2024	PPPO-02-10027472-24, DOE/LX/07-2501&D2	TRANSMITTAL OF THE OPERATION AND MAINTENANCE AND ENVIRONMENTAL MONITORING PLAN FOR SOLID WASTE MANAGEMENT UNITS 1 AND 211-A REMEDIAL ACTIONS FOR VOLATILE ORGANIC COMPOUND SOURCES TO THE SOUTHWEST GROUNDWATER PLUME AT THE GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2501&D2	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027472-24-OM AND EMP SWMUS 1 AND 211A-2024-05-07	5/21/2024
SWP-PD	5/17/2024	FR-24-0978, DOE/LX/07-2501&D2	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT ACKNOWLEDGMENT OF RECEIPT AND CONCURRENCE WITH THE OPERATION AND MAINTENANCE PLAN FOR SOLID WASTE MANAGEMENT UNITS 1 AND 211-A REMEDIAL ACTIONS FOR VOLATILE ORGANIC COMPOUND SOURCES TO THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-2501&D2) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0978-KY CONCUR OM SWMU 1 211A-2024-05-17	6/24/2024
WP-PD	5/1/2024	N/A	U.S. DEPARTMENT OF ENERGY, PORTSMOUTH PADUCAH PROJECT OFFICE, PADUCAH GASEOUS DIFFUSION PLANT WATER POLICY INFORMATION FOR RESIDENTS AND BUSINESSES	DOE	RESIDENTS	INF-RECMGMT-WATER POLICY INFO-2024-05-01	5/21/2024

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Paducah Documents Added to the Post-Decision Files-Second Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
ARF ARR	3/15/2024	PPPO-02-10026824-24	PADUCAH FEDERAL FACILITY AGREEMENT FISCAL YEAR 2025 PRESIDENT'S BUDGET	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10026824-24-FFA 25 PRESIDENT BUDGET-2024-03-15	4/18/2024
ARF ARR	3/25/2024	PPPO-02-10027366-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027366-24-EXT REQ NW PLUME-2024-03-25	4/18/2024
ARF ARR	4/4/2024	PPPO-02-10027444-24	PADUCAH FEDERAL FACILITY AGREEMENT-SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027444-24-FFA SIGNED MOD NW PLUME-2024-04-04	4/18/2024
ARF ARR	4/25/2024	PPPO-02-10027598-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027598-24-EXT REQ NW PLUME-2024-04-25	5/21/2024
ARF ARR	5/2/2024	PPPO-02-10027636-24	PADUCAH FEDERAL FACILITY AGREEMENT-SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027636-24-SIGNED MOD NW PLUME-2024-05-02	5/21/2024
ARF ARR	5/22/2024	PPPO-02-10027830-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027830-24-EXT REQ NW PLUME TECH MEMO-2024-05-22	6/24/2024
ARF ARR	5/29/2024	PPPO-02-10027886-24	PADUCAH FEDERAL FACILITY AGREEMENT SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027886-24-SIGNED MOD NW PLUME-2024-05-29	6/24/2024

Paducah Documents Added to the Administrative Record Files-Third Quarter CY 2024

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
ARF 400OUREME DIAL	6/21/2024	FR-24-0986, DOE/LX/07-2433&D2/R1/A1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE ON THE D2/R1/A1 C-400 COMPLEX OPERABLE UNIT (OU) REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORK PLAN, DOE/LX/07-2433&D2/R1/A1	USEPA-4	DOE	INF-RECMGMT-FR-24-0986-EPA CONCUR RIFS-2024-06-21	7/17/2024
ARF 400OUREME DIAL	6/21/2024	FR-24-0987, DOE/LX/07-0107&D2/R15/V1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND ACCEPTANCE FOR THE PADUCAH SITE'S METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS, VOLUME 1 HUMAN HEALTH, DOE/LX/07-0107&D2/R15/V1	USEPA-4	DOE	INF-RECMGMT-FR-24-0987-EPA ACCEPT RISK ASSESS-2024-06-21	7/17/2024
ARF 400OUREME DIAL	6/21/2024	FR-24-0988, DOE/LX/07-2433&D2/R1/A1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT (KDWM) ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE TO THE ADDENDUM TO THE REMEDIAL INVESTIGATION / FEASIBILITY STUDY WORK PLAN FOR THE C-400 COMPLEX OPERABLE UNIT (DOE/LX/07-2433&D2/R1/A1) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0988-KY CONCUR RIFS-2024-06-21	7/17/2024
ARF 400OUREME DIAL	6/17/2024	PPPO-02-10027546-24B, DOE/LX/07-2433&D2/R1/A1/R1	TRANSMITTAL OF THE ADDENDUM TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN FOR THE C-400 COMPLEX OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2433&D2/R1/A1/R1	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027546-24B-RIFS WORK PLAN-2024-06-17	7/17/2024
ARF WDA	7/15/2024	N/A	REOPENING OF ADMINISTRATIVE RECORD FILE AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE	EIC	INF-RECMGMT-REOPEN ARF WDA-2024-07-15	7/24/2024
ARF WDA	9/4/2024	PPPO-02-10028743-24; DOE/LX/07-2507&D1	TRANSMITTAL OF THE GEOTECHNICAL SAMPLING AND ANALYSIS PLAN FOR THE WASTE DISPOSAL ALTERNATIVES PROJECT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2507&D1	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028743-24-GEO SMPLING PLAN WDA PRJCT-2024-09-04	9/17/2024

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Paducah Documents Added to the Administrative Record Files-Third Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
NSDD-PD	6/26/2024	CP4-ES-0041-F03	CP4-ES-0041-F03 - WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (WEEKLY) - JUNE 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F03-C400L WKLY CHKLST-2024-06-26	7/17/2024
NSDD-PD	6/26/2024	CP3-ES-0041-F07	CP4-ES-0041-F07 - WALKTHROUGH CHECKLIST - NORTH-SOUTH DIVERSION DITCH (STORM EVENT) - JUNE 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F07-C400L STORM CHKLST-2024-06-26	7/17/2024
NWP PT-PD	6/26/2024	PPPO-02-10028239-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10028239-24-EXT NW PLUME TECH MEMO-2024-06-26	7/17/2024
NWP PT-PD	6/27/2024	PPPO-02-10028295-24	PADUCAH FEDERAL FACILITY AGREEMENT-SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10028295-24-SIGNED NW PLUME TECH MEMO-2024-06-27	7/17/2024
NSDD-PD	7/29/2024	CP3-ES-0041-F03	CP3-ES-0041-F03 - WALKTHROUGH CHECKLIST- NORTH-SOUTH DIVERSION DITCH (WEEKLY) - JULY 2024	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F03-C400 NS CHKLST-2024-06-24	8/21/2024
NSDD-PD	7/29/2024	CP3-ES-0041-F07	CP3-ES-0041-F07 - WALKTHROUGH CHECKLIST- NORTH-SOUTH DIVERSION DITCH (STORM EVENT) - JULY 2024	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F07-C400L NS CHKLST-2024-07-29	8/21/2024
NWP PT-PD	7/23/2024	PPPO-02-10028594-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028594-24-EXT REQ NW PLME-2024-07-23	8/21/2024
NWP PT-PD	7/31/2024	PPPO-02-10028715-24	PADUCAH FEDERAL FACILITY AGREEMENT - SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028715-24-SGND MOD NW PLME-2024-07-31	8/21/2024
NSDD-PD	8/26/2024	CP3-ES-0041-F03	CP3-ES-0041-F03- WALKTHROUGH CHECKLIST- NORTH-SOUTH DIVERSION DITCH (WEEKLY) - AUGUST 2024	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F03-C400L NSDD INSP-2024-08-26	9/17/2024
NSDD-PD	8/27/2024	CP3-ES-0041-F04	CP3-ES-0041-F04 - WALKTHROUGH CHECKLIST- NORTH-SOUTH DIVERSION DITCH (QUARTERLY) - AUGUST 2024	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F04-C400L NSDD INSP-2024-08-27	9/17/2024

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Paducah Documents Added to the Administrative Record Files-Third Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
NSDD-PD	8/20/2024	CP3-ES-0041-F05	CP3-ES-0041-F05 - WALKTHROUGH CHECKLIST- NORTH-SOUTH DIVERSION DITCH SURGE BASIN / CONCRETE DITCH (SEMI-ANNUAL)	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F05-C400L NSDD INSP-2024-08-20	9/17/2024
NSDD-PD	9/3/2024	CP3-ES-0041-F06	CP3-ES-0041-F06 - WALKTHROUGH CHECKLIST-NORTH-SOUTH DIVERSION DITCH (ANNUAL)	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F06-NSDD CHKLST-2024-09-03	9/17/2024
C400SOURCE-PD	8/1/2024	CP3-ES-0041-F14	CP3-ES-0041-F14 - C-400 LAND USE CONTROL IMPLEMENTATION PLAN (LUCIP) INSPECTION	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F14-C400 AUG INSP-2024-08-01	9/17/2024
SWP-PD	8/5/2024	CP3-ES-0041-F15	CP3-ES-0041-F15 - QUARTERLY SOUTHWEST PLUME SOLID WASTE MANAGEMENT UNIT (SWMU) INSPECTIONS - AUGUST 2024	FRNP	DOE	INF-RECMGMT-CP3-ES-0041-F15-QRTLY SW PLUME SWMU INSP-2024-08-05	9/17/2024
SWP-PD	5/16/2024	CP4-ES-0041-F17	CP4-ES-0041-F17 - QUARTERLY SOUTHWEST (SW) PLUME SOLID WASTE MANAGEMENT UNIT (SWMU) INSPECTIONS - MAY 2024	FRNP	DOE	INF-RECMGMT-CP4-ES-0041-F17-QRTLY SW PLUME SWMU INSP-2024-05-16	9/17/2024
NWP PT-PD	8/26/2024	PPPO-02-10028927-24	TRANSMITTAL OF THE MEMORANDUM TO FILE: NONSIGNIFICANT CHANGE FOR THE RECORD OF DECISION FOR INTERIM REMEDIAL ACTION OF THE NORTHWEST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028927-24-NONSIG CHNGE NWP-2024-08-26	9/17/2024

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Paducah Documents Added to the Administrative Record Files-Third Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
ARF ARR	6/26/2024	PPPO-02-10028239-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10028239-24-EXT NW PLUME TECH MEMO-2024-06-26	7/17/2024
ARF ARR	6/27/2024	PPPO-02-10028295-24	PADUCAH FEDERAL FACILITY AGREEMENT-SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10028295-24-SIGNED NW PLUME TECH MEMO-2024-06-27	7/17/2024
ARF ARR	6/20/2024	PPPO-02-10027558-24C, DOE/LX/07-0107&D2/R15/V1	TRANSMITTAL OF THE METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT PADUCAH, KENTUCKY VOLUME 1. HUMAN HEALTH, DOE/LX/07-0107&D2/R15/V1	DOE	KDEP, USEPA-4	INF-RECMGMT-PPPO-02-10027558-24C-RISK ASSESS AND EVALUATIONS-2024-06-20	7/17/2024
ARF ARR	7/12/2024	FR-24-0996, DOE/LX/07-0107&D2/R15/V1	ACKNOWLEDGEMENT OF RECEIPT, REVIEW AND ACCEPTANCE OF THE METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, VOLUME 1. HUMAN HEALTH (DOE/LX/07-0107&D2/R15/V1) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-0996-KY ACK RISK ASSES AND EVAL-2024-07-12	7/24/2024
ARF ARR	7/27/2024	FR-24-1003	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE ON THE D1 SITE EVALUATION REPORT FOR THE C-721 GAS MANIFOLD STORAGE SLAB AND UNDERLYING SOILS (AREA OF CONCERN 575)	USEPA-4	DOE	INF-RECMGMT-FR-24-1003-C721 SITE EVAL RPRT-2024-07-27	8/21/2024
ARF ARR	7/30/2024	FR-24-1004, DOE/LX/07-2505&D1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT APPROVAL OF THE SITE EVALUATION REPORT FOR THE C-721 GAS MANIFOLD STORAGE SLAB AND UNDERLYING SOILS AREA (AREA OF CONCERN 575) (DOE/LX/07-2505&D1) PADUCAH SITE PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-1004-KDWM APRVL C721-2024-07-30	8/21/2024
ARF ARR	7/26/2024	PPPO-02-10028223-24B, DOE/LX/07-2505&D1	TRANSMITTAL OF THE SITE EVALUATION REPORT FOR THE C-721 GAS MANIFOLD STORAGE SLAB AND UNDERLYING SOILS (AREA OF CONCERN 575) AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2505&D1	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028223-24B-SER C721 STRGE SLB-2024-07-26	8/21/2024
ARF ARR	7/23/2024	PPPO-02-10028594-24	EXTENSION REQUEST FOR SUBMITTAL OF THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND MILESTONE MODIFICATION FOR THE TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028594-24-EXT REQ NW PLME-2024-07-23	8/21/2024
ARF ARR	7/31/2024	PPPO-02-10028715-24	PADUCAH FEDERAL FACILITY AGREEMENT - SIGNED MILESTONE MODIFICATION FOR THE NORTHWEST PLUME TECHNICAL MEMORANDUM AND SUBSEQUENT DOCUMENT	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028715-24-SGND MOD NW PLME-2024-07-31	8/21/2024
ARF ARR	8/9/2024	PPPO-02-10028758-24	PADUCAH FEDERAL FACILITY AGREEMENT FISCAL YEAR 2024 FUNDING ALLOCATION EVALUATION	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028758-24-FY 24 FUNDING ALLOCTN EVAL-2024-08-09	8/21/2024
ARF ARR	8/27/2024	FR-24-1022; DOE/LX/07-2463&D2/R1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE ON THE D2R1 SITE EVALUATION REPORT FOR THE C-611-P BUILDING - PUMP HOUSE	USEPA-4	DOE	INF-RECMGMT-FR-24-1022-D2R1 SER C611P-2024-08-27	9/17/2024
ARF ARR	8/27/2024	FR-24-1023; DOE/LX/07-2464&D2/R1	U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 4 ACKNOWLEDGEMENT OF RECEIPT AND CONCURRENCE ON THE D2R1 SITE EVALUATION REPORT FOR THE C-611-T BOOSTER PUMP STATION PLANT WATER	USEPA-4	DOE	INF-RECMGMT-FR-24-1023-D2R1 SER C611T-2024-08-27	9/17/2024

Paducah Documents Added to the Administrative Record Files-Third Quarter CY 2024 (Continued)

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Name	Date Added
ARF ARR	9/3/2024	FR-24-1024; DOE/LX/07-2463&D2/R1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT (KDWM) CONCURRENCE WITH THE SITE EVALUATION REPORT FOR THE C-611-P BUILDING - PUMP HOUSE AT THE PADUCAH GASEOUS DIFFUSION PLANT (2463&D2/R1) PADUCAH SITE, PADUCAH, MCCracken COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE	INF-RECMGMT-FR-24-1024-KDWM SER C611P-2024-09-03	9/17/2024
ARF ARR	9/3/2024	FR-24-1025; DOE/LX/07-2464&D2/R1	KENTUCKY DEPARTMENT OF WASTE MANAGEMENT (KDWM) CONCURRENCE WITH THE SITE EVALUATION REPORT FOR THE C-611-T BOOSTER PUMP STATION PLANT WATER AT THE PADUCAH GASEOUS DIFFUSION PLANT (2464&D2/R1)	KDEP	DOE	INF-RECMGMT-FR-24-1025-KDWM SER C611T-2024-09-03	9/17/2024
ARF ARR	8/9/2024	PPPO-02-10028758-24	PADUCAH FEDERAL FACILITY AGREEMENT FISCAL YEAR 2024 FUNDING ALLOCATION EVALUATION	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028758-24-FY 2024 FNDING EVAL-2024-08-09	9/17/2024
ARF ARR	8/26/2024	PPPO-02-10028774-24; DOE/LX/07-2464&D2/R1; DOE/LX/07-2463&D2/R1	TRANSMITTAL OF THE SITE EVALUATION REPORT FOR THE C-611-T BOOSTER PUMP STATION PLANT WATER AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2464&D2/R1, AND SITE EVALUATION REPORT FOR THE C-611-P BUILDING - PUMP HOUSE AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2463&D2/R1	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028774-24-SER C611T C611P-2024-08-26	9/17/2024
ARF ARR	8/26/2024	PPPO-02-10028927-24	TRANSMITTAL OF THE MEMORANDUM TO FILE: NONSIGNIFICANT CHANGE FOR THE RECORD OF DECISION FOR INTERIM REMEDIAL ACTION OF THE NORTHWEST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE	KDEP; USEPA-4	INF-RECMGMT-PPPO-02-10028927-24-NONSIG CHNGE NWP-2024-08-26	9/17/2024

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APPENDIX E

C-749 URANIUM BURIAL GROUND (SWMU 2) GROUNDWATER MONITORING WELL DATA

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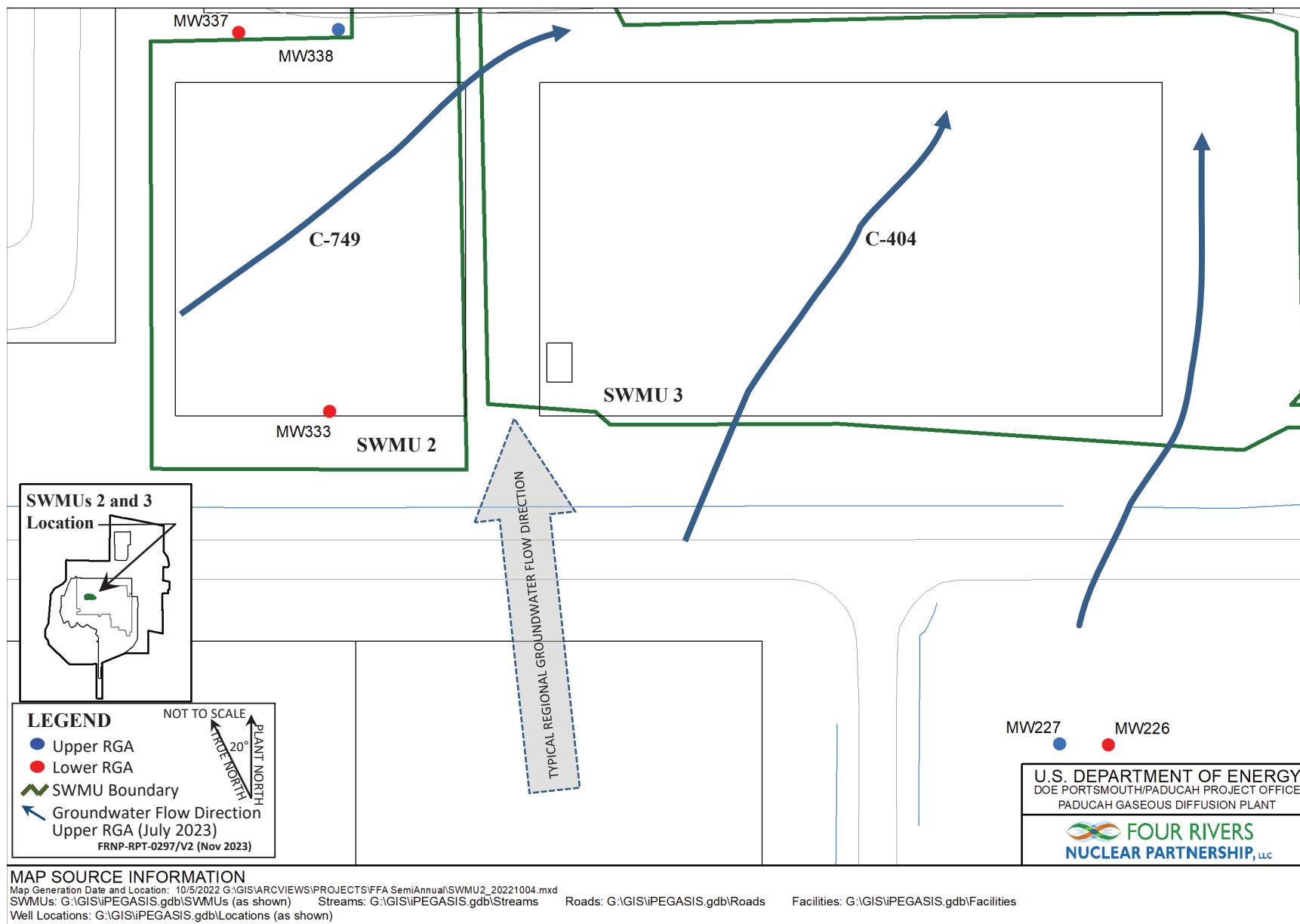


Figure E.1. SWMU 2 Wells Location

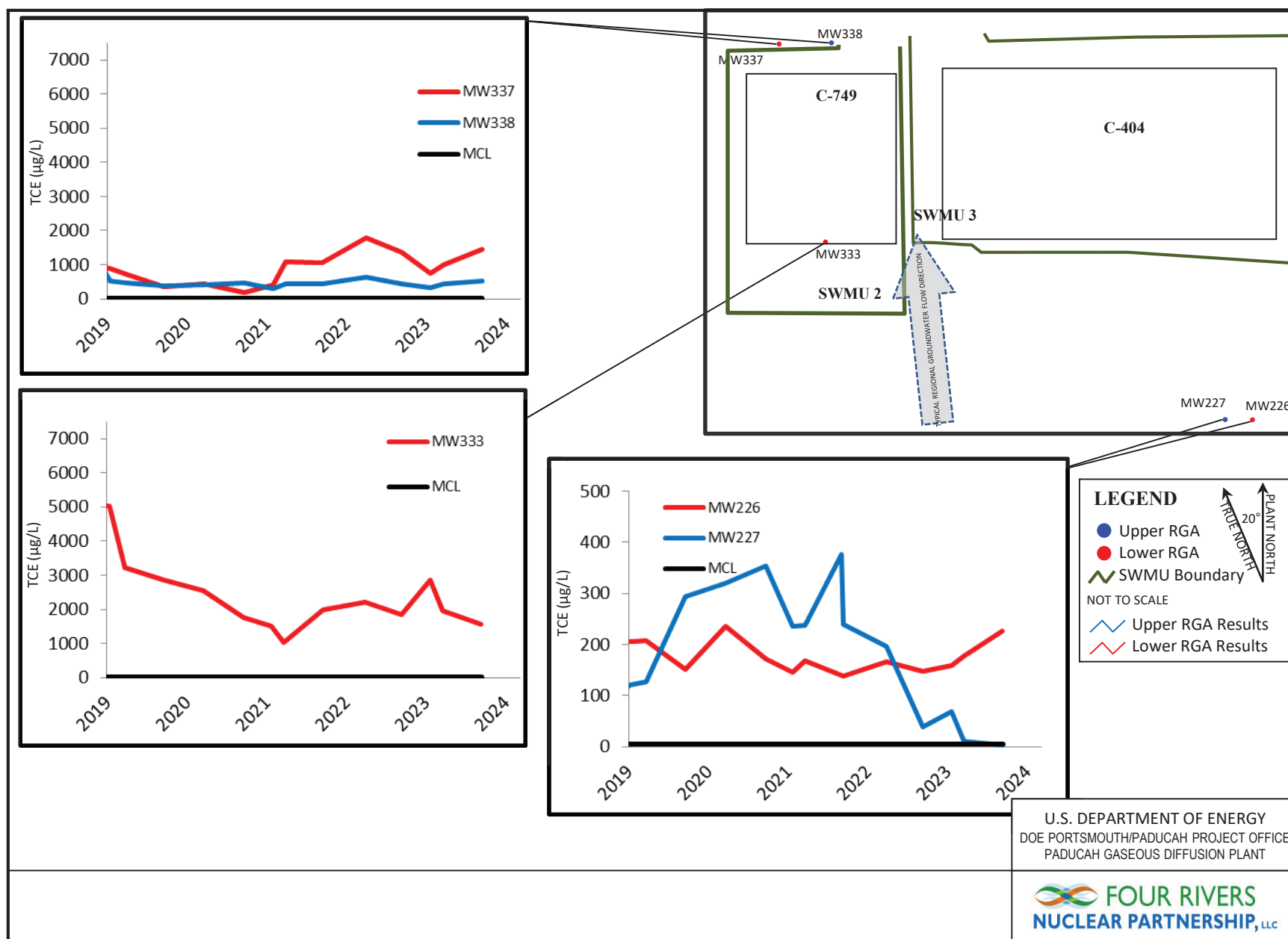


Figure E.2. TCE Trends in SWMU 2 Wells

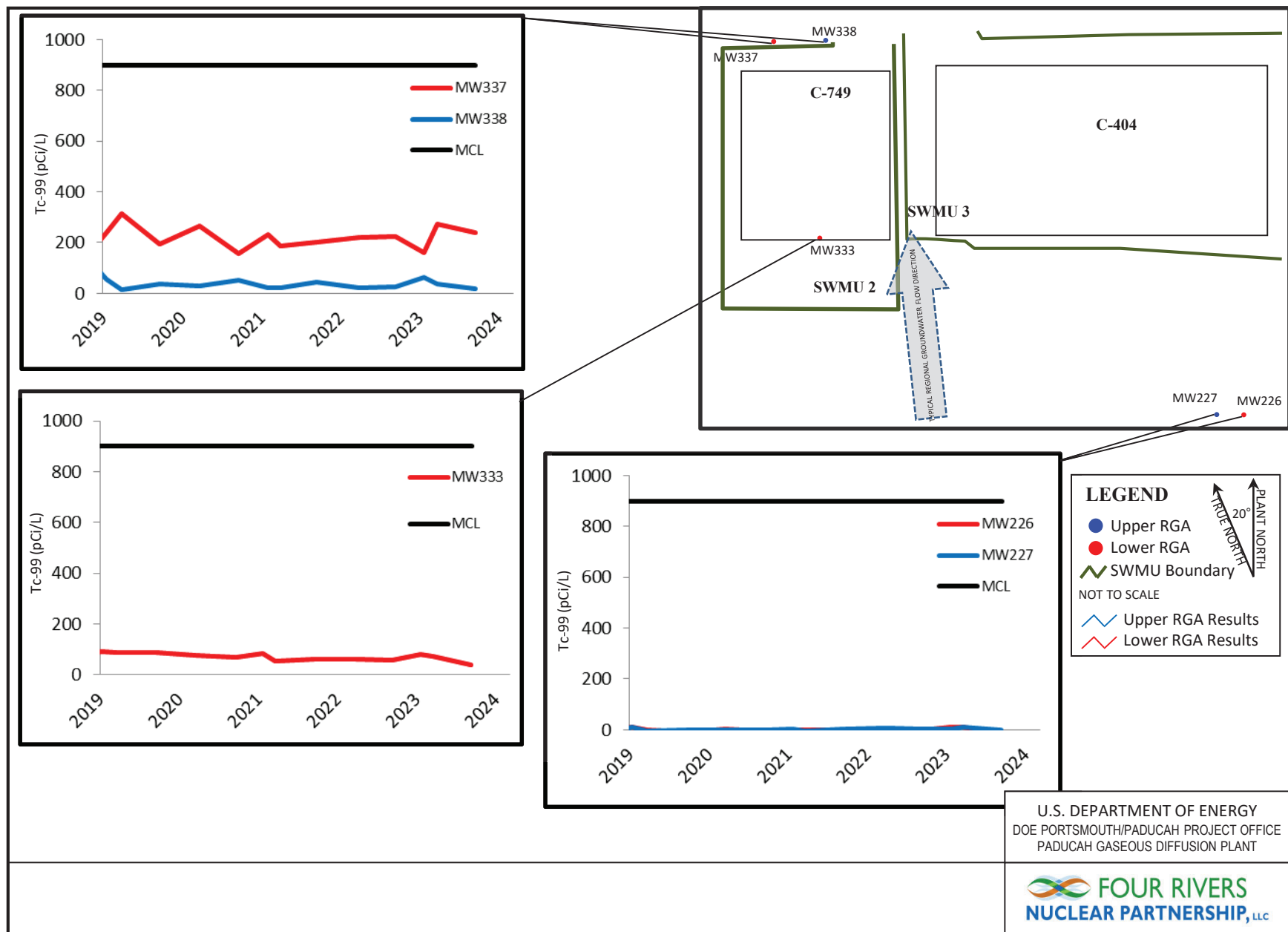


Figure E.3. Tc-99 Trends in SWMU 2 Wells

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