



## Department of Energy

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APR 27 2017

Mr. Brian Begley  
Federal Facility Agreement Manager  
Division of Waste Management  
Kentucky Department for Environmental Protection  
300 Sower Boulevard, 2nd Floor  
Frankfort, Kentucky 40601

PPPO-02-4137330-17D

Ms. Julie Corkran  
Federal Facility Agreement Manager  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303

Dear Mr. Begley and Ms. Corkran:

**TRANSMITTAL OF ERRATA PAGES AND COMPLETE CORRECTED DOCUMENTS  
FOR THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION  
PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT  
FOR THE SECOND HALF OF FISCAL YEAR 2014, PADUCAH, KENTUCKY  
(DOE/LX/07-1296/V2)**

Reference: Letter from J. Woodard to T. Mullins, J. Tufts and A. Webb, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2014, Paducah, Kentucky, (DOE/LX/07-1296/V2)," (PPPO-02-2599532-15B), dated October 27, 2014

Enclosed are the certified errata pages and complete corrected document (i.e., with errata pages included) for the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2014, Paducah, Kentucky*, DOE/LX/07-1296/V2. The enclosed errata pages have been prepared to correct reporting errors related to the volume of trichloroethene (TCE) removed from the Northwest Plume Pump-and-Treat System. The errors resulted from the application of inconsistent methodologies for calculating and compiling TCE volumes removed from the Northwest Plume. The errors were discovered during an independent assessment of the data presented in Table 2 of the report that was conducted in February 2017.

If you have any questions or require additional information, please contact me at (270) 441-6862.

Sincerely,



Tracey Duncan  
Federal Facility Agreement Manager  
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. Errata page for FFA Semiannual Progress Report for the Second Half of FY 2014
3. Errata pages for FFA Semiannual Progress Report for the Second Half of FY 2014, DOE/LX/07-1296/V2—Redline
4. FFA Semiannual Progress Report for the Second Half of FY 2014, DOE/LX/07-1296/V2—Complete Corrected Document

e-copy w/enclosures:

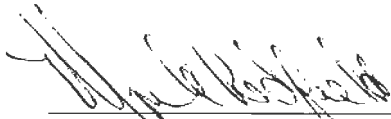
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**CERTIFICATION**

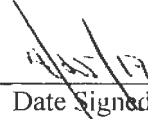
**Document Identification:**     *U.S. Department of Energy Paducah Gaseous Diffusion Plant  
Federal Facility Agreement Semiannual Progress Report for  
the Second Half of Fiscal Year 2014, Paducah, Kentucky  
(DOE/LX/07-1296/V2)*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons 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.

Fluor Federal Services, Inc.



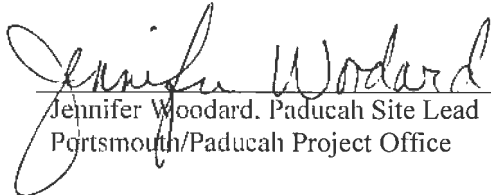
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Myrna E. Redfield, Director  
Environmental Management



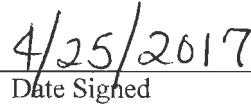
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Date Signed

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons 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



\_\_\_\_\_  
Jennifer Woodard, Paducah Site Lead  
Portsmouth/Paducah Project Office



\_\_\_\_\_  
Date Signed

## **ERRATA SHEET**

***U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
Second Half of Fiscal Year 2014  
Paducah, Kentucky  
DOE/LX/07-1296/V2, issued October 2014***

The following six corrections should be incorporated into the document.

1. Cover Page: The cover was modified to indicate errata were issued for this report.
2. Title Page: The title page was modified to indicate errata were issued for this report on the date specified.
3. Groundwater Operable Unit, page 5, Table 2: Corrected cumulative trichloroethene (TCE) removed for Northwest Plume Pump-and-Treat and total volume for all projects.
4. Northeast Plume IRA, page 18, first paragraph: Deleted text.
5. Northwest Plume IRA page 24, second paragraph: Deleted text.
6. Northwest Plume IRA, page 24, Table 5: Corrected technetium-99 value.

**U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
Second Half of Fiscal Year 2014  
Paducah, Kentucky**



**CLEARED FOR PUBLIC RELEASE**



**U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
Second Half of Fiscal Year 2014  
Paducah, Kentucky**

Date Issued—October 2014

Errata Issued—April 2017

Prepared for the  
U.S. DEPARTMENT OF ENERGY  
Office of Environmental Management

Prepared by  
LATA Environmental Services of Kentucky, LLC  
managing the  
Environmental Remediation Activities at the  
Paducah Gaseous Diffusion Plant  
under contract DE-AC30-10CC40020

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## ACRONYMS

ACM	asbestos-containing material
AR	Administrative Record
ATU	alternate treatment unit
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
EQ	equalization
ERH	electrical resistance heating
ESD	explanation of significant differences
EW	extraction well
FFA	Federal Facility Agreement
FS	feasibility study
FY	fiscal year
GDP	gaseous diffusion plant
GWOU	Groundwater Operable Unit
IRA	interim remedial action
LATA Kentucky	LATA Environmental Services of Kentucky, LLC
MW	monitoring well
NEPCS	Northeast Plume Containment System
NTU	nephelometric turbidity unit
NWPGS	Northwest Plume Groundwater System
O&M	operation and maintenance
OU	operable unit
PGDP	Paducah Gaseous Diffusion Plant
RAWP	removal action work plan
RGA	Regional Gravel Aquifer
RI	remedial investigation
ROD	record of decision
SMP	Site Management Plan
SOU	Soils Operable Unit
SST	Swift and Staley Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
UCRS	Upper Continental Recharge System
WAG	waste area group

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**INTRODUCTION**

The Paducah Gaseous Diffusion Plant (PGDP) 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 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 being implemented in a sequenced approach consisting of (1) pre-shutdown scope, (2) post-shutdown scope, and (3) Comprehensive Site Operable Unit scope. The pre-shutdown scope is associated with media-specific operable units (OUs) initiated prior to shutdown of the operating gaseous diffusion plant (GDP). The source areas for the pre-GDP shutdown scope have been grouped into these media-specific OUs:

- Groundwater OU (GWOU)
- Burial Grounds OU (BGOU)
- Surface Water OU (SWOU)
- Soils OU (SOU)
- Decontamination and Decommissioning (D&D) OU

Section XXIII of the FFA requires that DOE prepare a regulatory progress report that describes the actions that DOE has taken during the previous six months to implement FFA requirements, as well as the schedules<sup>1</sup> of activities to be taken during the upcoming six months. Activities that have taken place after the reporting period closed are not included in this report. Projects and activities reported in this update are grouped by the media-specific OUs listed in Table 1.

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 next reporting period (including projected work/crucial phases of construction)
- III. Identity and assigned tasks of DOE contractors for work to be performed during this reporting period

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<sup>1</sup> 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**

<b>Operable Unit</b>	<b>Project/Activities</b>
Groundwater Operable Unit	<ul style="list-style-type: none"> <li>• C-400 Interim Remedial Action (IRA)</li> <li>• Southwest Plume Sources Remedial Action</li> <li>• Dissolved-Phase Plumes Remedial Action</li> <li>• Northeast Plume IRA</li> <li>• Northwest Plume IRA</li> </ul>
Burial Grounds Operable Unit	<ul style="list-style-type: none"> <li>• Burial Grounds Operable Unit</li> <li>• C-749 Uranium Burial Ground Solid Waste Management Unit (SWMU) 2</li> </ul>
Surface Water Operable Unit	<ul style="list-style-type: none"> <li>• Remedial Action</li> </ul>
Soils Operable Unit	<ul style="list-style-type: none"> <li>• Remedial Action</li> </ul>
Decontamination and Decommissioning Operable Unit	<ul style="list-style-type: none"> <li>• C-410/420 Complex</li> <li>• C-340 Metals Reduction Plant Complex</li> </ul>
Comprehensive Site Operable Unit*	<ul style="list-style-type: none"> <li>• No Projects</li> </ul>
Additional Reporting	<ul style="list-style-type: none"> <li>• Waste Area Groups 1 and 7</li> <li>• Community Relations Plan</li> <li>• Site Management Plan</li> <li>• CERCLA Waste Disposal Alternatives Evaluation</li> <li>• CERCLA Five-Year Review</li> </ul>

\*The Comprehensive Site Operable Unit work scope, including GDP shutdown, is defined more clearly in the fiscal year (FY) 2015 SMP.

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 of the sections satisfies a reporting requirement for the FFA semiannual report or the Hazardous Waste Facility Permit and has been formatted in accordance with the template found in Appendix D of the FFA.

This report includes six appendices as follows:

- Appendix A contains Northeast and Northwest Plumes Water Withdrawal Reports for this reporting period.
- Appendix B contains Figures B.1 through B.25, as referenced in the Northeast and Northwest Plume updates, and a summary of the data associated with the CERCLA outfall for Northeast Plume.



- Appendix C contains a map depicting the monitoring well (MW) locations; a figure summarizing the trichloroethene (TCE) concentrations in these wells over time; and a summary of the C-746-K Landfill groundwater monitoring data from January 1996 through April 2014. This data currently are collected semiannually. Sampling of these MWs is outlined in the Record of Decision (ROD) for Waste Area Groups (WAGs) 1 and 7.
- 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).
- Appendix E contains a map depicting the C-400 MW location; and a summary of the C-400 groundwater MW data trending TCE and technetium-99 (Tc-99) from 2000 through June 2014. Groundwater data from July 2014 through March 2015 will be included in the next semiannual report scheduled for April 2015.
- Appendix F contains a map depicting the C-749 Uranium Burial Ground (SWMU 2) groundwater MWs and a summary of the SWMU 2 trends for TCE and Tc-99 for reporting dates 1993 through August 2014.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**GROUNDWATER OPERABLE UNIT**

The scope of the GWOU includes performing investigations, conducting baseline risk assessments, evaluating removal/remedial alternatives, and selecting and implementation of 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 Phases, 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 most predominant contaminant of concern in the groundwater of all three plumes is TCE. Table 2 provides an overall broad picture of the TCE mass removed [TCE values may contain other volatile organic compounds (VOCs)] by various actions through September 30, 2014.

**Table 2. Cumulative TCE Removed at Paducah**

Source Area	Cumulative TCE Removed (gal)*
Northwest Plume Pump-and-Treat	3,090**
Northeast Plume Pump-and-Treat	288**
C-400 Six-Phase Treatability Study	1,900
C-400 Phase I	535*
C-400 Phase IIa and Phase IIb	1,123*
Dissolved-Phase Plume	N/A
Southwest Plume***	0
SWMU 4***	0
Other sources (i.e., SWMU 91, LASAGNA™)	246
<b>Total</b>	<b>7,182</b>

\*Cumulative through September 30, 2014. TCE values may contain other VOCs.

\*\*Cumulative through June 30, 2014.

\*\*\*No remedial action selected/implemented to date.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**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):**

**Phase IIa:**

- Operated at better than 92% operational uptime during this reporting period.
- Recovered approximately 1,123 gal of VOCs from the Phase IIa treatment zone, as of the end of this reporting period.
- Initiated pulse operations for Phase IIa on July 28, 2014. Pulse operations were completed on September 9, 2014.
- Developed and issued Remedial Goals Met for Phase IIa of the Interim Remedial Action for Volatile Organic Compound Contamination at the C-400 Cleaning Building, PPPO-02-2572921-14, documenting that the remediation goals for Phase IIa have been met as defined in Section 3.3, “Criteria for Ceasing IRA System Operations,” of the Remedial Design Report, Certified for Construction Design Drawings and Technical Specifications Package, for the Groundwater Operable Unit for the Phase IIa Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1272&D2/R1.

**Phase IIb:**

- Developed, revised, and issued the Treatability Study Design, Design Drawings and Technical Specifications Package for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1295&D2/R1, to EPA and Kentucky for review on July 18, 2014. Received Kentucky and EPA approval on July 21, 2014, and July 22, 2014, respectively.
- Issued Request for Proposal to solicit vendor proposals for award of the construction, installation, and implementation activities associated with the C-400 Phase IIB Steam Injection Treatability Study Project.
- Continued groundwater monitoring for the C-400 project required by the Remedial Action Work Plan for the Interim Remedial Action the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0004&D2/R2. The TCE and Tc-99 groundwater monitoring trends from January 2000 through June 2014 are included as Appendix E of this report.

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

- Continue with Phase IIa electrical resistance heating (ERH) operations until concurrence is received from the FFA parties that remediation goals for Phase IIa have been achieved.
- Shutdown heating operations and continue extraction system operations during cool down period.
- Issue Request for Proposal to solicit vendor proposals for award of the Phase I and Phase IIa well abandonment and Phase IIa postoperational sampling activities associated with the C-400 Phase I and Phase IIa IRA projects.
- Award contract for Phase I and Phase IIa well abandonment and Phase IIa postoperational sampling.
- Initiate C-400 Phase I well abandonment.
- Initiate C-400 Phase IIa D&D, well abandonment, and postoperational sampling.
- Award contract for implementation of the Phase IIb Treatability Study.
- Initiate C-400 Phase IIb Treatability Study construction start by November 11, 2014.

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

Responsibility for the day-to-day operations of the GWOU belongs to LATA Environmental Services of Kentucky, LLC, (LATA Kentucky) as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management services. Swift & Staley Inc., (SST) manages the AR and the Environmental Information Center (EIC).

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

The requirements and schedules are being met for the GWOU C-400 phased IRA subproject, consistent with the SMP and as agreed to by the FFA parties; however, extensions on document review and modification periods have resulted in an overall impact to the project schedule for the C-400 Phase IIb Treatability Study.

**V. Primary/Secondary Document Tracking System:**

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

- *Remedial Goals Met for Phase IIa of the Interim Remedial Action for Volatile Organic Compound Contamination at the C-400 Cleaning Building, PPPO-02-2572921-14*
- *Treatability Study Design, Design Drawings and Technical Specifications Package for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1295&D2*

- *Treatability Study Design, Design Drawings and Technical Specifications Package for the C-400 Interim Remedial Action Phase Iib Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1295&D2/R1*

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

- The Construction Start for the C-400 Phase Iib Treatability Study is November 11, 2014.
- EPA and Kentucky response/concurrence to DOE's letter, *Remedial Goals Met for Phase Iia of the Interim Remedial Action for Volatile Organic Compound Contamination at the C-400 Cleaning Building*, PPPO-02-2572921-14, no later than October 17, 2014.

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

The requirements and schedules are being met for the GWOU C-400 IRA project, consistent with the SMP and as agreed to by the FFA parties; however, extensions on document review and modification periods have resulted in an overall impact to the project schedule for the C-400 Phase Iib Treatability Study. Additionally, results of the treatability study have the potential to impact future remedial schedules associated with the Phase Iib remedial action.

**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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Sampling of the C-400 wells has been incorporated into the Environmental Monitoring Program and the O&M cost is not broken out separately. O&M cost of Phase Iia was \$2.42M for this reporting period.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**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):**

- Developed and issued the Addendum to the D2 *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, to EPA and Kentucky on May 20, 2014. Received Kentucky and EPA conditional concurrence on June 17, 2014, and June 23, 2014, respectively.
- Developed and issued the Revised Addendum to D2 *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, to EPA and Kentucky on July 23, 2014. Received Kentucky and EPA approval on July 24, 2014, and July 25, 2014, respectively.
- Completed the four borings described in the Revised Addendum to D2 *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, on September 8 and 9, 2014, and submitted samples to the laboratory.
- Received analytical data for the SWMU 1 Anomaly sampling and initiated data evaluation. Preliminary data review indicates all TCE sample results were less than 54 parts per billion (ppb) TCE, which is less than the target clean up level for TCE for SWMU 1 of 75 ppb.
- Conducted annual inspection of warning signs at SWMU 1, SWMU 211-A, and SWMU 211-B and verification of the Excavation/Penetration Permit program for the Southwest Plume areas as required by the Southwest Plume ROD.
- Prepared the SWMU 1 site for deep soil mixing activities.
  - Excavated mixing area to a depth of four ft, separating non-soil items (drum lids, rags, alumina, etc.) during the excavation process. Three intermodals of soil containing small quantities of alumina were generated during this effort, one container included a concrete culvert. These containers, totaling approximately 50 tons, were disposed in the on-site landfill.

- Removed and containerized soil from two grids where previous investigations had indicated detectable PCB contamination and disposed this material (approximately 830 tons) in the on-site landfill.
  - Removed approximately 120 tons of soil contaminated with detectable transuranics from the ditch on the north side of the mixing area and disposed of this material in the on-site landfill.
  - Performed a radiological walkover survey at the base of the excavation using grid system for the Soils Operable Unit and investigated areas containing elevated readings by digging an additional 6 inches with an excavator to determine if foreign materials were present. In specific grids or subgrids, the walkover indicated multiple areas with elevated readings. In these grids, the field team used excavator and investigated the entire grid. No non-soil materials were found during the additional six inches of excavation.
  - Replaced approximately two ft of soil in the area and compacted to prepare a work surface for the crane. Constructed a gravel road with appropriate slope for mixing crane to access the mixing area.
  - Installed a runoff control basin to allow the mixing area to drain during mixing operations.
  - Hydroseeded the area for erosion control and stabilized the site while awaiting mobilization of the deep soil mixing subcontractor. Continued to do inspections of the sediment controls while awaiting revegetation of disturbed areas.
- Continued procurement process for the SWMU 1 Deep Soil Mixing Project.
  - Continued evaluation of EPA's request for additional work in accordance with Section XIX of the FFA for SWMU 211-A and 211-B. Held various conference calls with the FFA parties to discuss options for a path forward on the scope of the additional work.
  - Initiated revisions of SWMU Assessment Reports for SWMU 102-A, SWMU 102-B, SWMU 211-A, and SWMU 211-B as agreed to by the FFA parties during review of the *D1 Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision Fiscal Year (FY) 2014, DOE/LX/07-1292&D1*.

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

- Develop and submit a technical memorandum documenting the results of sampling conducted under the Revised Addendum to *D2 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*.
- Continue discussions with EPA and Kentucky to jointly scope the specific details associated with EPA's request for additional work at SWMUs 211-A and 211-B.
- Provide written acceptance or rejection of EPA's additional work request for SWMU 211-A and SWMU 211-B to EPA and Kentucky no later than October 23, 2014.

- Continue procurement activities to support implementation of the approved remedial action at SWMU 1.
- Award subcontract for deep soil mixing at SWMU 1 and mobilize subcontractor and initiate field work at SWMU 1.
- Finalize the SWMU Assessment Reports for SWMU 102-A, SWMU 102-B, SWMU 211-A, and SWMU 211-B for submittal to EPA and Kentucky.

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

Responsibility for the day-to-day operations of the GWOU belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

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

The requirements and schedules are being met for the Southwest Plume sources remedial action subproject consistent with the SMP and as agreed to by the FFA parties. Development and submittal of planning documents for the Southwest Plume source areas are being met consistent with the negotiated timelines as agreed to by the FFA parties; however, EPA's request for additional work will impact the current enforceable milestone dates for submittal of the Remedial Design Report and Remedial Action Work Plan for SWMUs 211-A and 211-B. Milestone modifications will be requested once the FFA parties have reached consensus on the additional work to be performed.

**V. Primary/Secondary Document Tracking System:**

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

- The technical memorandum documenting results of sampling conducted under the Revised Addendum to D2 *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, was under development during this reporting period.
- FFA minor modifications to extend the time period for consideration of additional work related to 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, have been under development and review during this reporting period. These modifications will change the time period for DOE's written acceptance or rejection of an additional work request to October 23, 2014.
- SWMU Assessment Reports for SWMU 102-A, SWMU 102-B, SWMU 211-A, and SWMU 211-B have been under development 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):**

SWMU 1 Deep Soil Mixing activities will be performed immediately adjacent to a uranium hexafluoride (UF<sub>6</sub>) cylinder yard leased to the United States Enrichment Corporation (USEC). The placement of the deep soil mixing crane next to the cylinder yard creates a potential accident scenario (e.g., crane falling over on cylinders) that is not allowed by USEC's operating certificate with the Nuclear Regulatory Commission. DOE requested an accelerated temporary release of the C-745-A Cylinder Yard, which would allow soil mixing to proceed without impacting the USEC operating certificate. The NRC, however, questioned the need to release the C-745-A Yard with the imminent return of the diffusion plant to DOE. Return of the diffusion plant to DOE is expected to occur in October, 2014; however, the inability to mobilize equipment and initiate soil mixing until turnover will result in schedule and/or cost impacts to the SWMU 1 field work.

**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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**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):**

No activities were performed in support of the Dissolved-Phase Plumes during this reporting period.

**II. Schedule of activities during upcoming reporting period (including projected work/crucial phases of construction):**

Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers. As a result, no additional 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:**

Responsibility for the day-to-day operations of the GWOU belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

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

Project implementation has been resequenced as described in Section II.

**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:**

None.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**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):**

The formal dispute for the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1280&D2, and Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1291&D2*, is continuing. The Dispute Resolution Committee (DRC) members have agreed to extend the DRC consultation period to November 17, 2014. The DRC will meet the first week of November 2014 to discuss the modeling approach and determine the date to bring the dispute to a conclusion based upon the modeling schedule.

During this reporting period, the Northeast Plume Containment System (NEPCS) treated 55,320,500 gal of contaminated groundwater and achieved an operational efficiency of 95%. The average system treatment rate for the reporting period was 210 gal/min and was calculated assuming 100% operational uptime. Operational online efficiencies for the reporting period were as follows: April 2014, 88%; May 2014, 94%; June 2014, 91%; July 2014, 97%; August 2014, 100%; September 2014, 99.7%.

**A) Process Operations:**

The NEPCS consists of two extraction wells (EWs), an underground equalization (EQ) tank, transfer piping, an alternate treatment unit (ATU) for air stripping and suspended solids removal, and MW network.

**B) Process Testing:**

Operation of the NEPCS began February 28, 1997. As of September 30, 2014, the NEPCS has processed a total of approximately 1,437,362,217 gal of water. The monthly withdrawal volumes 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, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2014.

Influent sample results, compared to the effluent (cooling tower shower) sample results, indicated that TCE was effectively removed to the operational goal of 5 micrograms/liter

(µg/L). The influent flow is a composite from two EWs. Influent TCE analytical data from 1997 through the end of June 2014 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 through June 2014. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 3.

**Table 3. TCE Concentrations for Northeast Plume**

	TCE (µg/L)		
	High	Low	Average
Influent (EQ Tank)	170	106	130
Effluent (CERCLA Outfall)*	15	< 1	5

\*For the purpose of determining efficiency, a reading of < 1 is assumed to be zero.

As presented in Table 3, the NEPCS continued to remove TCE effectively. The system operated with an average removal efficiency of approximately 96.2% for TCE.

The EWs were sampled quarterly during this reporting period. The results of the sampling showed no significant change in TCE levels since the last reporting period. EW331 had an average TCE concentration of 131 µg/L, while EW332 had an average concentration of 149 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 *Paducah Plume Operations Maintenance, Calibration, and Testing Plan*, PAD-SO-0046, January 2013.

Instances of downtime occurred during the reporting period relating to mechanical failures, routine maintenance, and calibration of system components, weather, and testing of the new ATU.

**Nonroutine Maintenance Activities:**

On April 17, 2014, at 1400 hours, the Northeast Plume system shut down because of a high-high equalization tank alarm. On April 21, 2014, maintenance personnel replaced a blown transfer pump fuse, and the system was restarted at 0800 hours.

On May 4, 2014, at 1700 hours, the Northeast Plume system shut down. On May 6, 2014, maintenance personnel identified a blown fuse associated with the transfer pump. The electricians replaced the fuse, and the system was restarted at 1000 hours.

On June 20, 2014, at 1625 hours, the Northeast Plume system shut down during a storm. The system was restarted on June 23, 2014, at 0700 hours.



On July 28, 2014, at 0800 hours, the Northeast Plume system was shut down to perform the annual calibration verification of measuring and test equipment in the facility. The system was restarted on July 29, 2014, at 0700 hours.

On September 18, 2014, at 1430 hours, the Northeast Plume system shut down because of a blown fuse for the transfer pump for the equalization tank at C-614. The electricians replaced the fuses and restarted the transfer pump at 1630 hours. At that time, only one of the EW pumps would start so the system ran on one pump for the weekend. On September 22, 2014, at 0830 hours, maintenance was performed to start the other EW pump, and both pumps were operational by 0900 hours.

**E) Effectiveness Monitoring—Monitoring Well Results:**

Figure B.1, included in Appendix B, shows locations of the MWs and EWs. Figure B.2 shows the location of the MWs with the top of McNairy topography. Figures B.3 shows system influent TCE concentrations, and Figure B.4 includes a summary of the TCE in the Northeast Plume EWs. Figure B.5 shows the estimated cumulative amount of TCE removed since the NEPCS began operations in 1997. Figures B.6 through B.10 presented in Appendix B, show TCE concentrations and Tc-99 activities in MWs downgradient and upgradient and the EWs.

MW292 is located approximately 1,200 ft upgradient of the pumping wells to provide an early detection point for Tc-99 migration. During the first and second quarters of calendar year 2014, Tc-99 activity at MW292 was 36 and 41 pCi/L, respectively.

**F) Modification of the NEPCS Operations or Configuration:**

None.

**II. Schedule of activities during upcoming reporting period (including projected work/crucial phases of construction):**

- Continue with negotiations to resolve the FFA formal dispute associated with the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2, and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2. Once the dispute is resolved, the following activities will be performed.
  - Complete engineering design of the optimized IRA extraction and treatment system.
  - Initiate fieldwork for drilling of new optimized EW.
  - Complete and issue the D2/R1 Remedial Action Work Plan and D2/R1 ESD in accordance with the terms of the formal dispute resolution.
  - Initiate treatment unit and appurtenant equipment construction at off-site and on-site locations.

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

Responsibility for the day-to-day operations of the NEPCS belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

**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 95% of the time during this reporting period.

**V. Primary/Secondary Document Tracking System:**

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

- Proposal for resolution of formal dispute on the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2, and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2.

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

- Resolution of FFA formal dispute associated with the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2, and *Explanation of Significant Differences to the Record of Decision for Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2, by November 17, 2014.
- Complete and issue the D2/R1 Remedial Action Work Plan and D2/R1 ESD in accordance with the terms of the formal dispute resolution memorandum of agreement.

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

Dispute resolution has resulted in cost and schedule delays. New enforceable milestones will be established as part of dispute resolution.

**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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Actual costs for O&M of the Northwest/Northeast Plume facilities are tracked jointly. The total operating cost for the reporting period was \$280,000.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**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):**

- During this reporting period, the Northwest Plume Groundwater System (NWPGS) treated 49,103,090 gal of contaminated groundwater with an average monthly operational efficiency of 85%. The average system treatment rate for the reporting period was 186 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: April 2014, 93%; May 2014, 91%; June 2014, 91%; July 2014, 95%; August 2014, 93%; September 2014, 44%.

**A) Process Operations:**

The NWPGS consists of two EWs (EW232 and EW233) located just north of PGDP and underground transfer pipeline for moving contaminated groundwater. The treatment facility has an operational capacity of 220 gpm 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 exhaust of the air stripper. Treated groundwater from the transfer pipeline is released to a tributary flowing to Outfall 001. An MW network is used to evaluate performance. As a result of the 2010 optimization, two of the original four EWs (EW230 and EW231) were placed in standby for use as needed in the future, while the two remaining EWs (EW228 and EW229) and associated transfer pipeline were removed from service.

**B) Process Testing:**

Operation of the NWPGS began on August 28, 1995. As of September 30, 2014, the NWPGS has processed a total of 1,939,196,727 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, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2014.

Figure B.11, included in Appendix B, shows locations of the Northwest Plume MWs. Figure B.12 shows the location of the MWs with the top of McNairy topography. Influent TCE and Tc-99 analytical data are presented in Appendix B on Figures B.13 and B.14. Figures B.15 and B.16 includes a summary of the TCE and Tc-99 concentrations of the effluent versus time at the Northwest Treatment System. Figure B.17 shows the cumulative

estimated amount of TCE removed since the Northwest Plume system began operations in 1995. The influent sample results, compared to the NWPGS effluent results, indicated that the NWPGS continues to effectively remove TCE and Tc-99.

High, low, and average influent and effluent TCE and Tc-99 concentrations from January through June 2014 are presented in Table 4.

**Table 4. TCE and Tc-99 Concentrations for Northwest Plume**

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
Influent	2,240	1,300	1,942	344	275	307
Effluent	4	< 1	3	89	33	47

The treatment system influent was sampled monthly. The effluent was sampled weekly. These sampling frequencies were conducted in accordance with the revised O&M Plan for the Northwest Plume Groundwater System IRA D4/R5, which DOE submitted on September 13, 2010, and was approved in correspondence from Kentucky on October 4, 2010, with concurrence from EPA on October 8, 2010. As presented in Table 4, the NWPGS continued to remove TCE and Tc-99 effectively. The system operated with an average removal efficiency of 99.8% for TCE and 84.7% for Tc-99.

The average TCE effluent concentration for this reporting period was 3 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 47 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 revised O&M Plan for the Northwest Plume.

**Table 5. TCE and Tc-99 Concentrations for Northwest Plume EWs**

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
EW232	1,100	383	626	159	96	124
EW233	3,900	3,300	3,567	588	380	452

**D) Treatment Media:**

**Ion Exchange Resins:**

The NWPGS is equipped with four ion exchange columns used for the removal of Tc-99. Purolite A-520-E resin is used in the columns, which are arranged in a lead/lag configuration on two parallel skids. No resin changes were required during this reporting period.

**Activated Carbon Media:**

The NWPGS is equipped with two carbon columns containing granular activated carbon for adsorption of volatile organic compounds from the vapor-phase effluent of the air stripper unit. The carbon in each column is replaced routinely. The carbon in both columns was replaced on September 24, 2014, with recycled carbon. The next carbon exchange is planned for March 2015.

**E) Maintenance Activities:****Routine Maintenance Activities:**

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Calibration, and Testing Plan*, PAD-SO-0046, January 2013. Instances of minor downtime occurred during the reporting period relating to power outages, maintenance, and calibration of the system. Carbon will be changed out in the treatment system on March 2015.

**Nonroutine Maintenance Activities:**

On April 2, 2014, at 2000 hours, the Northwest Plume system was shut down during a storm event due to a low-low alarm on the equalization tank. The alarm occurred because the pump on the EW had shut down. The system was restarted on April 3, 2014, at 0600 hours.

On April 7, 2014, at 0730 hours, the Northwest Plume system was shut down for a carbon change. The carbon was removed from the C-612 facility and then the operators were pulled to the C-400 facility to remove the carbon from that facility. The operators refilled the carbon vessels at C-612 on April 8, 2014, and the system was restarted at 1300 hours.

On April 13, 2014, at 2300 hours, the Northwest Plume system was shut down during a storm event because a manhole vault accumulated water above the shutdown level. On April 14, 2014, at 0600 hours, the manhole vault was pumped and the system was restarted.

On May 9, 2014, at 1400 hours, the Northwest Plume system was shut down. The alarm indicated a variable frequency drive failure on EW232. The system was restarted on May 12, 2014, at 0645 hours.

On May 12, 2014, at 1100 hours, the Northwest Plume system was shut down due to variable frequency drive failure on EW232. Electricians determined that the cooling fan on the variable frequency drive was not starting. When the variable frequency drive began to heat up, the drive would shut down due to overheating. The fan was lubricated, tested, and found to start on its own after cleaning and lubricating the fan motor. The system was restarted on May 12, 2014, at 1400 hours.

On June 2, 2014, at 0630 hours, the Northwest Plume system was shut down to repair a leaking three inch valve that discharged backwash water from the sand filters to the settling tank. The valve was replaced, and the system was restarted on June 2, 2014, at 0900 hours.

On June 17, 2014, at 1300 hours, a backwash of the ion exchange columns was being performed. During this operation, a sampling valve that had a half-inch steel pipe nipple connection broke off. Maintenance personnel tried to remove the nipple from the larger PVC

pipng, which resulted in breaking the PVC reducer. In order to repair the reducer, several valves and connections had to be cut out and replaced. The system was restarted on June 19, 2014, at 1430 hours. When the system was restarted, EW232 shut down due to a high temperature alarm. The flow from EW231 was increased to 200 gpm and the system ran on one well until maintenance personnel were available on June 23, 2014, at 0700 hours. Electricians determined that the cooling fans on the variable frequency drive were not starting following a shutdown of the drive. The fans on the variable frequency drive were started manually, and the system was returned to normal operation.

On June 24, 2014, at 1831 hours, the Northwest Plume system was shut down because the building lost power during an electrical storm. The power to the facility was restored, and the system was restarted on June 25, 2014, at 0822 hours.

On July 5, 2014, at 1821 hours, the Northwest Plume system was shut down because the building lost power due to a power failure in the USEC facility. USEC could not find the source of the power failure, and the system was restarted on July 7, 2014, at 0815 hours.

On August 17, 2014, at 0430 hours, the Northwest Plume system was shut down due to a storm in the area. The alarm indicated a low-low fault on the equalization tank. The system was restarted on August 18, 2014, at 0730 hours.

On August 30, 2014, at 1130 hours, the Northwest Plume system was shut down due to a lightning strike and a power outage. Power was restored to the facility on August 31, 2014; however, major damage was done to a motor controller for the air stripper blower in the facility. Power was lost again to the facility on September 2, 2014, and not restored until September 3, 2014. The motor controller for the air stripper was considered obsolete, and a replacement was found for the item. The new motor controller was installed on September 9, 2014, and the system would not restart. The program logic control panel for the sand filter system was found to be the reason the system would not restart. On September 9, 2014, and September 10, 2014, replaced the power supply, processor, and rack for the program logic controller; however, the system would not restart. On September 17, 2014, an engineer from Purchase Integration came on-site to evaluate the program logic controller system. On his visit, he found problems with the air stripper panel and the electricians had to replace more fuses related to that system. The engineer also found problems with the sand filter system and had to download the program to the processor for sand filter program logic controller. The Northwest Plume system became operational on September 17, 2014, at 1300 hours.

On September 24, 2014, at 0700 hours, the Northwest Plume system was shut down to change the carbon in the two carbon columns. The carbon was changed in both columns, and the system became operational on September 24, 2014, at 1300 hours.

**F) Effectiveness Monitoring—Monitoring Well Results:**

Figures B.18 through B.25 presented in Appendix B, show TCE and Tc-99 concentrations in MWs at the south and north fields of the Northwest Plume and the EWs, respectively. These graphs show all data since monitoring began in 1995 and indicate the position of the MWs relative to the extraction.



**G) Modification of the NWPGS Operations or Configuration:**

EW232 and EW233 became operational on August 24, 2010. These EWs replace the previous EWs for recovery of TCE-contaminated groundwater from the Northwest Plume. Each of the new wells has a design capacity of 220 gal per minute and is operated full time at approximately 110–115 gpm.

**II. Schedules of activities during upcoming reporting period (including projected work/crucial phases of construction):**

The project team will continue to conduct and document the necessary tasks required for equipment maintenance, calibration, and operation, as specified in the *Operations and Maintenance Plan for the Northwest Plume Groundwater System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1253&D4/R5.

Hydraulic and chemical effectiveness monitoring, as described in the D4/R5 O&M Plan for the Northwest Plume Groundwater System IRA, was initiated during the reporting period.

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

Responsibility for the day-to-day operations of the NWPGS belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition LATA Kentucky provides programmatic and technical support, analytical services, and business management services. SST manages the AR and the EIC.

**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 remained operational 85% 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, 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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Actual costs for O&M of the Northwest/Northeast Plume facilities are tracked jointly. The total operating cost for the reporting period was \$280,000.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**BURIAL GROUNDS OPERABLE UNIT**

The scope of the BGOU includes a remedial investigation (RI), 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*, signed in 1995.

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**FEDERAL FACILITY AGREEMENT  
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**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**BURIAL GROUNDS OPERABLE UNIT PROJECT: 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)**

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

- Completed development of the *Feasibility Study for Solid Waste Management Units 2, 3, 7, and 30 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1274&D2 (FS), and issued the FS Report to Kentucky and EPA for review and comment on June 12, 2014.
- The draft-final *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2, previously was submitted to EPA and Kentucky on July 17, 2013. EPA issued conditional approval on October 17, 2013. Kentucky continues to extend its review and has not issued a response.
- Initiated revision to the SWMU Assessment Report for C-404 (SWMU 3) for submittal to EPA and Kentucky.
- Continued collection of monthly water level data from UCRS wells and initiated development of work control activities for Phase IV and Phase V of the *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan*, DOE/OR/07-2179&D2/A2/R2.
- Revised *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan*, DOE/OR/07-2179&D2/A2/R2, and associated Waste Management Plan to accommodate additional Phase III scope. These documents were approved by EPA and Kentucky during the reporting period. Initiated SWMU 4 field sampling and analytical laboratory activities associated with additional Phase III scope.

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

- Evaluate EPA and Kentucky approval or conditional concurrence of the *Feasibility Study for Solid Waste Management Units 2, 3, 7, and 30 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1274&D2. If conditional

concurrence is provided, either accept the conditions or invoke informal dispute resolution within 30 days of receipt of the conditional concurrence. If conditions are accepted, develop and submit a D2/R1 *Feasibility Study for Solid Waste Management Units 2, 3, 7, and 30 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1274&D2/R1.

- Evaluate Kentucky approval or conditional concurrence of the D2 *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2. If conditional concurrence is provided, either accept the conditions provided by EPA (previously provided on October 17, 2013) and Kentucky or invoke informal dispute resolution within 30 days of receipt of Kentucky's conditional concurrence. If conditions are accepted, develop and submit a D2/R1 *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6*, DOE/LX/07-1275&D2/R1.
- Continue monthly water level recordings in the MWs installed during Phase II (SWMU 4).
- Work associated with SWMUs 2, 3, 7, 9, 10, 30, and 145 of the BGOU has been resequenced based upon agreement with the FFA managers and their respective senior managers. With the exception of finalization of the FS for SWMUs 2, 3, 7, and 30, no activities are scheduled for these SWMUs during the upcoming reporting period (assumes FS approval).
- Complete SWMU 4 field sampling and analytical laboratory activities associated with additional Phase III scope.
- Finalize the revised SWMU Assessment Report for C-404 (SWMU 3) for submittal to EPA and Kentucky.

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

Responsibility for the day-to-day operations of BGOU belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC, and maintains existing burial ground caps.

### **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; however, extensions on document review and modification periods have resulted in an overall impact to the project schedule for the BGOU.
- Work associated with SWMUs 2, 3, 7, 9, 10, 30, and 145 of the BGOU has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window. With the exception of finalization of the FS for SWMUs 2, 3, 7, and 30, no activities are scheduled for these SWMUs during the upcoming reporting period (assumes FS approval).

**V. Primary/Secondary Document Tracking System:**

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

- *Feasibility Study for Solid Waste Management Units 2, 3, 7, and 30 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1274&D2*
- *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6, DOE/LX/07-1275&D2*
- *Record of Decision for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1282&D1*
- *Land Use Control Implementation Plan for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1293&D1*
- *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan, DOE/OR/07-2179&D2/A2/R3*
- *Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2179&D2/R2 (revision to the Waste Management Plan section to support SWMU 4)*
- The revised SWMU Assessment Report for C-404 (SWMU 3) has been under development during this reporting period.

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

- Approval, conditional approval, or disapproval on the D2 *Proposed Plan for the Burial Grounds Operable Unit Source Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky: Solid Waste Management Units 5 and 6, DOE/LX/07-1275&D2*, is due from Kentucky no later than October 27, 2014.
- The *Record of Decision for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1282&D1*, is due to EPA and Kentucky January 22, 2015.
- The D1 Remedial Design Work Plan for Solid Waste Management Units 5 and 6 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, is due to EPA and Kentucky February 21, 2015.
- Approval, conditional approval, or disapproval of the *Feasibility Study for Solid Waste Management Units 2, 3, 7, and 30 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1274&D2*, is due from EPA and Kentucky no later than November 12, 2014.

**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 managers, FFA senior managers, local elected officials, and congressional staff. In addition, a series of Web-based meetings with EPA and Kentucky were conducted to reach consensus on the quantity and location of additional SWMU 4 Phase III borings and the required document revisions.

**VIII. Changes in relevant personnel:**

- Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.
- Lisa Santoro was appointed as the DOE Project Lead for SWMU 4.

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

None. [Refer to the following section of this report for information regarding O&M costs for the IRA at the C-749 Uranium Burial Ground (SWMU 2).]



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Reporting Period: 4/1/2014–9/30/2014**

**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, 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*. The results for the groundwater monitoring from May 1993, through August 2014, have been included as part of this report. The results of the groundwater monitoring trends from 1996 through August 2014 are presented in Appendix F.

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

Groundwater monitoring will continue at the C-749 Uranium Burial Ground, as required by the ROD.

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

Responsibility for the day-to-day operations of C-749 Uranium Burial Ground belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC, 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.

**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:**

None.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

**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 is approximately \$1,000.00 per year.

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Reporting Period: 4/1/2014–9/30/2014**

**SURFACE WATER OPERABLE UNIT**

The SWOU includes the Surface Water Removal Action and Surface Water Remedial Action projects. Additionally, O&M is performed on North-South Diversion Ditch Sections 1 and 2 and institutional controls, as required by the *Operations and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch*, DOE/OR/07-2057&D2, and *Operations and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1904&D1; and O&M activities for the C-613 Basin are maintained in accordance with the *Operations 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. Inspection reports are filed in the Document Management Center, managed by SST. The estimated annual cost of this O&M is \$66,000.

Per the *Operations 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 October 2014, and the current maximum discharge limit for turbidity is 103 nephelometric turbidity units (NTU), with a 30-day average not to exceed 45 NTU.

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**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):**

- Continued to revise the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2600&D1, in conjunction with the CERCLA Five-Year Review.
- Initiated revisions to the SWMU Assessment Report for SWMU 526 for submittal to EPA and Kentucky.

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

- Finalize and issue the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2600&D1, once the CERCLA Five-Year Review has been approved. Approval of the CERCLA Five-Year Review is expected in FY 2015.
- Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers. As a result, no additional activities are scheduled for this project during the upcoming reporting period.
- Finalize the revision to the SWMU Assessment Report for SWMU 526 and submit to EPA and Kentucky.

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

Responsibility for the day-to-day operations of the SWOU Remedial Action belongs to LATA Kentucky as the DOE prime remediation contractor at the PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

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

Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window. No activities are scheduled for this project during the upcoming reporting period.

**V. Primary/Secondary Document Tracking System:**

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

- The *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2600&D1, has been under development during this reporting period.
- The revised SWMU Assessment Report for SWMU 526 has been under development during this reporting period.

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

- The *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2600&D1, is scheduled to receive regulatory approval after submittal of the D2/R2 CERCLA Five-Year Review.

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

Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

**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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

None.

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**SOILS OPERABLE UNIT**

The SOU is being implemented in a phased approach (i.e., pre-GDP shutdown and post-GDP shutdown). The SOU consists of 86 SWMUs/areas of concern; three inactive facilities [C-218 Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), C-410-B HF Neutralization Lagoon (SWMU 19)]; and the soil/rubble areas that have been identified to date. Prior to GDP shutdown, the SOU will focus on accessible plant surface soils (ground surface to 10 ft below ground surface and 16 ft below ground surface in the vicinity of pipelines) not associated with PGDP operations. Following PGDP shutdown, slabs and underlying soils associated with facilities that have undergone D&D will be addressed as part of a subsequent action (e.g., post-GDP shutdown for the Soils and Slabs OU). Actions to address a total of 24 of the 86 SWMUs have been deferred to Soils and Slabs OU. Of the remaining 62 SWMUs, 50 will be addressed as part of the Soils OU FS. The remaining 12 SWMUs will be evaluated further under a subsequent Soils OU RI and addressed by a subsequent Soils OU FS.

Due to interferences from ongoing USEC operations, implementation of the response action pursuant to an approved Action Memorandum for SWMU 40 will occur after GDP shutdown (*Action Memorandum for Soils Operable Unit Inactive Facilities*, DOE/LX/07-0121&D2/R1). Implementation of the SWMU 40 response will be reinstated with development, review, and approval of a Remedial Action Work Plan.

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**SOILS OPERABLE UNIT PROJECT: Remedial Action**

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

- Developed and issued the *Addendum to the Work Plan for the Soils Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Remedial Investigation 2 Sampling and Analysis Plan*, DOE/LX/07-0120&D2/R2/A1/R1, to EPA and Kentucky for review on August 29, 2014. Received EPA and Kentucky approval on September 19, 2014, and September 25, 2014, respectively.
- Developed and issued the *Sitewide Evaluation Work Plan for Anomalies Located Outside the Limited Area at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1288&D2, to EPA and Kentucky for review on August 29, 2014. Received EPA and Kentucky approval on September 19, 2014, and September 25, 2014, respectively.
- Initiated field activities associated with clearing and grubbing in support of the Sitewide Evaluation.
- Awarded contract for drilling and sampling activities under the Soils OU Remedial Investigation 2.
- Initiated revisions of SWMU Assessment Reports for SWMU 99-A, SWMU 99-B, SWMU 225-A, SWMU 225-B, and SWMU 474, as agreed to by the FFA parties during comment resolution of the *D1 Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D1.

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

- Initiate and finalize field work for the Soils OU Remedial Investigation 2.
- Initiate and finalize field work for the Sitewide Evaluation.
- Begin development of the Soils OU Remedial Investigation 2 Report.
- Begin development of the Sitewide Evaluation Report.
- Finalize the SWMU Assessment Reports for SWMU 99-A, SWMU 99-B, SWMU 225-A, SWMU 225-B, and SWMU 474.

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

Responsibility for the day-to-day operations of the SOU RI belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

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

Based on additional funding received by DOE for FY 2014, this project is being accelerated. 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:**

- *Addendum to the Work Plan for the Soils Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Remedial Investigation 2 Sampling and Analysis Plan, DOE/LX/07-0120&D2/R2/A1/R1.*
- *Sitewide Evaluation Work Plan for Anomalies Located Outside the Limited Area at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1288&D2.*
- SWMU Assessment Reports for SWMU 99-A, SWMU 99-B, SWMU 225-A, SWMU 225-B, and SWMU 474 have been under development 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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

None.

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**DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT**

The D&D OU will employ the CERCLA removal action process to decommission excess buildings (i.e., inactive with no reuse potential) that have a known or potential release of contamination to the environment. Consistent with the 1995 DOE and EPA Memorandum, *Policy on Decommissioning DOE Facilities under CERCLA*, DOE will employ the CERCLA Non-Time-Critical Removal Action framework when appropriate. In instances where facilities do not have a known or potential release, DOE may decommission the facility as a non-CERCLA demolition action using National Environmental Policy Act documentation.

The remaining scope of the D&D OU prior to PGDP shutdown consists of the following inactive DOE facilities:

- C-410/420 Feed Plant Complex
- C-340 Metals Reduction Complex

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**D&D OPERABLE UNIT: C-410/420 Complex**

The scope of this project includes D&D of the C-410 UF<sub>6</sub> Feed Plant, using CERCLA removal actions implemented in accordance with the FFA and consistent with the 1995 EPA and DOE Joint Policy Statement on decommissioning activities.

**I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan) for the C-410/420 Complex:**

- All UF<sub>6</sub> Cold Traps currently are in storage inside C-746-Q and are routinely inspected as part of DOE's surveillance and maintenance program.
- Completed removal and placement of water from Sector 6 (Zone 22) to frac tank storage and shipped off-site for treatment and disposal.
- Completed mezzanine removal in Zone 22.
- Completed placement of flowable fill in Zone 53.
- Completed removal of transite siding in Sectors 2, 3, 5, and 6.
- Completed demolition of Sectors 2, 3, 5, and 6 on August 27, 2014. This equates to approximately 64% of the structure.
- Initiated shipment of gondolas of demolition debris off-site for disposal.

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

- Complete transite removal of C-420.
- Complete removal of superheaters from C-420.
- Scramble pad at C-410/420.
- Complete shipment of gondolas of demolition waste off-site for disposal.
- Complete removal of loose paint, vacuuming, fixative application, and final survey in preparation for demolition of C-420.
- Initiate and complete flowable fill in Zones 22 and 26.

- Complete demolition of C-420 stacks, propane tank, and railroad ties.
- Complete disposal of remaining waste.
- Initiate development of D1 Removal Action Completion Report.

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

Responsibility for the day-to-day operations of D&D belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

**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.

**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):**

Asbestos-insulated pipe was discovered. Remediation of the asbestos insulated pipe has delayed the project one month.

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

Provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, congressional staff, and D&D Tri-Party Working Group.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

None.

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Reporting Period: 4/1/2014–9/30/2014**

**D&D OPERABLE UNIT:**

**C-340 Metals Reduction Plant Complex**

The scope of this project includes demolition of the C-340 Uranium Metals Reduction Complex, using CERCLA removal actions implemented in accordance with the FFA and consistent with the 1995 EPA and DOE Joint Policy Statement on decommissioning activities.

**I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan) for the C-340 Complex:**

- Submitted the *D2 Removal Action Report for the C-340 Metals Reduction Plant at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1286&D2, to EPA and Kentucky on April 25, 2014.
- Received approval of the *D2 Removal Action Report for the C-340 Metals Reduction Plant at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1286&D2, from EPA on May 15, 2014, and from Kentucky on May 16, 2014, and initiated resolution of comments.

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

Routine inspections of the C-340 building slab.

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

Responsibility for the day-to-day operations of D&D belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

**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.

**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:**

Provided routine updates on the subproject to the Paducah Site CAB, FFA managers, local elected officials, congressional staff, and D&D Tri-Party Working Group.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

None.



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**COMPREHENSIVE SITE OPERABLE UNIT**

There were no reportable activities for the Comprehensive Site Operable Unit during this reporting period.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**ADDITIONAL REPORTING**

Presented in this section are updates for WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites, Underground Storage Tanks, and Kentucky Ordnance Works sites), the Community Relations Plan (CRP), the SMP, CERCLA Waste Disposal Alternatives Evaluation, and CERCLA Five-Year Review.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**PROJECT: WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites,**

**Underground Storage Tanks, and Kentucky Ordnance Works Sites)**

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

Continued surface water and groundwater monitoring around the C-746-K Landfill and in Bayou Creek, as required by the *Record of Decision for Waste Area Groups 1 and 7 at PGDP, Paducah, Kentucky*, DOE/OR/06-1470&D3. WAGs 1 and 7 ROD requires these data to be submitted semiannually. The results of the groundwater monitoring data from January 1995 through April 2014 are presented graphically in Appendix C.

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

Surface water and groundwater monitoring will continue around C-746-K Landfill and in Bayou Creek, as required by the ROD. This monitoring is conducted and reported in accordance with other PGDP programs, such as the Groundwater Protection Program, Environmental Monitoring Program, and Kentucky Pollutant Discharge Elimination System Permit.

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

Responsibility for the day-to-day operations of WAGs 1 and 7 belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky also provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

**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.

**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:**

None.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Sampling of the surface water for the C-746-K Landfill has been incorporated into the Environmental Monitoring Program. O&M cost is not broken out separately.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**PROJECT: Community Relations Plan**

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

- None.

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

Initiate development of Revision 9 of the Community Relations Plan (CRP). The FFA parties agreed to revise and submit the CRP for review and approval on a biannual basis (i.e., status of major projects in Chapter 2, Appendix A—Key Contacts for PGDP and Appendix B—Public Involvement History). Revision 9 to the CRP is due in July 2015.

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

Responsibility for the maintenance of the CRP belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. SST manages the AR and the EIC.

The FFA parties agreed to revise and submit the CRP for review and approval on a biannual basis (i.e., status of major projects in Chapter 2, Appendix A—Key Contacts for the PGDP and Appendix B—Public Involvement History). Revision 9 to the CRP is due in July 2015.

**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.

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

- Revision 9 of the CRP is due to EPA and Kentucky no later than July 1, 2015.

**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 managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Not applicable.



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**PROJECT: Site Management Plan**

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

- Issued a modification to the FY 2014 SMP to EPA and Kentucky for approval on August 25, 2014. This modification provided for revision of the D2 FY 2014 SMP and updated the milestones in Appendix 5 to reflect the milestone modifications that had occurred since the D2 SMP was approved by EPA and Kentucky on February 25, 2014, and February 25, 2014, respectively. The D2/R1 FY 2014 SMP was approved by Kentucky and EPA on September 2, 2014, and September 19, 2014, respectively.
- During this reporting period, the D1 FY 2015 SMP has been under development. Multiple scoping meetings have been held, and DOE has worked closed with EPA and Kentucky on the development of the FY 2015 SMP.

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

Finalize and transmit the FY 2015 D1 SMP to EPA and Kentucky on or before November 15, 2014.

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

Responsibility for the maintenance of the SMP belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

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

FFA Section XVIII requires submittal of the SMP by November 15 of each year.

**V. Primary/Secondary Document Tracking System:**

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

- The D1 FY 2015 SMP has been under development during this reporting period.
- The D2/R1 FY 2014 SMP was under development and EPA and Kentucky review during this reporting period.

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

- D1 FY 2015 SMP is due to EPA and Kentucky no later than November 15, 2014.
- Comments on the D1 FY 2015 SMP are due to DOE within 30 days of the document's being issued or December 15, 2014.
- D2 FY 2015 SMP, if required, is due within 15 days of receipt of regulatory comments on the D1 SMP.

**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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Not applicable.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**PROJECT: CERCLA Waste Disposal Alternatives Evaluation**

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

- Continued development of the D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1279&D1.*
- Received conditional approval of the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0244&D2,* from Kentucky and EPA on October 23, 2013, and March 18, 2014, respectively.
- DOE invoked informal dispute on the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0244&D2,* on May 19, 2014.
- Held numerous dispute resolution meetings between the FFA parties, including two face-to-face meetings, to resolve conditions received on the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0244&D2.*

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

- Develop and submit the D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1279&D1,* to EPA and Kentucky for review in accordance with the date established by the FFA parties as part of dispute resolution.
- Conduct a Public Information Workshop upon finalization and approval of the RI/FS Report. DOE is co-sponsoring the workshop with the Paducah CAB and partnering with Kentucky and EPA. The purpose of the workshop is to summarize the content of the RI/FS Report and solicit feedback.
- Continue to evaluate EPA and Kentucky conditional concurrence and either resolve the conditions or elevate to formal dispute resolution by October 31, 2014.

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

Responsibility for the CERCLA waste disposal evaluation belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the AR and the EIC.

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

DOE invoked informal dispute on of the *D2 Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, on May 19, 2014. Numerous dispute resolution meetings between the FFA parties, including two face-to-face meetings, to resolve conditions received on the *D2 Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, have been held throughout this reporting period. Current enforceable milestone dates have been stayed and new enforceable milestone dates will be established as part of dispute resolution.

**V. Primary/Secondary Document Tracking System:**

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

- The conditional approval of the *D2 Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, has been evaluated as part of dispute resolution during this reporting period.
- The *D1 Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, has been under development during this reporting period.

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

- Informal dispute resolution for the *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2/R1, must be resolved no later than October 31, 2014.
- *D1 Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, is due to EPA and Kentucky in accordance with the date established by the FFA parties as part of dispute resolution.

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

The project currently is experiencing significant cost and schedule delays associated with informal dispute. Should the FFA parties enter into formal dispute resolution, the project will

continue to experience cost and schedule delays. Current enforceable milestones have been stayed, and new enforceable milestone dates will be established as part of dispute resolution.

**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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Not applicable.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
SECOND HALF OF FISCAL YEAR 2014**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 4/1/2014–9/30/2014**

**PROJECT: CERCLA Five-Year Review**

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

- Submitted the D2 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2, to Kentucky and EPA on April 3, 2014.
- Received conditional concurrence on the D2 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2, from Kentucky and EPA on May 2, 2014.
- Developed and submitted the D2/R1 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1, to Kentucky and EPA on May 30, 2014.
- Received comments on the D2/R1 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1, from EPA on July 3, 2014.
- Received acknowledgement from Kentucky on July 8, 2014, that its comments on the D2/R1 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1, had been addressed. Kentucky also acknowledged receipt of EPA's comments for modification and/or additional action and that the FFA parties would need to work together to address EPA's request to finalize the document.
- Initiated clarification meetings with EPA and Kentucky concerning additional actions requested by EPA in the comments received July 3, 2014.
- Received letter on September 30, 2014, from EPA with deferred protectiveness statements for the C-400 and Water Policy.

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

- Initiate scoping meetings with EPA and Kentucky for the additional actions requested.

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

Responsibility for the CERCLA Five-Year Review belongs to LATA Kentucky as the DOE prime remediation contractor at PGDP. In addition, LATA Kentucky provides programmatic and

technical support, analytical services, and business management. SST manages the AR and the EIC.

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

This Five-Year Review encompasses the remedial actions that DOE has taken under the OUs identified at the Paducah Site, plus the Water Policy removal action, Surface Water Interim Corrective Measures, and Surface Water On-Site Sediment Removal. It covers activities associated with response actions from January 2008 through December 2012. The last CERCLA Five-Year Review at the Paducah Site was conducted in 2008 for the period January 2003 through December 2007. While the requirements and time schedules are being met, extensions on document review and modification periods have occurred.

**V. Primary/Secondary Document Tracking System:**

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

- The D2 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2, has been under development and EPA and Kentucky review during this reporting period.
- The D2/R1 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1, has been under development and EPA and Kentucky 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 managers, FFA senior managers, local elected officials, and congressional staff.

**VIII. Changes in relevant personnel:**

Jennifer Woodard was appointed as the DOE Site Lead and continues to serve in dual capacity as the DOE FFA Manager.

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

Not applicable.



**APPENDIX A**

**NORTHEAST AND NORTHWEST PLUME  
WATER WITHDRAWAL REPORTS**

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**TABLE 1. NORTHEAST PLUME CONTAINMENT SYSTEM  
WATER WITHDRAWAL REPORTING FORM (gallons of water pumped)**

Day	April 2014	May 2014	June 2014	July 2014	August 2014	September 2014
1	311,500	321,700	326,325	255,200	327,225	331,020
2	316,500	267,050	326,325	331,367	327,225	331,020
3	331,000	267,050	314,100	331,367	327,225	319,600
4	331,840	267,050	297,800	331,367	327,225	327,700
5	331,840	0	359,700	331,367	321,300	261,675
6	331,840	267,050	318,200	331,367	335,800	261,675
7	331,840	295,500	318,200	331,367	273,300	261,675
8	331,840	323,700	318,200	315,900	348,275	261,675
9	288,900	320,575	318,200	337,200	348,275	673,800
10	288,900	320,575	338,400	330,600	348,275	277,800
11	318,675	320,575	263,300	331,850	348,275	324,900
12	318,675	320,575	324,700	331,850	320,400	346,600
13	318,675	321,500	322,475	331,850	326,704	346,600
14	318,675	340,300	322,475	331,850	411,396	346,600
15	317,600	316,000	322,475	323,100	172,525	346,600
16	323,500	318,450	322,475	329,600	172,525	253,100
17	74,540	318,450	340,300	329,700	172,525	409,200
18	74,540	318,450	369,700	331,050	172,525	261,100
19	74,540	318,450	246,600	331,050	327,700	186,175
20	74,540	328,300	108,800	331,050	336,100	186,175
21	74,540	321,600	108,800	331,050	300,900	186,175
22	324,200	326,500	108,800	326,900	331,900	223,375
23	334,400	322,840	108,800	318,400	331,900	338,800
24	201,100	322,840	235,800	336,500	331,900	332,450
25	350,125	322,840	404,300	323,925	331,900	332,450
26	350,125	322,840	245,500	323,925	333,100	329,675
27	350,125	322,840	349,450	323,925	396,800	329,675
28	350,125	315,400	349,450	323,925	164,100	329,675
29	318,600	316,100	349,450	2,900	331,020	329,675
30	313,200	326,325	349,450	321,600	331,020	331,600
31		326,325		336,000	331,020	
Monthly Total	8,376,500	9,417,750	8,788,550	9,799,100	9,560,360	9,378,240
*Daily Average	279,217	313,925	292,952	316,100	308,399	312,608
Days water pumped	30	30	30	31	31	30

\*Value based on number of days water was pumped.

**TABLE 2. NORTHWEST PLUME GROUNDWATER SYSTEM  
WATER WITHDRAWAL REPORTING FORM**

Day	April 2014	May 2014	June 2014	July 2014	August 2014	September 2014
1	321,460	325,760	320,563	326,150	322,875	0
2	321,850	327,038	320,563	242,318	322,875	0
3	260,190	327,038	242,820	242,318	322,875	0
4	258,536	327,038	307,230	242,318	322,875	0
5	258,536	327,038	353,640	242,318	316,220	0
6	258,536	366,490	321,050	242,318	346,600	0
7	258,536	256,900	321,050	242,318	197,530	0
8	258,536	326,920	321,050	314,090	349,683	0
9	279,455	117,320	321,050	321,860	349,683	0
10	279,455	117,320	326,000	300,440	349,683	0
11	293,988	117,320	323,500	323,705	349,683	0
12	293,988	117,320	326,070	323,705	304,530	0
13	293,988	287,620	324,885	323,705	319,270	0
14	293,988	290,540	324,885	323,705	402,520	0
15	328,920	333,900	324,885	320,890	213,900	0
16	325,430	317,318	324,885	323,940	213,900	0
17	319,982	317,318	315,950	323,610	213,900	17,830
18	319,982	317,318	0	323,100	213,900	235,160
19	319,982	317,318	57,150	323,100	317,760	319,580
20	319,982	351,050	278,378	323,100	326,720	319,580
21	319,982	322,570	278,378	323,100	316,130	319,580
22	337,745	328,390	278,378	322,720	321,930	319,580
23	316,035	322,854	278,378	312,440	321,930	334,010
24	318,030	322,854	262,300	337,560	321,930	279,575
25	309,798	322,854	162,160	323,530	321,930	279,575
26	309,798	322,854	293,207	323,530	326,480	319,825
27	309,798	322,854	184,466	323,530	391,810	319,825
28	309,798	328,750	184,466	323,530	257,780	319,825
29	318,090	318,460	184,466	309,790	455,827	319,825
30	329,630	320,563	184,466	324,380	227,913	326,670
31		320,563		329,160	0	
Monthly Total	9,044,020	9,139,445	8,046,265	9,502,280	9,340,640	4,030,440
*Daily Average	301,467	294,821	277,457	306,525	311,355	287,889
Days water pumped	30	31	29	31	30	14

\*Value based on number of days water was pumped.

**APPENDIX B**

**NORTHEAST PLUME AND NORTHWEST PLUME GRAPHS  
AND MAPS FIGURES B.1 THROUGH B.25**

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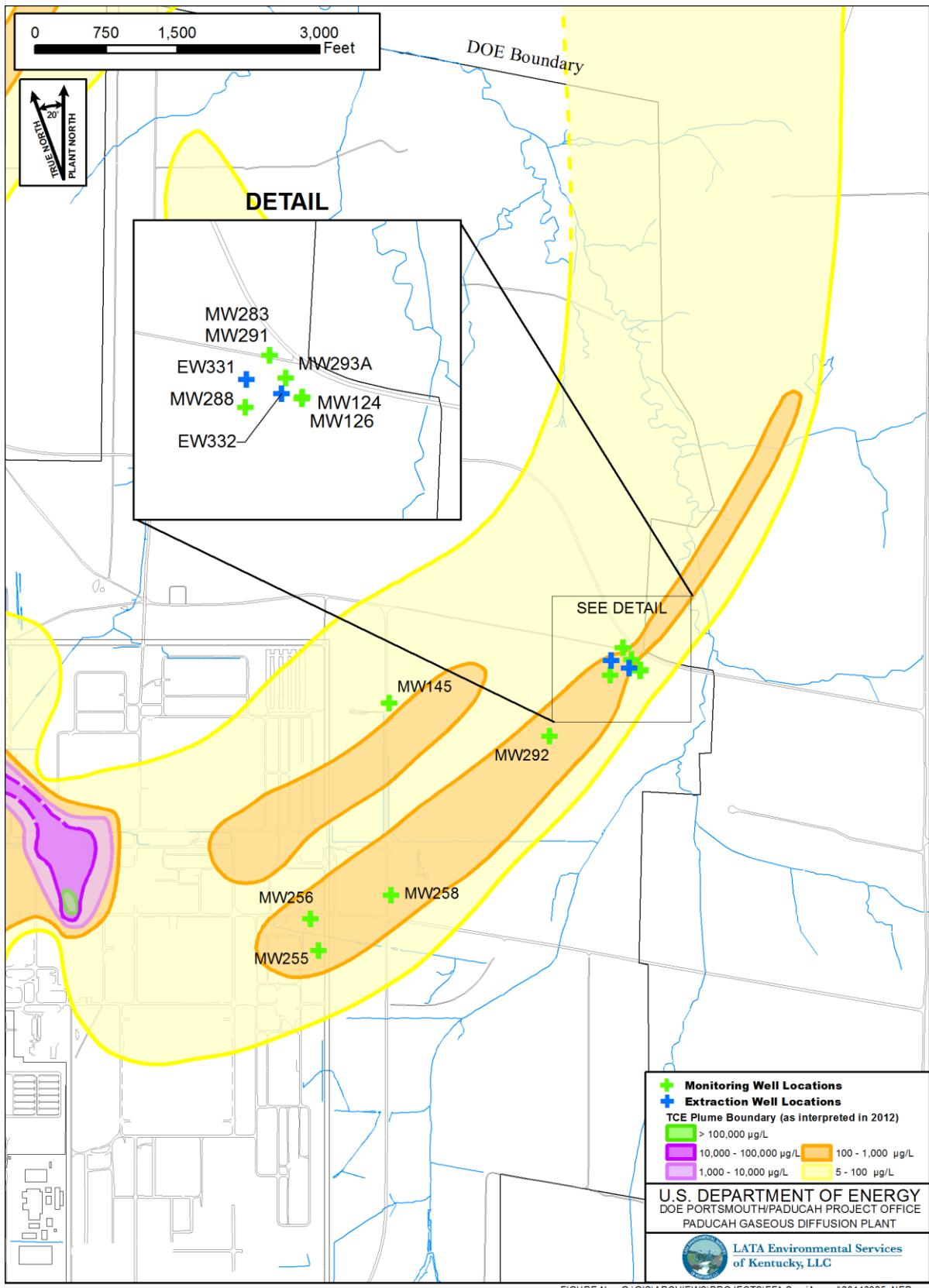


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DATE 3/25/2014

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

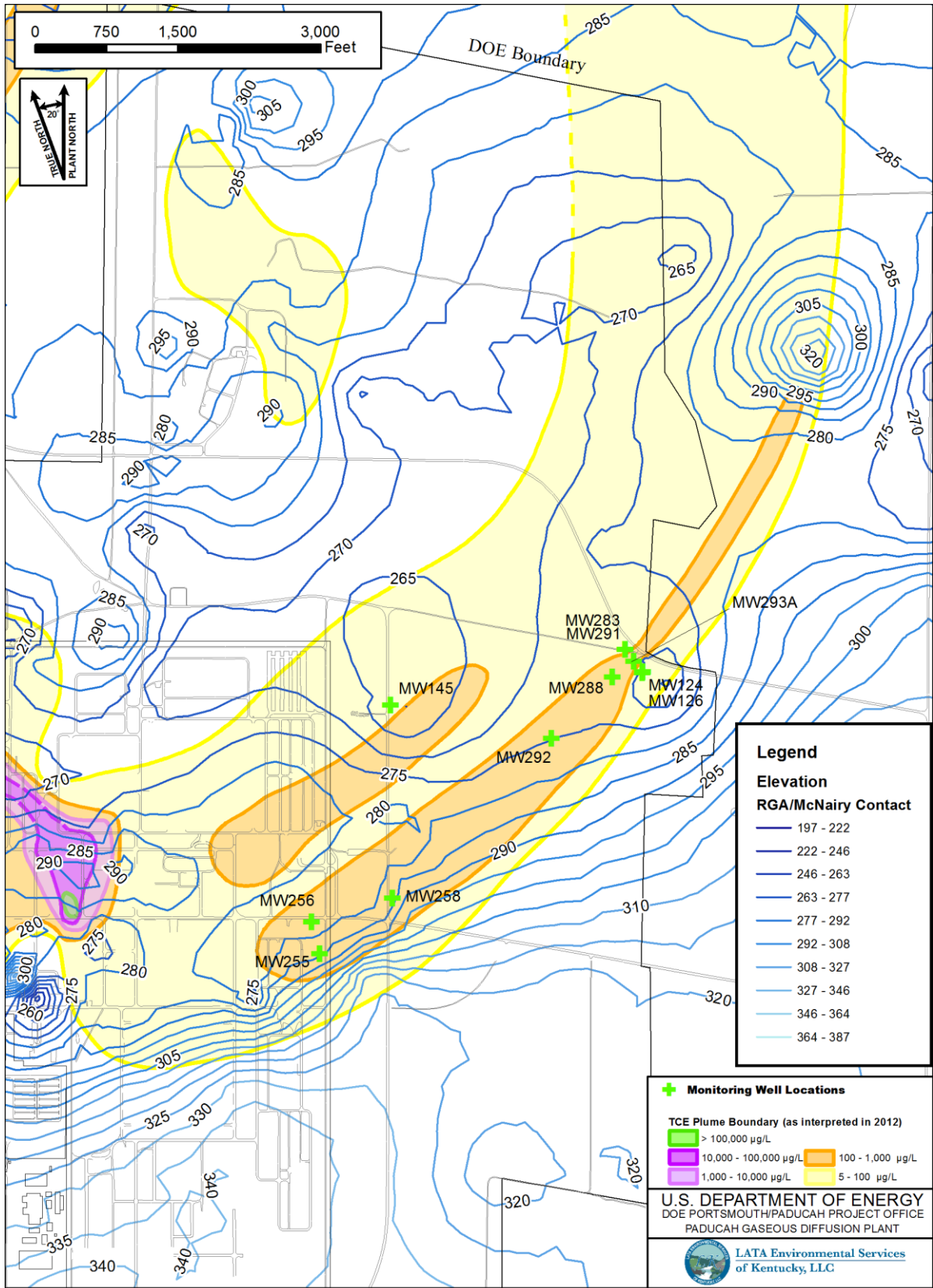
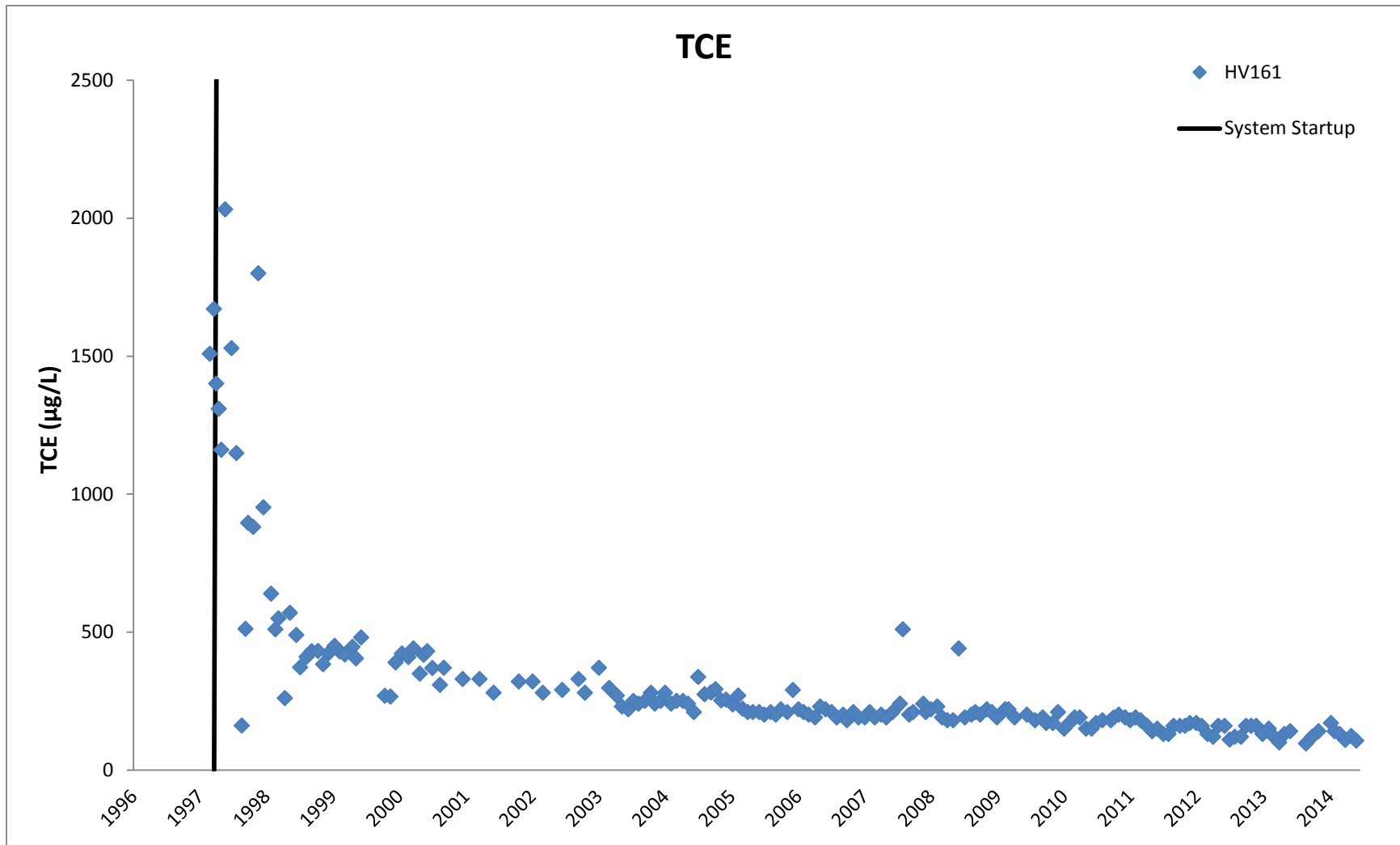


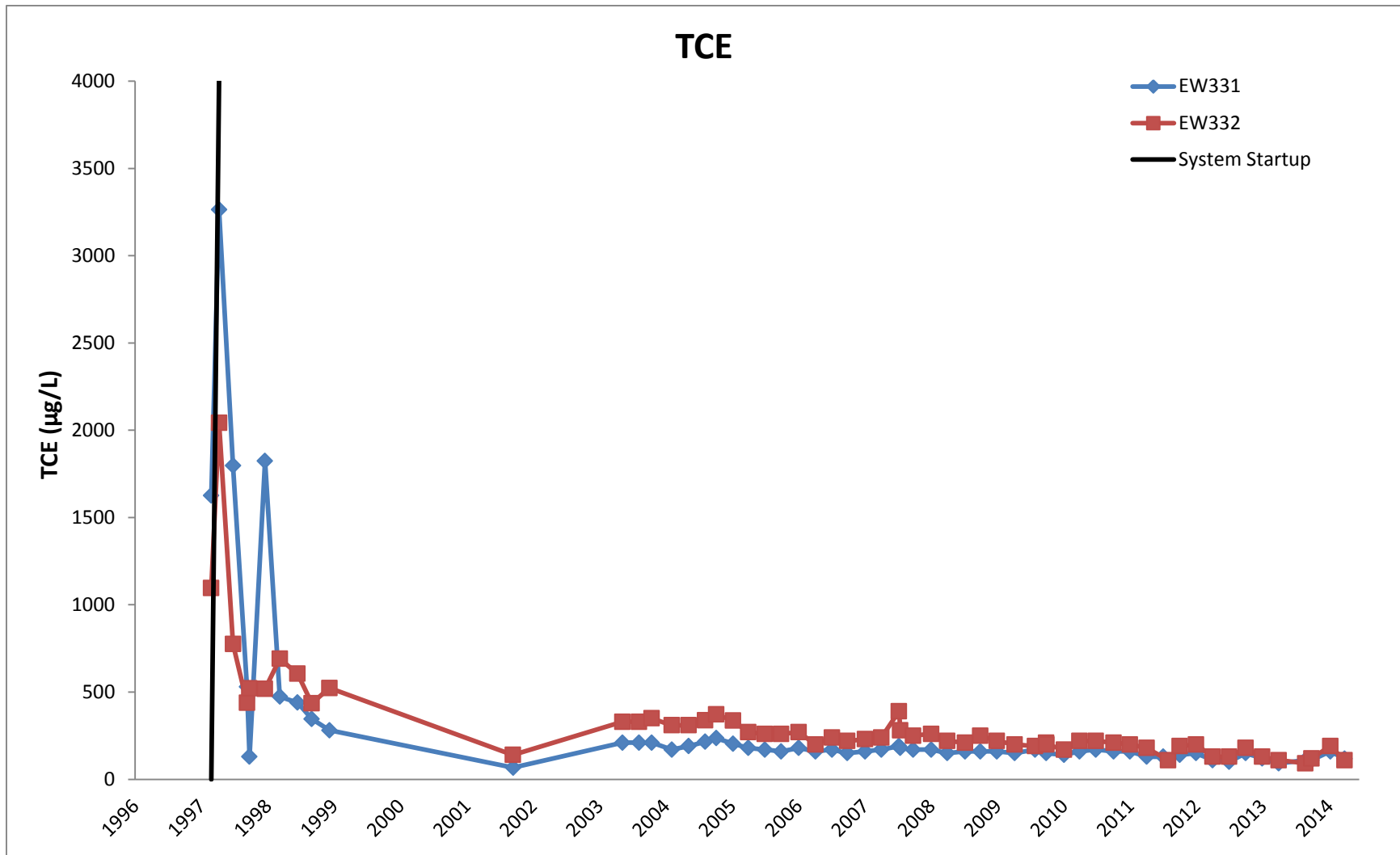
Figure B.2. Northeast Plume with McNairy Topography





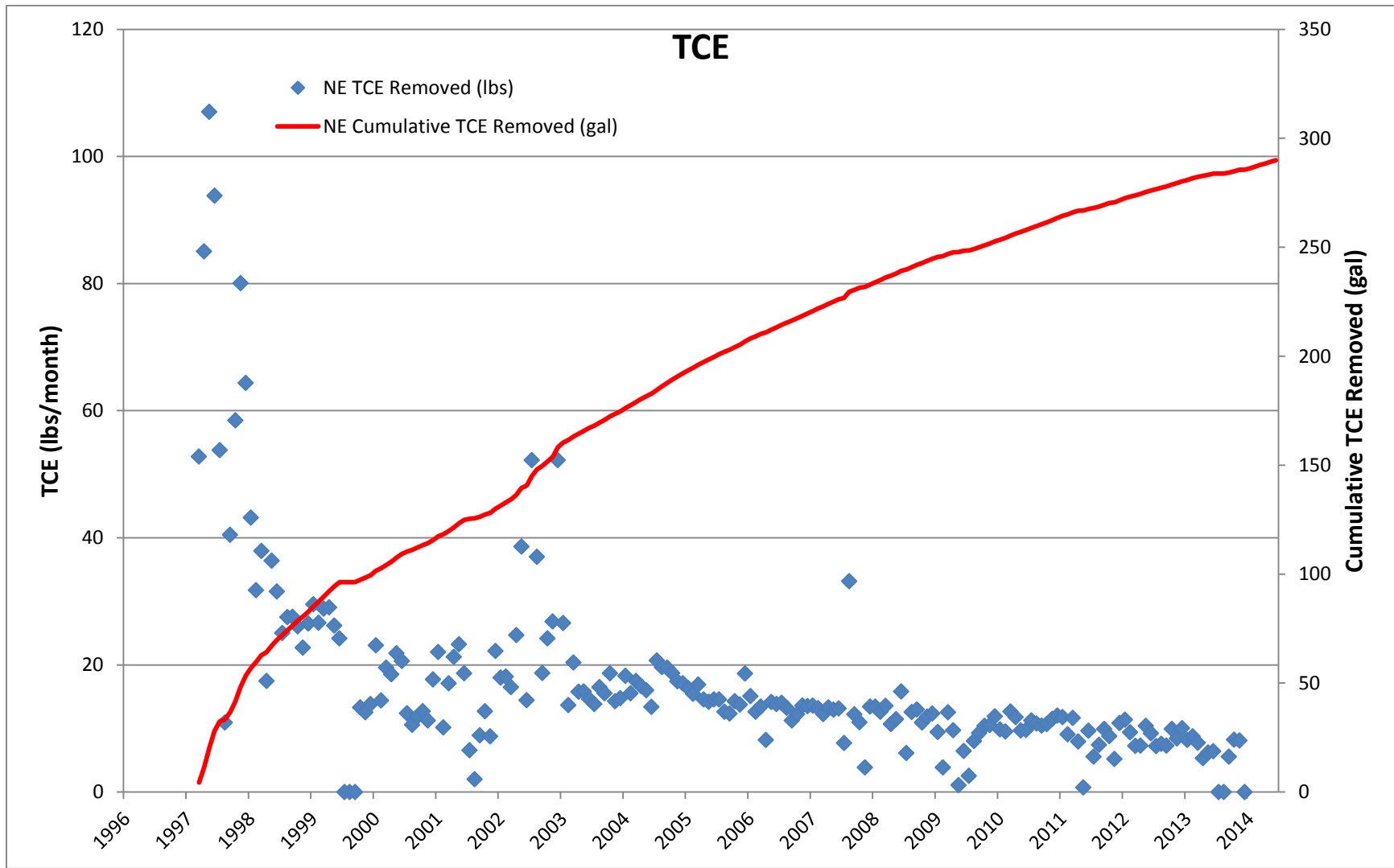
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.3. Northeast Plume Containment System Influent TCE Concentrations**



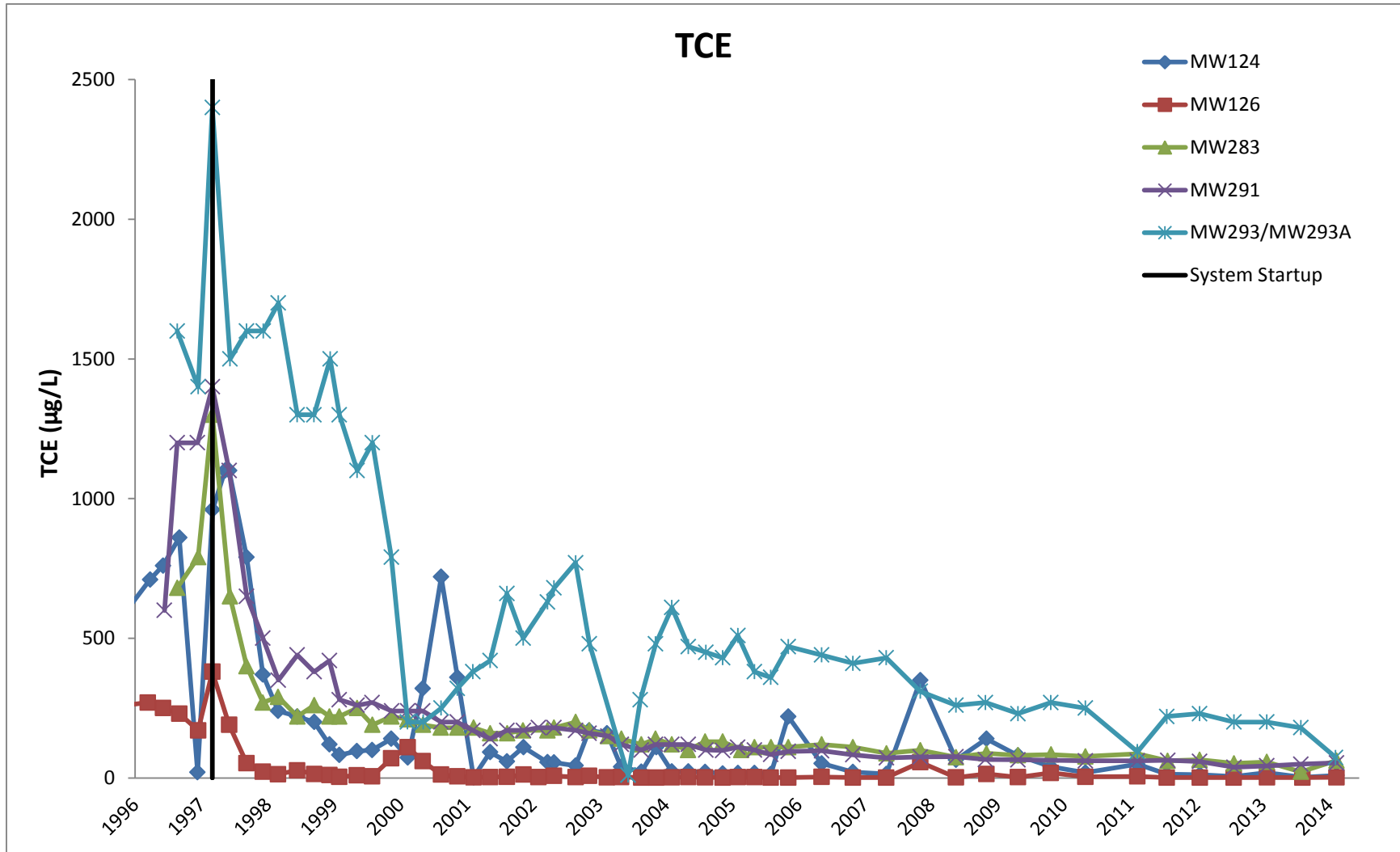
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.4. Northeast Plume—TCE Concentrations in Extraction Wells**



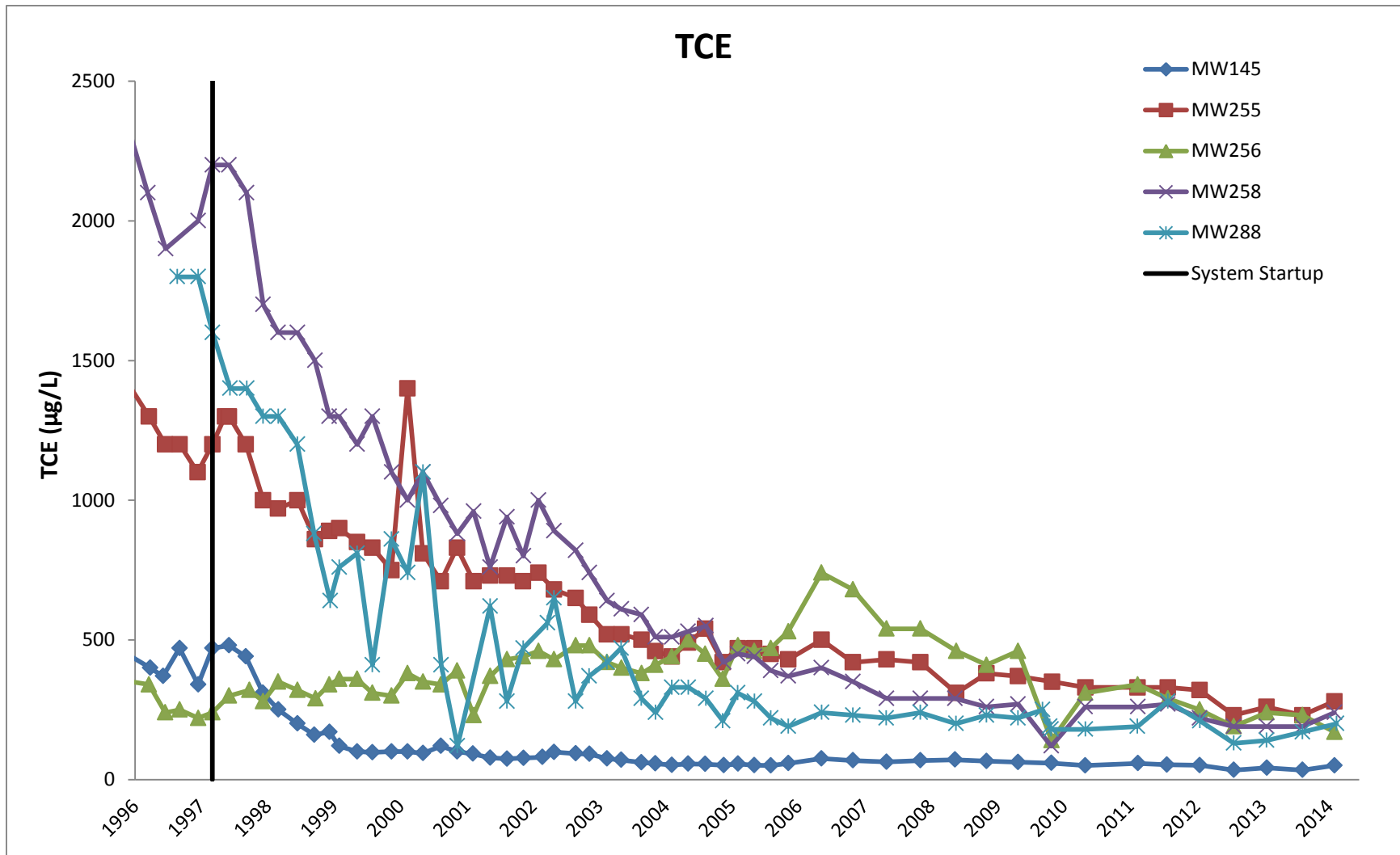
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.5. Northeast Plume Containment System TCE Removed



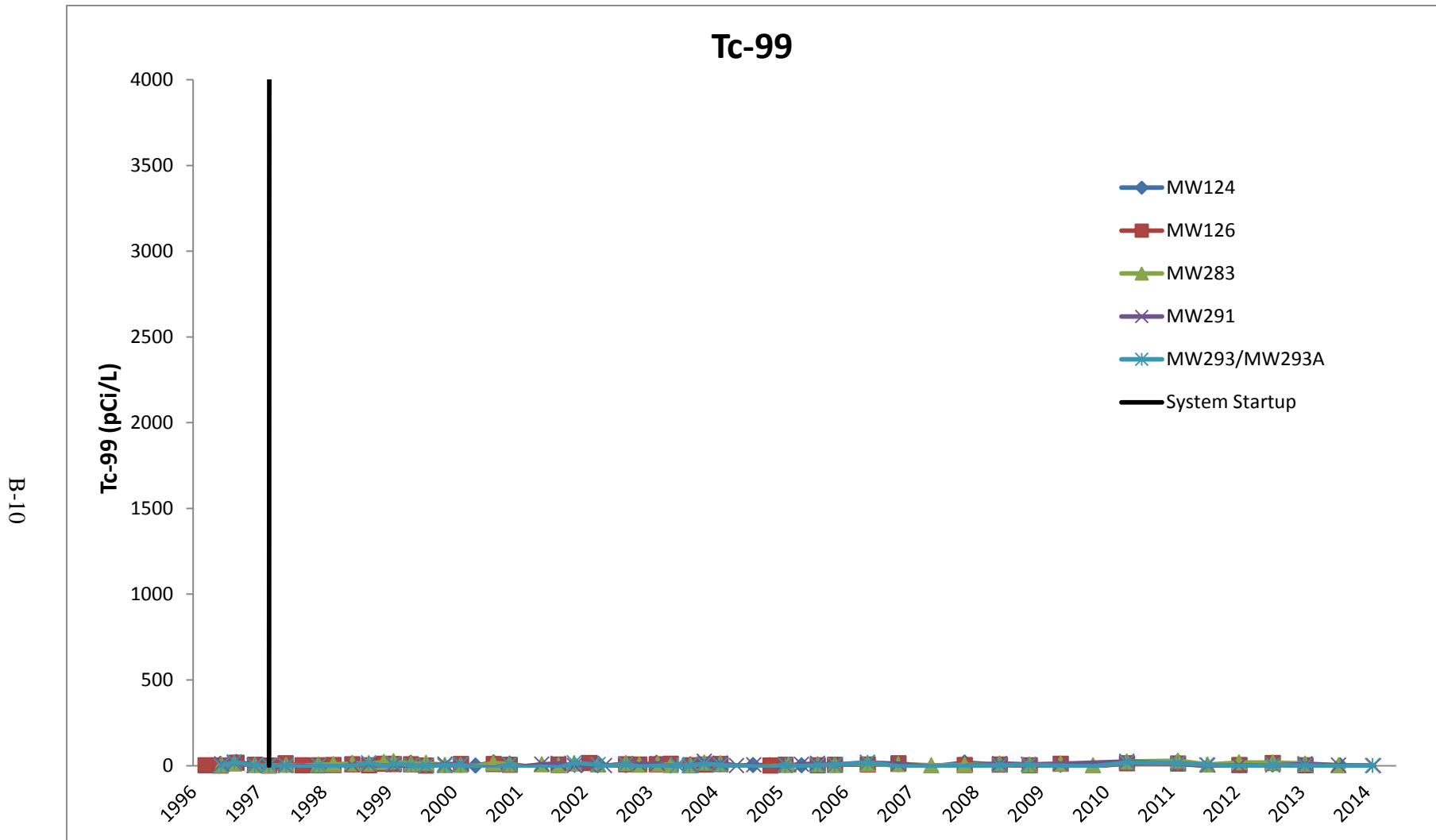
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.6. Northeast Plume—TCE Concentrations in Downgradient Wells**



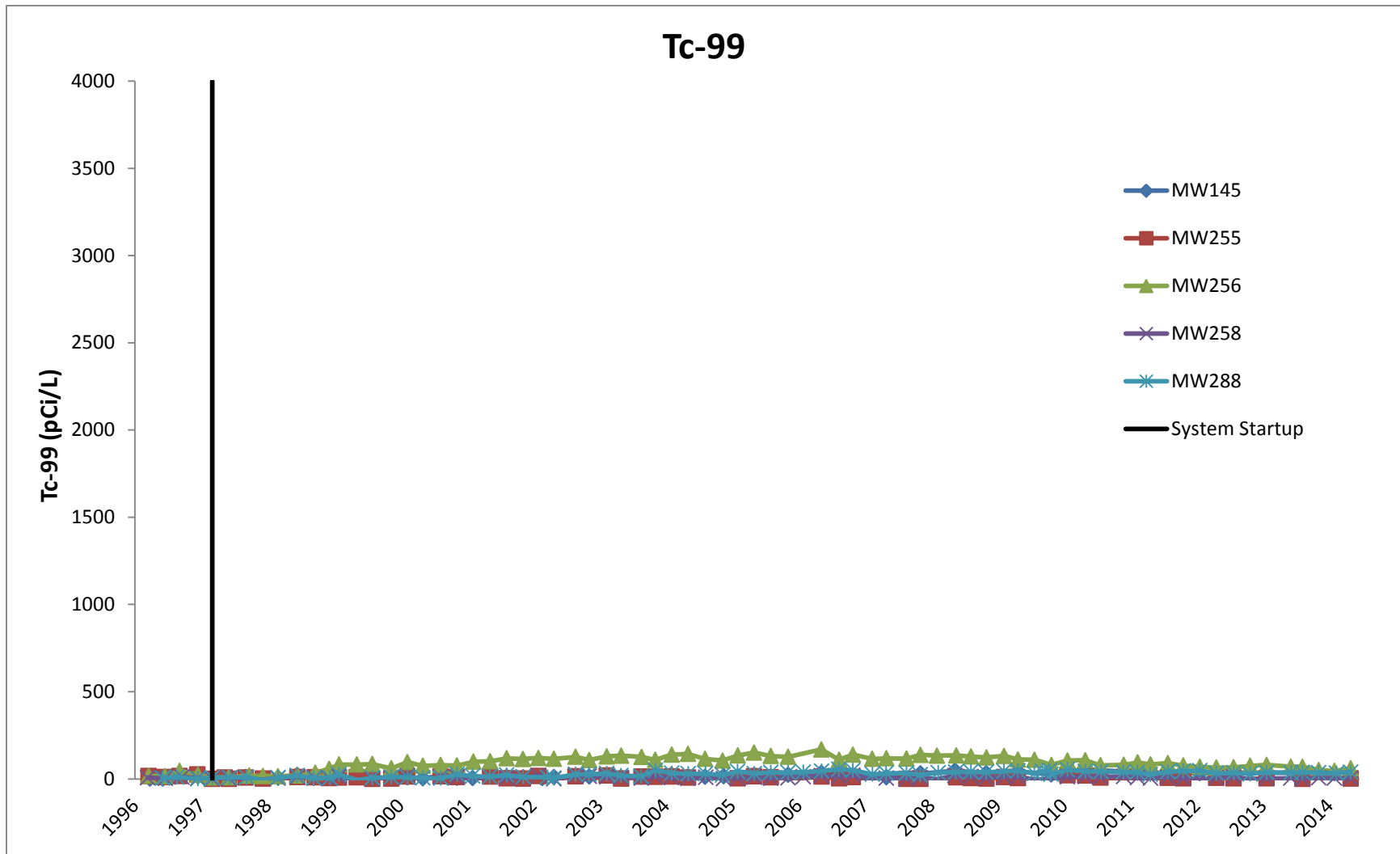
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.7. Northeast Plume—TCE Concentrations in Upgradient Wells



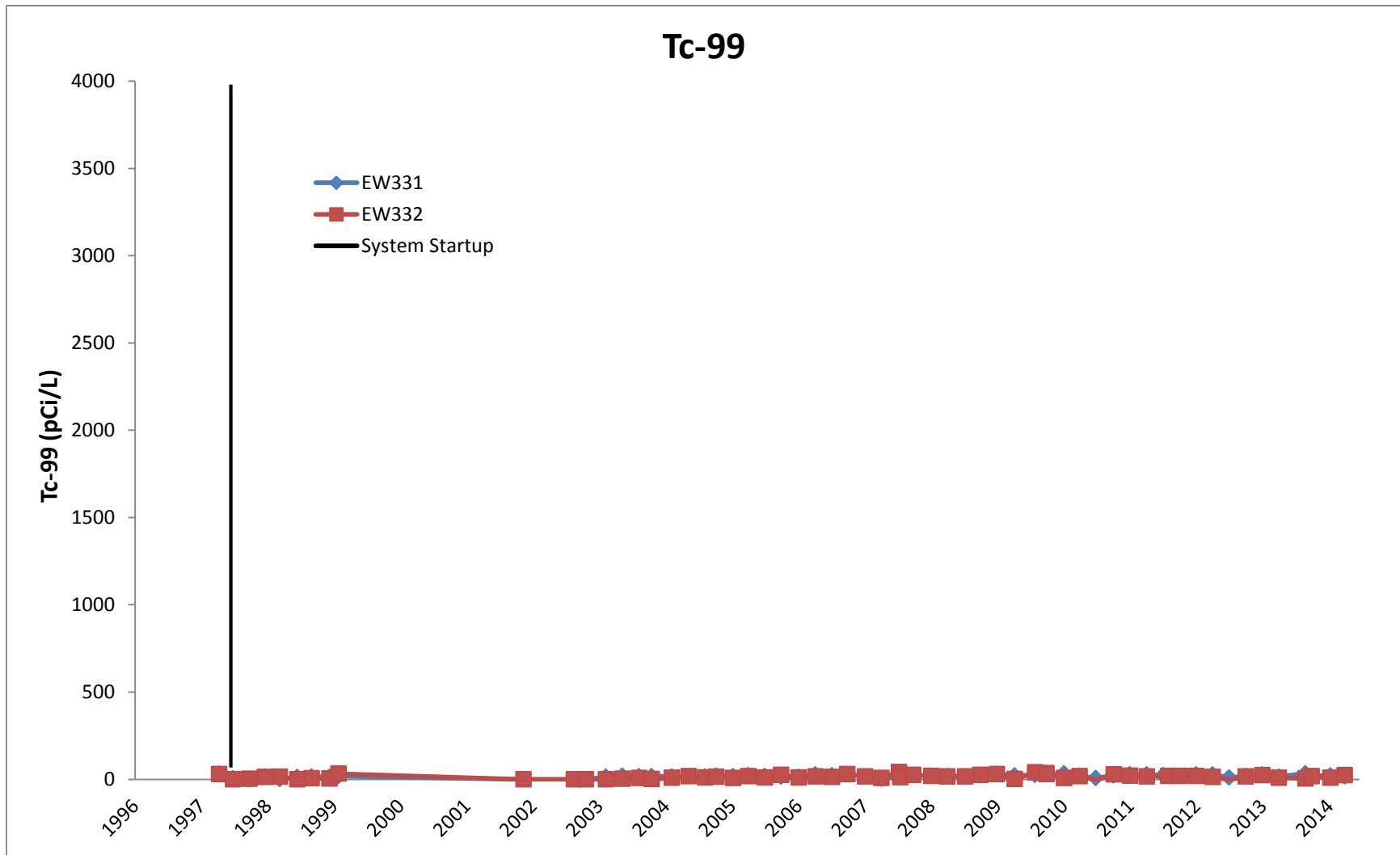
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.8. Northeast Plume—Tc-99 Activities in Downgradient Wells**



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

Figure B.9. Northeast Plume—Tc-99 Activities in Upgradient Wells



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

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



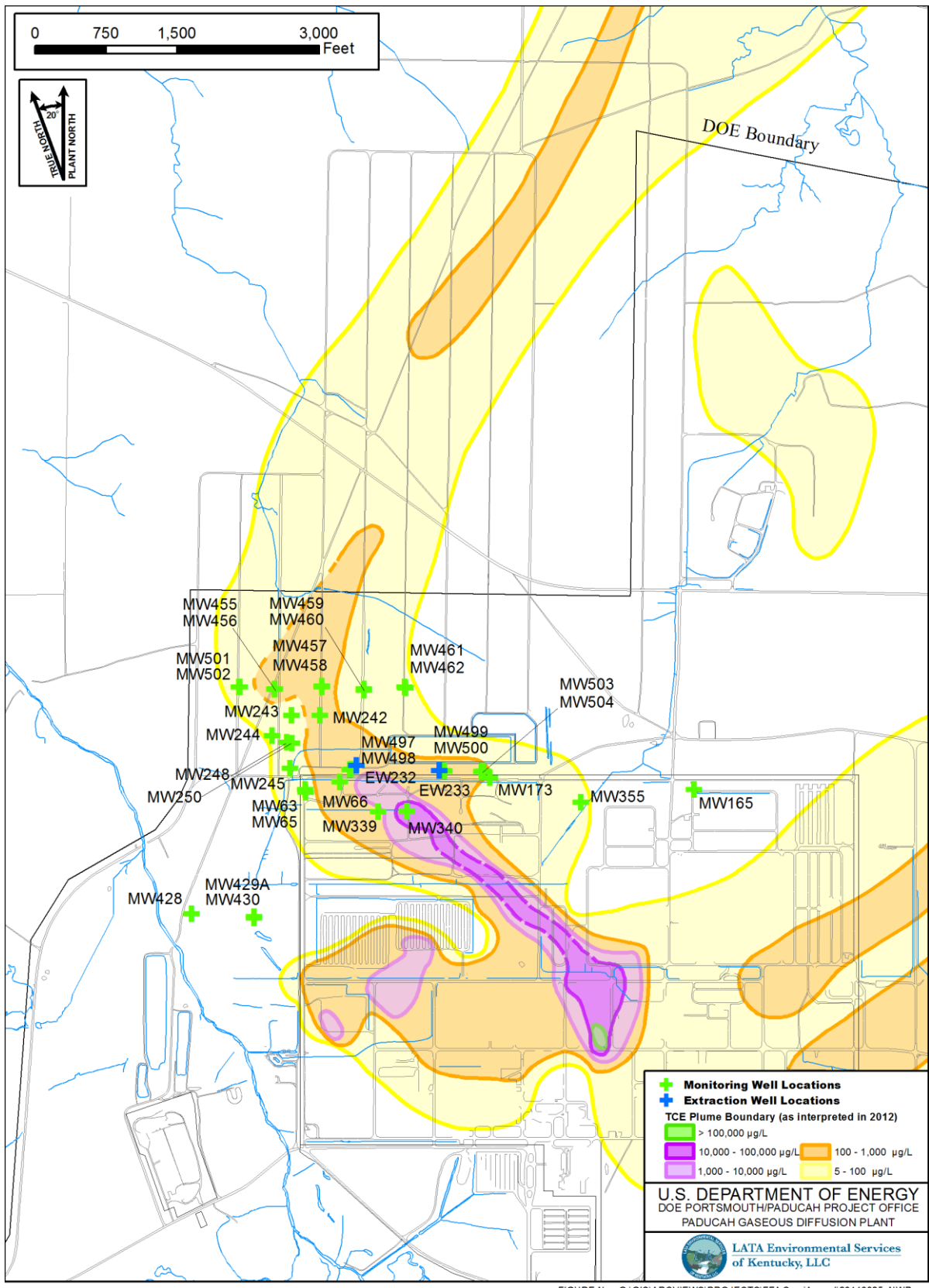


FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual\20140325\_NWP.mxd  
 DATE 3/25/2014

Figure B.11. Northwest Plume Groundwater Wells

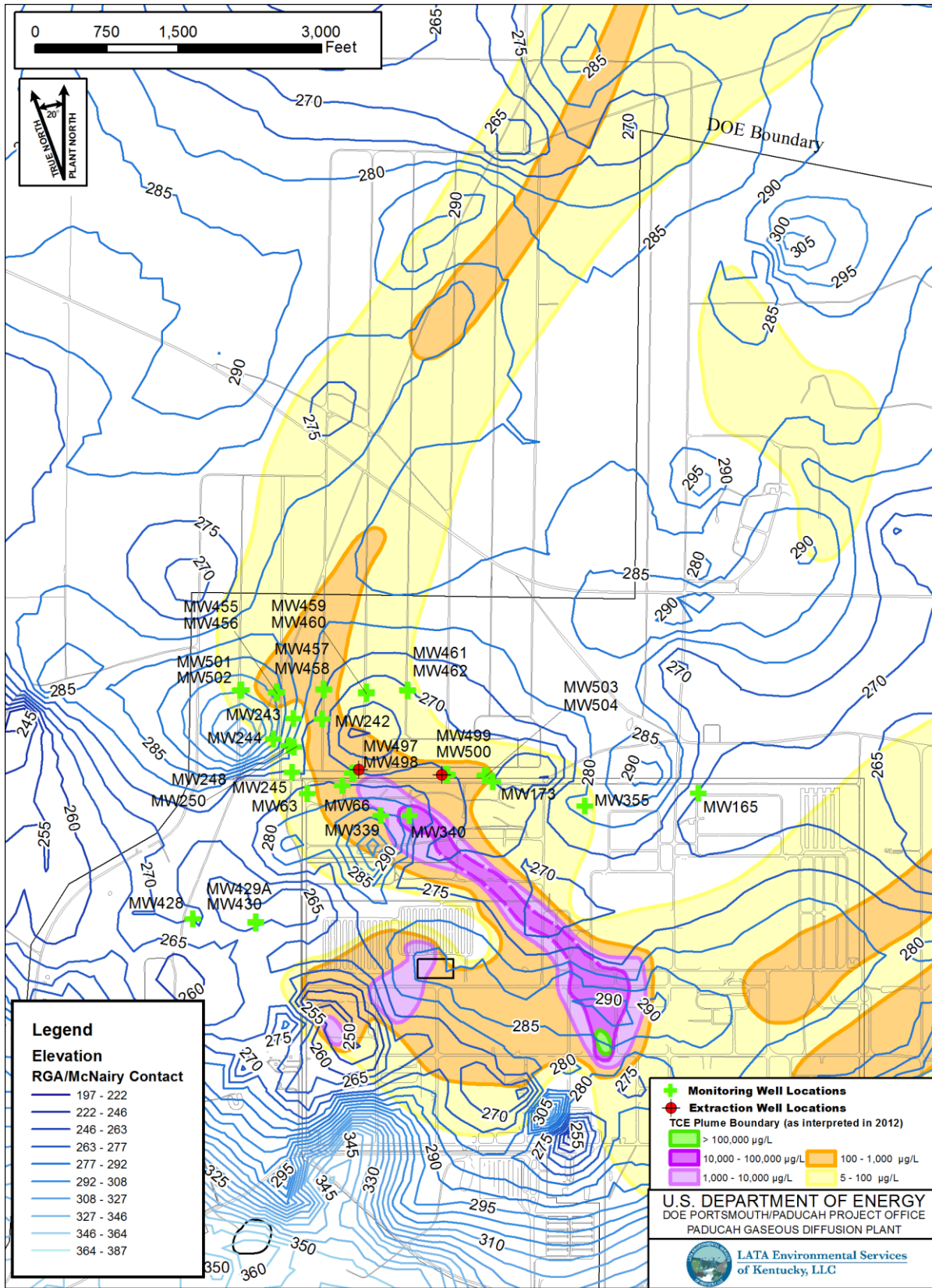
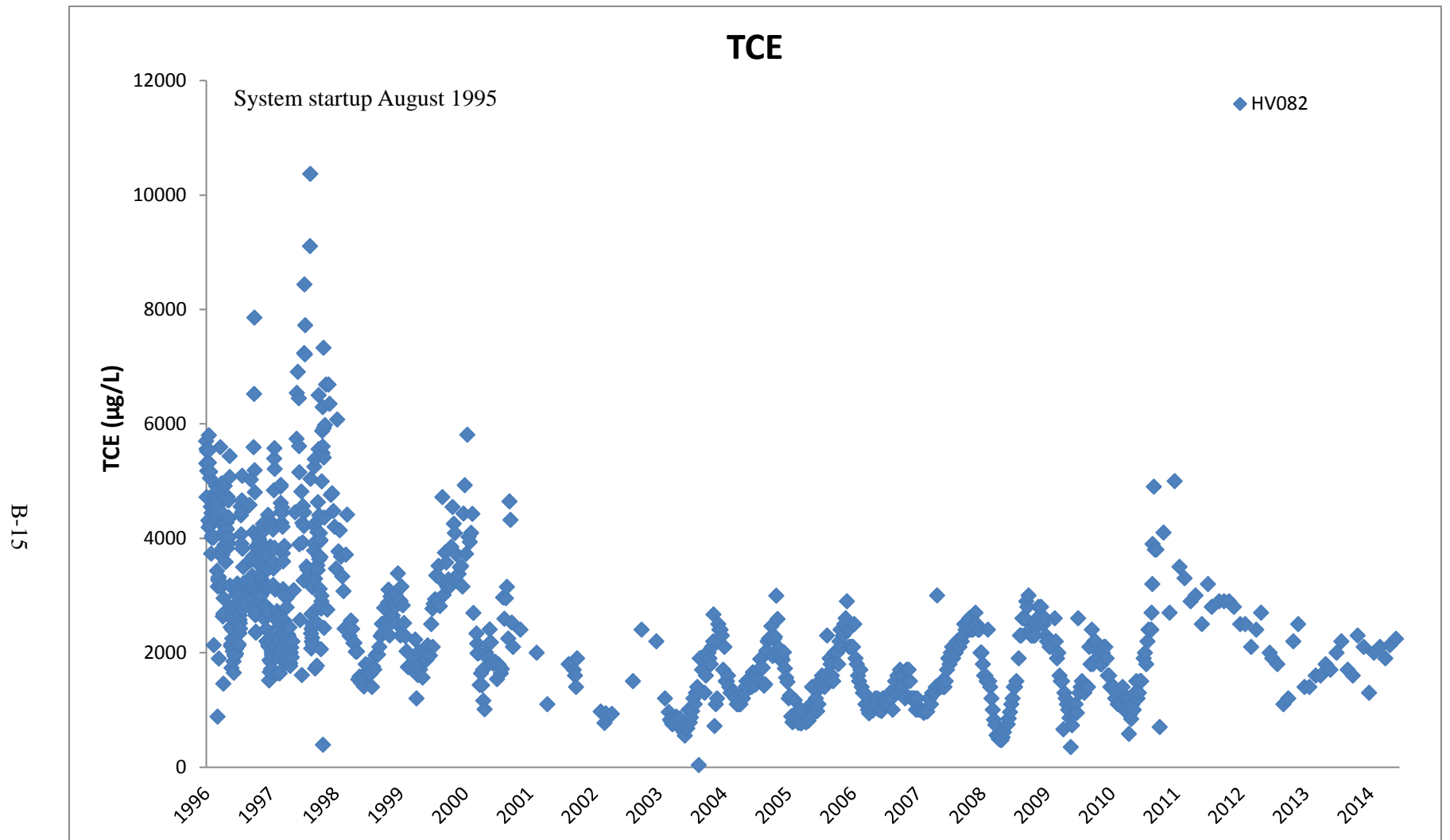


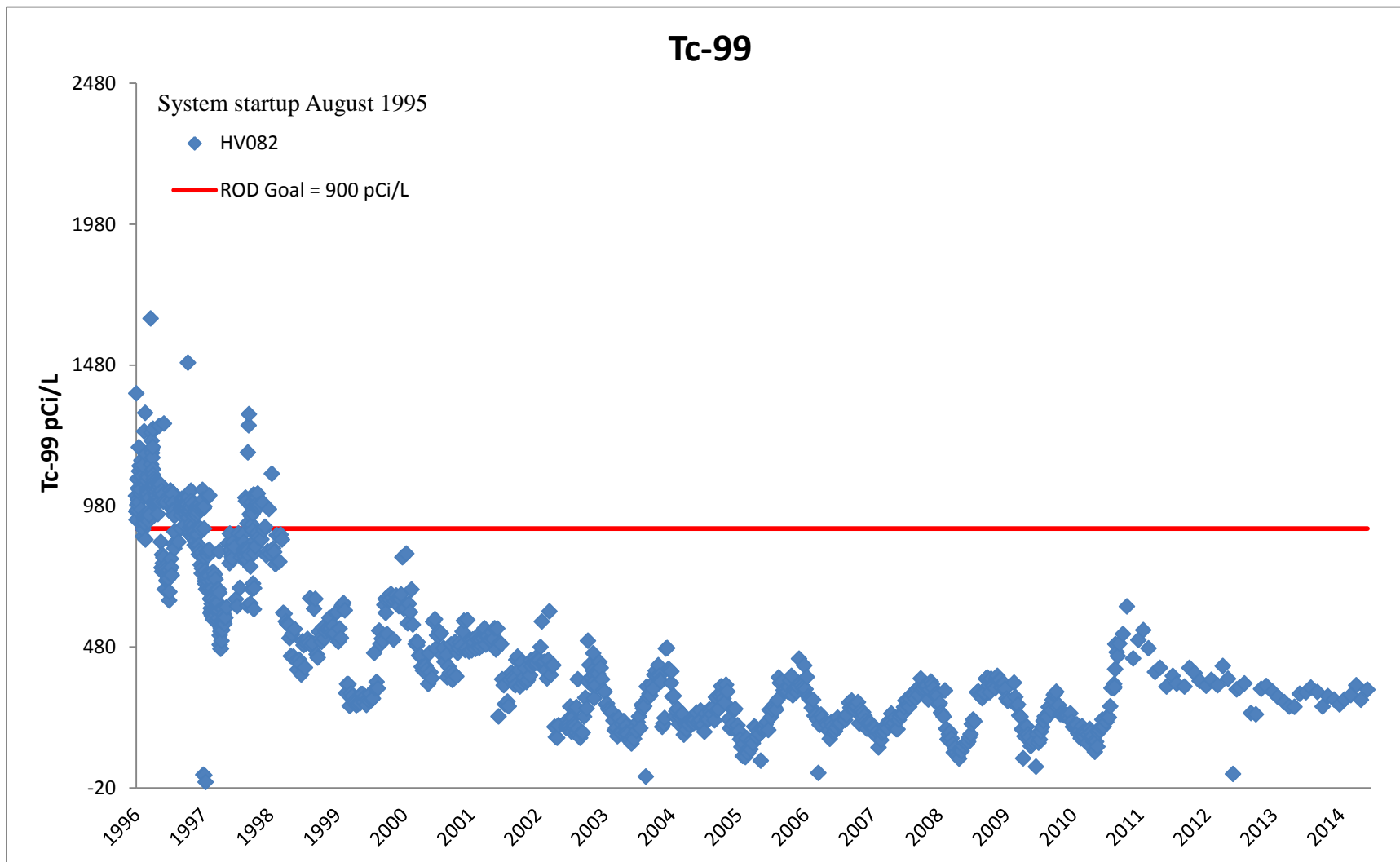
FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual\20140325\_NWP\_RGA.mxd  
DATE 3/25/2014

Figure B.12. Northwest Plume with Top of McNairy Topography



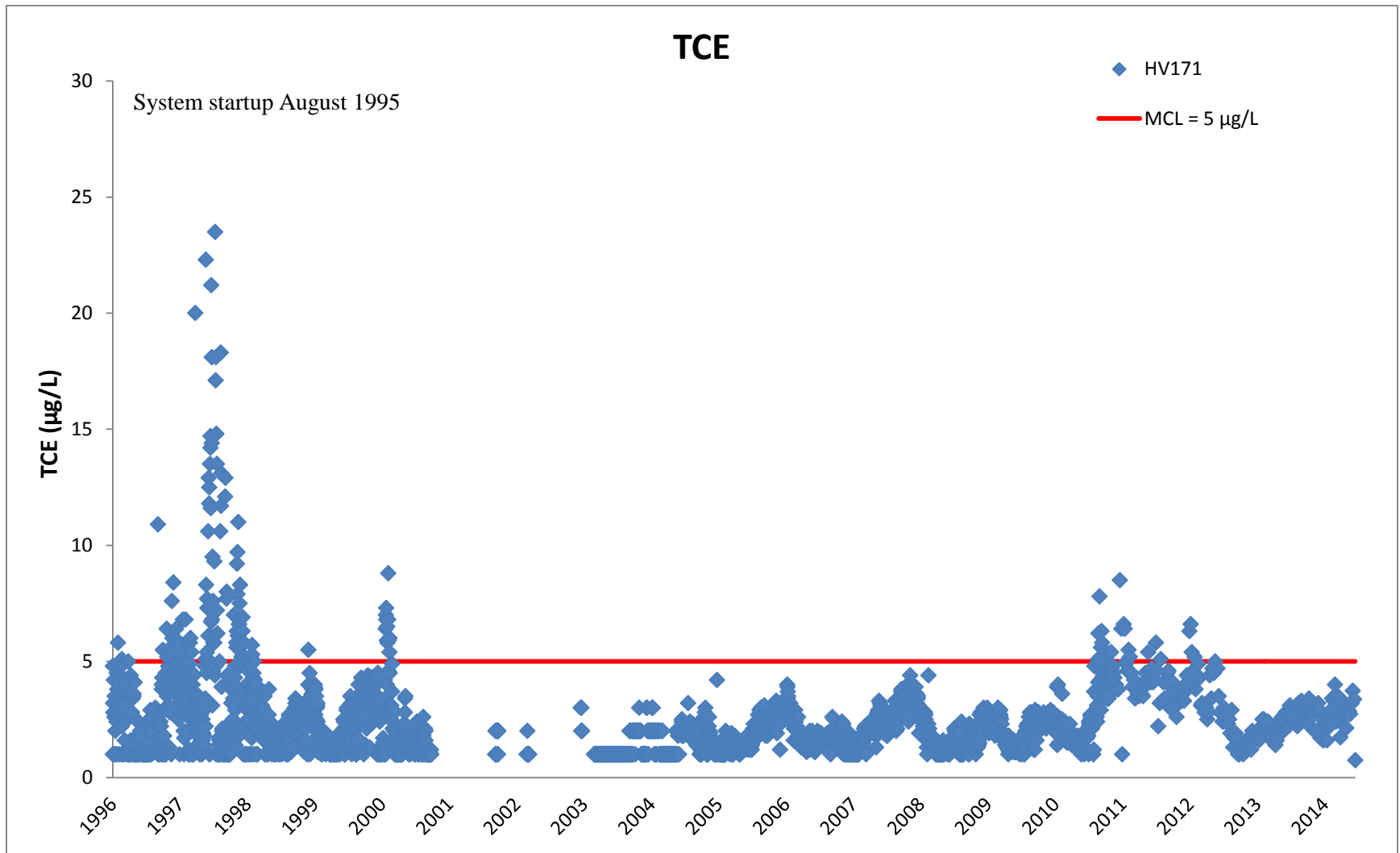
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.13. Northwest Plume Groundwater System Influent TCE Concentrations**



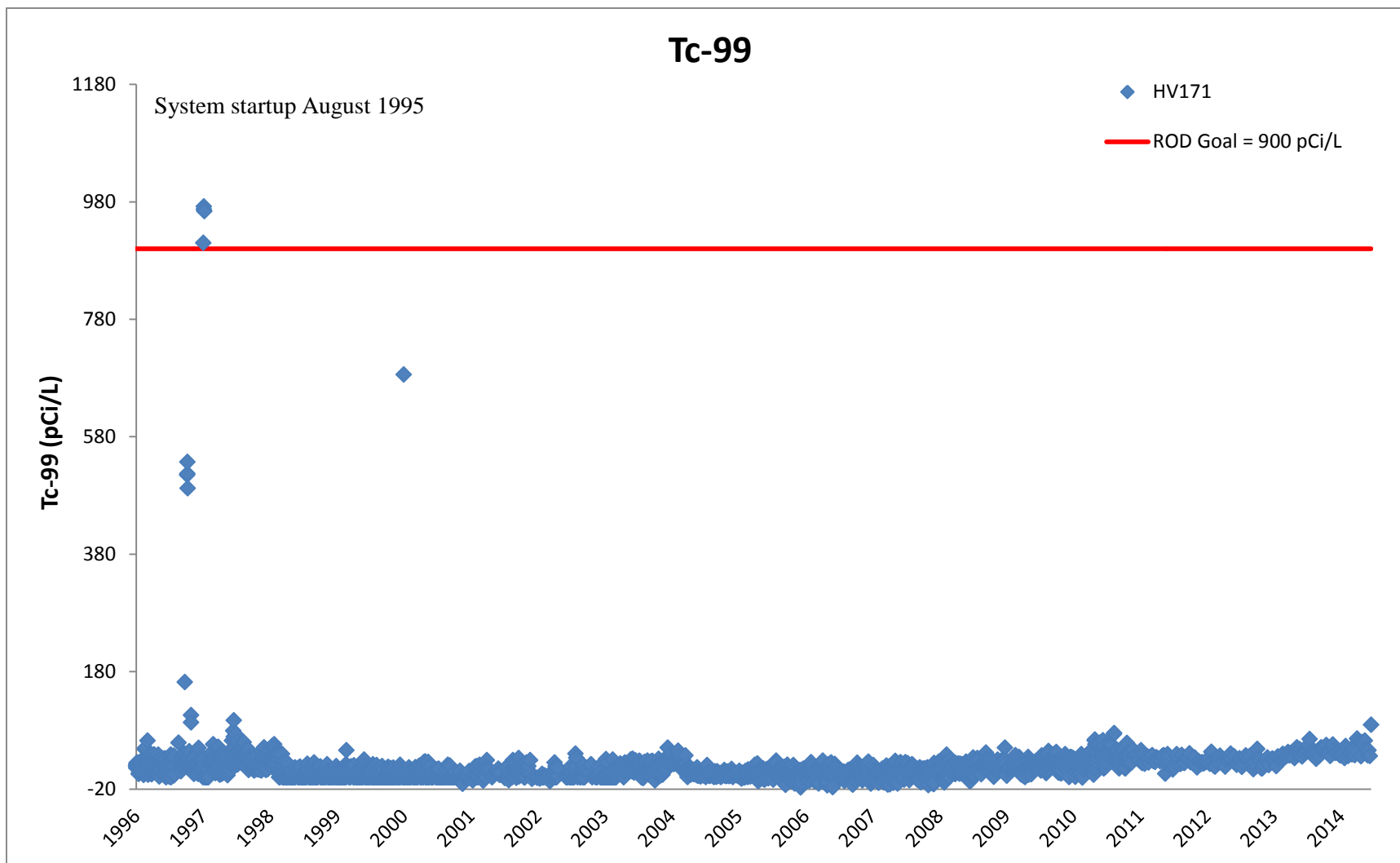
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.14. Northwest Plume Groundwater System Influent Tc-99 Activities**



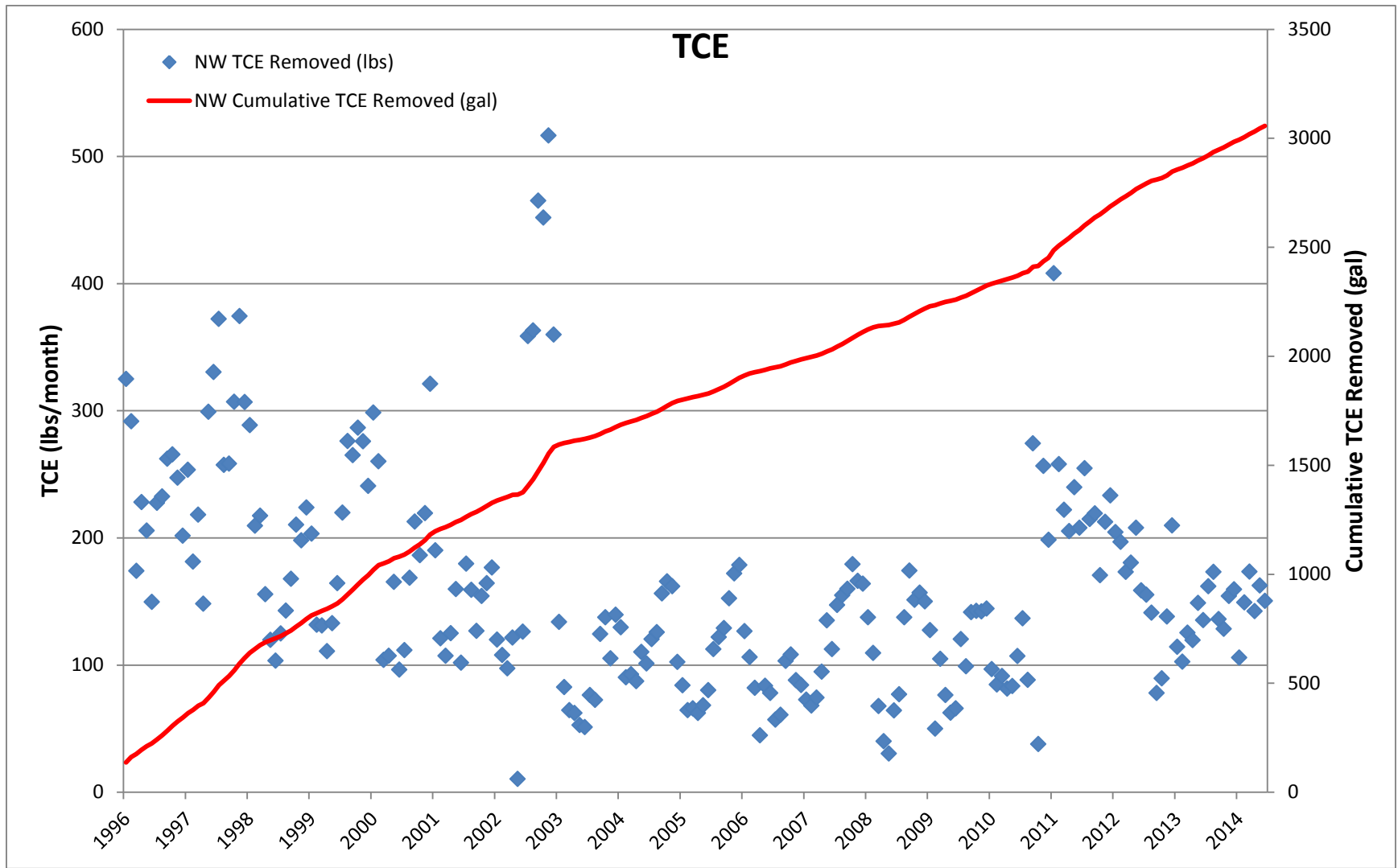
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.15. Northwest Plume Groundwater System Effluent TCE Concentrations**



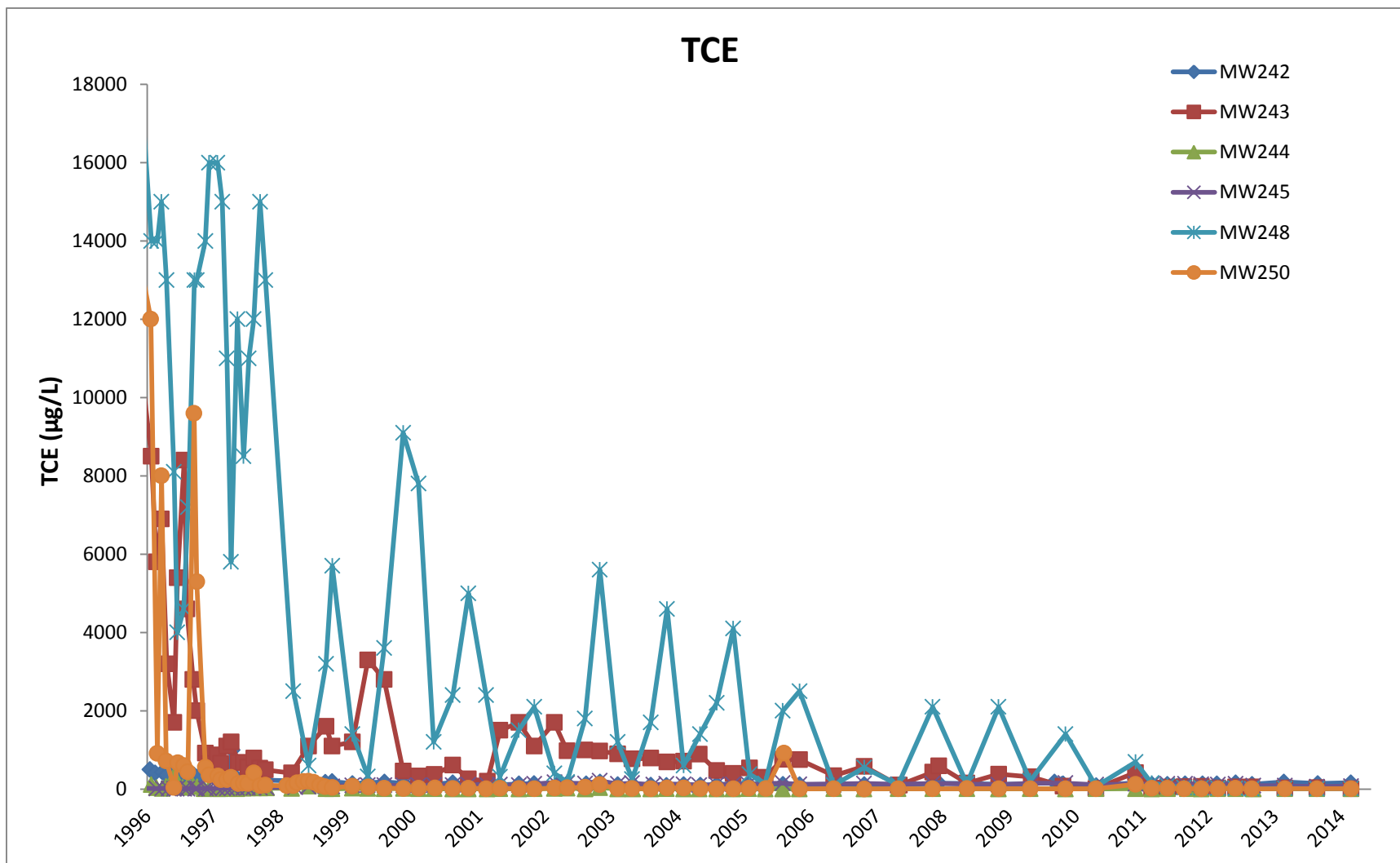
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.16. Northwest Plume Groundwater System Effluent Tc-99 Activities**



NOTE: Data rejected by validation or assessment are included on the graph.

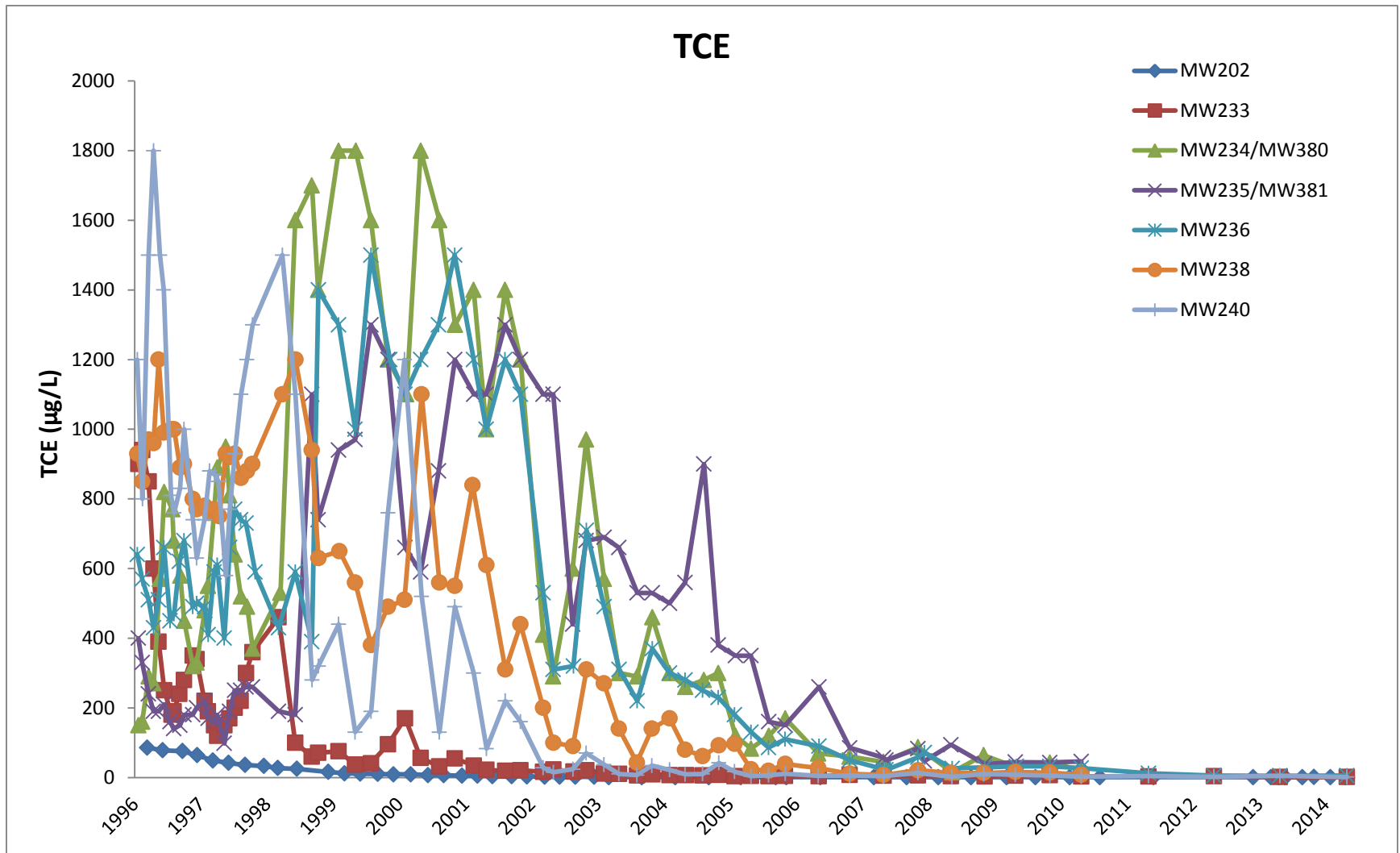
Figure B.17. Northwest Plume Groundwater System TCE Removed



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

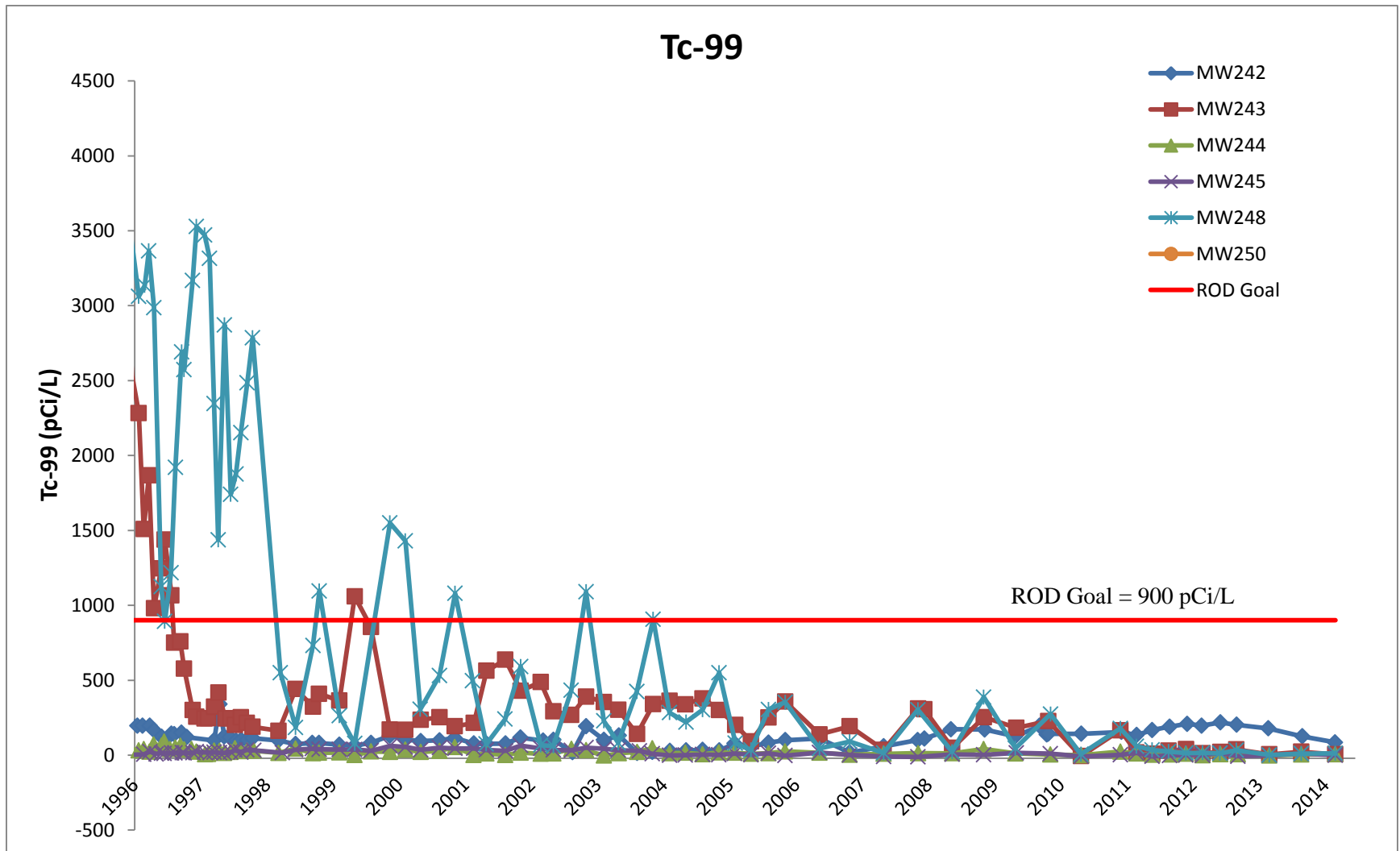
**Figure B.18. Northwest Plume—South Well Field TCE Concentrations**





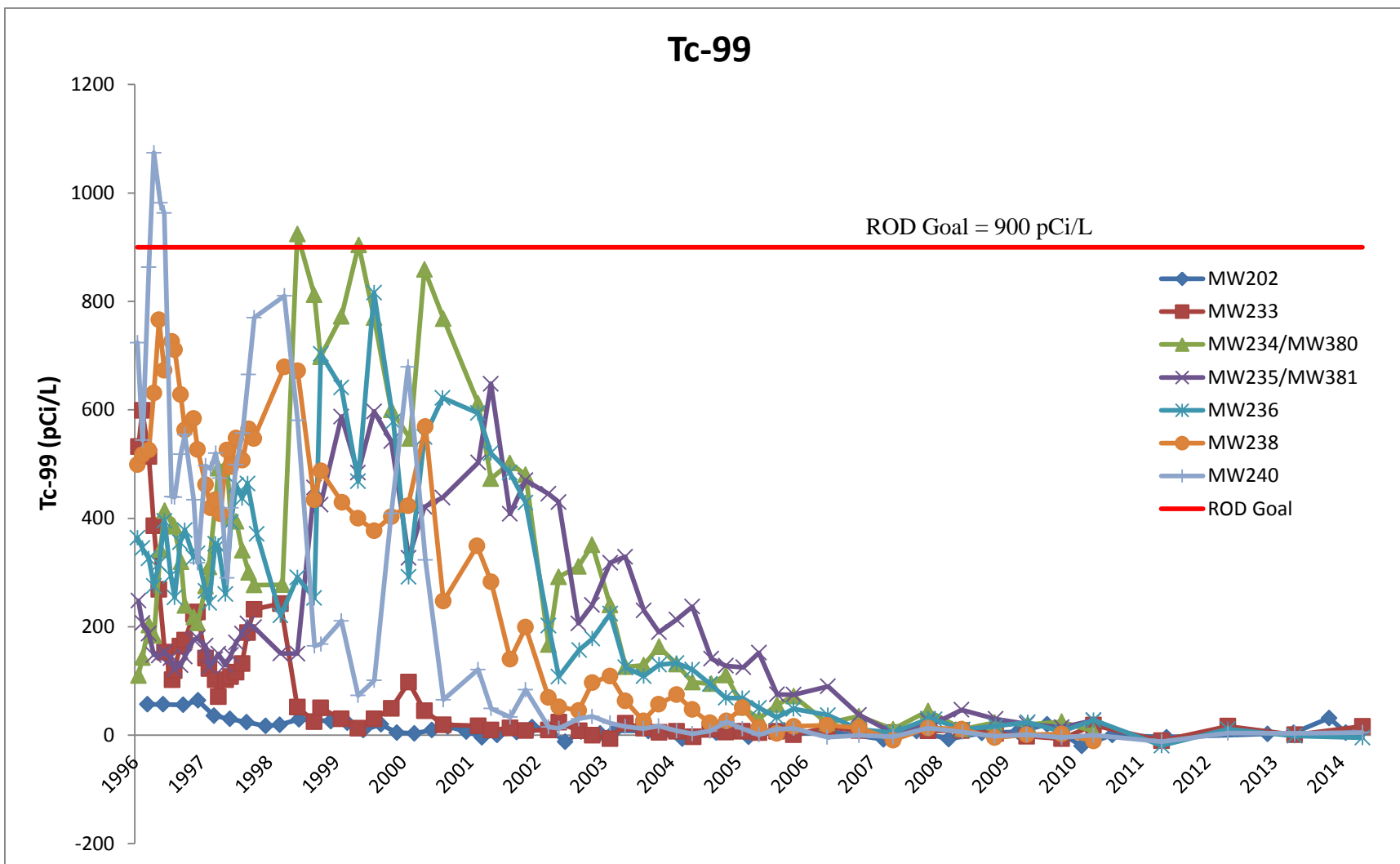
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.19. Northwest Plume—North Well Field TCE Concentrations**



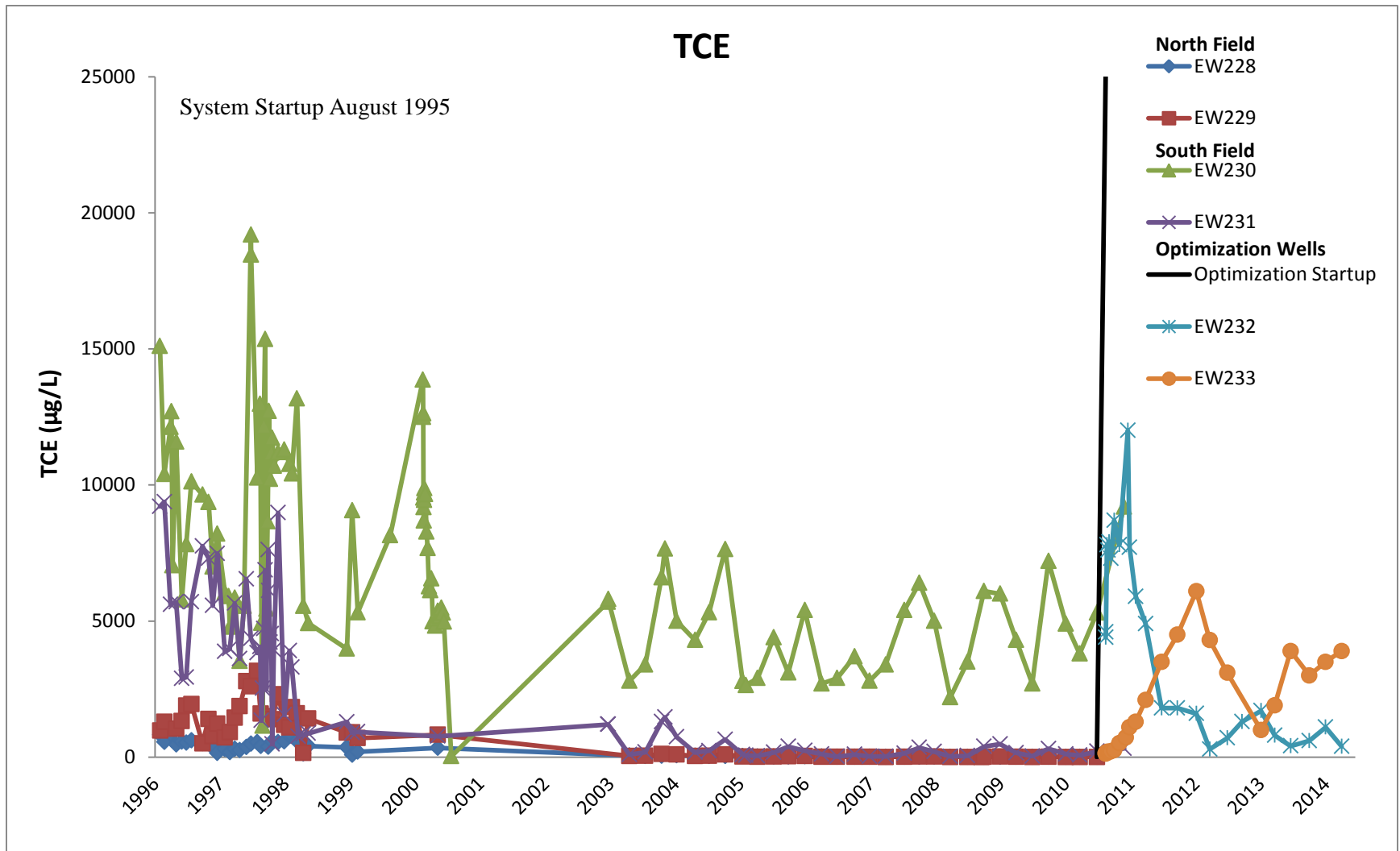
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.20. Northwest Plume—South Well Field Tc-99 Activities



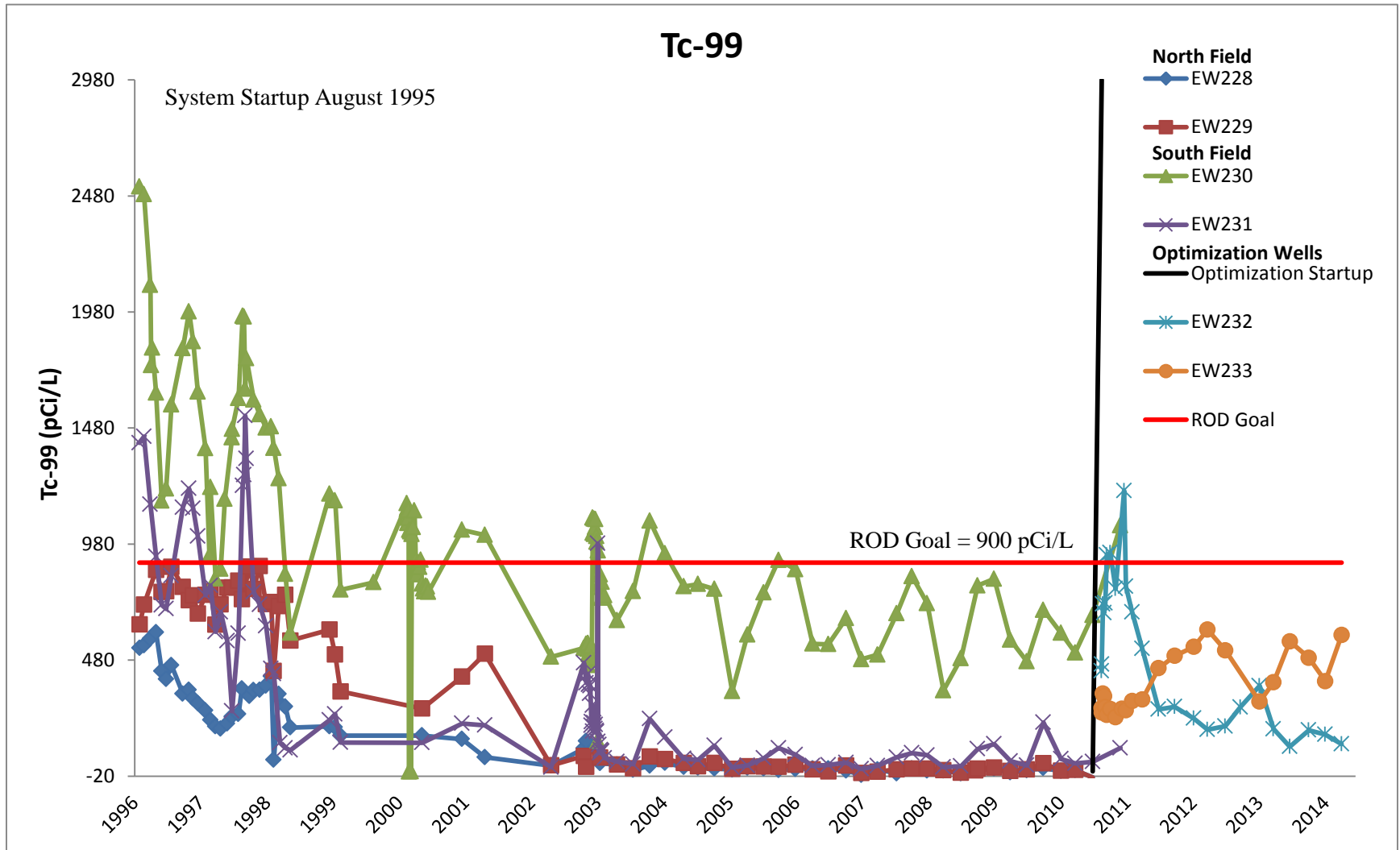
NOTE: Data rejected by validation or assessment have not been graphed.

**Figure B.21. Northwest Plume—North Well Field Tc-99 Activities**



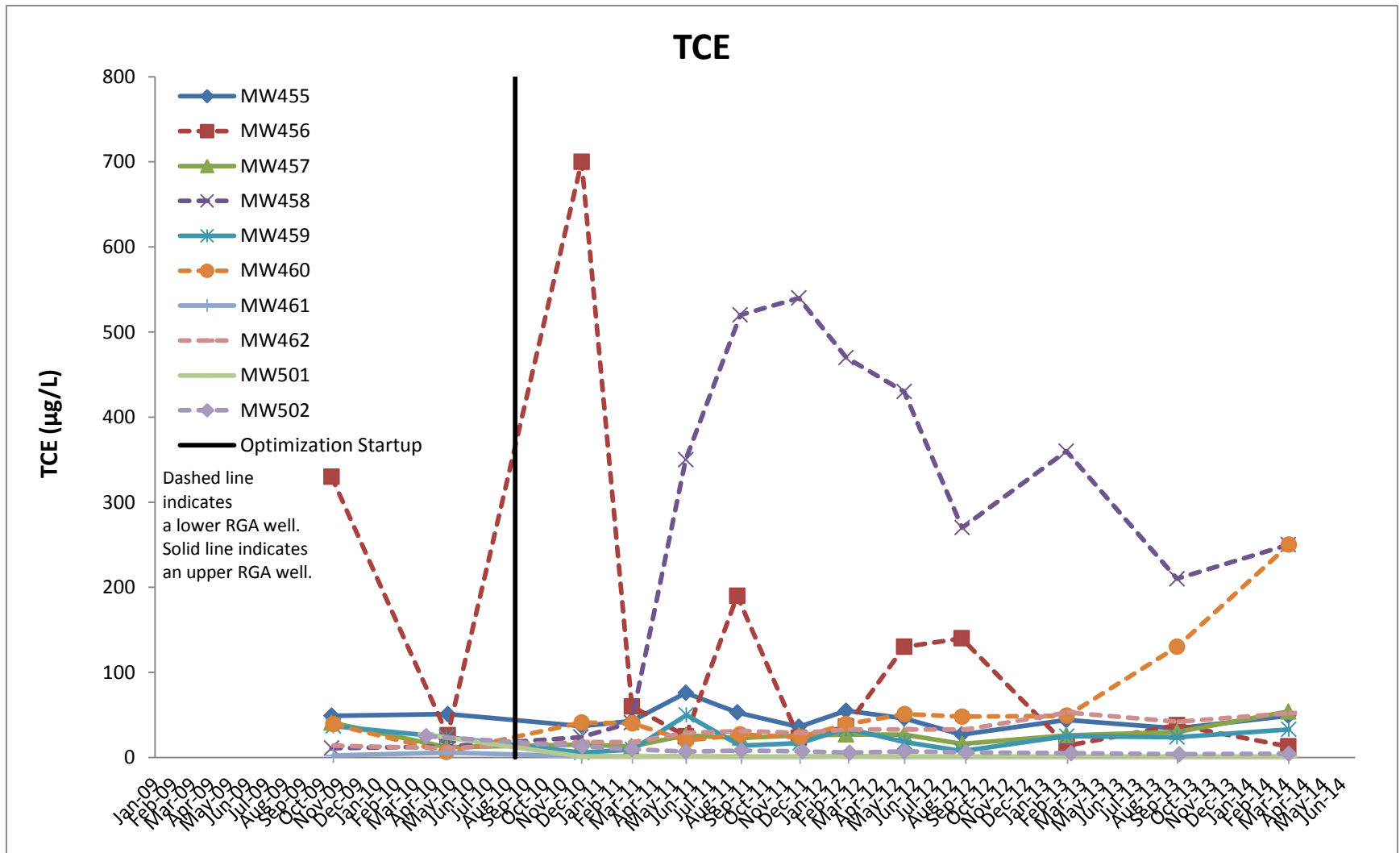
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.22. Northwest Plume—TCE Concentrations in Extraction Wells



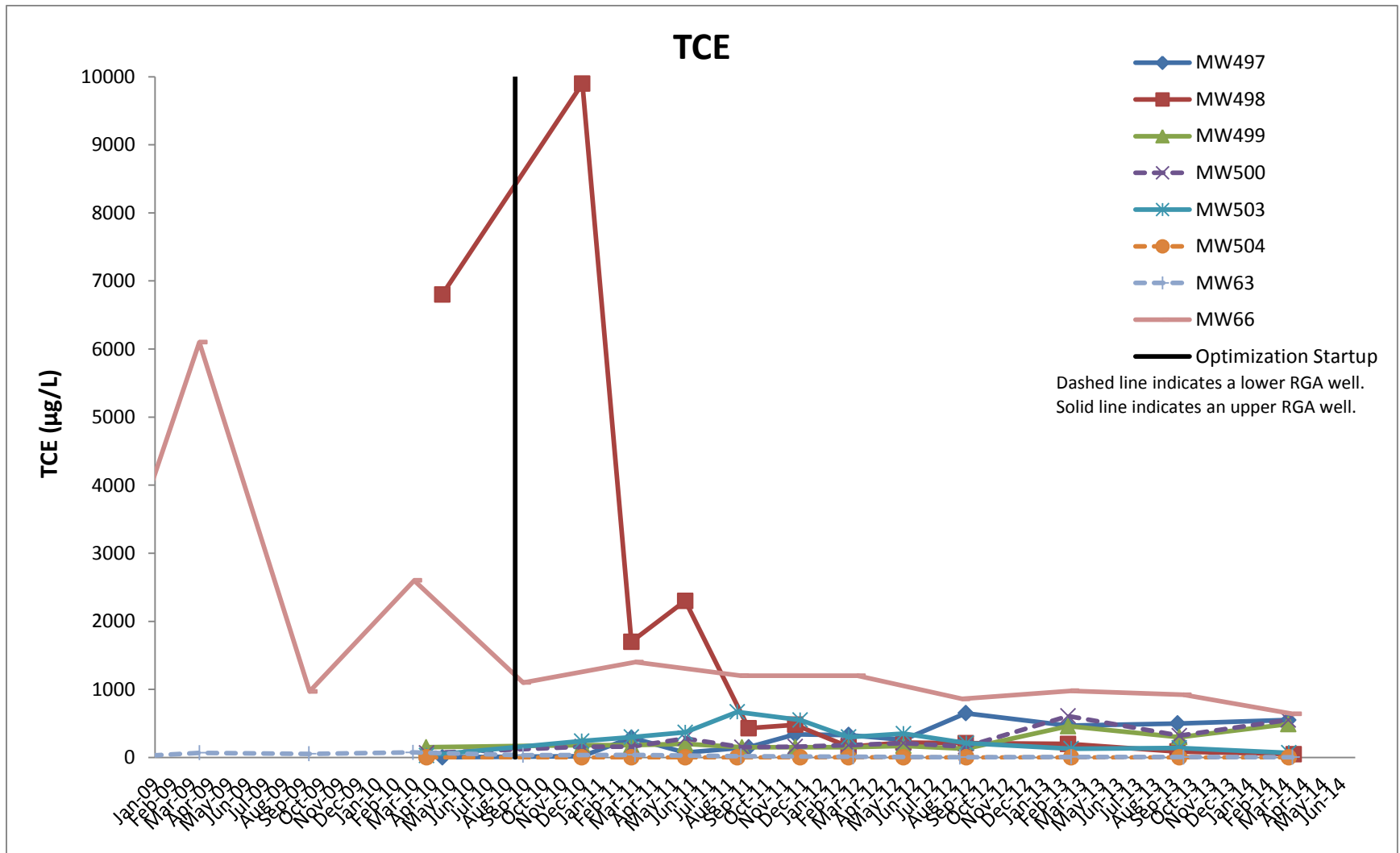
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.23. Northwest Plume—Tc-99 Activities in Extraction Wells



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

Figure B.24. Northwest Plume—New Well Field TCE Concentrations



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

Figure B.25. Northwest Plume—Additional Well Field TCE Concentrations

**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 7/29/2014**

**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
9/3/2013	6.3	< 1					C13246018001
9/10/2013	10	< 5					C13253015001
9/10/2013	9.4	< 5					C13253015002
9/13/2013				< 1		< 1	QTXC0019-13
9/16/2013	9	< 5					C13259014001
9/23/2013	8.3	< 5					C13266024001
10/3/2013			16.2				C13276015001
10/3/2013	9.4	< 1					C13276032002
10/7/2013	6.6	< 1					C13280028001
10/14/2013	3.8	< 1					C13287017001
10/21/2013	< 1	< 1					C13294018001
10/25/2013				< 1		< 1	QTXC00110-13
10/28/2013	2.9	< 5					C13301021001
11/4/2013			20.2				C13308024001
11/4/2013	3	< 5					C13308025001
11/11/2013	3.4	< 5					C13315031002
11/11/2013	3.3	< 5					C13315031001
11/20/2013	3	< 5					C13324011001
11/25/2013	< 1	< 1					C13329036001
12/2/2013	< 1	< 1					C13336090001
1/21/2014			21.2				C14021027001

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**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 7/29/2014**

**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
1/21/2014			19.1				C14021027002
1/21/2014	3.7	< 1					C14021029001
1/27/2014	3.5	< 1					C14027014001
1/31/2014				< 1		< 1	QTXC0011-14
2/5/2014	< 1	< 1					C14036044001
2/10/2014	4.7	< 1					C14041021001
2/17/2014	5.7	< 1					C14048023002
2/17/2014	5.4	< 1					C14048023001
2/24/2014	4.8	< 1					C14055021001
3/4/2014	4.6	< 1					C14063020001
3/10/2014	5.2	< 1					C14069033001
3/17/2014	4.8	< 1					C14076022001
3/24/2014	2.5	< 1					C14083021001
4/1/2014	2.68	< 1					345636002
4/10/2014			< 10.5				346575006
4/10/2014	3.05	< 1					346575008
4/14/2014	3.42	< 1					346699001
4/23/2014	3.48	< 1					347434001
4/28/2014	3.63	< 1					347629001
5/7/2014	4.17	< 1					348446002
5/7/2014	4.29	< 1					348446001

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**Northeast Plume CERCLA Outfall Monitoring**

**Water Quality Records for**

**Sample Date Range: 9/3/2013 - 7/29/2014**

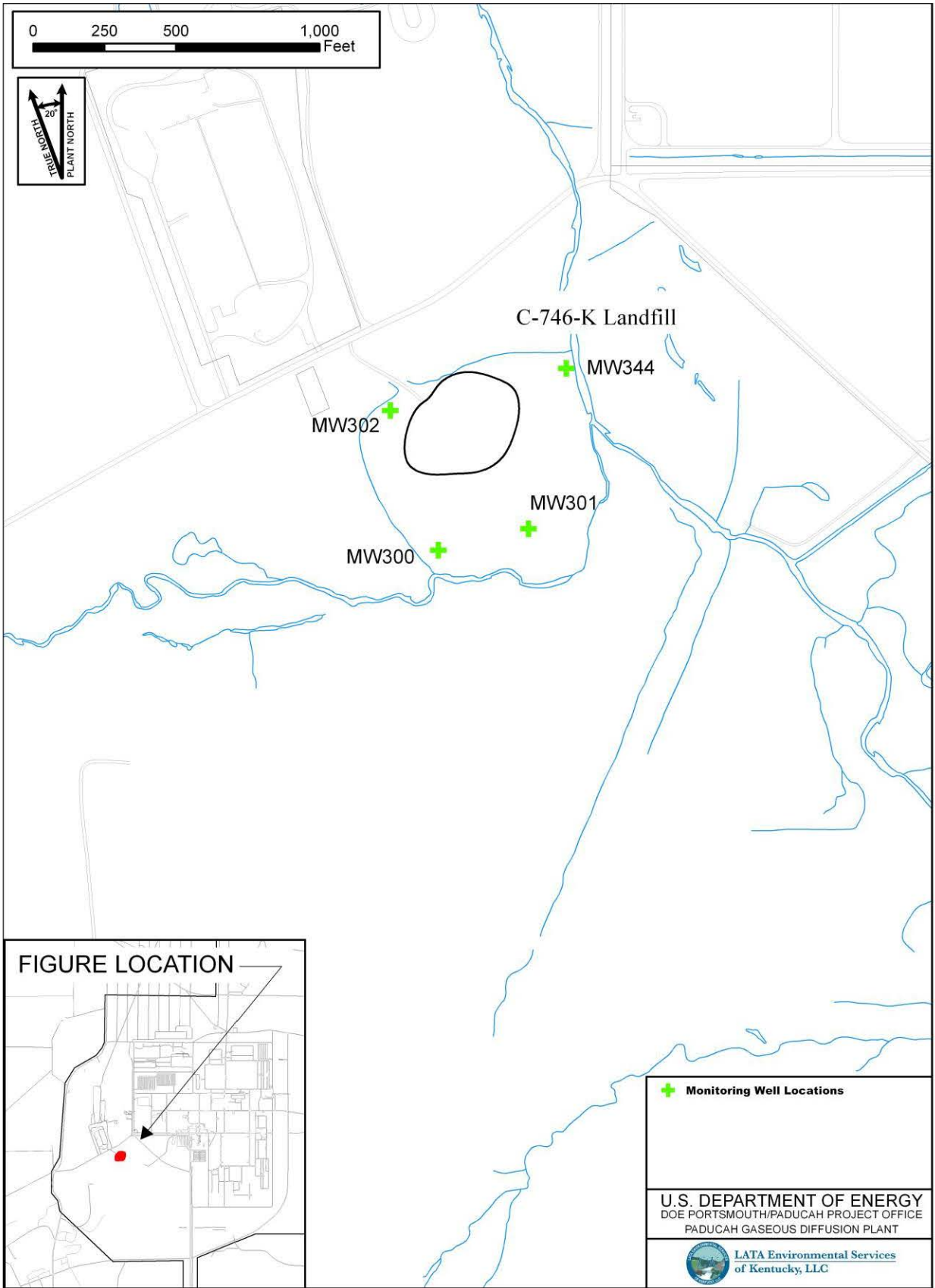
**C001**

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID
	TCE ug/L	1,1-DCE ug/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
5/12/2014	5.02	< 1					348596001
5/19/2014	5.4	< 1					349038001
5/27/2014	11.1	< 1					349629001
6/2/2014	15	< 1					349858001
6/10/2014	4.1	< 1					350426001
6/16/2014	4.5	< 1					350780001
6/23/2014	5.79	< 1					351207001
B-30 6/29/2014				< 1		< 1	QTXC0016-14
6/30/2014	6.56	< 1					351615001
7/8/2014	5.68	< 1					352237001
7/14/2014	4.73	< 1					352624001
7/21/2014	3.73	< 1					353177001
7/21/2014			< 12.7				353177002
7/25/2014				< 1		< 1	QTXC0017-14
7/29/2014	4.95	< 1					353694001

**APPENDIX C**

**C-746-K LANDFILL DATA**

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**Figure C.1. Monitoring Well Locations**

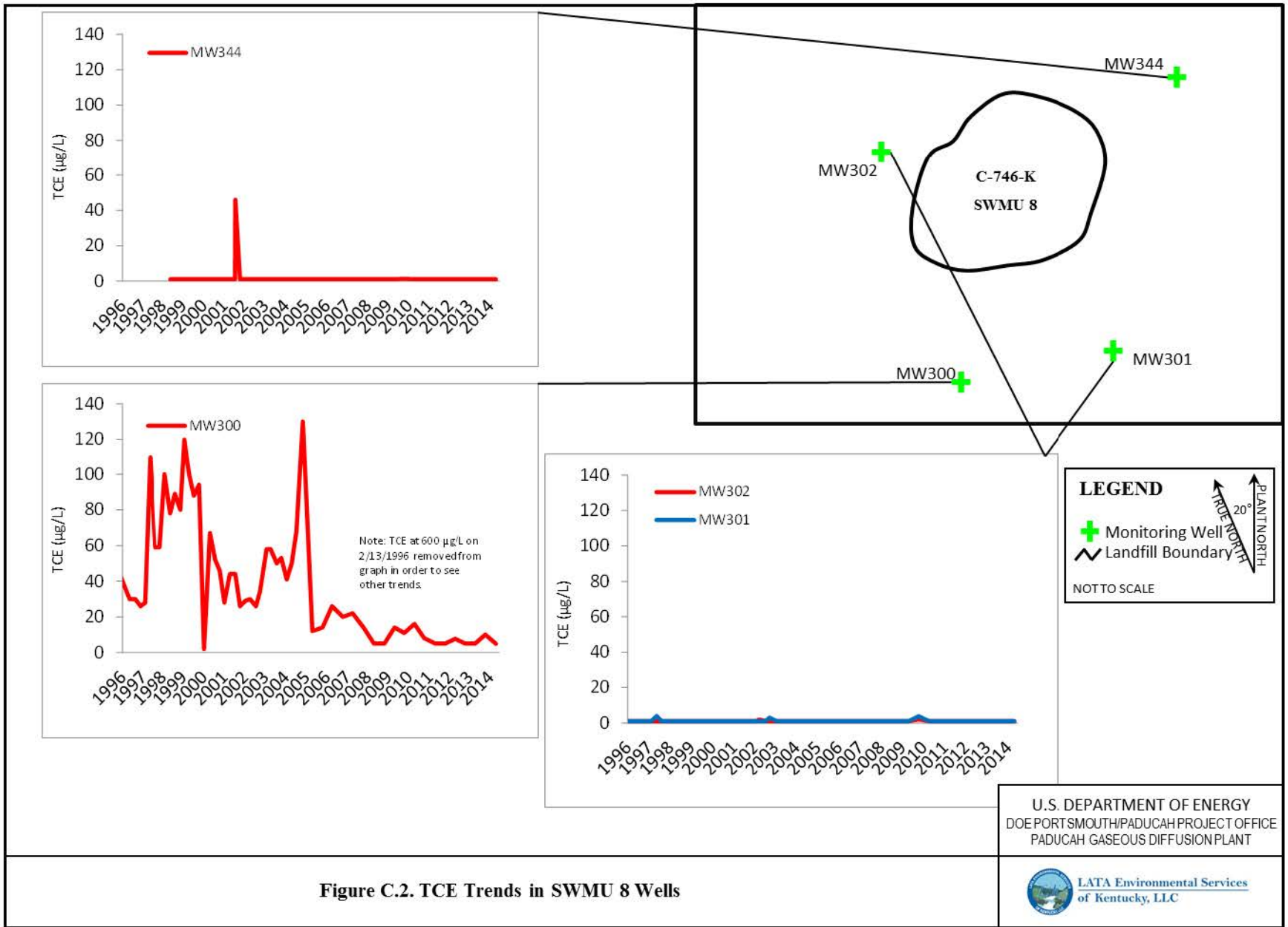


Figure C.2. TCE Trends in SWMU 8 Wells

**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW300**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
5/31/1994	27	18	23	< 5		87.7	1230	< 50.7	25.8	< 31.3	7.68	3220303
3/21/1995	52	72	61	< 50	< 50		973	49	33.8	27	1	950322-056
7/12/1995	38	< 50	< 50	< 50	< 50		761	52.4	47	143	3	950713-153
9/12/1995	38	< 50	< 50	< 50	< 50	52.8	679	57.5	24	33	12	950913-029
12/7/1995	42	56	47	< 5	< 5		767	44.6	59.9	-6	0	951211-006
2/13/1996	600	54	< 50	< 50	< 50	64.5	985	60			4	960214-062
5/9/1996	30	< 50	< 50	< 50	< 50	44.9	792	44.9	.4	16	2	960513-011
8/19/1996	30	< 50	< 50	< 50	< 50	37.2	568	44.4	22.9	31.5	0	960819-088
11/18/1996	26	< 50	< 50	< 50	< 50	35.8	570	37.5	7.4	48	0	961118-095
2/10/1997	28	49	30	< 25	< 25	21.3	412	20.6	5	45	0	970211-009
5/13/1997	110	120	61	< 50	< 50	31.3	518	27.6	5.2	11	0	970514-042
8/7/1997	59	< 50	68	< 50	< 50	27	497	31.2	12	13	0	970807-104
11/10/1997	59	110	66	< 25	< 25	31.8	521	32.3	-7.7	6	4	971110-114
2/4/1998	100	240	140	< 50	< 50	36.2	674	33.8	< -4	< 2	< -2	C980370056
5/19/1998	78	460	< 250	< 250	< 250	30.8	534	30.5	< 6.3	< 54	< 4.8	C981400029
8/11/1998	89	230	120	< 5	< 5	27.3	532	31	< 37.7	< 11	< 9.2	C982240047
11/16/1998	80	< 250	< 250	< 250	< 250	25.2	406	28.1	32.52	< 37.03	< -4.1	C983200080
1/25/1999	120	250	< 250	< 250	< 250	27	490	27.4	< 1.11	< 4.76	< -8.4	C990250154
4/19/1999	100	240	110	< 100	< 100	26.7	559	25.7	< 28.48	< 55.05	< -4.95	C991090060
7/15/1999	88	210	< 100	< 100	< 100	24.8	506	28.3	< 2.73	< -19.36	< 3.06	C991960146
10/14/1999	94	210	< 200	< 200	< 200	23.2	500	27.2	< 18.8	< 40.17	< -1.57	C992870104
1/13/2000	2	< 5	< 5	< 5	< 5	19.2	303	20.8	< -2.5	< 24.46	< 8.53	C000130120
1/13/2000	2	< 5	< 5	< 5	< 5	15.9	301	19	< -4.85	< -7.6	< 8.59	C000130123
4/27/2000	67	130	80	< 50	< 50	18.2	310	21.4	< 10.97	66.12	< -1.63	C001190009
7/27/2000	52	< 100	< 100	< 100	< 100	15.2	318	23.7	< 15.87	< 55.01	< 11.9	C002090106
10/16/2000	46	100	60	< 5	< 5	14.8	278	23	< 8.41	< 36.69	< 2.75	C002910044
1/10/2001	28	64	39	< 5	< 5	10.3	217	18	< -9.46	< 4.09	< 2.2	C010100097
4/16/2001	44	100	64	< 50	< 50	15	340	24.1	< -7.63	< 25.6	< 27.4	C011060085
7/24/2001	44	93	59	< 50	< 50	16.4	331	28.6	< 27	< 8.41	< 7.99	C012060008
10/15/2001	26	< 50	< 50	< 50	< 50	10.6	220	18.8	< 32.5	33.9	< -2.48	C012880074
1/22/2002	29	< 100	< 100	< 100	< 100	10	286	20.9	< 43.8	< 19.4	< 3.36	C020220046
4/10/2002	30	57	< 50	< 50	< 50	13	381	26.6	< -15.1	< 50.8	< 2.75	C021010048

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW300**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
7/24/2002	26	< 100	< 100	< 100	< 100	12.9	339	26.8	< 47.4	62.2	< 8.97	C022060004
7/24/2002	26	< 100	< 100	< 100	< 100	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003
10/3/2002	34	66	< 50	< 50	< 50	.0101	.33	36.9	< 26.9	< 24.9	17.5	C022760027
1/30/2003	58	160	100	< 50	< 50	10.8	395	23.5	< 3.65	< 3.52	< 1.19	C030310020
4/15/2003	58	180	< 100	< 100	< 100	6.86	437	22.9	< 2.47	< 20.3	< 4.19	C031050068
7/30/2003	42	< 100	< 100	< 100	< 100	21.9	409	27	< 9.4	< 48.7	< 1.31	C032110044
7/30/2003	50	< 100	< 100	< 100	< 100	14.3	382	25.4	< 51.5	53.5	< 4.26	C032110045
10/21/2003	53	92	63	< 50	< 50	.55	497	24.9	< 39.1	< 38	< -4.59	C032950017
1/26/2004	41	120	< 100	< 100	< 100	.471	414	1.91	< 50.1	< 1.36	< 6.71	C040260079
4/21/2004	50	140	< 100	< 100	< 100	.591	327	17.2	< -5.55	< 8.26	< -1.58	C041130033
7/15/2004	68	160	< 100	< 100	< 100	.69	424	24.2	< 21.8	< -11.1	< -7.47	C041970166
7/15/2004	55	140	< 100	< 100	< 100	.882	396	22.9	< 15	< 17.4	< -6.91	C041970167
11/9/2004	130	110	< 100	< 100	< 100	.99	369	22.9	< 12	< 29.7	< -2.6	C043150018
4/27/2005	12	51	< 50	< 50	< 50	.289	126	11.8	< 19.1	39.8	< -2.41	C051170049
10/25/2005	14	65	< 50	< 50	< 50	.344	178	15.2	< 2.14	29.6	< 6.49	C052990006
10/25/2005	13	55	< 50	< 50	< 50	.259	199	16.1	< 18.1	38.4	< 8.37	C052990007
4/11/2006	26	120	77	< 50	< 50	< .2	161	16.5	< .896	< 28.2	< -2.86	C061020009
10/23/2006	< 20	< 100	< 100	< 100	< 100	.334	124	16.2	< -.251	< 16.2	< 8.62	C062960050
4/12/2007	< 22	< 120	< 60	< 50	< 50	< .2	203	18.1	< -3.16	< 33.1	< -1.66	C071030007
10/25/2007	13	120	75	< 5	< 5	< .2	166	20.2	< 4.54	27.8	< 1.13	C072980184
10/25/2007	14	120	77	< 5	< 5	< .2	162	19.7	< -.658	< 25.1	< 1.82	C072980183
4/28/2008	< 5	42	34	< 25	< 5	< .2	117	16.8	< -.155	64.4	< .8	C081200001
10/29/2008	< 5	48	32	< 25	< 5	< .2	63.9	15	< 6.06	43.7	< 11.7	C08304013001
10/29/2008	< 5	46	29	< 25	< 5	< .2	110	16.9	< 5.22	34.8	< 6.45	C08304013002
4/30/2009	14	93	52	< 5	< 5	< .2	104	27.4	< -.39	37	< 5.55	C09120015001
10/19/2009	9	41	24	< 2	< 2	< .2	65	9.73	< -2.41	27.1	< -8.19	C09292035002
10/19/2009	11	39	24	< 2	< 2	< .2	36.9	11.2	< -1.13	28.4	< -8.36	C09292035001
4/20/2010	16	130	58	< 25	< 5	< .2	121	19.2	< -4.11	33.6	< -1.74	C10110009002
10/13/2010	8	140	78	< 25	< 5	< .4	165	25.5	< 2.34	62.3	< -3.09	C10286021003
10/13/2010	8	130	72	< 25	< 5	< .4	241	27.2	< 21.9	48.4	< -7.38	C10286021002
4/26/2011	< 5	68	44	< 25	< 5	.625	129	14.1	< .246	34.3	< -.327	C11116009001
10/19/2011	< 5	68	42	< 5	< 5	.558	155	18.4	< 2.93	65.7	< .89	C11292015001

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW300**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
10/19/2011	< 5	71	44	< 5	< 5	.358	78.8	15.8	< 13.2	53.9	< -4.3	C11292015002
4/24/2012	7.8	100	59	< 5	< 5	< 2	218	18.2	< 3.57	80.6	< 3.84	C12115011001
10/29/2012	< 5	93	56	< 5	< 5	.271	222	25.5	< 1.27	49.6	< -4.68	C12303019003
10/29/2012	< 5	100	69	< 5	< 5	1.65	217	25.3	< 12.6	57.8	< -2.74	C12303019002
4/23/2013	< 5	93	73	< 5	< 5	< .2	292	23.6	< 4.25	< 42	< -2.67	C13113007001
10/21/2013	< 10	76	53	< 10	2.2	< .2	201	21.4	< 3.28	61.9	< .287	C13294037002
10/21/2013	< 10	76	52	< 10	< 2	< .2	208	20.7	< -6.52	< 36.5	< 11.5	C13294037003
4/29/2014	4.9	82.4	56.8	< 10	< 10	.0253	276	19.3	< 10.4	37.4	< .00258	347676009

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW301**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
6/1/1994	< 5	< 5	3	< 5		.823	470	28.3	< 10.4	< 19.4	5.07	3220101
3/21/1995	< 1	< 5	< 5	< 5	< 5		236	22	-5.9	34	3	950322-052
7/12/1995	< 1	< 5	< 5	< 5	< 5		249	22.1	14	102	9	950713-157
9/12/1995	< 1	< 5	< 5	< 5	< 5	< .625	171	17.8	-2.6	17	3	950913-025
12/7/1995	1	< 5	< 5	< 5	< 5		99	12.3	30.3	49	6	951211-014
2/13/1996	< 1	< 5	< 5	< 5	< 5	.766	166	18.9	6.3	82	0	960214-066
5/9/1996	< 1	< 5	< 5	< 5	< 5	.975	224	18	.3	22	3	960513-010
8/19/1996	< 1	< 5	< 5	< 5	< 5	1.58	284	21.3	5.5	42.4	7	960819-087
11/18/1996	< 1	< 5	< 5	< 5	< 5	1.32	175	19.5	-1.4	47	0	961118-096
11/18/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	< .05	6	15	0	961118-097
2/10/1997	< 1	< 5	< 5	< 5	< 5	1.13	225	19.8	12.6	47	0	970211-015
5/13/1997	4	< 5	< 5	< 5	< 5	< .75	248	22	-11	45	0	970514-043
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	203	17.2	19.2	160	0	970807-105
11/10/1997	< 1	< 5	< 5	< 5	< 5	< 1	72.4	10	4.3	18	3	971110-115
2/4/1998	< 1	< 5	< 5	< 5	< 5	2.44	160	15.8	< -11.3	106	< 4	C980370057
5/19/1998	< 1	< 5	< 5	< 5	< 5	< 1	169	17.4	< -2.3	< 25	< 8.2	C981400028
8/11/1998	< 1	< 5	< 5	< 5	< 5	2.13	170	16.3	< -2.3	< 35	< 4.3	C982240046
11/16/1998	< 1	< 5	< 5	< 5	< 5	< 1	102	12.8	< 11.32	55.82	< -15.9	C983200081
1/25/1999	< 1	< 5	< 5	< 5	< 5	< 1	138	14.9	< 3.83	< 52.42	< -5.8	C990250155
4/19/1999	< 1	< 5	< 5	< 5	< 5	< .2	203	18.2	< -6.97	< 49.78	< -10.6	C991090061
7/15/1999	< 1	< 5	< 5	< 5	< 5	< .2	210	17.5	< -12.3	< 32.1	< -6.69	C991960147
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	73.1	10.3	< 1.83	41.56	< .419	C992870105
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	73.7	10.6	17.2	50.79	< 2.57	C992870106
1/13/2000	< 1	< 5	< 5	< 5	< 5	< .2	77.8	9.32	< 6.93	52.05	< 6.54	C000130122
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	152	15.6	< 4.87	< -6.93	< -12.6	C001190010
7/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	135	14.9	< 2.09	< 4.03	< -2.23	C002090105
10/16/2000	< 1	< 5	< 5	< 5	< 5	< .2	70.6	10.6	< -16.56	63.66	< -2.02	C002910045
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	95.6	12.2	< 6.56	27.9	< -1.62	C010100098
4/16/2001	< 1	< 5	< 5	< 5	< 5	.231	128	13.8	< 11.1	30.1	< 5.23	C011060088
4/16/2001	< 1	< 5	< 5	< 5	< 5	1.86	139	13.8	< 16.1	32.7	< 10.7	C011060087
7/24/2001	< 1	< 5	< 5	< 5	< 5	< .2	106	13.1	< -.871	54.4	< 7.08	C012060010
10/15/2001	< 1	< 5	< 5	< 5	< 5	< .2	107	12.8	< 21.9	37.9	< 5.53	C012880075

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW301**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	146	14.5	< 3.69	< 28.3	< 2.51	C020250055
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	154	15.4	< -2.44	51.6	< 6.3	C020250056
4/10/2002	< 1	< 5	< 5	< 5	< 5	.317	172	16.2	< 19	< 5.09	< .617	C021010049
7/24/2002	< 1	< 5	< 5	< 5	< 5	< .2	186	15.4	< 36.1	< 23.5	17.8	C022060005
10/3/2002	3	< 5	< 5	< 5	< 5	< .002	< .2	14.5	< 5.72	46.8	< 15	C022760029
1/30/2003	< 1	< 5	< 5	< 5	< 5	.287	166	15.5	< -1.71	< 6.29	< -.324	C030310017
1/30/2003	< 1	< 5	< 5	< 5	< 5	4.62	203	16.1	< .197	< 3.65	< 3.3	C030310018
4/14/2003	< 1	< 5	< 5	< 5	< 5	1.03	232	17.2	< .227	< 37.1	< -.162	C031040077
7/30/2003	< 1	< 5	< 5	< 5	< 5	.71	218	15.4	< 32.9	50.2	< 2.84	C032110046
10/21/2003	< 1	< 5	< 5	< 5	< 5	< .2	257	17.4	< 9.47	< 31.4	< 0	C032950018
1/26/2004	< 1	< 5	< 5	< 5	< 5	.39	267	19.6	< 14.9	53.3	< 10.8	C040260080
1/26/2004	< 1	< 5	< 5	< 5	< 5	.577	266	19.3	< 17.7	73	< 11.7	C040260081
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	238	18	< 9.42	< 42.4	< -3	C041130034
7/15/2004	< 1	5	5	< 5	< 5	< .2	277	19.8	< 17.3	< 40.3	< -12.4	C041970168
10/19/2004	< 1	< 5	< 5	< 5	< 5	< .2	152	13.7	< -32.8	< 33.7	< -1.56	C042940033
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	232	20.1	< -.987	129	< -6.58	C051170050
10/25/2005	< 1	5.1	5.6	< 5	< 5	< .2	289	19.9	< -12.7	51.3	< 4.49	C052990008
4/11/2006	< 1	< 5	5.2	< 5	< 5	< .2	287	20.9	< 8.03	50.9	< -2.97	C061020010
4/11/2006	< 1	< 5	5.4	< 5	< 5	< .2	279	19.6	< 3.04	62	< 8.86	C061020011
10/23/2006	< 1	5.9	5.8	< 5	< 5	.76	295	20.5	< 13.7	< 31.7	< 15.3	C062960051
4/12/2007	< 1	< 5	< 5	< 5	< 5	2.42	265	15.8	< 7.86	60.8	< 4.66	C071030005
10/25/2007	< 1	3.6	3.1	< 1	< 1	1.06	117	8.42	< 1.59	39.3	< -9.49	C072980109
4/28/2008	< 1	< 1	2.8	< 5	< 1		185	14.7	< 20.4	79.9	< -4.91	C081190048
4/28/2008	< 1	< 1	2.9	< 5	< 1		192	15.3	< 25.6	45.9	< -3.1	C081190047
10/29/2008	< 1	3.8	3.9	< 5	< 1	< .2	240	16.3	< 7.81	77.1	< 5.16	C08304013003
4/30/2009	< 1	4.5	4.4	< 1	< 1	< .2	160	14.5	< 17.8	85	< 12.3	C09120015003
4/30/2009	< 1	3.8	3.9	< 1	< 1	< .2	228	15.9	< 7.32	71	< 7.74	C09120015002
10/19/2009	3.8	5.5	4.8	< 1	< 1	< .2	208	14	< .393	58.6	< -1.75	C09292035003
4/20/2010	< 1	< 5	3	< 5	< 1	< .2	198	13.8	< 11.5	50.7	< -8.41	C10110009004
4/20/2010	< 1	< 5	2.9	< 5	< 1	< .2	196	13.7	< -7.51	45.2	< -8.84	C10110009005
10/13/2010	< 1	< 5	1.9	< 5	< 1	< .4	133	11	< -.711	56.4	< -4.72	C10286021005
4/26/2011	< 1	< 5	< 1	< 5	< 1	.247	176	14.5	< 8.21	68	< -13.4	C11116009002

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW301**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
10/19/2011	< 1	< 5	1.7	< 1	< 1	.298	183	11.8	< 8.7	86.5	< 4.3	C11292015003
4/24/2012	< 1	2.1	< 1	< 1	< 1	< 2	119	9.63	< 5.31	< 35.7	< 2.86	C12115011002
10/29/2012	< 1	< 1	< 1	< 1	< 1	6.98	163	8.35	< 15.1	58.9	< 1.99	C12303019004
4/23/2013	< 1	1.2	1.4	< 1	< 1	.216	120	9.8	< 10.1	< 46.9	< .0556	C13113007002
10/21/2013	< 1	2.4	2.2	< 1	< 1	10.9	200	10.7	< 6.61	< 54.4	< 8.32	C13294037004
4/29/2014	< 1	1.73	1.95	< 1	< 1	.0277	121	8.95	6.95	52.9	< 2.71	347676005

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW302**

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Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
6/1/1994	< 5	< 5	< 5	< 5		< .415	.238	.189	< 3.09	< 3.11	< .94	3220301
3/21/1995	< 1	< 5	< 5	< 5	< 5		2.6	.26	2.2	5	8	950322-048
7/12/1995	< 1	< 5	< 5	< 5	< 5		.702	.175	4	13	6	950713-149
9/11/1995	< 1	< 5	< 5	< 5	< 5	1.3	1.06	.139	7.2	2	13	950912-007
12/7/1995	< 1	< 5	< 5	< 5	< 5		2.39	.087	6.2	3	2	951211-018
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.14	1.68	.08	-6	-2	1	960214-054
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.61	2.14	.099	-5.4	-4	0	960214-058
5/9/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.041	.9	17	6	960513-009
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	< .05	12.3	5	11	960821-020
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.058	4.4	6	6	960821-022
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	.31	.157	-2	1	0	970211-011
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	1.64	.19	2.9	3	0	970211-010
5/13/1997	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.099	5.9	3	10	970514-044
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	< .1	2.8	1	0	970807-144
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.12	1.6	1	2	970807-145
11/10/1997	< 1	< 5	< 5	< 5	< 5	1.02	1.09	.11	9.8	14	0	971110-118
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	.114	< 1.8	< 0	< 5	C980370102
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	< .1	< 1.2	< 4	< -2	C980370103
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.164	< 2.3	37	< 2.1	C981400088
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.167	< -9	8	< 2.8	C981400087
8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.173	< 7.6	11	< -7.6	C982240043
8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.143	< 1	< 4	< -1	C982240044
11/16/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.1	< 3.6	8.03	< -7.2	C983200082
1/25/1999	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.11	< .86	< .3	< -19.8	C990250156
4/19/1999	< 1	< 5	< 5	< 5	< 5	.22	< .2	.122	< 1.67	< 4.72	< -18.5	C991090062
7/15/1999	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.157	< .82	< -20.12	< 5.04	C991960148
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.069	< 4.18	< 3.33	< -1.15	C992870107
1/13/2000	< 1	< 5	< 5	< 5	< 5	< .2	.381	.05	< .05	< 5.09	< 1.59	C000130119
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.11	< 4.56	< 2.89	< -21.3	C001190011
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.118	< 1.91	< 4.14	< -16.4	C001190012
7/27/2000	< 1	< 5	< 5	< 5	< 5	.203	.315	.185	< 6.72	< 4.08	< -2.03	C002090104
10/16/2000	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.08	< 2.79	22.54	< 5.95	C002910046

**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW302**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.101	< -4.7	< 3.52	< 2.65	C010100095
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.112	< .329	< 5.56	< 8.77	C010100096
4/16/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.068	< -4.37	< 1	< 12.2	C011060086
7/24/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.053	< 1.09	< 1.72	< 12.4	C012060011
10/15/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.207	< 2.32	< .344	< 4.48	C012880076
1/22/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.047	< 5.75	< 1.7	< 11.5	C020220047
4/10/2002	2	< 5	< 5	< 5	< 5	< .2	< .2	.062	< 2.37	< -2.75	< -3.64	C021010051
4/10/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.054	< 5.56	< -1.95	< 4.88	C021010050
7/24/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.056	9.53	< 2.21	< 14.7	C022060006
10/3/2002	< 1	< 5	< 5	< 5	< 5	< .002	< .002	.0688	< 9.5	< 2.76	< 10.1	C022760028
1/30/2003	< 1	< 5	< 5	< 5	< 5	.639	.762	.144	< -.209	< 1.74	< 2.05	C030310021
4/15/2003	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.0607	< 2.62	< 1.04	< 4.54	C031050066
4/15/2003	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.0609	< -4.39	43.1	16.2	C031050067
7/30/2003	< 1	< 5	< 5	< 5	< 5	< .2	.523	1.3	< 6.9	< 4.11	< -9.55	C032110047
10/21/2003	< 1	< 5	< 5	< 5	< 5	< .2	5.77	1.88	< 4.13	< 2.82	< -6.62	C032950016
1/26/2004	< 1	< 5	< 5	< 5	< 5	< .2	2.64	1.98	< -3.37	9.48	< 6.25	C040260078
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.611	1.63	< 6.89	< -1.62	< -.819	C041130035
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.302	1.71	< -1.61	< -.897	< 5.4	C041130036
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	1.18	1.63	< 5.85	< -.825	< -12.4	C041970169
10/19/2004	< 1	< 5	< 5	< 5	< 5	< .2	.244	1.06	< -4.94	< 3.65	< 4.4	C042940032
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	.675	< 1.48	< 3.76	< 15.3	C051170052
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	.154	.708	< .394	< .723	< 15.5	C051170051
10/25/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	1.35	< -1.17	< .46	< 9.83	C052990009
4/11/2006	< 1	< 5	< 5	< 5	< 5	.418	1.02	.572	< -1.64	< 3.54	< .914	C061020008
10/26/2006	< 1	< 5	< 5	< 5	< 5	.347	.479	.99	< -.702	< 3.23	< 8.62	C062990102
10/26/2006	< 1	< 5	< 5	< 5	< 5	< .2	.128	.986	< -3.44	< 2.09	< 8.97	C062990103
4/12/2007	< 1	< 5	< 5	< 5	< 5	< .2	.131	.345	< 4.96	< 3.59	< 13.1	C071030006
10/25/2007	< 1	< 1	< 1	< 1	< 1	< .2	.317	.622	< 3.48	< 4.7	< -3.38	C072980110
4/28/2008	< 1	< 1	< 1	< 5	< 1	< .1	< .1	.263	< 3.99	< -.184	< -5.34	C081190049
10/29/2008	< 1	< 1	< 1	< 5	< 1	.23	.281	.319	< 1.16	< .994	< 10.6	C08304013004
4/30/2009	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.215	< 1.78	< 1.17	< 1.39	C09120016001
10/19/2009	2.1	< 1	< 1	< 1	< 1	.493	.425	.433	< .942	< 1.51	< -6.33	C09292035004

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**Water Quality Records for**

**MW302**

**Sample Date Range: 5/31/1994 - 4/29/2014**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
4/20/2010	< 1	< 5	< 1	< 5	< 1	.933	1.5	1.01	< 1.13	< 1.46	< -.868	C10110009001
10/13/2010	< 1	< 5	< 1	< 5	< 1	< .4	.21	.245	< 4.95	< 2.61	< 2.66	C10286021004
4/26/2011	< 1	< 5	< 1	< 5	< 1	< .2	.112	.095	< .402	< 3.67	< -.163	C11116009003
10/19/2011	< 1	< 5	< 1	< 1	< 1	< .2	.235	.208	< 1.9	6.89	< 2.99	C11292015004
4/24/2012	< 1	< 1	< 1	< 1	< 1	< .4	.333	.163	< .867	< .188	< 3.89	C12115011003
10/29/2012	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.0704	< .308	< -.308	< -6.18	C12303019001
4/23/2013	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.0804	< 3.53	< 1.37	< -2.15	C13113007003
10/21/2013	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.19	< 2.39	< 2.41	< 1.2	C13294037001
4/29/2014	< 1	< 1	< 1	< 1	< 1	.0339	.112	.156	< -.306	< 2.95	< 2.13	347676007

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW344**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
5/20/1998	< 1	< 5	< 5	< 5	< 5	5.43	11.2	.663	< 4	24	< -2.8	C981400089
8/11/1998	< 1	< 5	< 5	< 5	< 5	7.65	13.1	.946	< 3.2	11	< -1.3	C982240042
11/16/1998	< 1	< 5	< 5	< 5	< 5	2.65	12.2	.83	< 5.66	8.45	< 6.8	C983200078
11/16/1998	< 1	< 5	< 5	< 5	< 5	2.43	9.51	.65	< 2.27	9.59	< -3.1	C983200079
1/25/1999	< 1	< 5	< 5	< 5	< 5	8.54	13	.79	< .1	14.19	< 8.4	C990250157
4/19/1999	< 1	< 5	< 5	< 5	< 5	9.26	16.1	.827	< 4.05	8.24	< -9.06	C991090063
7/15/1999	< 1	< 5	< 5	< 5	< 5	3.21	13.6	.756	< 3.29	< 3.03	< 7.03	C991960149
10/14/1999	< 1	< 5	< 5	< 5	< 5	8.76	13.1	.871	5.38	< 5.75	< 7.28	C992870108
1/13/2000	< 1	< 5	< 5	< 5	< 5	1.35	9.06	.565	< .74	12.89	< 6.94	C000130121
4/27/2000	< 1	< 5	< 5	< 5	< 5	3.68	10.8	.523	< 2.81	19.31	< -2.65	C001190013
7/27/2000	< 1	< 5	< 5	< 5	< 5	1.92	8.16	.531	7.68	12.31	< 10.4	C002090102
7/27/2000	< 1	< 5	< 5	< 5	< 5	1.27	6.22	.404	< 4.3	14.19	< -6.62	C002090103
10/16/2000	< 1	< 5	< 5	< 5	< 5	1.92	6.81	.525	< 1.79	15.94	< .674	C002910047
10/16/2000	< 1	< 5	< 5	< 5	< 5	1.5	5.4	.37	< -9	21.88	< 1.57	C002910048
1/10/2001	< 1	< 5	< 5	< 5	< 5	4.4	6.02	.396	< .529	< 1.5	< 4.46	C010100099
4/16/2001	< 1	< 5	< 5	< 5	< 5	2.3	7.02	.411	< 1.98	6.24	< -7.79	C011060089
7/19/2001	< 1	< 5	< 5	< 5	< 5	1.83	5.1	.355	< -2.34	< 1.95	< 7.79	C012010060
7/24/2001	46	100	59	< 50	< 50	15.8	315	27.7	< 32.1	< 25.1	< 12.4	C012060009
10/15/2001	< 1	< 5	< 5	< 5	< 5	.655	3.55	.399	< 4.6	< 2.4	< -2	C012880066
10/15/2001	< 1	< 5	< 5	< 5	< 5	.797	3.79	.329	< .901	9.99	< -8.48	C012880067
1/22/2002	< 1	< 5	< 5	< 5	< 5	1.37	5.33	.366	< 5.38	6.15	< 6.69	C020220045
4/10/2002	< 1	< 5	< 5	< 5	< 5	1.63	7.58	.378	< -.899	< 2.73	< 4.04	C021010052
7/24/2002	< 1	< 5	< 5	< 5	< 5	2.07	5.44	.49	10.2	< 6.95	< 4.82	C022060007
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00423	.00456	.323	< 5.83	< 5.09	18.5	C022760030
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00323	.00478	.366	< 2.54	< 2.37	< 13.8	C022760031
1/30/2003	< 1	< 5	< 5	< 5	< 5	1.68	4.16	.378	< -2.18	< .631	< 2	C030310019
4/14/2003	< 1	< 5	< 5	< 5	< 5	3.92	3.28	.268	< .0183	< 8.74	20.4	C031040078
7/30/2003	< 1	< 5	< 5	< 5	< 5	21.9	35.4	6.18	< 12.1	< 6.22	< 12.3	C032110048
10/21/2003	< 1	< 5	< 5	< 5	< 5	4.19	32.6	.388	< 5.8	< 4.3	< 3.31	C032950014
10/21/2003	< 1	< 5	< 5	< 5	< 5	3.63	34.8	3.99	< 3.45	< 3.49	< -1.39	C032950015
1/26/2004	< 1	< 5	< 5	< 5	< 5	4.22	18.2	2.32	10.1	7.74	< 5.32	C040260082
4/21/2004	< 1	< 5	< 5	< 5	< 5	2.91	13.3	1.23	< 2.26	< 1.95	< -4.04	C041130037

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**C-746-K Landfill Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/31/1994 - 4/29/2014**

**MW344**

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	12.9	1.61	< .82	< 2.89	< -8.52	C041970170
10/19/2004	< 1	< 5	< 5	< 5	< 5	2.99	11.8	1.63	< -2.19	< .172	< 4.34	C042940035
10/19/2004	< 1	< 5	< 5	< 5	< 5	2.51	13.2	1.56	< -.79	9.99	< -3.88	C042940034
4/27/2005	< 1	< 5	< 5	< 5	< 5	3.67	7.9	.692	< .794	5.87	< 10.7	C051170053
10/25/2005	< 1	< 5	< 5	< 5	< 5	1.49	5.25	.714	< 2.1	< 5.13	< 8.07	C052990010
4/11/2006	< 1	< 5	< 5	< 5	< 5	2.55	6.79	.419	< 2.13	< 5.53	< .686	C061020012
10/26/2006	< 1	< 5	< 5	< 5	< 5	4.32	5.55	.472	< 2.45	< 5.05	< 13.9	C062990104
4/12/2007	< 1	< 5	< 5	< 5	< 5	7.87	6.28	.286	8.77	< 7.36	< 7.1	C071030004
4/12/2007	< 1	< 5	< 5	< 5	< 5	13.5	7.9	.279	< 6.28	< 4.88	< -3.22	C071030003
10/25/2007	< 1	< 1	< 1	< 1	< 1	5.46	4.1	.217	< 2.24	< 2.43	< 1.88	C072980185
4/28/2008	< 1	< 1	< 1	< 5	< 1		.947	.183	< 1.35	< 4.02	< 2.67	C081200002
10/29/2008	< 1	< 1	< 1	< 5	< 1	3.36	3.64	.256	< 2.88	< 4.82	< .645	C08304013005
4/30/2009	< 1	< 1	< 1	< 1	< 1	4	3.56	.19	< 2.62	5.57	< 10.1	C09120016002
10/19/2009	1.3	< 1	< 1	< 1	< 1	3.55	3.04	.299	< 1.6	< 4.25	< -.283	C09292035005
4/20/2010	< 1	< 5	< 1	< 5	< 1	11.5	22	.262	9.17	8.43	< 10	C10110009003
10/13/2010	< 1	< 5	< 1	< 5	< 1	9.93	13.8	.233	8.01	9.96	< -7.65	C10286021001
4/26/2011	< 1	< 5	< 1	< 5	< 1	4.48	7.89	.155	< .101	5.63	< -3.92	C11116009005
4/26/2011	< 1	< 5	< 1	< 5	< 1	4.7	8.17	.154	< -.331	< 5.11	< -7.02	C11116009004
10/19/2011	< 1	< 5	< 1	< 1	< 1	2.86	7.14	.188	< 2.34	9.7	< 2.78	C11292015005
4/24/2012	< 1	< 1	< 1	< 1	< 1	3.92	6.46	.118	< 6.28	< 5.53	< 7.1	C12115011005
4/24/2012	< 1	< 1	< 1	< 1	< 1	4.39	7.54	.167	< 3.64	< 3.59	< -.511	C12115011004
10/29/2012	< 1	< 1	< 1	< 1	< 1	2.12	3.89	.143	< .405	< 3.49	< -8.39	C12303019005
4/23/2013	< 1	< 1	< 1	< 1	< 1	2.65	4.66	.116	< 4.97	< 3.39	< -3.25	C13113014001
4/23/2013	< 1	< 1	< 1	< 1	< 1	2.77	3.82	.107	< 1.89	< 3.93	< -1.43	C13113014002
10/21/2013	< 1	< 1	< 1	< 1	< 1	8.79	6.63	.185	< 4.86	4.56	< 4.93	C13294037005
4/29/2014	< 1	< 1	< 1	< 1	< 1	4.42	10.1	.139	6.34	9.4	< -2.93	347676003
4/29/2014	< 1	< 1	< 1	< 1	< 1	3.92	9.31	.138	9.05	7.89	< 1.14	347676001

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**APPENDIX D**

**ADMINISTRATIVE RECORD AND  
POST-DECISION RECORD INDICES**

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## Paducah Documents Added to the Administrative Record Files- Second Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARF4-1	03/24/14	PPPO-02-2219887-14	REQUESTED MODIFICATION TO THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY AT THE PGDP, SOLID WASTE MANAGEMENT UNIT 4 SAMPLING AND ANALYSIS PLAN (DOE/OR/07-2179&D2/A2/R2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00643
ARF4-1	03/28/14	KY-14-0727	RESPONSE TO DOE LETTER ON THE REQUESTED MODIFICATION OF THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT RI/FS SWMU 4 SAMPLING AND ANALYSIS PLAN (DOE/OR/07-2179&D2/A2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00654
ARFBGOU	08/16/13	KY-13-0517	EPA NOTIFICATION FOR EXTENSION FOR THE NOTIFICATION OF 45-DAY EXTENSION FOR REVIEW OF THE PROPOSED PLAN REPORT FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS, SWMUs 5 AND 6 (DOE/LX/07-1275&D2), PGDP	USEPA-4	DOE-PPPO	No	ENV 1.A-00612
ARFBGOU	10/01/13	MEM-14-0076	E-MAIL RETRACTING EPA CONDITIONAL APPROVAL LETTER FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SWMUs 5 & 6	USEPA-4	DOE-PPPO	No	ENV 1.A-00613
ARFBGOU	11/19/13	MEM-14-0075	E-MAIL DRAFT COMMENT RESPONSE SUMMARY FOR FEASIBILITY STUDY FOR SWMUs 2, 3, 7 AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-1274&D1) ISSUED APRIL 2012	DOE-PPPO	USEPA-4	No	ENV 1.A-00614
ARFBGOU	02/19/14	KY-14-0695	EPA EXTENSION APPROVAL TO RESPOND TO KY DEPT OF ENVIRONMENTAL PROTECTION'S JANUARY 27, 2014 EXTENSION REQUEST FOR REVIEW TIME FOR PROPOSED PLAN FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-1275&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00615
ARFBGOU	03/10/14	PPPO-02-2239648-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00616
ARFBGOU	03/10/14	KY-14-0725	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-BURIAL GROUND OPERABLE UNIT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00632
ARFBGOU	03/17/14	KY-14-0714	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00633
ARFBGOU	04/07/14	KY-14-0731	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00650
ARFBGOU	04/07/14	PPPO-02-2278517-14	EXTENSION REQUEST FOR SUBMITTAL OF THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP, PADUCAH, KENTUCKY (DOE/LX/07-1274&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00651

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## Paducah Documents Added to the Administrative Record Files- Second Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	04/09/14	KY-14-0739	APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF THE D2 FEASIBILITY STUDY FOR SWMUs 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00652
ARFBGOU	04/14/14	PPPO-02-2287824-14	EXTENSION REQUEST FOR SUBMITTAL OF THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP, PADUCAH, KENTUCKY (DOE/LX/07-1274&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00653
ARFBGOU	04/28/14	KY-14-0760	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00667
ARFBGOU	04/28/14	KY-14-0758	APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF THE D2 FEASIBILITY STUDY FOR SWMUs 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00656
ARFBGOU	04/29/14	KY-14-0759	EXTENSION REQUEST FOR SUBMITTAL OF THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1274&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00657
ARFBGOU	05/20/14	PPPO-02-2300334-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00668
ARFBGOU	05/23/14	KY-14-0773	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00669
ARFBGOU	05/30/14	PPPO-02-2341665-14	MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00670
ARFBGOU	06/04/14	KY-14-0781	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SOLID WASTE MANAGEMENT UNITS 5 AND 6 (DOE/LX/07-1275&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00671
ARFC-340	02/26/14	KY-14-0702	EPA COMMENTS ON THE REMOVAL ACTION REPORT FOR THE C-340 METALS REDUCTION PLANT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1286&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00624
ARFC-340	03/11/14	KY-14-0709	SUBMITTAL OF COMMENTS TOT HE REMOVAL ACTION REPORT FOR THE C-340 METALS REDUCTION PLANT (DOE/LX/07-1286&D1)	KDWM	DOE-PPPO	No	ENV 1.A-00625
ARFC-340	03/28/14	PPPO-02-2182955-14	URANIUM ENRICHMENT TOXIC SUBSTANCES CONTROL ACT COMPLIANCE AGREEMENT: CERTIFICATION OF WORK COMPLETION FOR THE POLYCHLORINATED BIPHENYL GASKET REMOVAL PROGRAM AND VENTILATION DUCT MANAGEMENT AND HYDRAULIC SYSTEM REMOVAL IN BUILDING C-340 AT THE PGDP	DOE-PPPO	USEPA-4	No	ENV 1.A-00644

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## Paducah Documents Added to the Administrative Record Files- Second Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFC-340	04/25/14	PPPO-02-2239798-14,DOE/LX/07-1286&D2	REMOVAL ACTION REPORT FOR THE C-340 METALS REDUCTION PLANT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1286&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00660
ARFCC	08/20/13	KY-13-0520	NOTIFICATION OF EXTENSION FOR REVIEW OF THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00617
ARFCC	02/18/14	KY-14-0690B	EPA NOTIFICATION FOR EXTENSION FOR REVIEW OF REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2), PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00618
ARFCC	03/07/14	KY-14-0707	EPA NOTIFICATION FOR EXTENSION FOR REVIEW OF REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2), PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00619
ARFCC	03/11/14	PPPO-02-2234554-14	MILESTONE MODIFICATION FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00621
ARFCC	03/11/14	KY-14-0708	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00620
ARFCC	03/17/14	KY-14-0711	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00634
ARFCC	03/19/14	KY-14-0713	EPA CONDITIONAL CONCURRENCE ON THE REMEDIAL INVESTIGATION FEASIBILITY STUDY (RI/FS) REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2), PGDP	USEPA-4	DOE-PPPO	No	ENV 1.A-00635
ARFCC	03/19/14	KY-14-0722	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX - CERCLA	DOE-PPPO	USEPA-4	No	ENV 1.A-00636
ARFCC	03/19/14	PPPO-02-2255819-14	MILESTONE MODIFICATION FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00637
ARFCC	03/25/14	KY-14-0724	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00655

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## Paducah Documents Added to the Administrative Record Files- Second Quarter CY2014

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFCC	04/30/14	PPPO-02-2313104-14	PROPOSAL OUTLINING PROPOSED REGULATORY STRATEGY TO SUPPORT EXPEDITIOUS CLEANUP ACTIVITIES AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00672
ARFCC	05/06/14	PPPO-02-2314060-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00673
ARFCC	05/08/14	KY-14-0767b	MILESTONE MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX (CERCLA)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00674
ARFCC	05/08/14	PPPO-02-2323634-14	MILESTONE MODIFICATION REQUEST FOR THE D1 PROPOSED PLAN AND SUBSEQUENT FEDERAL FACILITY AGREEMENT DOCUMENTS FOR THE WASTE DISPOSAL ALTERNATIVES EVALUATION PROJECT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00675
ARFCC	05/13/14	KY-14-0767a	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE D1 PROPOSED PLAN FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00676
ARFCC	05/19/14	PPPO-02-2293050-14	PADUCAH FEDERAL FACILITY AGREEMENT NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE FOR THE CONDITIONAL CONCURRENCE OF THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP (DOE/LX/07-0244&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00677
ARFREF	02/24/14	KY-14-0697	EPA APPROVAL OF THE FISCAL YEAR 2014 SITE MANAGEMENT PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-1292&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00622
ARFREF	02/25/14	KY-14-0699	APPROVAL OF THE 2014 SITE MANAGEMENT PLAN PADUCAH GASEOUS DIFFUSION PLANT PADUCAH, KENTUCKY ANNUAL REVISION (DOE/LX/07-1292&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00623
ARFREF	03/27/14	PPPO-02-2266042-14	EXTENSION FOR SUBMITTAL OF THE D2 FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1289&D2	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00645
ARFREF	03/31/14	KY-14-0729	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1289&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00646
ARFREF	04/02/14	PPPO-02-2189449-14,DOE/LX/07-1289&D2	TRANSMITTAL OF THE FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1289&D2	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00647
ARFREF	04/16/14	PPPO-02-2296979-14	PADUCAH FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00649
ARFREF	04/21/14	PPPO-02-2300629-14	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-FISCAL YEAR 2016 BUDGET TARGET FUNDING GUIDANCE NOTIFICATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00659



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ARFREF	04/29/14	PPPO-02-2293774-14,DOE/LX/07-1296/V1	U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE FIRST HALF OF FISCAL YEAR 2014, PADUCAH, KENTUCKY (DOE/LX/07-1296/V1)	DOE-PPPO	KDEP,USEPA-4,KDEP	No	ENV 1.A-00663
ARFREF	05/02/14	KY-14-0761	EPA CONDITIONAL CONCURRENCE OF THE FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-1289&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00664
ARFREF	05/02/14	KY-14-0762	CONDITIONAL CONCURRENCE FOR THE FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1289&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00666
ARFREF	05/19/14	PPPO-02-2345406-14	CLARIFICATION OF THE SUBMITTAL DATE FOR THE FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1289&D2/R1	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00665

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6PHASE-PD	02/18/14	PPPO-02-2174764-14,DOE/LX/07-1294&D2	TRANSMITTAL OF THE TREATABILITY STUDY WORK PLAN FOR STEAM INJECTION, GROUNDWATER OPERABLE UNIT, AT PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1294&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00628
6PHASE-PD	03/14/14	PPPO-02-2260351-14	REQUEST FOR EXTENSION AND MODIFICATION REQUEST FOR SUBMITTAL OF THE C-400 PHASE IIB D1 TREATABILITY STUDY DESIGN	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00629
6PHASE-PD	03/17/14	KY-14-0712	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE TREATABILITY STUDY WORK PLAN FOR STEAM INJECTION, GROUNDWATER OPERABLE UNIT (DOE/LX/07-1294&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00630
6PHASE-PD	03/20/14	KY-14-0715	APPROVAL OF THE TREATABILITY STUDY WORK PLAN FOR STEAM INJECTION, GROUNDWATER OPERABLE UNIT (DOE/LX/07-1294&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00631
6PHASE-PD	03/21/14	KY-14-0716	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE D1 C-400 PHASE IIB TREATABILITY STUDY DESIGN	KDWM	DOE-PPPO	No	ENV 1.A-00638
6PHASE-PD	03/21/14	KY-14-0723b	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-C-400	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00641
6PHASE-PD	03/21/14	KY-14-0723	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-C-400	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00640
6PHASE-PD	03/21/14	KY-14-0717	EPA APPROVAL OF THE TREATABILITY STUDY WORK PLAN FOR STEAM INJECTION, GROUNDWATER OPERABLE UNIT, AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-1294&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00639
6PHASE-PD	03/24/14	PPPO-02-2190048-14,DOE/LX/07-1295&D1	TRANSMITTAL OF THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PGDP, DOE/LX/07-1295&D1	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00642
GW3-PD	02/25/14	PPPO-02-2228261-14	INITIATION OF FORMAL DISPUTE RESOLUTION ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES TO THE RECORD OF DECISION FOR THE INTERIM REMEDIAL ACTION OF THE NORTHEAST PLUME AT PGDP DOE/LX/07-1291&D2, AND REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION AT PGDP DOE/LX/07-1280&D2	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00626
GW3-PD	04/03/14	PPPO-02-2261797-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00648

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GW3-PD	05/01/14	PPPO-02-2300443-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00661
GW3-PD	06/05/14	PPPO-02-2354645-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00662
SWP-PD	02/25/14	KY-14-0701	EPA MODIFICATION REQUEST TO THE REMEDIAL DESIGN WORK PLAN FOR SWMUs 1, 211-A AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP (DOE/LX/07-1268&D2/R2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00627
SWP-PD	04/25/14	PPPO-02-2301468-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSIDERATION OF ADDITIONAL WORK FOR THE REMEDIAL DESIGN WORK PLAN FOR THE SOUTHWEST GROUNDWATER PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00658

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Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARF4-1	07/23/14	KY-14-0839	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-BURIAL GROUNDS OPERABLE UNIT (SWMU 4)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00707
ARF4-1	08/06/14	KY-14-0838	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE ADDENDUM TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY - SOLID WASTE MANAGEMENT UNIT 4 SAMPLING AND ANALYSIS PLAN (DOE/LX/07-2179&D2/A2/R3) AND SUBSEQUENT DOCUMENTS	USEPA-4,USEPA-4	DOE-PPPO	No	ENV 1.A-00708
ARFBGOU	06/12/14	PPPO-02-2378851-14,DOE/LX/07-1274&D2	TRANSMITTAL OF THE FEASIBILITY STUDY FOR SWMUs 2,3,7, AND 30 FOR THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-1274&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00683
ARFBGOU	07/02/14	KY-14-802	EXTENSION REQUEST FOR SUBMITTAL OF COMMENTS TO THE FEASIBILITY STUDY FOR SWMUs 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00681
ARFBGOU	07/02/14	KY-14-804	REQUEST FOR EXTENSION OF REVIEW TIME FOR THE PROPOSED PLAN FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1275&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00682
ARFC-340	05/15/14	KY-14-0769	[EPA APPROVES] REMOVAL ACTION REPORT FOR THE C-340 METALS REDUCTION PLANT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1286&D2), PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00678
ARFCC	07/02/14	PPPO-02-2400976-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00691
ARFREF	05/30/14	PPPO-02-2319575-14,DOE/LX/07-1289&D2/R1	TRANSMITTAL OF THE FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1289&D2/R1	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00680
ARFREF	06/17/14	PPPO-02-2318263-14,DOE/LX/07-1292&D2	PADUCAH FEDERAL FACILITY AGREEMENT MODIFICATION-FISCAL YEAR 2014 SITE MANAGEMENT PLAN, ENFORCEABLE COMMITMENTS, AND LIST OF SOLID WASTE MANAGEMENT UNITS/AREAS OF CONCERNS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00684
ARFREF	06/19/14	PPPO-02-2393051-14	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETING CONDUCTED FEBRUARY 26, 2014	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00685
ARFREF	06/27/14	PPPO-02-2372410-14	PADUCAH FEDERAL FACILITY AGREEMENT FISCAL YEAR 2014 FUNDING ALLOCATION EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00686
ARFREF	07/02/14	KY-14-0803	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE FISCAL YEAR 2014 SITE MANAGEMENT PLAN, ENFORCEABLE COMMITMENTS AND LIST OF SOLID WASTE MANAGEMENT UNITS/AREAS OF CONCERN	KDWM	DOE-PPPO	No	ENV 1.A-00698

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ARFREF	07/03/14	KY-14-0808	EPA COMMENTS ON 2013 CERCLA FIVE-YEAR REVIEW FOR THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1289&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00710
ARFREF	07/08/14	KY-14-0809	FIVE-YEAR REVIEW OF REMEDIAL ACTIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1289&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00711
ARFREF	07/14/14	PPPO-02-2376295-14,DOE/LX/07-0107&D2/R3/V1	TRANSMITTAL OF THE UPDATED 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/R3/V1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00687
ARFREF	07/16/14	KY-14-0814	MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-SITE MANAGEMENT PLAN	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00699
ARFREF	08/27/14		PUBLIC NOTICE: DEPT OF ENERGY IS MOVING PAPER COPIES OF THE PADUCAH GASEOUS DIFFUSION PLANT ADMINISTRATIVE RECORD DOCUMENTS (TO FEDERAL RECORD CENTER IN DAYTON OHIO)	DOE-PPPO		No	ENV 1.A-00704
ARFSOU	06/24/14	DOE/LX/07-0120&D2/R2/A1,P PPO-02-2333246-14	TRANSMITTAL OF THE ADDENDUM TO THE WORK PLAN FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PGDP, REMEDIAL INVESTIGATION 2, SAMPLING AND ANALYSIS PLAN (DOE/LX/07-0120&D2/R2/A1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00696
ARFSOU	07/24/14	KY-14-0817	COMMENTS ON THE ADDENDUM TO THE WORK PLAN FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY REMEDIAL INVESTIGATION 2 - SAMPLING AND ANALYSIS PLAN (DOE/LX/07-0120&D2/R2/A1)	KDWM	USEPA-4	No	ENV 1.A-00697

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6PHASE-PD	06/18/14	KY-14-0794	EPA CONDITIONAL CONCURRENCE OF THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PGDP (DOE/LX/07-1295&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00690
6PHASE-PD	06/19/14	KY-14-0795	CONDITIONAL CONCURRENCE TO THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-1295&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00692
6PHASE-PD	07/18/14	PPPO-02-2393427-14,DOE/LX/07-1295&D2/R1	TRANSMITTAL OF THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AT PGDP, DOE/LX/07-1295&D2/R1	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00702
6PHASE-PD	07/21/14	KY-14-0812	APPROVAL OF THE TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY (DOE/LX/07-1295&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00703
GW3-PD	06/06/14	KY-14-0792	EPA's REPLY TO THE TRANSMITTAL OF THE RISK-BASED EFFLUENT CONCENTRATION FOR CERCLA OUTFALL ASSOCIATED WITH NORTHEAST PLUME IRA HYDRAULIC CONTROL OPTIMIZATION, PGDP	USEPA-4	DOE-PPPO	No	ENV 1.A-00709
GW3-PD	06/23/14	PPPO-02-2393705-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00689
GW3-PD	07/14/14	KY-14-0810	KENTUCKY'S POSITION WITH RESPECT TO RESOLVING THE CURRENT NORTHEAST PLUME OPTIMIZATION PROJECT FORMAL DISPUTE	KDWM	DOE-PPPO	No	ENV 1.A-00706
GW3-PD	08/14/14	PPPO-02-2452230-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00712
GW3-PD	08/29/14	PPP0-02-2503109-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00713

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SWP-PD	05/20/14	PPPO-02-2300246-14,DOE/LX/07-1287&D2/A1	TRANSMITTAL OF ADDENDUM TO 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 (SWMU1) AT PGDP DOE/LX/07-1287&D2/A1, SUPPORTING IMPLEMENTATION OF ADDITIONAL SOIL SAMPLING IN THE HISTORIC ARIAL PHOTO AND WASTE AREA GROUP 27 TEST PIT AREAS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00679
SWP-PD	06/17/14	KY-14-0793	CONDITIONAL CONCURRENCE TO 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 OIL LANDFARM (SWMU 1) (DOE/LX/07-1287&D2/A1)	KDWM	DOE-PPPO	No	ENV 1.A-00688
SWP-PD	06/23/14	KY-14-0798	EPA CONDITIONAL CONCURRENCE OF 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 OIL LANDFARM (SWMU 1) AT PGDP (DOE/LX-07-1287&D2/A1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00693
SWP-PD	07/21/14	PPP0-02-2426542-14	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSIDERATION OF ADDITIONAL WORK FOR THE REMEDIAL DESIGN WORK PLAN FOR THE SOUTHWEST GROUNDWATER PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00694
SWP-PD	07/23/14	PPP0-02-2426542-14,DOE/LX/07-1287&D2/A1/R1	TRANSMITTAL OF REVISED ADDENDUM TO 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 (SWMU 1) AT PGDP, DOE/LX/07-1287&D2/A1/R1, SUPPORTING THE IMPLEMENTATION OF ADDITIONAL SOIL SAMPLING IN THE HISTORIC AERIAL PHOTO AND WASTE AREA GROUP 27 TEST PIT AREAS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00695
SWP-PD	07/24/14	KY-14-0816	CONCURRENCE TO 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-7 47-C OIL LANDFARM (SWMU 1) (DOE/LX/07-1287&D2/A2)	KDWM	DOE-PPPO	No	ENV 1.A-00700
SWP-PD	07/25/14	KY-14-0818	EPA APPROVAL OF THE ADDENDUM TO 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 LAND FARM (SWMU 1) AT PGDP (DOE/LX/07-1287&D2/A1/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00701
SWP-PD	07/28/14	KY-14-0823	COMMENTS ON THE SITEWIDE EVALUATION WORK PLAN FOR ANOMALIES LOCATED OUTSIDE THE LIMITED AREA (DOE/LX/07-1288&D1)	KDWM	DOE-PPPO	No	ENV 1.A-00705

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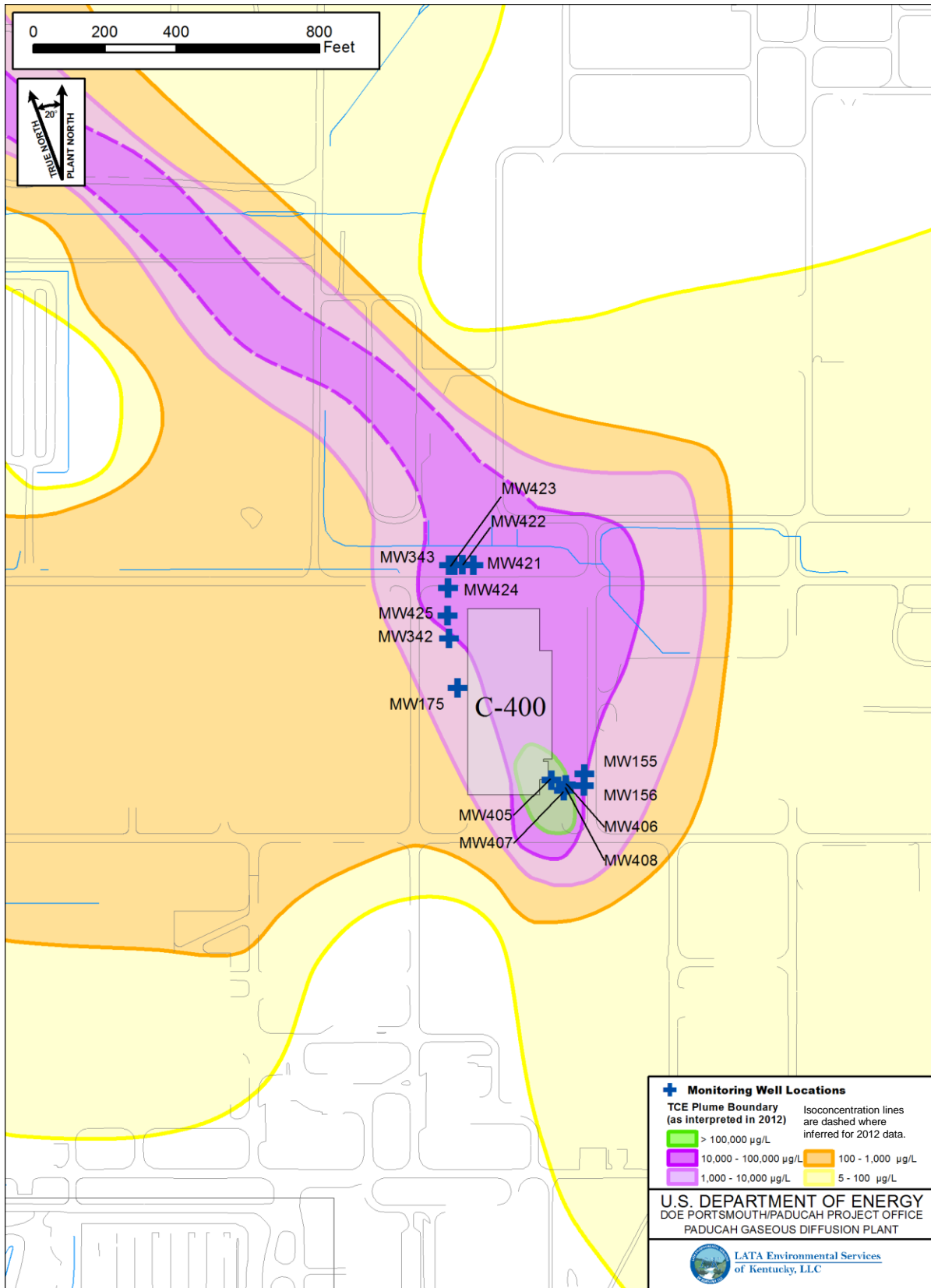
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**APPENDIX E**

**C-400 PROJECT GROUNDWATER MONITORING WELLS DATA**

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3/25/2014

Figure E.1. C-400 Monitoring Wells

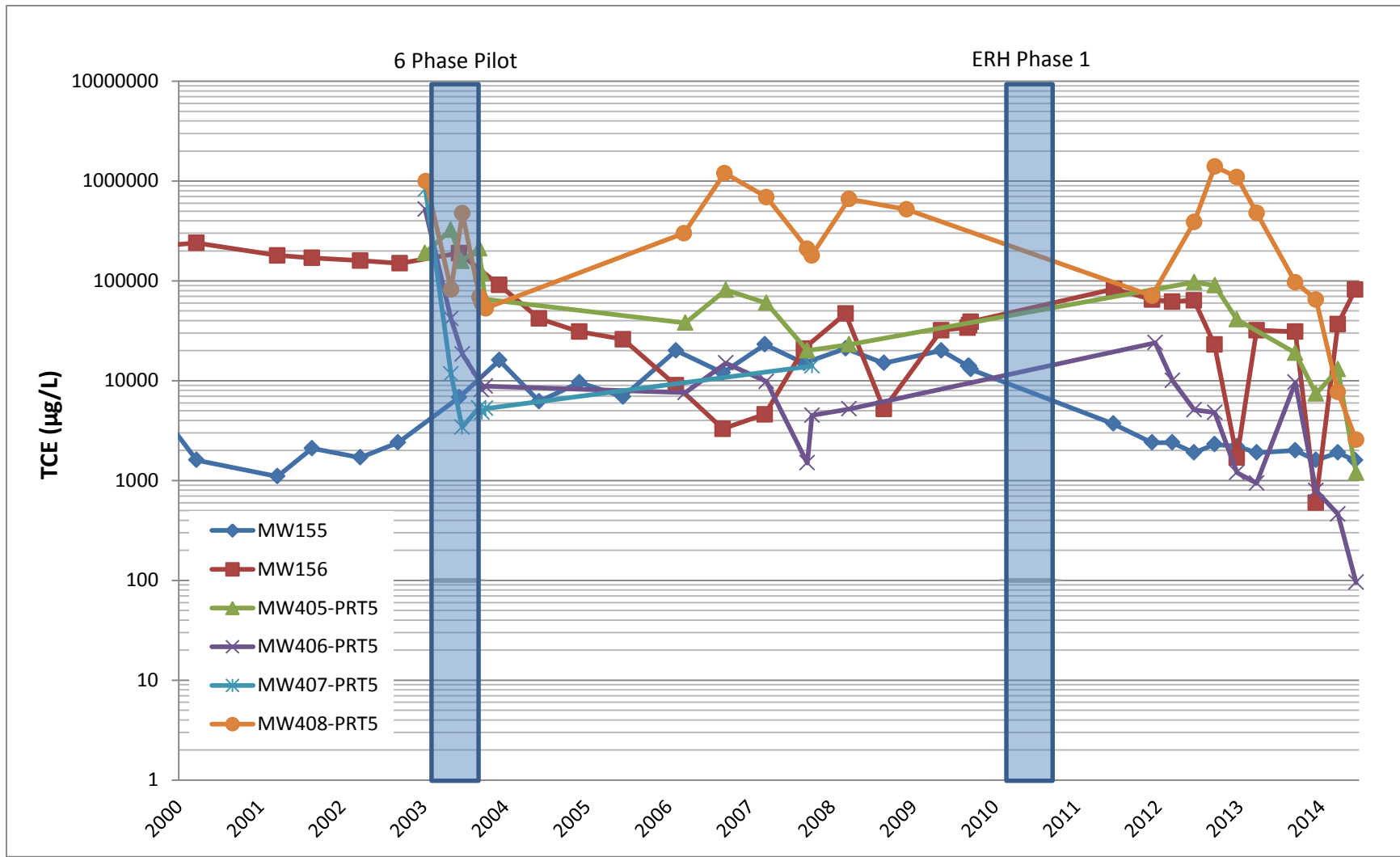


Figure E.2. C-400 TCE Trends in MWs in Source Areas

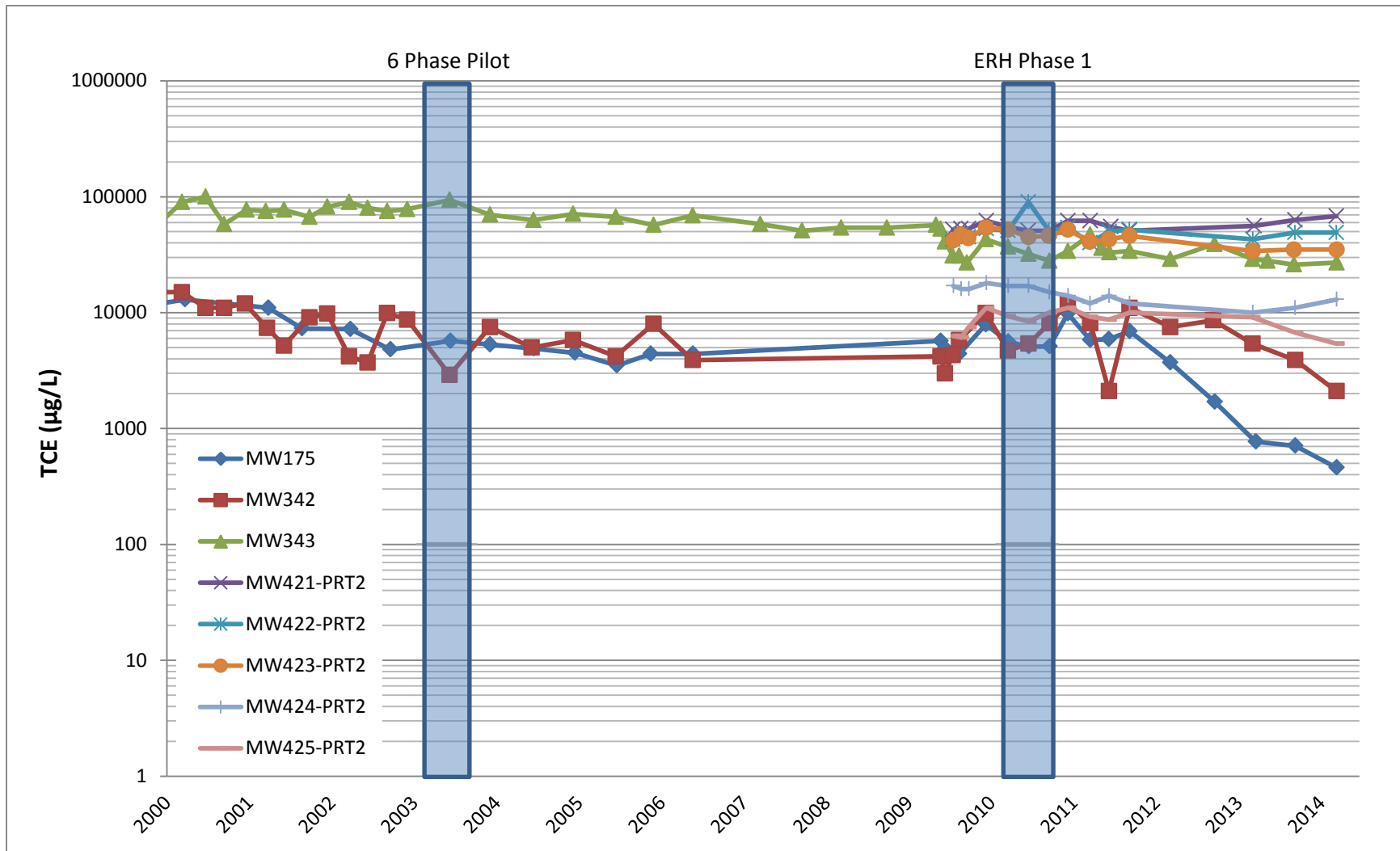


Figure E.3. C-400 TCE Trends in MWs Downgradient of Source Areas

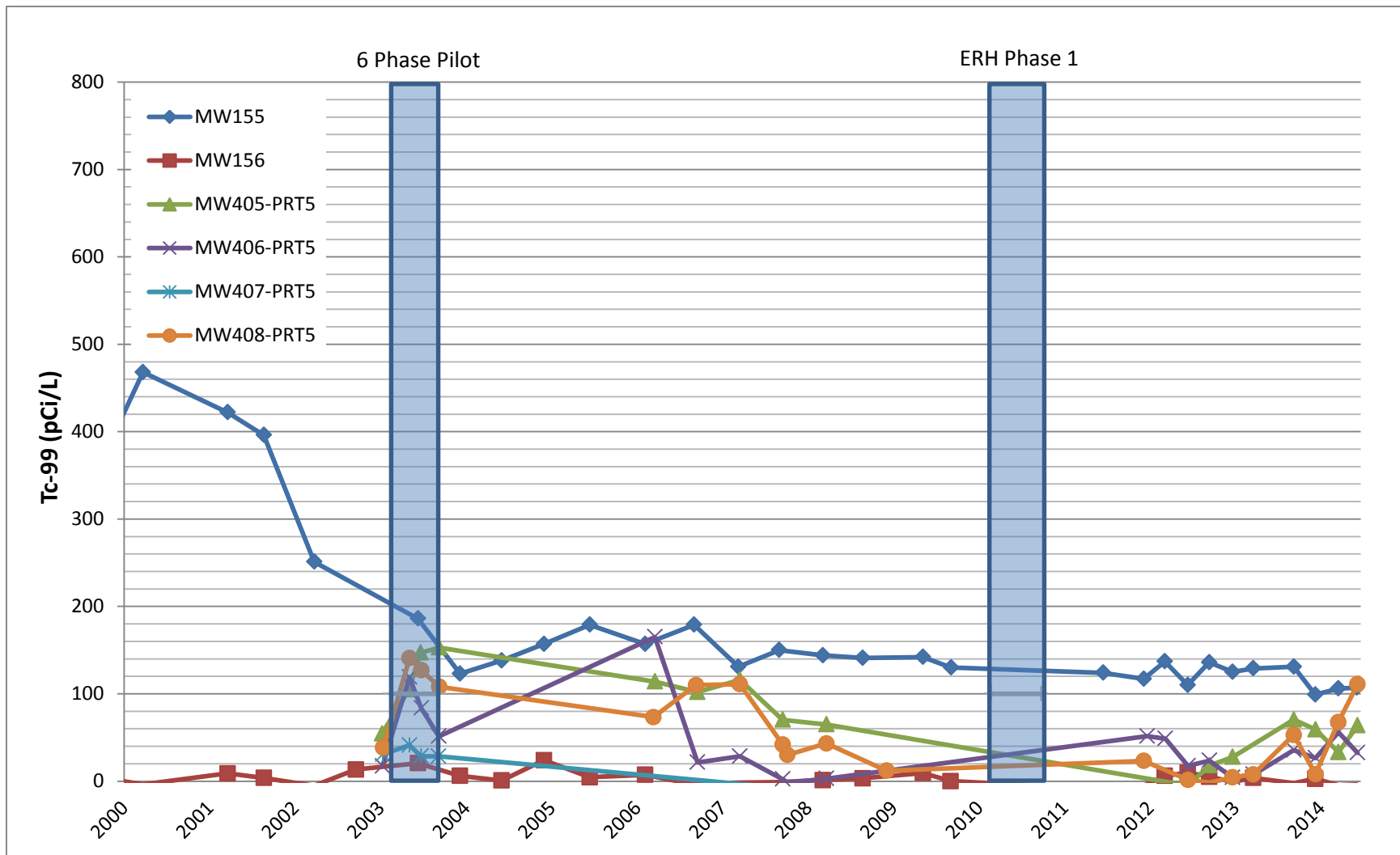


Figure E.4. C-400 Tc-99 Trends in MWs in Source Areas

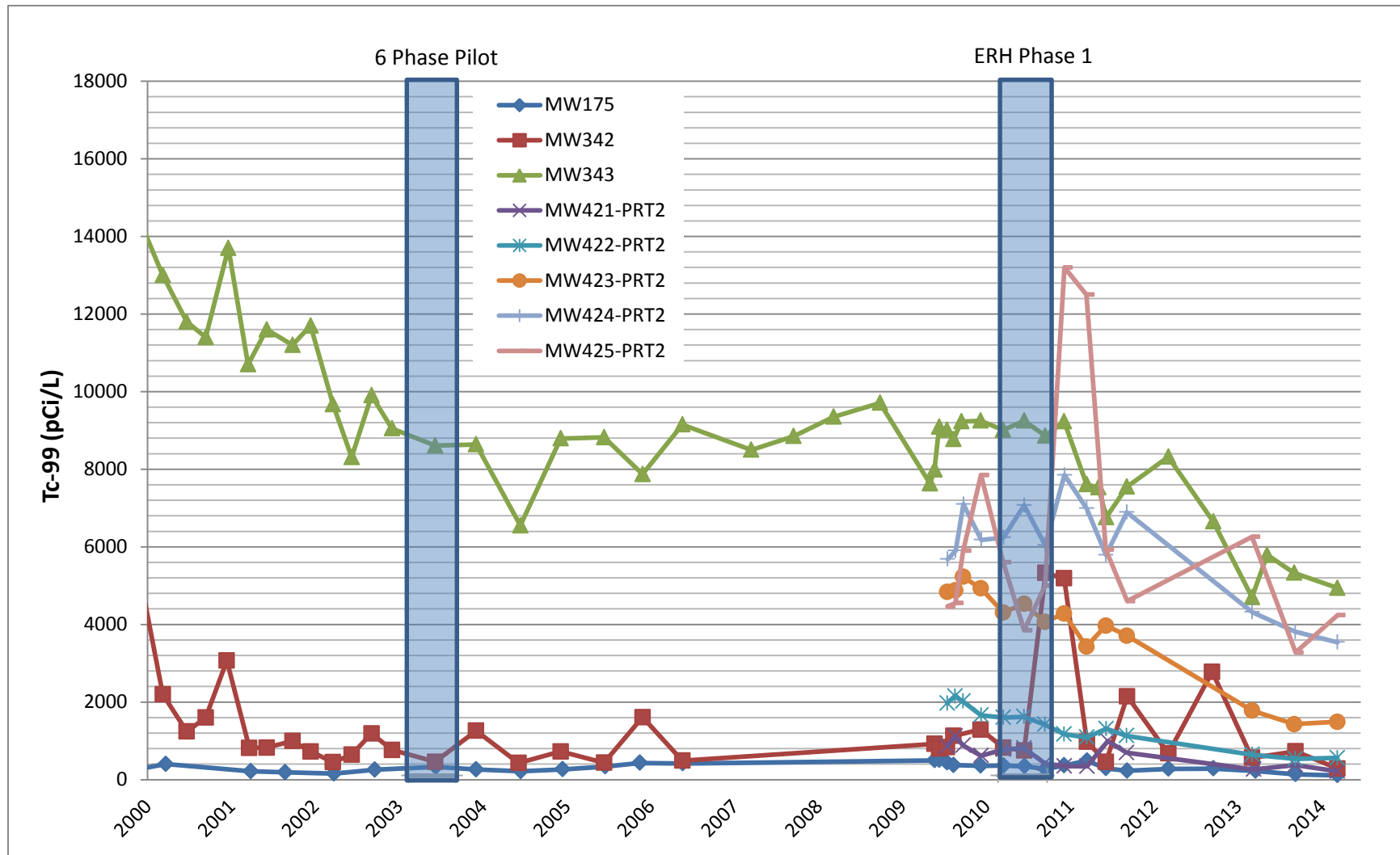


Figure E.5. C-400 Tc-99 Trends in MWs Downgradient of Source Areas

**C-400 Monitoring**  
**Water Quality Records for**  
**MW155**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L		PCB 1268 µg/L
9/10/2009	14000	< 1000			< 1000													C09254002003
9/10/2009	14000	< 200	< 200	< 200	< 200	< 1.12	93.2	130	< .005									C09253025001
9/15/2009	14000	< 500			< 500													C09258030001
9/22/2009	13000	< 500			< 500													C09265022002
6/23/2011	3700	< 100	< 20	< 20	< 20	7.65	130	124	< .005									C11174017005
12/14/2011	2400	< 500			< 100	< 3.61	111	117	< .005									C11348018003
3/13/2012	2400	< 50			< 50	< 2.35	89.7	137	< .005									C12073014001
6/19/2012	1900	< 250			< 50	6.46	121	110	< .005									C12171014003
9/19/2012	2300	< 20			< 20	< 3.19	131	136	< .005									C12263022001
12/28/2012	2200	< 20			< 20			125										C12363012001
12/28/2012	2200	< 20			< 20			120										C12363012002
3/27/2013	1900	< 20			< 20			129										C13086008001
9/16/2013	2000	< 100			< 20			131										C13259034001
12/17/2013	1600	< 20			< 20			99.1										C13351094007
12/17/2013	1600	< 20			< 20			98.6										C13351094006
3/26/2014	1900	< 20			< 20			106										C14085027001
6/12/2014	1590	< 25			< 25			107										350627004

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW156**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L		PCB 1268 µg/L
9/8/2009	34000	< 2000	< 2000	< 2000	< 2000	< 3.89	4.01	< .0531	< .005									C09252004001
9/8/2009	34000	< 5000			< 5000													C09252006001
9/15/2009	36000	< 5000			< 5000													C09258030002
9/22/2009	39000	< 5000			< 5000													C09265022001
6/27/2011	83000	< 5000	< 1000	< 1000	< 1000	< 3.86	5.6	< -8.94	< .005									C11178014001
12/14/2011	65000	< 5000			< 1000	< 2.55	7.54	< -5.13	< .005									C11348018004
3/13/2012	62000	< 2000			< 2000	6.83	< 4.93	< 6.21	< .005									C12073014002
6/19/2012	64000	< 5000			< 1000	< 6.32	< 6.31	< 9.77	< .005									C12171014004
9/19/2012	23000	< 500			< 500	< 3.24	< 5.54	< 5.12	< .005									C12263022002
12/28/2012	1700	< 500			< 500			< -.798										C12363012003
3/27/2013	32000	< 1000			< 1000			< 3.7										C13086008002
9/16/2013	31000	< 2500			< 500			< -2.19										C13259034002
12/17/2013	600	< 500			< 500			< 2.71										C13351094008
3/26/2014	37000	< 500			< 500			< -4.56										C14085027002
6/12/2014	81800	< 1000			< 1000			< -3.61										350627005

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW175**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	4900	< 50			< 50	11.7	447	508	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09168007001
7/20/2009	4400	< 250			< 50	< 3.65	415	438	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09201015001
8/18/2009	4400	< 50			< 50	9.43	416	375	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230023001
12/14/2009	7900	< 250			< 50	< -7.22	363	357	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024001
3/24/2010	5600	< 50			< 50	< 1.61	211	360	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10083023001
6/23/2010	4800	< 250			< 50	< 4.95	292	343	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017001
6/23/2010	5100	< 250			< 50	12.9	301	315	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017002
9/23/2010	5100	< 250			< 50	7.46	226	275	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013001
12/13/2010	9800	< 250			< 50	26.6	274	363	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023005
3/23/2011	5800	< 100			< 100	24.3	366	488	< .005	< 167	< 176	< 137	< 98	< 118	< 68.6		< 88.2	C11082024002
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-01
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-02
6/13/2011	5900	< 250			< 50	9.43	190	267	< .005									C11165011003
6/13/2011	5900	< 250			< 50	13.5	201	292	< .005									C11165011004
9/14/2011	6900	< 250			< 50	< -1.01	218	228	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087005
3/12/2012	3700	< 50			< 50	< 5.16	156	279	< .005									C12072031011
9/25/2012	1700	< 20			< 20	< 3.25	245	284	< .005									C12269015004
9/25/2012	1700	< 20			< 20	< 3.18	245	282	< .005									C12269015003
3/27/2013	770	< 10			< 10			226										C13086008003
9/18/2013	710	< 100			< 20			139										C13261023005
3/20/2014	460	< 5			< 5			110										C14079018001
3/20/2014	460	< 5			< 5			102										C14079018002

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW342**

**Sample Date Range: 6/16/2009 - 6/16/2014**

E-11

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	3000	< 50			< 50	16.7	616	805	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168006001
7/20/2009	4300	< 250			< 50	< -785	510	837	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09201016001
8/18/2009	5800	< 50			< 50	16	985	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230024001
12/14/2009	9500	< 250			< 50	< -6.46	978	1290	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024002
12/14/2009	9900	< 250			< 50	< .633	926	1280	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09348024003
3/23/2010	4700	< 50			< 50	10.3	386	827	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025007
6/22/2010	5400	< 250			< 50	11.4	642	750	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173039001
9/23/2010	7600	< 250			< 50	< -52	3690	5330	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013002
9/23/2010	8100	< 250			< 50	< -57.1	3720	4720	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013003
12/13/2010	12000	< 200			< 200	56	3960	5190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023003
12/13/2010	12000	< 200			< 200	41	4120	5000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023002
3/23/2011	8100	< 100			< 100	26.8	835	980	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .32	< .09	C11082024001
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-01
6/14/2011	2100	< 500			< 100	28.8	457	456	< .005									C11165038001
9/14/2011	11000	< 250			< 50	< -9.47	1800	2150	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087003
9/14/2011	10000	< 250			< 50	< -4.68	1750	1930	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087004
3/12/2012	7500	< 100			< 100	< 2.56	420	678	< .005									C12072031010
9/19/2012	8600	< 100			< 100	10.4	2820	2780	< .005									C12263022003
3/12/2013	5400	< 100			< 100			564										C13072002001
9/18/2013	3900	< 500			< 100			728										C13261023004
3/20/2014	2100	< 20			< 20			287										C14079016010

**C-400 Monitoring**  
**Water Quality Records for**  
**MW343**

**Sample Date Range: 6/16/2009 - 6/16/2014**

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Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	41000	< 500			< 500	82.1	6710	9090	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168007002
7/20/2009	31000	< 2500			< 500	< 4.65	6730	9010	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09201066001
8/18/2009	31000	< 400			< 400	19.7	7420	8770	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230023002
9/21/2009	27000	< 1000	< 200	< 1000	< 200	< -119	6980	9230	< .005									C09265006005
12/14/2009	43000	< 2000			< 400	< -176	6970	9250	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09348027001
3/22/2010	37000	< 400	< 250	< 250	< 250	< -90.6	5370	8960	< .005									C10082002001
3/22/2010	37000	< 250			< 250	37.4	6850	< 8920	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005001
3/22/2010	37000	< 250			< 250	92.1	5660	9010	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005002
6/22/2010	32000	< 2500			< 500	22	6440	9250	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173027001
9/22/2010	28000	< 2500			< 500	< -114	6340	8860	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020004
12/13/2010	34000	< 2500			< 500	< -77.3	6970	9230	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023006
3/22/2011	47000	< 400			< 400	46.5	6570	7610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .13	< .09	C11081023004
3/22/2011	39000	< 400			< 400	134	5310	7600	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .53	< .09	C11081023003
5/12/2011	36000	< 2500	< 500	< 500	< 500	150	5510	7530	< .005									C11132027003
6/15/2011	33000	< 2000			< 400	< -4.39	7110	6760	< .005									C11166026001
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-02
9/13/2011	34000	< 2000			< 400	< -144	6990	7550	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012004
3/12/2012	28000	< 400			< 400	< -85.1	4680	8320	< .005									C12072031006
3/12/2012	29000	< 400			< 400	< -56.9	4670	7030	< .005									C12072031007
9/24/2012	39000	< 500			< 500	< -23.7	4970	6650	< .005									C12268086002
3/12/2013	29000	< 400			< 400			4700										C13072002002
5/17/2013	28000	< 1000	< 200	< 200	< 200			5790										C13137019001

**C-400 Monitoring**  
**Water Quality Records for**  
**MW343**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L		PCB 1260 μg/L
9/12/2013	25000	< 1000			< 200			5330										C13255009004
9/12/2013	26000	< 1000			< 200			5150										C13255009005
3/20/2014	27000	< 200			< 200			4940										C14079016011

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW405**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/23/2011	52000	< 2500	< 500	< 500	< 500	8.66	22.7	< 16.1	.014									C11174017004

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW405-PRT5**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/20/2012	97000	< 5000			< 1000	< 4.86	15.7	< -4.94	< .005									C12172011001
9/20/2012	90000	< 1000			< 1000	< .778	14.6	< 17.9	< .005									C12264031001
12/28/2012	41000	< 1000			< 1000			27.7										C12363012004
9/16/2013	19000	< 1000			< 200			70.4										C13259034003
12/18/2013	7400	< 100			< 100			59.1										C13353003001
3/26/2014	13000	< 100			< 100			33.1										C14085027003
6/16/2014	1190	< 20			< 20			63.8										350866002

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW406**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L		PCB 1268 µg/L
6/23/2011	6500	< 500	< 100	< 100	< 100	11.4	45.5	47.7	< .005									C11174017003

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW406-PRT5**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
12/28/2011	24000	< 500			< 100	7.77	54.5	51.5	< .005									C11362008002
3/15/2012	10000	< 100			< 100	< -2.11	45.3	48.6	< .005									C12075015001
6/20/2012	5100	< 500			< 100	< 1.89	23.6	< 17.5	< .005									C12172011002
9/20/2012	4800	< 100			< 100	< -.0458	31.2	23.5	< .005									C12264031002
12/28/2012	1200	< 10			< 10			< 4.01										C12363012005
3/27/2013	940	< 20			< 20			< 7.56										C13086018001
9/16/2013	9600	< 100			< 20			35.5										C13259034004
12/18/2013	790	< 10			< 10			26.5										C13353003002
3/26/2014	460	< 5			< 5			55.9										C14085027004
6/16/2014	95.4	< 2			< 2			32.5										350866003

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW407-PRT4**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
12/28/2011	4900	< 500			< 100	< 3.09	10.7	< 5.26	< .005									C11362008001
3/14/2012	14000	< 100			< 100	< 3.36	5.57	< -5.15	< .005									C12074017002
6/20/2012	13000	< 500			< 100	< 4.76	8.43	< 8.61	< .005									C12172011003
9/20/2012	13000	< 100			< 100	< .291	< 3.11	< -10.2	< .005									C12264031003
12/28/2012	7000	< 50			< 50			< .433										C12363012006
3/27/2013	14000	< 200			< 200			< .435										C13086018002
9/16/2013	24000	< 500			< 100			< 13.4										C13259034005
12/18/2013	7000	< 100			< 100			< 3.81										C13353003003
3/26/2014	2300	< 20			< 20			67.6										C14085027005
6/16/2014	32100	< 500			< 500			58.3										350866004

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW408**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/23/2011	95000	< 5000	< 1000	< 1000	< 1000	< 2.51	13.3	< 14.5	< .005									C11174017001

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW408-PRT5**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L		PCB 1268 µg/L
12/14/2011	71000	< 5000			< 1000	< 1.93	32.9	23.2	< .005									C11348026001
6/20/2012	390000	< 20000			< 4000	< 3.79	12.2	< 1.58	< .005									C12172011004
9/20/2012	1400000	< 4000			< 4000	< -1.52	13.4	< -1.7	< .005									C12264031004
12/28/2012	1100000	< 5000			< 5000			< 4.33										C12363012007
3/27/2013	480000	< 10000			< 10000			< 7.73										C13086018003
9/16/2013	97000	< 2500			< 500			52.9										C13259034006
12/18/2013	65000	< 1000			< 1000			< 8.07										C13353003004
3/26/2014	7700	< 50			< 50			67.7										C14085027006
6/16/2014	2560	< 40			< 40			111										350866001

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW421-PRT1**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	20000	< 1000			< 200	38	1780	1650	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09202027001
8/25/2009	21000	< 200			< 200	< -.377	1300	1670	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09237029001
9/29/2009	22000	< 200			< 200	33	878	1240	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002001
12/16/2009	27000	< 1000			< 200	27.7	906	1160	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09350025004
3/23/2010	24000	< 200			< 200	15.5	1180	1780	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025004
6/23/2010	58000	< 500			< 500	18.4	1710	2340	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10172026001
9/21/2010	34000	< 500			< 500	15.1	826	1190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016001
12/14/2010	28000	< 2500			< 500	9.44	789	916	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026001
3/23/2011	28000	< 250			< 250	< 4.35	623	859	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .06	< .09	C11082024003
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-01
6/22/2011	29000	< 2000			< 400	< -121	3300	3930	< .005									C11173026001
9/12/2011	32000	< 1000			< 200	9.06	2190	2500	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015001
3/19/2013	26000	< 400			< 400			912										C13078013003
9/17/2013	34000	< 2000			< 400			1750										C13260018001
3/19/2014	31000	< 400			< 400			761										C14078013004

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW421-PRT2**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	52000	< 2500			< 500	15.2	830	856	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09202027002
8/25/2009	53000	< 500			< 500	6.73	865	1120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237029002
9/29/2009	53000	< 500			< 500	27.9	639	882	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002002
12/16/2009	62000	< 2500			< 500	4.74	475	618	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025005
3/23/2010	55000	< 500			< 500	12.7	417	777	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025005
6/21/2010	51000	< 500			< 500	26.9	514	813	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10172026002
9/21/2010	51000	< 500			< 500	8.44	255	416	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016002
12/14/2010	62000	< 500			< 500	10.4	280	348	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026002
3/23/2011	62000	< 500			< 500	8.6	220	340	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .15	< .09	C11082024004
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-02
6/22/2011	55000	< 2500			< 500	< -24.9	853	996	< .005									C11173026002
9/12/2011	51000	< 2000			< 400	14.5	582	694	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015002
3/19/2013	56000	< 500			< 500			265										C13078013004
9/17/2013	63000	< 2000			< 400			377										C13260018002
3/19/2014	68000	< 400			< 400			216										C14078013005

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW421-PRT3**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	63000	< 2500			< 500	< 3.73	327	302	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09202027003
8/25/2009	66000	< 500			< 500	< 3.62	398	451	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237029003
9/29/2009	61000	< 500			< 500	8.99	323	335	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273002003
12/16/2009	77000	< 2500			< 500	4.67	226	345	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025006
3/23/2010	70000	< 500			< 500	12.8	218	376	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025006
6/21/2010	68000	< 500			< 500	< 4.02	278	251	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173001001
9/21/2010	64000	< 500			< 500	6.83	215	285	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016003
12/14/2010	65000	< 500			< 500	< 5.08	209	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026003
3/23/2011	61000	< 500			< 500	19	186	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .34	< .09	C11082024005
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-03
6/22/2011	72000	< 2500			< 500	15.7	289	399	< .005									C11173026003
9/12/2011	67000	< 2500			< 500	5.7	272	313	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255015003
3/12/2012	73000	< 500			< 500	5.39	177	283	< .005									C12072031003
9/25/2012	96000	< 1000			< 1000	< 1.59	225	211	< .005									C12270003002
3/19/2013	80000	< 1000			< 1000			216										C13078013005
9/17/2013	63000	< 2500			< 500			191										C13260018003
3/19/2014	67000	< 500			< 500			202										C14078013006

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW422-PRT1**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	10000	< 500			< 100	< -96.7	10400	13600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202018001
8/24/2009	13000	< 100			< 100	95	12900	15600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237007001
9/28/2009	12000	< 100			< 100	59.7	14200	16900	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021004
12/16/2009	16000	< 1000			< 200	< -15.7	10200	13900	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025001
3/23/2010	14000	< 100			< 100	< -25.6	8460	13400	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025001
6/21/2010	14000	< 100			< 100	< -60.6	11600	15500	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173001002
9/20/2010	15000	< 200			< 200	< -51	8500	12900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039004
12/13/2010	23000	< 1000			< 200	< -3.47	5090	6610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024004
3/22/2011	20000	< 200			< 200	87.5	4860	6410	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11081023005
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-03
6/15/2011	14000	< 1000			< 200	< -13.8	7910	9730	< .005									C11166026002
9/12/2011	16000	< 1000			< 200	< -54.7	10600	12300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022001
3/13/2013	16000	< 250			< 250			6720										C13072022004
9/17/2013	17000	< 500			< 100			14200										C13260018004
3/19/2014	15000	< 100			< 100			5800										C14078013007

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW422-PRT2**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	43000	< 2500			< 500	32.8	1570	1970	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019001
8/24/2009	47000	< 500			< 500	28.2	1650	2150	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008001
9/28/2009	45000	< 500			< 500	18.5	1490	2020	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09271021005
12/16/2009	53000	< 2500			< 500	16.1	1110	1660	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025002
3/23/2010	51000	< 500			< 500	24	823	1600	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025002
6/21/2010	90000	< 400			< 400	17.5	1060	1620	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173001003
9/20/2010	51000	< 1000			< 1000	9.61	808	1420	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039005
12/13/2010	54000	< 2500			< 500	41.2	789	1170	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024005
3/22/2011	40000	< 500			< 500	27.3	823	1090	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .44	< .09	C11081023006
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-04
6/15/2011	50000	< 2500			< 500	35.3	1000	1310	< .005									C11166026003
9/12/2011	52000	< 2000			< 400	10.6	900	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022002
3/13/2013	43000	< 500			< 500			643										C13072022005
9/17/2013	49000	< 2000			< 400			535										C13260018005
3/19/2014	49000	< 400			< 400			559										C14078013008

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW422-PRT3**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	45000	< 2500			< 500	< -.394	1650	2310	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019002
8/24/2009	46000	< 500			< 500	15.4	1380	1960	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008002
9/28/2009	45000	< 500			< 500	15.5	1560	1940	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021006
12/16/2009	58000	< 2500			< 500	20.7	1230	1630	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09350025003
3/23/2010	53000	< 500			< 500	19.6	866	1490	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025003
6/21/2010	72000	< 1000			< 1000	15.1	883	1520	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173001004
9/20/2010	61000	< 1000			< 1000	16.3	777	1320	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039006
12/13/2010	54000	< 2500			< 500	22.6	782	1070	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024006
3/22/2011	54000	< 500			< 500	23.3	677	1010	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .36	< .09	C11081023007
6/15/2011	49000	< 2500			< 500	13.5	864	1140	< .005									C11166026004
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-05
9/12/2011	53000	< 2000			< 400	7.69	718	910	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11255022003
3/12/2012	69000	< 500			< 500	< 4.11	575	774	< .005									C12072031004
9/25/2012	48000	< 1000			< 1000	< 4.02	524	631	< .005									C12270003001
3/13/2013	35000	< 500			< 500			559										C13072022006
9/17/2013	47000	< 2000			< 400			535										C13260018006
3/19/2014	49000	< 400			< 400			543										C14078013009

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW423-PRT1**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	13000	< 500			< 100	< -60	8610	10400	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09203009001
8/25/2009	12000	< 200			< 200	81	9720	12100	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09237022001
9/28/2009	11000	< 100			< 100	87.3	11100	14000	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09271021001
12/15/2009	15000	< 1000			< 200	< -236	11500	14400	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09349015001
3/22/2010	15000	64			< 25	45.5	8550	13800	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005003
6/22/2010	12000	< 500			< 100	< -79.6	10100	13400	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027002
9/20/2010	12000	< 200			< 200	52.9	9500	16000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039001
12/13/2010	18000	< 500			< 100	< -161	8180	10800	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024001
3/21/2011	15000	< 200			< 200	95.2	6870	8960	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11080075002
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-06
6/14/2011	15000	< 500			< 100	< -273	9620	9790	< .005									C11165038005
9/13/2011	14000	< 1000			< 200	< -18.7	8820	10500	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012001
3/13/2013	18000	< 200			< 200			9070										C13072009001
9/12/2013	13000	< 1000			< 200			14900										C13255083001
3/20/2014	13000	< 100			< 100			8350										C14079016004

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW423-PRT2**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	42000	< 2500			< 500	< -8.97	3760	4840	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09203009002
8/25/2009	47000	< 500			< 500	34.3	3420	4880	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237022002
9/28/2009	44000	< 500			< 500	35.8	3820	5230	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09271021002
12/15/2009	54000	< 2500			< 500	< -51.8	3650	4930	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09349015002
3/22/2010	52000	< 500			< 500	40.2	2260	4310	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005004
6/22/2010	45000	< 2500			< 500	< -2.09	3050	4530	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027003
9/20/2010	46000	< 500			< 500	14.3	2590	4070	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039002
12/13/2010	52000	< 2500			< 500	42.7	2070	4280	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024002
3/21/2011	41000	< 500			< 500	114	1990	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .15	< .09	C11080075003
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-07
6/14/2011	43000	< 2500			< 500	< -23.6	2810	3970	< .005									C11165038006
9/13/2011	46000	< 2000			< 400	< -37.2	2730	3710	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012002
3/13/2013	34000	< 500			< 500			1780										C13072009002
9/12/2013	35000	< 2000			< 400			1430										C13255083002
3/20/2014	35000	< 400			< 400			1490										C14079016005

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW423-PRT3**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	42000	< 2500			< 500	< -4.38	2660	4350	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09203009003
8/25/2009	47000	< 500			< 500	23.4	2850	4440	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237022003
9/28/2009	14000	< 500			< 500	97.8	10600	13500	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09271021003
12/15/2009	53000	< 2500			< 500	< -48.6	2970	4030	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09349015003
3/22/2010	51000	< 500			< 500	43.5	1960	3810	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005005
6/22/2010	49000	< 2500			< 500	5.16	2930	3850	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173027004
9/20/2010	50000	< 500			< 500	34.3	2080	3730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039003
12/13/2010	50000	< 2500			< 500	19	2120	3140	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.15	< .09	C10347024003
3/21/2011	41000	< 500			< 500	89.1	1880	2900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .12	< .09	C11080075004
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-08
6/14/2011	43000	< 2500			< 500	< -17.1	2540	3680	< .005									C11165038007
9/13/2011	47000	< 2000			< 400	< -27.3	2490	2990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256012003
3/12/2012	37000	< 500			< 500	< -9.6	1620	2350	< .005									C12072031005
9/24/2012	67000	< 500			< 500	19.2	1550	1820	< .005									C12268086001
3/13/2013	34000	< 500			< 500			1800										C13072009003
9/12/2013	35000	< 2000			< 400			1730										C13255083003
3/20/2014	36000	< 400			< 400			1480										C14079016006

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW424-PRT1**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	7200	< 500			< 100	< -7	2300	1790	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09204021001
8/27/2009	7100	< 50			< 50	< 3.09	2680	3330	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09239018001
9/30/2009	7700	< 100			< 100	125	4580	6150	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09273021001
12/17/2009	9200	< 100			< 100	< -31.9	7760	10000	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09351022002
3/24/2010	7900	< 100			< 100	86.8	4420	6540	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10083023002
6/23/2010	7900	< 250			< 50	14	4020	5080	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017003
9/22/2010	7900	< 1000			< 200	< -79.8	7420	10300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020001
12/15/2010	8400	< 100			< 100	< -325	9940	13900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020001
6/14/2011	7900	< 500			< 100	< -211	7890	8220	< .005									C11165038002
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-09
9/13/2011	9000	< 500			< 100	< -150	5730	6730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019001
3/13/2013	7900	< 100			< 100			10300										C13072022001
9/17/2013	5900	< 250			< 50			5540										C13260018007
3/20/2014	3900	< 50			< 50			6530										C14079016007

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW424-PRT2**

**Sample Date Range: 6/16/2009 - 6/16/2014**

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Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	17000	< 1000			< 200	< -29.4	4170	5680	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09204022001
8/27/2009	16000	< 200			< 200	< -4.44	6130	5900	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09239019001
9/30/2009	16000	< 200			< 200	91.8	5200	7100	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09273023001
12/17/2009	18000	< 200			< 200	7.27	4010	6180	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09351022003
3/24/2010	17000	< 250			< 250	52.8	2940	6240	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10083023003
6/22/2010	17000	< 1000			< 200	12.7	5150	7070	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017004
9/22/2010	15000	< 1000			< 200	< -41.8	4000	6040	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020002
12/15/2010	14000	< 200			< 200	< -161	5510	7850	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020002
3/22/2011	12000	< 100			< 100	170	4620	6990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .26	< .09	C11081023001
6/14/2011	14000	< 500			< 100	< -51.5	4820	5790	< .005									C11165038003
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-10
9/13/2011	12000	< 500			< 100	< -138	5900	6890	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019002
3/13/2013	10000	< 100			< 100			4320										C13072022002
9/17/2013	11000	< 500			< 100			3810										C13260018008
3/20/2014	13000	< 100			< 100			3540										C14079016008

**C-400 Monitoring**  
**Water Quality Records for**  
**MW424-PRT3**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	22000	< 1000			< 200	< -7.72	1900	2770	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09204023001
8/27/2009	23000	< 200			< 200	< 5.21	3400	4970	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09239020001
9/30/2009	23000	< 250			< 250	78.9	3350	4660	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273024001
12/17/2009	23000	< 200			< 200	12.3	2960	4500	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09351022004
3/24/2010	23000	< 250			< 250	< -39.3	2810	4600	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10083023004
6/23/2010	21000	< 1000			< 200	10.2	3160	4740	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017005
9/22/2010	21000	< 1000			< 200	< -14.6	2650	4440	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020003
12/15/2010	19000	< 200			< 200	< -54.8	2840	4300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020003
3/22/2011	16000	< 200			< 200	93.3	2580	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .28	< .09	C11081023002
6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-11
6/14/2011	18000	< 1000			< 200	< -23	2990	3940	< .005									C11165038004
9/13/2011	16000	< 1000			< 200	< -42.4	2720	4190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019003
3/12/2012	12000	< 200			< 200	15.3	2120	3500	< .005									C12072031008
9/25/2012	11000	< 200			< 200	< -2.6	3010	3600	< .005									C12269015005
3/13/2013	10000	< 100			< 100			3070										C13072022003
9/17/2013	9300	< 500			< 100			2870										C13260018009
3/20/2014	10000	< 100			< 100			2500										C14079016009

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW425-PRT1**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	5100	< 250			< 50	< 2.26	755	789	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09203011001
8/26/2009	8200	< 100			< 100	9.62	4390	3870	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09238024001
9/29/2009	11000	< 100			< 100	107	6500	8580	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273002004
12/16/2009	13000	< 500			< 100	26.5	6360	9490	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09350025007
3/23/2010	8900	< 100			< 100	51.4	2200	3010	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005006
6/22/2010	8300	< 500			< 100	25	1340	1330	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039002
9/21/2010	12000	< 500			< 100	< -221	10000	12700	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10264016004
12/15/2010	13000	< 200			< 200	< -819	15000	18300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020004
3/21/2011	11000	< 100			< 100	81.2	10800	14000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .17	< .09	C11080075005
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-03
6/13/2011	7600	< 500			< 100	75.3	2130	2530	< .005									C11165011005
9/14/2011	12000	< 500			< 100	< -143	7140	9190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087006
3/12/2013	6500	< 100			< 100			5630										C13072002003
9/18/2013	4600	< 500			< 100			5220										C13261023001
3/20/2014	3000	< 50			< 50			2810										C14079016001

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW425-PRT2**

**Sample Date Range: 6/16/2009 - 6/16/2014**

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Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	6300	< 250			< 50	< 3.37	2930	4460	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09203011002
8/26/2009	6100	< 50			< 50	< -19.6	3370	4550	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09238024002
9/29/2009	7500	< 50			< 50	121	4600	5900	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002005
12/16/2009	11000	< 500			< 100	< -17.7	5550	7850	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09350025008
3/23/2010	9300	< 50			< 50	49.5	3710	5600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005007
6/22/2010	8400	< 250			< 50	43.7	2900	3850	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039003
9/21/2010	10000	< 500			< 100	< -37.4	4910	5000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016005
12/15/2010	11000	< 100			< 100	< -456	9930	13200	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020005
3/21/2011	9200	< 100			< 100	28.2	8260	12500	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .36	< .09	C11080075006
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-04
6/13/2011	8700	< 500			< 100	< -26.5	4870	5930	< .005									C11165011006
9/14/2011	10000	< 500			< 100	< -98.5	4370	4600	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087007
3/12/2013	9100	< 100			< 100			6260										C13072002004
9/18/2013	6700	< 500			< 100			3280										C13261023002
3/20/2014	5400	< 50			< 50			4240										C14079016002

**C-400 Monitoring**  
**Water Quality Records for**  
**MW425-PRT3**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	6200	< 250			< 50	< .86	3380	4420	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09203011003
8/26/2009	4700	< 50			< 50	< -23.2	3770	4120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09238024003
9/29/2009	6900	< 50			< 50	96.2	3490	4570	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002006
12/17/2009	8100	< 100			< 100	39.3	3620	5210	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09351022001
3/23/2010	7600	< 50			< 50	57	2590	4290	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005008
6/22/2010	7700	< 250			< 50	33.6	2790	3760	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039004
9/21/2010	8500	< 500			< 100	< -22.6	3270	5070	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10264016006
12/15/2010	9100	< 100			< 100	< -325	7150	8570	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020006
6/13/2011	7400	< 500			< 100	< -23.1	3310	4310	< .005									C11165011007
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-05
9/14/2011	8500	< 500			< 100	< -99.4	4540	4360	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087008
3/12/2012	8000	< 100			< 100	< -25.1	3230	5410	< .005									C12072031009
9/19/2012	9900	< 100			< 100	< -28.6	4490	5320	< .005									C12263022004
3/12/2013	11000	< 100			< 100			4600										C13072002005
9/18/2013	9600	< 500			< 100			2530										C13261023003
3/20/2014	9500	< 100			< 100			3230										C14079016003

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW505**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results							Lab Sample ID	
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L		PCB 1268 µg/L
3/13/2012	160	< 5			< 5	< -2.14	48.8	51.6	< .005									C12073014003
6/18/2012	18	< 5			< 1	< -1.58	54	51.4	< .005									C12170024001
9/19/2012	22	< 1			< 1	< 1.39	45.1	61.8	< .005									C12263015001
12/5/2012	22	< 5			< 1			56.2										C12340029002
3/19/2013	34	< 1			< 1			49.2										C13078040001
3/19/2013	32	< 1			< 1			53.9										C13078040002
6/11/2013	31	< 1			< 1			55.5										C13162015006
9/12/2013	26	< 5			< 1			74.3										C13255009001
12/17/2013	28	< 1			< 1			56.2										C13351094003
3/19/2014	23	< 1			< 1			69										C14078013001
6/11/2014	26.2	< 1			< 1			52.8										350627002

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW506**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
3/13/2012	4300	< 50			< 50	< .856	50.5	62.6	< .005									C12073014004
6/18/2012	4100	< 250			< 50	< 3.44	66.4	59.7	< .005									C12170024002
9/19/2012	3700	< 50			< 50	< 3.84	50.8	59	< .005									C12263015002
12/5/2012	4200	< 250			< 50			42.8										C12340029004
3/19/2013	2100	< 50			< 50			49.7										C13078040003
6/11/2013	2400	< 50			< 50			64										C13162015005
9/12/2013	2100	< 100			< 20			63.1										C13255009002
12/17/2013	2000	< 20			< 20			60.9										C13351094004
3/19/2014	1200	< 20			< 20			65.4										C14078013002
6/11/2014	954	< 20			< 20			56.8										350627003

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**C-400 Monitoring**  
**Water Quality Records for**  
**MW507**

**Sample Date Range: 6/16/2009 - 6/16/2014**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
3/13/2012	1200	< 10			< 10	< 3.11	38.7	53.4	< .005									C12073014005
6/18/2012	1200	< 100			< 20	< 5.7	51.2	41.2	< .005									C12170024003
9/19/2012	1800	< 10			< 10	< .808	34.4	30.7	< .005									C12263015003
12/5/2012	1900	< 100			< 20			42.9										C12340029005
3/19/2013	770	< 20			< 20			48.3										C13078040004
6/11/2013	1000	< 10			< 10			72.4										C13162015003
6/11/2013	1100	< 10			< 10			65.1										C13162015004
9/12/2013	530	< 50			< 10			86.6										C13255009003
12/17/2013	870	< 10			< 10			64.6										C13351094005
3/19/2014	190	< 1			< 1			82.7										C14078013003
6/12/2014	260	< 5			< 5			80.4										350627006
6/12/2014	245	< 5			< 5			77.6										350627001

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**APPENDIX F**

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

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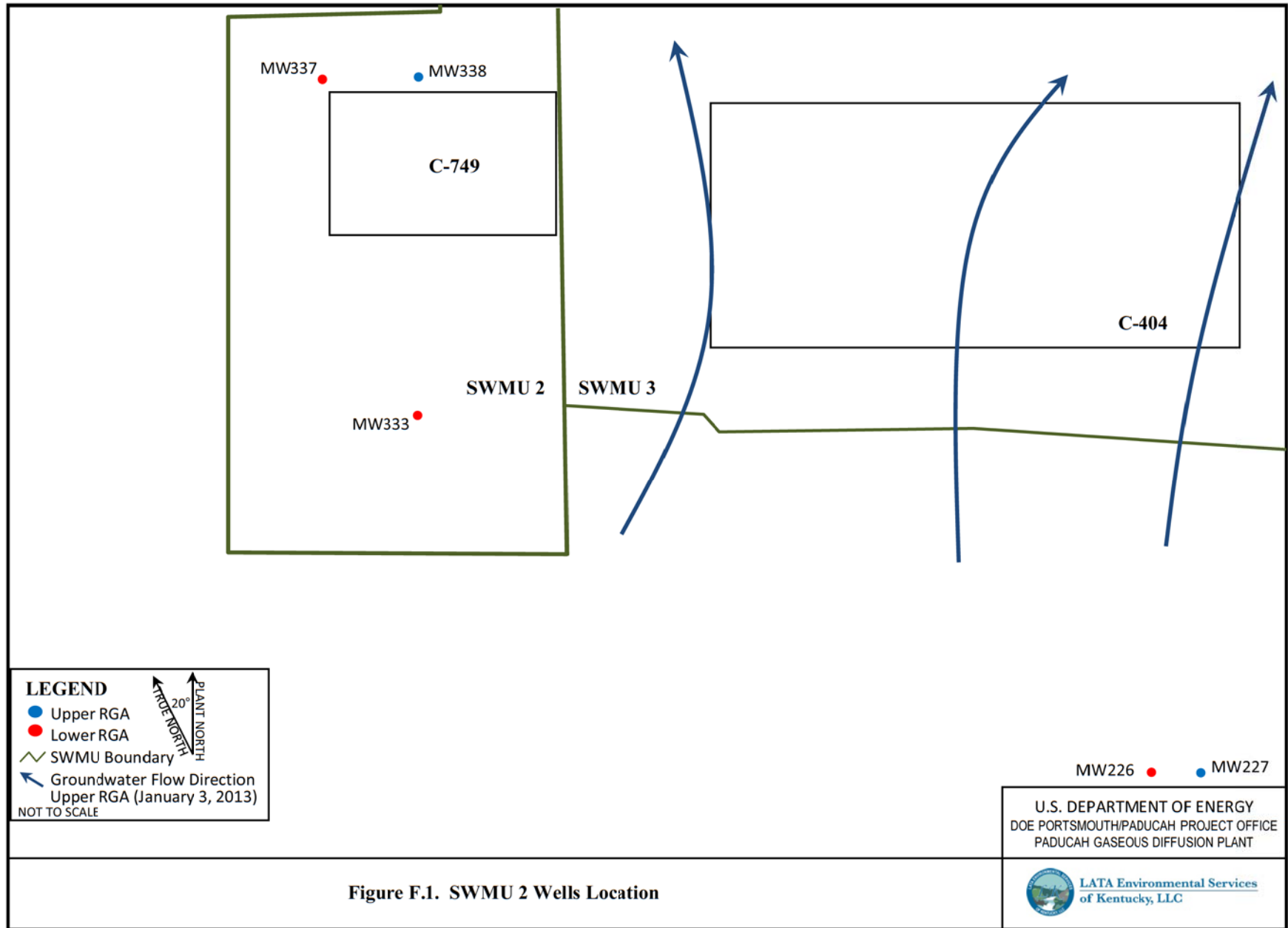


Figure F.1. SWMU 2 Wells Location

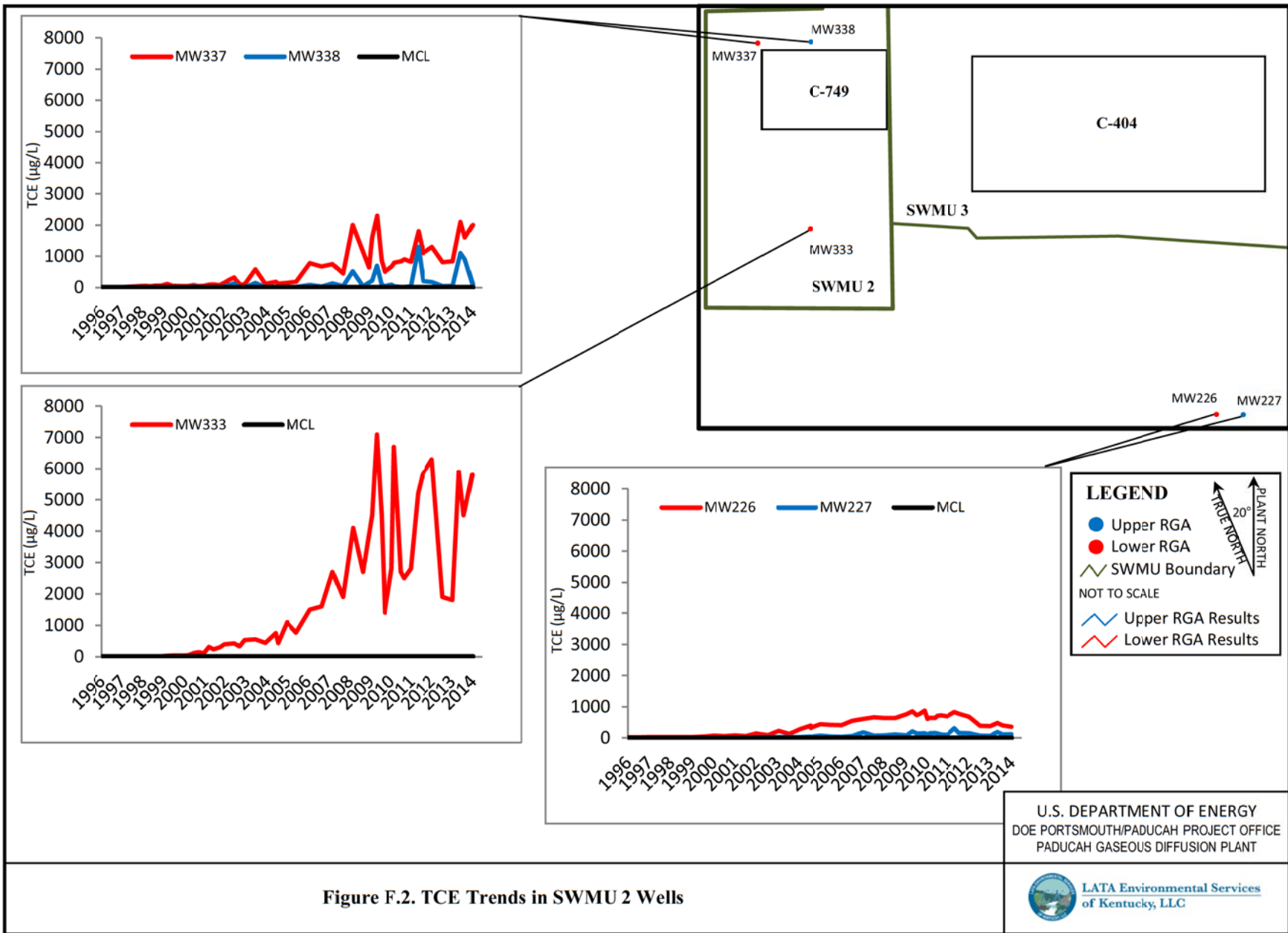


Figure F.2. TCE Trends in SWMU 2 Wells

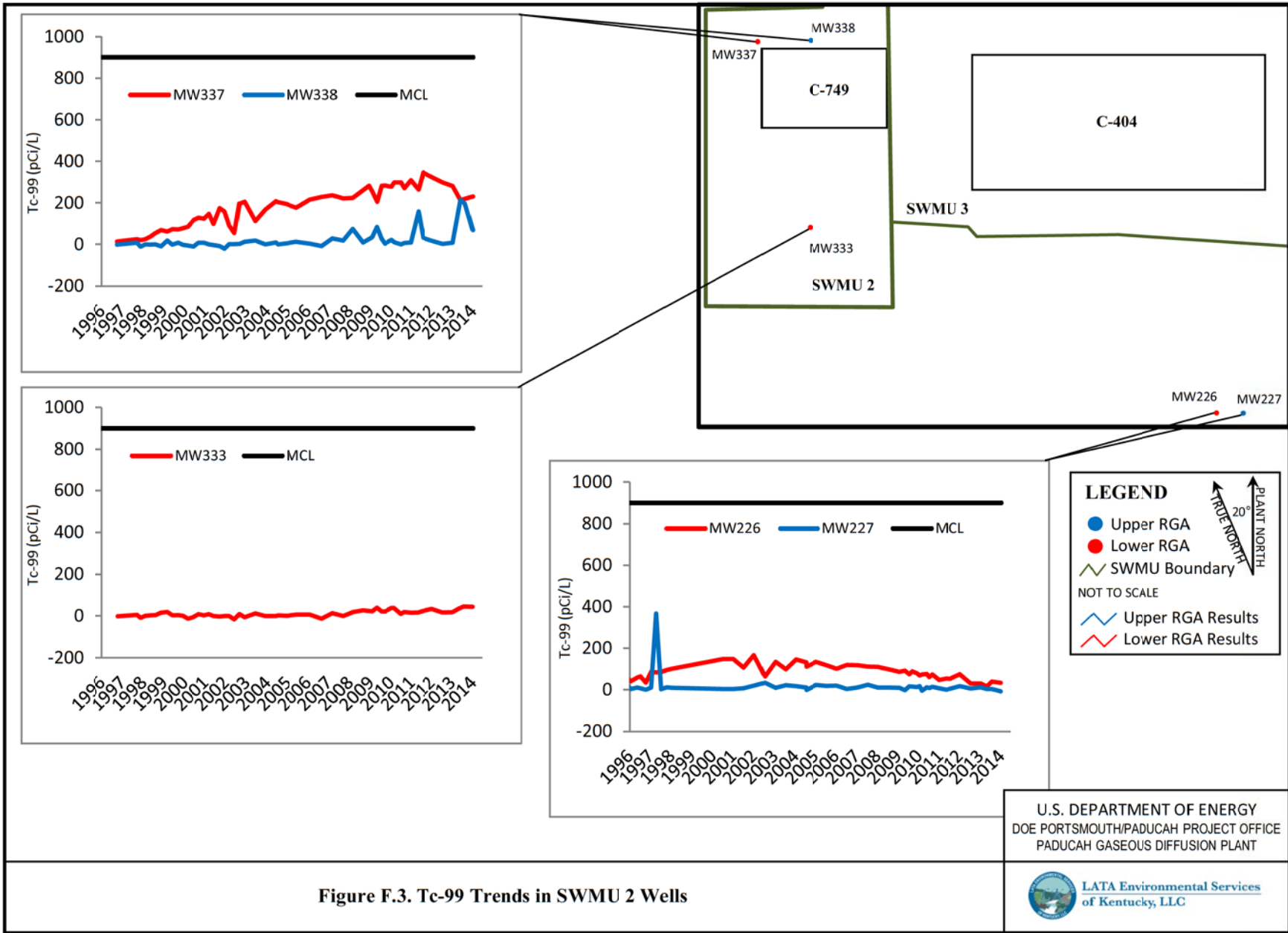


Figure F.3. Tc-99 Trends in SWMU 2 Wells

**C-749 Uranium Burial Ground (SWMU2) Monitoring**

Water Quality Records for

*Sample Date Range: 5/6/1993 - 8/25/2014*

MW226

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/6/1993	8							11				930507-105
5/6/1993	2							6				930507-101
5/13/1993	7							12				930513-235
6/2/1993	8							10				930602-113
6/16/1993	8							8				930617-116
6/16/1993	2											930617-118
7/14/1993	9							16				930715-049
7/20/1993	10							8				930721-106
8/9/1993	11							15				930810-018
8/16/1993	11							18				930819-067
9/30/1993	11							18				930930-169
10/26/1993	12							35				931027-061
11/8/1993	11							32				931109-073
11/16/1993	11							22				931117-105
1/11/1994	11							25				940111-177
1/25/1994	12							13				940126-013
2/8/1994	10							32				940209-005
2/15/1994	12							14				940216-023
7/18/1994	12							18				940719-065
7/26/1994	14							35				940726-198
8/11/1994	15							32				940812-033
8/18/1994	15							15				940818-135
1/17/1995	17							26				950117-115
1/17/1995	17							30				950117-119
1/23/1995	17							31				950125-081

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

Water Quality Records for

Sample Date Range: 5/6/1993 - 8/25/2014

MW226

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
2/6/1995	16							28				950207-055
2/13/1995	16							36				950215-031
4/19/1995								39				950419-194
4/24/1995								44				950425-170
5/3/1995								15				950503-140
5/8/1995								43				950509-033
5/8/1995								49				950509-041
7/19/1995	16							32				950720-047
7/25/1995	11							32				950726-034
8/7/1995								41				950808-083
8/14/1995								30				950815-031
8/14/1995								43				950815-023
10/23/1995								34				951024-036
10/30/1995								40				951031-056
10/30/1995								36				951031-060
11/8/1995								54				951110-059
11/15/1995								55				951116-020
1/22/1996	20							42				960122-119
5/17/1996								59				960521-007
7/10/1996	20							65				960710-204
10/14/1996								35				961015-019
1/16/1997	24							86				970121-043
4/14/1997								84				970414-100
7/14/1997	26							84				970714-133
7/14/1997	27							85				970714-134

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW226**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/14/1997								95				971014-047
1/12/1998	30							101				C980140119
7/13/1998	25											C981960004
7/13/1998	25											C981960005
1/11/1999	26											C990110084
7/20/1999	42											C992020008
7/20/1999	40											C992020007
1/11/2000	71											C000110092
7/12/2000	61							148				C001940098
1/9/2001	81							148				C010100017
7/11/2001	55							107				C011930007
1/8/2002	140							166				C020080098
7/22/2002	89							64.7				C022030173
1/21/2003	230							134				C030210115
7/23/2003	130							98.9				C032040144
1/21/2004	280							146				C040210090
7/22/2004	394											C042050002
7/22/2004	340	12	< 5	< 5	< 5	< .668	57.7	132	< .0902	< .0122	< .348	C042050009
7/27/2004	320							112				C042090056
1/24/2005	440							134	< .0357	< .0147	< -.0135	C050240045
7/27/2005	420							118	< .0346	< .00589	< .00252	C052080180
1/24/2006	410							101	< .0973	< -.0183	< .0768	C060240039
7/24/2006	550							119	< 1.07	< .187	< .282	C062050057
1/24/2007	610							118	< 1.03	< -.00311	< .21	C070240038
7/24/2007	660							112	< .0971	< -.0355	< .0361	C072060043

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW226**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
1/15/2008	640							110	< -.0264	< .0644	< .00478	C080160004
7/24/2008	640							98.7	< .0399	< .00678	< -.00253	C082060091
2/5/2009	760							86.5				C09036036004
5/12/2009	850	26	< 5	< 5	< 5	< -.403	49.2	92.3				C09132009001
7/28/2009	730							74.6				C09209020001
9/21/2009	780	< 25	< 5	< 25	< 5	< 2.56	46.3	88.1				C09265006002
12/10/2009	880							79.1				C09344026005
1/26/2010	610							69.3				C10026023001
3/9/2010	650	22	< 10	< 10	< 10	4.2	49.4	74				C10068052005
6/1/2010	640							75.7				C10152026001
7/14/2010	710							60.7				C10195040002
9/7/2010	720	22	< 10	< 10	< 10	< 4.04	38.8	73.8				C10250033001
1/3/2011	690							47.6				C11003029002
5/11/2011	830	28	< 5	< 5	< 5	4.3	41	54.5				C11131023001
7/28/2011	780							53.2				C11209031001
1/20/2012	680							74.7				C12020022001
7/31/2012	390							30.5				C12213022002
1/23/2013	380							30.3				C13023019002
5/14/2013	480	< 25	< 5	< 5	< 5			< 16.5				C13134021006
8/12/2013	400							39.3				C13224030001
1/8/2014	360							33				C14008024003
7/28/2014	350							< 7.97				353626001

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW227**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/13/1993	2							17				930513-239
6/2/1993	2							0				930602-124
6/16/1993	2							0				930617-138
7/13/1993	2							12				930713-156
7/19/1993	2							10				930721-102
8/9/1993	2							5				930810-014
8/16/1993	2							13				930820-001
9/30/1993	2							13				930930-173
10/26/1993	2							7				931027-053
11/8/1993	2							0				931109-077
11/16/1993	2							9				931117-134
1/11/1994	3							18				940111-181
1/25/1994	3							11				940126-017
2/8/1994	3							0				940209-001
2/15/1994	3							5				940216-019
4/29/1994	4											940429-116
7/18/1994	2							0				940719-061
7/26/1994	3							6				940726-202
8/10/1994	4							14				940811-063
8/10/1994	3	< 5	< 5	< 5	< 5							S408081-01V
8/10/1994	4							10				940811-075
8/18/1994	4							3				940818-131
1/17/1995	4							9				950118-204
1/23/1995	3							18				950125-093
1/23/1995	4							10				950125-097

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

Water Quality Records for

*Sample Date Range: 5/6/1993 - 8/25/2014*

MW227

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
2/6/1995	3							9				950207-059
2/13/1995	4							17				950215-027
4/19/1995								16				950419-202
4/24/1995								23				950425-178
4/24/1995								20				950425-162
5/3/1995								5				950503-136
5/8/1995								14				950509-049
7/19/1995	5							6				950720-043
7/25/1995	4							23				950726-038
8/7/1995								14				950808-067
8/7/1995								17				950808-087
8/14/1995								12				950815-027
10/23/1995								0				951024-032
10/23/1995								0				951024-040
10/30/1995								6				951031-064
11/8/1995								7				951110-063
11/15/1995								22				951116-024
1/22/1996	4							4				960122-123
1/22/1996	4							3	2.9	.18	6.69	960122-115
5/17/1996								10				960521-008
7/9/1996	5							7				960709-085
10/14/1996								0				961015-018
1/16/1997	6							11				970121-041
1/16/1997	6							3				970121-042
4/14/1997								367				970414-099

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW227**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
7/14/1997	6							2				970714-135
10/14/1997								< 12				971014-048
1/12/1998	4							< 9				C980140120
1/12/1998	4							< 8				C980140122
7/13/1998	6											C981960003
1/11/1999	6											C990110085
1/11/1999	6											C990110086
7/20/1999	8											C992020009
1/11/2000	3											C000110093
7/12/2000	6							< 3.92				C001940099
1/9/2001	3							< 3.82				C010100018
7/11/2001	7							< 7.5				C011930006
1/8/2002	23							20.2				C020080097
7/22/2002	23							33.4				C022030172
1/21/2003	24							< 9.75				C030210114
7/23/2003	26							22.5				C032040145
1/21/2004	31							< 17				C040210091
7/22/2004	40											C042050003
7/22/2004	33	< 1	< 1	< 1	< 1	5.9	10.1	< 10.4	< .284	< .00706	< .412	C042050010
7/27/2004	39							< -.469				C042090057
1/24/2005	76							22.8	< .348	< -.0287	< .122	C050240047
7/27/2005	45							18.9	< .0822	< .0131	< .0649	C052080181
1/25/2006	38							20.3	< .0898	< .004	< .0169	C060250133
7/24/2006	61							< 4.11	< 1.36	< .263	< .298	C062050058
1/24/2007	180							< 11	< .219	< .0426	< .0696	C070240039

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW227**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
7/24/2007	73							24	< .124	< -.0338	< .0891	C072060044
1/16/2008	79							< 11	< .21	< .00145	< .0742	C080160068
7/24/2008	110							< 10.9	< .0526	< .00769	< -.00691	C082060092
2/5/2009	82							< 9.22				C09036036005
5/12/2009	210	4.2	< 1	< 1	< 1	< 1.54	7.61	< -2.16				C09132009002
7/28/2009	140							16.5				C09209020002
9/21/2009	140	< 5	< 1	< 5	< 1	< .447	7.47	< 14.8				C09265006003
12/10/2009	150							< 12.6				C09344026006
1/26/2010	110							< 17.1				C10026023002
3/9/2010	150	3.5	< 1	< 1	< 1	< 2.74	7.52	< -4.34				C10068052006
6/1/2010	160							< 11.8				C10152026002
7/14/2010	140							< 8.12				C10195040003
9/7/2010	110	2.5	< 1	< 1	< 1	< -.521	5.85	< 13.6				C10250033002
1/3/2011	94							< 7.15				C11003029001
5/11/2011	310	6.2	< 1	< 1	< 1	< .974	10.6	< .676				C11131023002
7/28/2011	160							< 4.69				C11209031002
1/20/2012	150							17.9				C12020022003
7/31/2012	74							< 5.99				C12213022003
1/22/2013	63							< 11.8				C13022086002
5/14/2013	190	< 5	< 1	< 1	< 1			< 3.61				C13134021005
8/12/2013	110							< 4.08				C13224030002
1/8/2014	120							< -7.61				C14008024004
7/28/2014	104							< -4.4				353626002

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW333**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/14/1996									9.66		.14	96M04623-3731
10/14/1996								-1.1				96M04623-3761
10/14/1996	10				< .48							96M04623-3717
1/29/1997	5	< 5	< 5	< 5	< 5							970130-051
9/23/1997	5	< 5	< 5	< 5	< 5	-2	2	6				970923-064
11/19/1997	6	< 5	< 5	< 5	< 5	-7	2	-8				971119-080
2/9/1998	8	< 5	< 5	< 5	< 5	< 2.3	< 1	< 1				C980420046
5/4/1998	14	< 5	< 5	< 5	< 5	< 5.1	15	< 3				C981250036
8/10/1998	16	< 5	< 5	< 5	< 5	< 4.3	6	< 3.9				C982220109
11/12/1998	16	< 5	< 5	< 5	< 5	< -1.37	5.36	< 16				C983160089
3/3/1999	30	< 5	< 5	< 5	< 5	< .68	< 2.83	19.27				C990620037
6/4/1999	33	< 5	< 5	< 5	< 5	< 1.23	< .07	< 2.81				C991580024
9/15/1999						< -.79		< 4.13				C992580210
12/7/1999	29	< 5	< 5	< 5	< 5	2.48	< 1.48	< .475				C993410100
12/7/1999	33	< 5	< 5	< 5	< 5	< .45	< .49	< -6.17				C993410101
3/8/2000	46	< 5	< 5	< 5	< 5	< 1.58	< 4.62	< -12.8		< 0		C000680108
6/14/2000	110	< 5	< 5	< 5	< 5	< .52	< -.97	< -4.54				C001670002
9/12/2000	140	< 5	< 5	< 5	< 5	< 2.67	< 3.97	< 9.38				C002560135
12/18/2000	110	< 10	< 10	< 10	< 10	< .462	< .604	< 3.24				C003540006
3/19/2001	310	< 5	< 5	< 5	< 5	< -.5	< .794	< 8.5				C010780093
6/6/2001	230	< 25	< 25	< 25	< 25	< 1.62	4.76	< -.303				C011570178
9/25/2001	290	< 25	< 25	< 25	< 25	< 2.25	< 1.41	< -2.35		< -9.94		C012680234
12/17/2001	390	< 25	< 25	< 25	< 25	< 1.86	< -.125	< -.337				C013510092
3/13/2002	410	< 25	< 25	< 25	< 25	< 1.13	< .94	< -.654				C020720130
3/13/2002										< -3.95		C020720129

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW333**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
6/10/2002	420	< 50	< 50	< 50	< 50	< 1.57	< -2.59	< -15.7				C021610047
9/5/2002	330	< 50	< 50	< 50	< 50	< -.977	< -.125	< 8.51				C022480132
12/2/2002	530	< 25	< 25	< 25	< 25	< 1.7	< .462	< -6.2				C023370013
6/10/2003	550	< 25	< 25	< 25	< 25	< 1.08	< 1.1	< 12.4				C031620013
12/4/2003	440	< 25	< 25	< 25	< 25	< .213	< 2.21	< 0				C033380096
6/7/2004	750	< 50	< 50	< 50	< 50	< -.231	< -.683	< -.384	< 30	< 2.2	< .35	C041590175
7/20/2004	430	< 10	< 10	< 10	< 10	< 1.44	< 1.43	< 2.73	< .198	< .00505	< .363	C042020116
12/30/2004	1100	< 50	< 50	< 50	< 50	< -.0341	< .436	< 1.21				C043650022
6/14/2005	760	< 50	< 50	< 50	< 50	< .455	< 2.91	< 6.24	< .0723	< -.0127	< .0115	C051650114
2/14/2006	1300	< 50	< 50	< 50	< 50	< 2.43	< 3.19	< 5.18				C060450088
2/14/2006	1500	< 50	< 50	< 50	< 50	< -.267	< 3.66	< 6.25				C060450089
9/12/2006	1600	< 120	< 120	< 120	< 120	< 1.58	4.31	< -12.7				C062550163
3/19/2007	2700	< 100	< 100	< 100	< 100	4.34	8.66	< 13.8				C070780102
9/19/2007	1900	< 20	< 20	< 100	< 20	< 2.81	6.15	< .212				C072630092
3/11/2008	4100	< 25	< 25	< 120	< 25	< 1.75	16.9	19				C080710145
9/3/2008	2700	< 25	< 25	< 120	< 25	< .456	6.72	27.3				C082470086
2/9/2009	4500							22.7				C09040013001
5/7/2009	7100	< 250	< 50	< 250	< 50	< 2.35	22	39.9				C09127062003
7/28/2009	4500							21.1				C09209012001
9/25/2009	1400	< 50	< 50	< 50	< 50	< .535	17.7	21.3				C09268017001
1/26/2010	2800							38.1				C10026023004
3/8/2010	6700	< 50	< 50	< 50	< 50	< .795	24.7	38.6				C10067037002
7/9/2010	2700							< 10.3				C10190027002
9/8/2010	2500	< 50	< 50	< 50	< 50	< 1.48	10.6	18.7				C10251037004
1/4/2011	2800							< 15.6				C11005004006

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW333**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/11/2011	5200	< 100	< 20	< 20	< 20	< 2.14	13.1	< 16.3				C11131034002
7/28/2011	5800							23.4				C11209031004
1/20/2012	6300							33.7				C12020022002
7/26/2012	1900							< 17.2				C12208015003
1/22/2013	1800							18				C13022086003
5/15/2013	5900	< 250	< 50	< 50	< 50			34.7				C13135012003
8/6/2013	4500							45				C13219005002
1/8/2014	5800							44.4				C14008024002
7/23/2014	5980							40.1				353402002

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW337**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/4/1996	8.3				< .48							96M04622-3716
10/4/1996								14				96M04622-3760
10/4/1996									.38		.27	96M04622-3730
1/29/1997	10	< 5	< 5	< 5	< 5							970130-050
9/22/1997	38	< 5	< 5	< 5	< 5	3.8	21	26				970923-040
11/19/1997	41	< 5	< 5	< 5	< 5	.9	22	21				971119-081
2/9/1998	48	< 5	< 5	< 5	< 5	< 1.3	18	26				C980420047
5/4/1998	34	< 5	< 5	< 5	< 5	< 4.4	37	36.8				C981250037
8/10/1998	58	< 5	< 5	< 5	< 5	< .6	35	55.1				C982220110
11/17/1998	61	< 5	< 5	< 5	< 5	3.06	37.83	69.2				C983210021
3/3/1999	110	< 25	< 25	< 25	< 25	< 1.91	< 2.49	62.71				C990620038
6/4/1999	47	< 5	< 5	< 5	< 5	< .4	48.8	73.5				C991580025
9/15/1999						< .8	48.9	72.4				C992580183
12/7/1999	44	< 5	< 5	< 5	< 5	4.34	69.36	77.7				C993410097
3/7/2000	44	< 5	< 5	< 5	< 5	< -.43	79.03	84.8		< -9.63		C000680019
6/14/2000	75	< 5	< 5	< 5	< 5	< 1.02	97.07	117				C001670003
9/12/2000	44	< 5	< 5	< 5	< 5	< 3.09	112.58	129				C002560134
12/18/2000	50	< 5	< 5	< 5	< 5	< -.451	75.1	124				C003540007
3/19/2001	90	< 5	< 5	< 5	< 5	< 1.05	81.1	147				C010780094
6/6/2001	97	< 5	< 5	< 5	< 5	< .921	97.6	98.5				C011570179
9/24/2001	75	< 5	< 5	< 5	< 5	< -2.29	97.2	175		< -8.42		C012680004
12/17/2001	150	< 10	< 10	< 10	< 10	4.96	103	158				C013510093
3/13/2002										< -7.31	< 0	C020720125
3/13/2002	240	< 25	< 25	< 25	< 25	< 4.6	68	91.3				C020720126
6/10/2002	320	< 25	< 25	< 25	< 25	< -1.91	43.3	55.1				C021610048

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW337**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
9/5/2002	96	< 25	< 25	< 25	< 25	< .989	115	196				C022480133
12/2/2002	100	< 5	< 5	< 5	< 5	< 1.72	127	205				C023370011
6/9/2003	580	< 25	< 25	< 25	< 25	< .265	63.1	113				C031600083
12/4/2003	110	< 25	< 25	< 25	< 25	10.8	159	168				C033380097
6/8/2004	180	< 25	< 25	< 25	< 25	< -1.26	111	208	< 30	< 2.2	< .35	C041600042
7/20/2004	120	< 2	2.2	< 2	< 2	3.45	111	203	< .101	< -.00296	< .275	C042020117
12/8/2004	140	< 10	< 10	< 10	< 10	< -2.1	129	195				C043430086
6/21/2005	180	< 10	< 10	< 10	< 10	4.73	113	177	< .059	< -.0123	< .00534	C051720110
2/14/2006	780	< 25	< 25	< 25	< 25	< .0576	21.5	216				C060450090
9/12/2006	670	< 50	< 50	< 50	< 50	3.19	157	229				C062550177
3/19/2007	750	< 5	14	< 5	< 5	< 2.38	163	237				C070790063
9/19/2007	450	< 5	< 5	< 25	< 5	4.99	123	222				C072630052
3/6/2008	2000	< 10	< 10	< 50	< 10	4.24	173	224				C080670001
12/18/2008	640	< 10	< 10	< 10	< 10	< 1.52	97.5	282				C08353022001
2/10/2009	1600							256				C09041031001
5/11/2009	2300	< 25	< 25	< 25	< 25	< 1.82	177	205				C09131017003
7/28/2009	860							282				C09209006001
9/25/2009	500	< 10	< 10	< 10	< 10	4.01	196	284				C09268025002
1/27/2010	660							278				C10027031002
3/16/2010	790	< 50	< 10	< 50	< 10	5.77	191	298				C10075019002
7/14/2010	840							298				C10195017001
9/13/2010	900	< 10	< 10	< 10	< 10	< 1.14	155	271				C10256034001
1/3/2011	820							309				C11003029004
5/19/2011	1800	< 50	< 10	< 10	< 10	6.63	172	264				C11139019001
8/10/2011	880							347				C11222050002

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW337**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
8/10/2011	1100							333				C11222050003
1/23/2012	1300							324				C12023024006
7/30/2012	800							298				C12212050001
7/30/2012	810							294				C12212050002
1/24/2013	840							281				C13024007001
6/11/2013	2100	< 20	< 20	< 20	< 20			213				C13162014003
8/26/2013	1600							219				C13238022001
1/13/2014	2000							231				C14013030001
7/24/2014	1160							336				353464001

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW338**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
10/4/1996	.7				< .48							96M04621-3715
10/4/1996									.56		.67	96M04621-3729
10/4/1996								-82				96M04621-3759
1/29/1997	< 1	< 5	< 5	< 5	< 5							970130-049
9/22/1997	< 1	< 5	< 5	< 5	< 5	-1.1	3	8				970923-041
11/19/1997	< 1	< 5	< 5	< 5	< 5	.8	2	-10				971119-082
2/9/1998	< 1	< 5	< 5	< 5	< 5	< 4.2	< 5	< 0				C980420048
5/4/1998	2	< 5	< 5	< 5	< 5	< .2	12	< -6				C981250038
8/6/1998	< 1	< 5	< 5	< 5	< 5	< -1.9	< 3	< .2				C982180120
11/17/1998	< 1	< 5	< 5	< 5	< 5	< 1.15	< 2.58	< -9.2				C983210022
3/3/1999	5	< 5	< 5	< 5	< 5	< .35	< 1.7	19.04				C990620039
6/3/1999	1	< 5	< 5	< 5	< 5	< .96	19.31	< -.869				C991540178
9/15/1999						< 1.1		< 8.63				C992580184
12/7/1999	< 1	< 5	< 5	< 5	< 5	< 1.51	< 2.91	< -2.48				C993410096
3/7/2000	< 1	< 5	< 5	< 5	< 5	< 0	5.93	< -4.97		< -11.6		C000680018
6/14/2000	24	< 5	< 5	< 5	< 5	< 1.83	< -2.5	< -9.54				C001670001
9/12/2000	21	< 5	< 5	< 5	< 5	< 2.6	8.27	< 7.94				C002560133
12/18/2000	< 1	< 5	< 5	< 5	< 5	< 3.14	5.38	< 7.73				C003540008
3/19/2001	5	< 5	< 5	< 5	< 5	< -.418	< .657	< .481				C010780095
6/6/2001	8	< 5	< 5	< 5	< 5	< .866	< 2.9	< -3.53				C011570180
9/24/2001	3	< 5	< 5	< 5	< 5	< -.18	< 2.92	< -7.31		< -4.82		C012680005
12/17/2001	24	< 5	< 5	< 5	< 5	< 1.14	< .738	< -20.6				C013510094
3/13/2002	78	< 5	< 5	< 5	< 5	< -.652	< 4	< 1.2				C020720128
3/13/2002										< 0		C020720127
6/10/2002	130	< 10	< 10	< 10	< 10	< 1.08	< 5.59	< 1.54				C021610049

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW338**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results							Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L		
9/5/2002	11	< 5	< 5	< 5	< 5	< .0927	< 2.41	< 2.99				C022480134	
12/3/2002	8	< 5	< 5	< 5	< 5	< .447	< 3.19	< 13.4				C023370048	
6/9/2003	140	< 10	< 10	< 10	< 10	< -.525	8.03	18.8				C031600084	
12/4/2003	9	< 5	< 5	< 5	< 5	< 1.42	6.17	< 0				C033380098	
6/8/2004	22	< 5	< 5	< 5	< 5	< -1.41	< .409	< 9.88	< 30	< 2.2	< .35	C041600043	
7/20/2004	4.6	< 1	< 1	< 1	< 1	< .125	< 2.32	< -.111	< .169	< .0261	< .423	C042020118	
12/8/2004	13	< 5	< 5	< 5	< 5	< .742	< 3.48	< 5.2				C043430088	
6/16/2005	11	< 5	< 5	< 5	< 5	< 1.43	< 2.46	< 12.4	< .0101	< -.0133	< -.0335	C051670015	
2/14/2006	82	< 5	< 5	< 5	< 5	< -.143	6.12	< 3.55				C060450091	
9/12/2006	25	< 5	< 5	< 5	< 5	< .511	7.01	< -7.99				C062550178	
3/19/2007	130	< 5	< 5	< 5	< 5	< 1.6	18.3	29.4				C070790064	
9/19/2007	44	< 1	< 1	< 5	< 1	< 2.72	9.39	< 12.3				C072630054	
9/19/2007	44	< 1	< 1	< 5	< 1	< 1.36	7.27	18.2				C072630053	
3/6/2008	520	< 1	< 1	< 5	< 1	< 2.16	60.8	74.6				C080670002	
9/2/2008	33	< 1	< 1	< 5	< 1	< 2.39	7.6	< 9.04				C082460126	
2/9/2009	220							35.1				C09040021003	
5/7/2009	690	< 25	< 5	< 25	< 5	< -.167	64.6	83.5				C09127062004	
7/28/2009	80							26.3				C09209006002	
9/25/2009	40	< 1	< 1	< 1	< 1	< 3.07	< 3.87	< 3.76				C09268017003	
1/27/2010	89							22.4				C10027031001	
3/16/2010	36	< 10	< 2	< 10	< 2	< 1.76	8.45	< 10.3				C10075019003	
7/14/2010	14							< .779				C10195017003	
7/14/2010	14							< -3.51				C10195017002	
9/13/2010	14	< 1	< 1	< 1	< 1	< 1.25	< 3.53	< 7.51				C10256034002	
1/3/2011	39							< 9.16				C11003029005	

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**C-749 Uranium Burial Ground (SWMU2) Monitoring**

**Water Quality Records for**

**Sample Date Range: 5/6/1993 - 8/25/2014**

**MW338**

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
5/19/2011	1300	< 5	< 1	< 1	< 1	< 1.41	94.2	158				C11139019002
8/10/2011	200							32.7				C11222050004
1/23/2012	170							18				C12023024007
7/30/2012	44							< 2.01				C12212050003
1/24/2013	54							< 8.03				C13024007002
6/11/2013	1100	< 20	< 20	< 20	< 20			214				C13162014004
8/26/2013	900							197				C13238022002
1/13/2014	100							69.4				C14013030002
8/20/2014								44.4				355247001
8/25/2014	133											355531001

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