



Department of Energy

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APR 27 2017

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PPPO-02-4137330-17E

Ms. Julie Corkran
Federal Facility Agreement Manager
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street
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Dear Mr. Begley and Ms. Corkran:

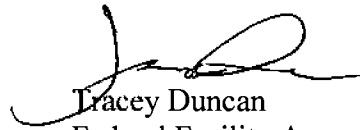
**TRANSMITTAL OF ERRATA PAGES AND COMPLETE CORRECTED DOCUMENTS
FOR THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION
PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT
FOR THE SECOND HALF OF FISCAL YEAR 2015, PADUCAH, KENTUCKY
(DOE/LX/07-2181/V2)**

Reference: Letter from T. Duncan to J. Corkran 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 2015, Paducah, Kentucky, (DOE/LX/07-2181/V2)," (PPPO-02-3211376-16), dated October 30, 2015

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 2015, Paducah, Kentucky*, DOE/LX/07-2181/V2. The enclosed errata pages have been prepared to correct reporting errors related to the volume of trichloroethene (TCE) removed from the Northwest and Northeast Plume Pump-and-Treat Systems. The errors resulted from the application of inconsistent methodologies for calculating and compiling TCE volume removed for the Northwest and Northeast Plumes. 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 2015
3. Errata pages for FFA Semiannual Progress Report for the Second Half of FY 2015, DOE/LX/07-2181/V2—Redline
4. FFA Semiannual Progress Report for the Second Half of Fiscal Year 2015, DOE/LX/07-2181/V2—Complete Corrected Document

e-copy w/enclosures:

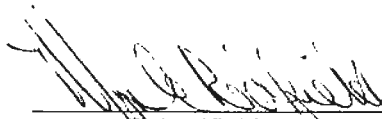
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CERTIFICATION

Document Identification: *U.S. Department of Energy Paducah Gaseous Diffusion Plant
Federal Facility Agreement Semiannual Progress Report for
the Second Half of Fiscal Year 2015, Paducah, Kentucky
(DOE/LX/07-2181/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.

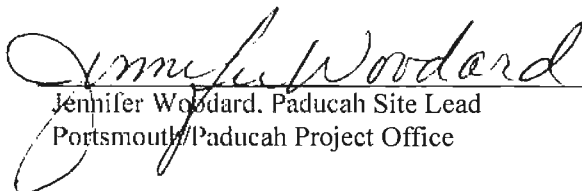


Myrna E. Redfield, Director
Environmental Management

4/25/17
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

4/25/2017
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 2015
Paducah, Kentucky
DOE/LX/07-2181/V2, issued October 2015

The following nine 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, last paragraph: Corrected date for cumulative trichloroethene (TCE) removed in Table 2.
4. Groundwater Operable Unit, page 5, Table 2: Corrected cumulative TCE removed for Northwest Plume Pump-and-Treat and Northeast Plume Pump-and-Treat and total volume for all projects.
5. Groundwater Operable Unit, page 5, Table 2: Corrected date in second table note.
6. Northeast Plume IRA, page 16, item C, second paragraph: Deleted text.
7. Northeast Plume IRA, page 16, Table 3: Corrected TCE values.
8. Northeast Plume IRA, page 16, item C, third paragraph: Corrected calculated average removal efficiency percentage.
9. Northwest Plume IRA, page 22, second paragraph: Deleted text.

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2015
Paducah, Kentucky**



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**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2015
Paducah, Kentucky**

Date Issued—October 2015

Errata Issued—April 2017

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FLUOR FEDERAL SERVICES, INC.,
Paducah Deactivation Project
managing the
Deactivation Project at the
Paducah Gaseous Diffusion Plant
under Task Order DE-DT-0007774

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ACRONYMS

AOC	area of concern
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
E/PP	excavation/penetration permit
EQ	equalization
EW	extraction well
FFA	Federal Facility Agreement
FFS	Fluor Federal Services, Inc.
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
PLC	Programmable Logic Controller
RI	remedial investigation
ROD	record of decision
SAR	SWMU assessment report
SMP	Site Management Plan
SOU	Soils Operable Unit
SSI	Swift and Staley Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
VOC	volatile organic compound
WAG	waste area group

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–09/30/2015**

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-gaseous diffusion plant (GDP) shutdown scope, (2) post-GDP shutdown scope, and (3) Comprehensive Site Operable Unit scope. The pre-GDP shutdown scope is associated with media-specific operable units (OUs) initiated prior to shutdown of the operating 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 schedules¹ of activities to be taken during the upcoming six months. Activities that have taken place after the reporting period end date 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

¹ Schedules are included for information and planning purposes only; enforceable schedules are established in the Site Management Plan (SMP).

Table 1. Operable Units and Corresponding Report Topics

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

*The Comprehensive Site OU 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 May 1994 through April 2015. 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 June 2009 through June 2015. Groundwater data from July 2015 through September 2015 will be included in the next semiannual report scheduled for April 2016.
- 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 June 2015.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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 June 30, 2015.

Table 2. Cumulative TCE Removed at Paducah

Source Area	Cumulative TCE Removed (gal)*
Northwest Plume Pump-and-Treat	3,220**
Northeast Plume Pump-and-Treat	296**
C-400 Six-Phase Treatability Study	1,900
C-400 Phase I	535
C-400 Phase IIa	1,137
Other sources (i.e., SWMU 91, LASAGNA™)	246
Total	7,334

*TCE values include liquid VOCs and VOCs on carbon recovered.

**Cumulative through June 30, 2015.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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:

- Received variance approval on an alternate method to abandon Phase I and Phase IIa electrodes.
- Completed abandonment of belowground structures associated with Phase I and Phase IIa on June 17, 2015.
- Completed well abandonment and plugging on June 24, 2015.

Phase IIb:

- Initiated Phase IIb Treatability Study on April 9, 2015, and completed Phase IIb Treatability Study on June 30, 2015.
- Received concurrence from Kentucky and EPA to relocate three temperature monitoring points for safety reasons due to proximity to underground utilities.
- Restored temporary rerouting of large power feeder impacted by ongoing demolition of the C-410/C-420 Complex to previous configuration.
- Completed D&D of the Phase IIb Treatability Study aboveground infrastructure on June 30, 2015.
- Completed waste disposition for Phase IIb Treatability Study on June 30, 2015.
- Initiated modeling and development of the *Treatability Study Report for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2202&D1, based on data collected during the Phase IIb Treatability Study.

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

- Submit the *Treatability Study Report for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2202&D1, to EPA and Kentucky for review and approval.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Environmental Services of Kentucky, LLC, (LATA Kentucky) to Fluor Federal Services, Inc. (FFS). Responsibility for the day-to-day operations of the GWOU belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management services. Swift & Staley Inc., (SSI) 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.

V. Primary/Secondary Document Tracking System:

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

- *Treatability Study Report for the C-400 Interim Remedial Action Phase IIb Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2202&D1.*

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

- D1 Treatability Study Report is due to EPA and Kentucky 181 calendar days from completion of treatability study data collection.
- D1 Revised Proposed Plan is due to EPA and Kentucky 110 days after approval of the Treatability Study Report.

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

None.

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

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

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

Sampling of the C-400 wells has been incorporated into the Environmental Monitoring Program.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

GROUNDWATER OPERABLE UNIT PROJECT: Southwest Plume Sources

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

SWMU 1

- Completed posting of warning signs at the soil mixing area prior to initiating field activities as required by the *Record of Decision for Solid Waste Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0365&D2/R1. The warning signs provide information to alert industrial workers of the presence of the contamination in the area.
- Completed field mobilization and assembly of soil mixing equipment and associated support treatment and construction equipment on April 10, 2015.
- Initiated the soil mixing remedial action on April 10, 2015, by mixing the first of three test cells that included cells 062, 116, and 224. The mixing of the three test cells was completed on April 13, 2015.
- Completed collection of soil samples from the three test cells and submitted soil samples to laboratory for analysis. The sample results were reviewed with the FFA parties during the weekly conference call on June 4, 2015.
- Continued soil mixing of the soil columns. At completion of this reporting period, approximately 91% (235 of 258) of the soil columns had undergone treatment.
- Received FFA parties agreement during conference calls held on May 21, 2015, and May 28, 2015, that soil columns with less than 100 ppm TCE in the vapor phase during the first thermal treatment pass would not require further treatment passes to reach the 160°F temperature requirement. Additionally, during this conference call, the order of cell sequencing was adjusted to reduce number of crane relocations required while still creating an outer boundary of treated cells, and flexibility was introduced to allow operator to reduce steam flow rate to less than 8,000 pound per hour as necessary to control “burping.” A record of conversation documenting these discussions was issued by DOE on June 5, 2015.
- Received FFA parties agreement on August 19, 2015, that soil mixing would not be necessary for four northern perimeter soil columns located in a transuranic contamination area on the northern edge of SWMU 1 if the adjacent soil columns, upon treatment, provided less than 100 ppm TCE in vapor phase during their first thermal pass. A Record of Conversation documenting this discussion was issued by DOE on September 9, 2015.

- In September, an unplanned task was initiated to stabilize the mixed shallow soils. This stabilization effort utilizes quick lime (CaO) to mix with the wet soils to absorb the interstitial water. The stabilization effort is necessary to allow the soils to be placed back in the soil mixing area as planned. The mixing of the quick lime task is expected to be performed continuously through the early portions of the next reporting period. This process was discussed with EPA and Kentucky during a teleconference on July 9, 2015.
- Completed development of the excavation/penetration permit (E/PP) for soil mixing under the PGDP Site E/PP program, as required by the *Record of Decision for Solid Waste Management Units 1, 211-A, 211-B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0365&D2/R1. The E/PP was administered to identify and control potential personnel hazards related to trenching, excavation, and penetration.
- Conducted annual field inspection of the warning signs on June 17, 2015.

SWMUs 211-A and 211-B

- Completed, in June 2015, additional soil and groundwater sampling that had been requested by EPA and Kentucky; the additional sampling subsequently will be documented in an addendum to the *Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Sampling and Analysis Plan*, DOE/LX/07-1268&D2/R2.
- Initiated development of the *Addendum to Final Characterization Report for Solid Waste Management Units 211-A and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1288&D2.

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

- Complete the soil mixing at the C-747-C Oil Landfarm (SWMU 1) and complete demobilization of the soil mixing equipment and associated treatment facilities.
- Perform the replacement of the previously excavated 2 ft to 4 ft of surface soils excavated to allow for soil mixing to 60 ft and to provide a relatively flat surface for the crane to work from for soil mixing.
- Complete development of the E/PP for post-soil mixing activities.
- Initiate and complete post-remedial action treatment soil sampling and MW installation and sampling, including geographic placement of MWs and contingent soil borings as documented in the *Remedial Action Work Plan for In Situ Source Treatment by Deep Soil Mixing of the Southwest Groundwater Plume Volatile Organic Source at the C-747-C Oil Landfarm (Solid Waste Management Unit 1) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1287&D2/A1. (Note: This sampling activity will include the performance of soil sampling of Soils OU quadrants that were disturbed by soil mixing activities. These sample results will be reported to the FFA parties by the SOU.)

- Complete waste disposition of waste generated from the SWMU 1 soil mixing remedial action.
- Initiate development of the Remedial Action Completion Report for the SWMU 1 soil mixing remedial action.
- Initiate and complete development of an addendum to the *Remedial Design Work Plan for Solid Waste Management Units 1, 211-A, and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Sampling and Analysis Plan*, DOE/LX/07-1268&D2/R2.
- Complete development of the *Addendum to Final Characterization Report for Solid Waste Management Units 211-A and 211-B Volatile Organic Compound Sources for the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1288&D2.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of the GWOU belongs to FFS. FFS also provides programmatic and technical support, analytical services, and business management services. SSI 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 for the SWMU 1 portion of the Southwest Plume sources remedial action subproject are being met consistent with the SMP and as agreed to by the FFA parties. The schedule has been impacted, as described in Section VI.

The requirements for the SWMUs 211-A and 211-B portion of the Southwest Plume subproject are being met consistent with the SMP and as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

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

- D1 Final Characterization Report Addendum for 211-A and 211-B.

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

- D1 Final Characterization Report Addendum for 211-A and 211-B due on December 18, 2015.
- Letter notification on Remedy Selection for 211-A and 211-B due on December 18, 2015.

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

The following are problems and delays encountered by this project.

During initial soil cell mixing, the tight soil conditions at SWMU 1 generated strong energy returns to the surface “burps.” These bursts of energy migrated to the surface and, on one occasion, lifted the containment shroud and drill platform. This lifting resulted in a shock load to the crane, which is outside safe operating conditions for the crane. Work was paused to evaluate this situation. To allow mixing to continue safely, modifications were made to the mixing equipment to provide a “shock absorber” between the shroud and the drill platform and crane to absorb energy that returned to the surface.

A change to the soil mixing protocol was implemented to control further the energy returns to the surface. This change involves making the first downward pass into the soil with water and air to turn the soil column into slurry. This loosens the soil and allows energy to return to the surface in a more controlled manner, avoiding the strong energy returns that could lift the shroud. The protocol change reduced productivity. The extra mixing “passes” required to create the slurry in each cell resulted in expansion of the mixed soil due to the increased water content.

Further, there have been two instances during this reporting period that impacted the soil mixing schedule. In one case, a mechanical issue impacted the schedule, and the second involved a work pause during transition of DOE prime remediation contractors. Mechanical issues started on April 29, 2015, in the form of a broken drive engine and transmission on the soil mixing, drilling assembly, which prevented soil mixing from continuing until after repairs were made. The engine and transmission were replaced, and soil mixing was reinitiated on May 18, 2015. Beginning July 17, 2015, soil mixing operations were suspended temporarily due to transition of DOE prime remediation contractors. Soil mixing operations were restarted on August 10, 2015, following training of personnel to FFS procedures and requirements.

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

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA project managers, FFA senior managers, local elected officials, and congressional staff. Special visit was held by the engineering staff and students from the University of Kentucky.

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE’s FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
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**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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):

- The FFA parties continued an update of the PGDP Sitewide Groundwater Model. The Groundwater Project Team held a meeting in Nashville, TN, on June 16 and 17, 2015.
- Completed development of TCE and Tc-99 plume maps for calendar year 2014.

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

Additional work associated with this project previously was resequenced based upon agreement with the FFA project managers and their respective senior managers. As a result, no additional activities associated with this project during the upcoming reporting period. Additional meetings of the PGDP Groundwater Modeling Support Group members are being planned for the next reporting period.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of the GWOU belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management services. SSI 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 previously was 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:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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):

- Memorandum of Agreement for Resolution of the Formal Dispute of the *Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky* DOE/LX/07-1291&D2, and *Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2, was signed July 31, 2015.
- Developed and submitted the *Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2/R1, to EPA and Kentucky on August 31, 2015.
- Developed and submitted the *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/R1, to EPA and Kentucky on August 31, 2015.
- During this reporting period, the Northeast Plume Containment System (NEPCS) treated 49,940,200 gal of contaminated groundwater and achieved an operational efficiency of 91.2%. The average system treatment rate for the reporting period was 191 gal/min and was calculated assuming 100% operational uptime. Operational online efficiencies for the reporting period were as follows: April 2015, 100.0%; May 2015, 99.5%; June 2015, 99.2%; July 2015, 88.4%; August 2015, 100.0%; September 2015, 90.0%.

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, 2015, the NEPCS has processed a total of approximately 1,523,452,517 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 2015.

Influent sample results, compared to the effluent sample results, indicated that TCE was effectively removed to the operational goal of 5 micrograms/liter ($\mu\text{g/L}$). The influent flow is a composite from two EWs. Influent TCE analytical data from 1997 through the end of June 2015 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 2015. 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 ($\mu\text{g/L}$)		
	High	Low	Average
Influent (EQ Tank)	162	95.6	129
Effluent (CERCLA Outfall)*	7.7	1.13	4.8

As presented in Table 3, the NEPCS continued to remove TCE effectively. The system operated with an average removal efficiency of approximately 96.3% for TCE.

The EWs were sampled quarterly during this reporting period. EW331 had an average TCE concentration of 122 $\mu\text{g/L}$, while EW332 had an average concentration of 170.5 $\mu\text{g/L}$.

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, Sampling and Analysis and Calibration, and Testing Plan*, PAD-SO-0046, November 2014.

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 May 19, 2015, at 0830 hours, the Northeast Plume system was shut down to change the bag filters at the ATU because of a high pressure differential across the system. The bag filters were changed and the system was restarted on May 19 at 1230 hours.

On June 5, 2015, at 0830 hours, the Northeast Plume system shut down due to a power loss at the Northeast EW field. The power to the restored to the EW field and the Northeast Plume system was restarted on June 5 at 1400 hours.

On July 3, 2015, at 0700 hours, the Northeast Plume system shut down because of a power loss at the Northeast Extraction Well field due to a storm. The power to the restored to the EW field and the Northeast Plume system was restarted on July 6 at 0630 hours.

On July 7, 2015, at 0230 hours, the Northeast Plume system shut down because of a power loss at the Northeast Extraction Well field due to a storm. The power to the restored to the EW field and the Northeast Plume system was restarted on July 7 at 0630 hours.

On July 8, 2015, at 0230 hours, the Northeast Plume system shut down because of a power loss at the Northeast EW field due to a storm. The power to the restored to the EW field and the Northeast Plume system was restarted on July 8 at 0630 hours.

On July 8, 2015, at 1130 hours, the Northeast Plume system shut down because of a power loss at the Northeast EW field due to a storm. The power to the restored to the EW field and the Northeast Plume system was restarted on July 9 at 0630 hours.

On September 5, 2015, at 1930 hours, the Northeast Plume system shut down because of power outages on Ogden Landing Road. The system was restarted on September 8, at 0600 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 2015, Tc-99 activity at MW292 was 36.5 and 42.2 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):

- Finalize the *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/R1.
- Finalize the *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/R1.
- Once approval is obtained for the *Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2/R1, and the *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/R1, the following activities will be performed.
 - Initiate fieldwork for drilling of transect MWs.
 - Initiate four quarters of transect MW sampling.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of the NEPCS belongs to FFS. In addition, FFS also provides programmatic and technical support, analytical services, and business management services. SSI 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 91.2% of the time during this reporting period.

V. Primary/Secondary Document Tracking System:

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

- *Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2/R1.
- *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/R1.

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

- Complete and issue the *Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1291&D2/R2, by October 30, 2015.

- Complete and issue the *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/R2, 30 days after receipt of EPA and Kentucky comments.

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

None.

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

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

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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 \$150,000.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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 35,403,010 gal of contaminated groundwater with an average monthly operational efficiency of 91.4%. The average system treatment rate for the reporting period was 135.08 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: April 2015, 80.0%; May 2015, 33.7%; June 2015, 4.4%; July 2015, 95.6%; August 2015, 100.0%; September 2015, 94.0%.

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.

B) Process Testing:

Operation of the NWPGS began on August 28, 1995. As of September 30, 2015, the NWPGS has processed a total of 2,024,828,777 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 2015.

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 NWPGS 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 2015 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	2,960	2,140	2,513.75	371	293	331.2
Effluent	4.03	1	2.37	69.5	55.7	62.53

The treatment system influent was sampled monthly. The effluent was sampled weekly. These sampling frequencies were conducted in accordance with the O&M Plan for the Northwest Plume Groundwater System IRA D4/R5. As presented in Table 4, the NWPGS continued to remove TCE and Tc-99 effectively. The system operated with an average removal efficiency of 99.9% for TCE and 81.1% for Tc-99.

The average TCE effluent concentration for this reporting period was 2.37 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 62.53 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 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	797	132	464.5	169	30.8	99.9
EW233	4,830	2,920	3,847.5	746	378	555

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 June 29, 2015, with recycled carbon. The next carbon exchange is planned for January 2016.

E) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Sampling and Analysis and Calibration, and Testing Plan*, PAD-SO-0046, November 2014. 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 October 2015.

On May 8, 2015, at 0700 hours, the Northwest Plume system shut down to remove obsolete equipment related to the C-612 modernization project. The obsolete equipment was removed, and the system was restarted on May 8, 2015, at 1300 hours.

On May 12, 2015, at 0800 hours, the Northwest Plume system was shut down to begin work on the C-612 modernization project. The work was complete on June 29, 2015, and the Northwest Plume system was restarted at 1230 hours.

Nonroutine Maintenance Activities:

On April 3, 2015, at 0400 hours, the Northwest Plume system shut down because of a problem with the Greensand Filter Panel Programmable Logic Controller (PLC) system. An attempt was made to restart the system on April 3, 2015, and again on April 4, 2015, but the system would not start. A plan was made to involve the electricians, Matrix Engineering and building personnel to troubleshoot and repair the system. On Monday, April 6, 2015, the respective parties began to troubleshoot the system; it was discovered that an Input/Output card in the PLC system was defective. The Input/Output card was replaced, and the system was restarted on April 6, 2015, at 1300 hours.

On April 7, 2015 at 1000 hours, the Northwest Plume system shut down because of a problem with the Greensand Filter Panel PLC system. Troubleshooting the Greensand Filter Panel PLC system found another Input/Output card in the PLC system to be defective. The Input/Output card was replaced, and the system was restarted on April 8, 2015, at 1100 hours.

On April 12, 2015, at 0700 hours, the Northwest Plume system shut down because of a problem with the Greensand Filter Panel PLC system. Troubleshooting the Greensand Filter Panel PLC system determined the Back Plane Board in the PLC system was defective. The Back Plane Board was replaced, and the system was restarted on April 13, 2015, at 1000 hours.

On April 17, 2015, at 0700 hours, the Northwest Plume system shut down to remove obsolete equipment related to the C-612 modernization project. The obsolete equipment was removed, and the system was restarted on April 17, 2015, at 1300 hours.

On April 24, 2015, at 0700 hours, the Northwest Plume system shut down to remove obsolete equipment related to the C-612 modernization project. The obsolete equipment was removed, and the system was restarted on April 24, 2015, at 1200 hours.

On May 11, 2015, at 1600 hours, the Northwest Plume system shut down because of a power outage. The system was restarted on May 12, 2015, at 0700 hours to process the water remaining in the tanks and prepare for the system to be shut down so the C-612 modernization project could proceed.

On July 26, 2015, at 1000 hours, the Northwest Plume system shut down due to a low water level alarm in the air stripper. The system was restarted on July 27, 2015, at 1300 hours.

On September 26, 2015, at 1830 hours, the Northwest Plume system shut down because of a power outage. The system was restarted on September 28, 2015, at 0700 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:

None.

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:

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of the NWPGS belongs to FFS as the DOE prime remediation contractor at PGDP. In addition FFS provides programmatic and technical support, analytical services, and business management services. SSI 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 91.4% of the time during this reporting period.

V. Primary/Secondary Document Tracking System:

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

None.

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

None.

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

None.

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

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

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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 \$175,000.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

BURIAL GROUNDS OPERABLE UNIT

The scope of the BGOU includes an 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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SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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):

- Initiated negotiations to resolve the informal dispute associated with 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.
- Elevated disputed conditions to Formal Dispute Resolution on May 1, 2015, related to Solid Waste Management Units 5 and 6. Initiated negotiations to resolve the formal dispute associated with 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.
- SWMU 4 field sampling and analytical laboratory activities associated with Phase IV scope were completed. Based on sampling results, the FFA parties collaborated to select Phase V MW locations. DOE initiated procurement and work control documentation to prepare for Phase V field work.
- Transmitted revised SWMU Assessment Report (SAR) for Area of Concern (AOC) 526, Internal Plant Drainage Ditches, to EPA and Kentucky. The SAR included a revised map identifying all associated internal plant ditches that comprise AOC 526, including the ditch to be disassociated from SWMU 3.

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

- Once the dispute is resolved, develop and submit a revised *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.
- Once the dispute is resolved, develop and submit a revised *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.
- Complete SWMU 4 field sampling and analytical laboratory activities associated with additional Phase V scope. Complete the excavation of the test pits associated with Phase II.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of BGOU belongs to FFS. In addition, FFS also provides programmatic and technical support, analytical services, and business management. SSI 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 related to the dispute resolution process have resulted in an overall impact to the project schedule for the BGOU.

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.*

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

- Resolution of informal dispute on 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*, by November 11, 2015.
- Resolution of formal dispute on the *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*, by November 20, 2015.
- Complete and issue the 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*, in accordance with the terms of the dispute resolution memorandum of agreement.
- Complete and issue the 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*, in accordance with the terms of the 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 for BGOU SWMUs 2, 3, 7, and 30 and BGOU SWMUs 5 and 6 has resulted in cost and schedule delays. Current enforceable milestones (if applicable) have been stayed and will be reestablished in accordance with the terms of the 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 project managers, FFA senior managers, local elected officials, and congressional staff. In addition, a series of meetings with EPA and Kentucky were conducted to reach consensus on the quantity and location of additional SWMU 4 Phase V borings and to discuss test pit locations.

VIII. Changes in relevant personnel:

David Dollins was appointed as the DOE Project Lead for BGOU SWMU 4.

Jennifer Woodard was appointed as the DOE Project Lead for BGOU SWMUs 2, 3, 7, and 30 and for BGOU SWMUs 5 and 6.

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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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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 June 2015, have been included as part of this report. The results of the groundwater monitoring trends from 1996 through June 2015 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:

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of C-749 Uranium Burial Ground belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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 Project Lead for BGOU SWMUs 2, 3, 7, and 30 and for BGOU SWMUs 5 and 6.

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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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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 SSI. 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 March 2015, and the current maximum discharge limit for turbidity is 100 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):

- Completed and submitted the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2600&D1, to EPA and Kentucky on July 6, 2015.
- Transmitted revised SAR for AOC 526, Internal Plant Drainage Ditches, to EPA and Kentucky. The SAR included a revised map identifying all associated internal plant ditches that comprise AOC 526, including the ditch to be disassociated from SWMU 3.

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.
- Additional work associated with this project previously was resequenced based upon agreement with the FFA project managers and their respective senior managers. As a result, no additional activities are scheduled for this project during the upcoming reporting period.
- Obtain approval of the revision to the SAR for AOC 526.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of the SWOU Remedial Action belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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 previously was resequenced based upon agreement with the FFA project 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:

- *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 and review during this reporting period.
- Revised SAR for AOC 526, Internal Plant Drainage Ditches, has been submitted to EPA and Kentucky 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.

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 previously was resequenced based upon agreement with the FFA project 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 project managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

Jennifer Woodard was appointed as the DOE Project Lead for SWOU.

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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/AOCs; three inactive facilities [C-218 Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), C-410-B Hydrogen Fluoride (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 Feasibility Study (FS). The remaining 12 SWMUs were evaluated further under a subsequent Soils OU RI and will be addressed by a subsequent Soils OU FS.

Due to interferences from ongoing plant 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 removal 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 submitted to EPA and Kentucky on July 2, 2015, the *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2306&D1.
- Finalized and submitted to EPA and Kentucky on July 23, 2015, the *Sitewide Evaluation Report for the Soils Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1256&D2/R1. EPA approval of the D2 was received on July 17, 2015. Kentucky approval of the D2/R1 was received on July 24, 2015.
- Developed and submitted to EPA and Kentucky on July 2, 2015, revisions of SARs for SWMU 32 and SWMU 33, as agreed to by the FFA parties during a December 10, 2014, teleconference. The SARs were updated to reference data collected during the Soils OU RI.
- Developed and submitted to EPA and Kentucky on September 16, 2015, an addendum to the *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1, for SWMU 27.
- Initiated RI activities for SWMU 1 and SWMU 229, as specified in 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.

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

- Finalize the *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2306&D2.
- Obtain approval of the SAR revisions for SWMU 32 and SWMU 33.
- Finalize the addendum to the *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1/A1, for SWMU 27.
- Complete RI activities for SWMU 1 and SWMU 229, as specified in 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.

- Initiate the development of the addendum to the *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D2*, for SWMU 229.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of the SOU RI belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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 SOU consistent with the SMP and as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

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

- *Soils Operable Unit Remedial Investigation 2 Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2306&D1.*
- *Sitewide Evaluation Report for the Soils Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1256&D2.*
- SARs for SWMU 32 and SWMU 33.
- *Addendum to the Soils Operable Unit Remedial Investigation Report for Solid Waste Management Unit 27 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0358&D2/R1/A1.*

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

None.

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

None.

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

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

VIII. Changes in relevant personnel:

April Ladd was appointed as the DOE Project Lead for SOU.

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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 facility:

- C-410/C-420 Feed Plant Complex

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

The scope of this project includes D&D of the C-410 UF₆ 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/C-420 Complex:

- Completed demolition of C-420 Building, propane tank, and railroad ties on May 14, 2015.
- Submitted a proposal for disposition of contaminated water collected and contained in Zone 26 of C-410 to EPA and Kentucky on May 24, 2015.
- Received EPA's revised proposal for disposition of contaminated water collected and contained in Zone 26 of C-410 on June 5, 2015.
- Completed shipment of gondolas of demolition debris off-site for disposal on July 23, 2015.
- Finalized agreement with FFA parties for disposition of contaminated water collected and contained in Zone 26 of C-410. MOA was signed on July 31, 2015.
- Initiated cleaning of the slab at C-410/C-420.
- Completed installation of water treatment system related to the contaminated water in Zone 26.
- Received agreement from FFA parties regarding sample results meeting the criteria for discharge of contaminated water in Zone 26 for both uranium and Tc-99 on September 11, 2015.
- Initiated treatment and discharge of C-410 water on September 17, 2015.

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

- Complete treatment and discharge of contaminated water in Zone 26.
- Initiate and complete flowable fill in Zone 26.
- Complete cleaning and application of epoxy coating of the slab at C-410/C-420.

- Complete disposal of remaining waste.
- Continue development of *Removal Action Report for the C-410 Complex Infrastructure Decontamination and Decommissioning Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-2182&D1.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of D&D belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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 currently are being met; however, EPA's November 26, 2015, Stop Work letter associated with discharge of approximately 200,000 gal of storm water from the basement of the C-410 Building has had a significant impact on DOE's ability to perform decommissioning and demolition activities. The FFA parties agreed on March 2, 2015, that impacts to the project have occurred and that good cause exists for an extension of the submittal date for the D&D Operable Unit (OU) D1 Completion Notification letter. The new due date for the D&D OU D1 Completion Notification letter is 90 days after completion of the C-410/C-420 Complex Removal Action.

V. Primary/Secondary Document Tracking System:

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

- "Response to U.S. Environmental Protection Agency Disapproval of the Discharge of Wastewater from Building C-410 Removal Action, Paducah Gaseous Diffusion Plant," PPPO-02-2571461-15, November 21, 2014.
- "EPA Issuance of Stop Work Order on the Discharge of Wastewater from Building C-410 Removal Action, Paducah Gaseous Diffusion Plant," November 26, 2014.
- "Intended Discharge of Radioactively Contaminated Waters Generated from C-410 Complex CERCLA Response Action," November 26, 2014.
- "U.S. Department of Energy Proposal to Disposition Contaminated Water Collected and Contained in the Zone 26 Basement Pit of the C-410 Complex at the Paducah Gaseous Diffusion Plant," PPPO-02-2745135-15, January 29, 2014.
- "EPA's Proposed Agreement on the U.S. Department of Energy Disposition of Contaminated Water Collected in Basement Pit of the C-410 Complex at the Paducah Gaseous Diffusion Plant," February 2, 2015.
- "Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant," PPPO-02-2818180-15, March 9, 2015.

- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2851317-15, March 27, 2015.
- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2906090-15, April 23, 2015.
- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2960935-15, May 29, 2015.
- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2992277-15, June 18, 2015.
- “Record of Conversation—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-3016795-15, July 1, 2015.
- “EPA Revised Memorandum of Agreement Proposal—Disposition of Contaminated Water Collected from the Basement of the C-410 Complex at the Paducah Gaseous Diffusion Plant,” July 8, 2015.
- “Disposition of Contaminated Water Collected from the basement of C-410 Complex at the Paducah Gaseous Diffusion Plant,” PPPO-02-2932877-15, August 4, 2015.

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

- D&D OU D1 Completion Notification letter is due 90 days after completion of the C-410/C-420 Complex Removal Action.

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

EPA’s November 26, 2015, Stop Work letter associated with the discharge of approximately 200,000 gal of storm water from the basement of the C-410 Building has had a significant impact on DOE’s ability to perform decommissioning and demolition activities. As a result, submittal of the D1 Remedial Action Report, due by June 30, 2015, was impacted. The FFA parties agreed on March 2, 2015, that impacts to the project have occurred and that good cause exists for an extension of the submittal date for the D&D Operable Unit (OU) D1 Completion Notification letter. The new due date for the D&D OU D1 Completion Notification letter is 90 days after completion of the C-410/C-420 Complex Removal Action.

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 project 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 Project Lead for the C-410/C-420 Complex.

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

None.

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COMPREHENSIVE SITE OPERABLE UNIT

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

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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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**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 June 2015 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:

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the day-to-day operations of WAGs 1 and 7 belongs to FFS as the DOE prime remediation contractor at PGDP. In addition, FFS also provides programmatic and technical support, analytical services, and business management. SSI 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:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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.

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PROJECT: Community Relations Plan

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

Finalized and submitted Revision 9 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant, DOE/OR/07-2009&D2/R9*, including updates to Appendix A to reflect changes to key contracts for PGDP and updates to Appendix B to reflect more recent significant activities in public involvement history, to EPA and Kentucky on June 9, 2015. 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).

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

Address EPA comments dated September 10, 2015, on Revision 9 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant, DOE/OR/07-2009&D2/R9*. Kentucky did not have comments on this document. Submit revised document for EPA and KY review and approval.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the maintenance of the CRP belongs to FFS. SSI 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).

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

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

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

Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant, DOE/OR/07-2009&D2/R9.

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

Revised CRP is due to EPA and Kentucky no later than November 9, 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 project managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

Not applicable.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

PROJECT: Site Management Plan

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

- DOE received conditions on the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2015*, DOE/LX/07-1301&D2, from EPA and Kentucky on April 14, 2015, and April 16, 2015, respectively.
- The FFA parties held clarification and comment resolution meetings on April 1, 2015, and April 29, 2015, and the D2/R1 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision FY 2015*, DOE/LX/07-1301&D2/R1, was submitted to EPA and Kentucky for review on April 29, 2015. Kentucky and EPA approval was received April 30, 2015, and May 5, 2015, respectively.

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

Initiate scoping discussions and development of the FY 2016 D1 SMP for submittal to EPA and Kentucky on or before November 15, 2015.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the maintenance of the SMP belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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:

- D2/R1 FY 2015 SMP
- Scoping of the D1 FY 2016 SMP with EPA and Kentucky

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

- D1 FY 2016 SMP is due to EPA and Kentucky no later than November 15, 2015.
- Comments on the D1 FY 2016 SMP are due to DOE within 30 days of document issuance or December 15, 2015.
- D2 FY 2016 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 project managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

Not applicable.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

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 dispute resolution meetings among the FFA parties to resolve conditions received on 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*.
- Issued the *Sampling and Analysis Plan to Support the Additional Field Investigation for the Waste Disposal Alternatives Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2185&D1*, and received approval from EPA and Kentucky. Conducted fieldwork at Sites 5A and 11. Evaluated field and laboratory data. Shared results with EPA and Kentucky and conducted a briefing. Developed a draft report, which will be included as an attachment to the forthcoming *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*, after the current dispute has been resolved.

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

- Continue negotiations to resolve the informal dispute associated with *D2/R1 Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0244&D2*.
- Develop and submit, following resolution of the current dispute, the revised *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*, to EPA and Kentucky for review in accordance with the date to be established by the FFA parties as part of dispute resolution.
- Incorporate the results of the Sites 5A and 11 hydrologic investigation into the revised *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*.
- Develop and submit, following resolution of the current dispute, 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.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the CERCLA waste disposal evaluation belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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 *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 to resolve the dispute 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 *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 placed on hold until the current dispute is resolved.
- The *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, has been placed on hold until the current dispute is resolved.
- The draft report for the Sites 5A and 11 investigation was developed during this reporting period and will be included in Appendix E of the forthcoming *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, after the current dispute is resolved.

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, currently is scheduled to end October 28, 2015.
- The *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, will be 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 delays and schedule delays associated with informal dispute. Should the FFA parties enter into formal dispute resolution, the project will continue to experience cost delays 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 project managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

Not applicable.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2015**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2015–9/30/2015**

PROJECT: CERCLA Five-Year Review

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

- Continued scoping meetings with the FFA parties to discuss the additional actions required to address the deferred protectiveness statements for received from EPA on September 30, 2014, concerning C-400 and the Water Policy.
- Developed and submitted a Sampling and Analysis Plan for the Water Policy Area to EPA and KDEP.
- Conducted sampling in accordance with the Sampling and Analysis Plan for Water Policy Area.
- Developed a report for the Water Policy Area Screening Study.

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

- Finalize scoping discussions with EPA and Kentucky to address the deferred protectiveness statements received from EPA on September 30, 2014, concerning C-400 and the Water Policy.
- Submit a report for the Water Policy Area Screening Study.

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

During this reporting period, the DOE prime remediation contract was transitioned from LATA Kentucky to FFS. Responsibility for the CERCLA Five-Year Review belongs to FFS. In addition, FFS provides programmatic and technical support, analytical services, and business management. SSI 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:

- Sampling and Analysis Plan and project-specific Quality Assurance Project Plan for Water Policy Vapor Intrusion associated with the Five-Year Review.
- Addendum to the D2/R1 *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1289&D2/R1.

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

None.

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

None.

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

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

VIII. Changes in relevant personnel:

Tracey Duncan was appointed as DOE's FFA Project Manager.

The DOE prime remediation contract was transitioned from LATA Kentucky to FFS.

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

Not applicable.

APPENDIX A

**NORTHEAST AND NORTHWEST PLUME
WATER WITHDRAWAL REPORTS**

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

Day	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015
1	334,000	325,450	338,460	175,567	348,433	340,200
2	278,140	325,450	263,900	175,567	348,433	343,900
3	278,140	325,450	352,800	175,567	348,433	341,400
4	278,140	325,450	340,700	175,567	332,200	337,000
5	278,140	336,600	307,300	175,567	348,000	89,725
6	278,140	308,600	307,300	175,567	360,000	89,725
7	387,500	332,900	307,300	311,900	334,300	89,725
8	352,600	330,850	307,300	222,700	345,600	89,725
9	265,600	330,850	423,500	111,700	345,600	340,700
10	337,775	330,850	335,300	335,225	345,600	349,000
11	337,775	330,850	411,500	335,225	337,800	345,500
12	337,775	413,600	323,525	335,225	333,700	364,867
13	337,775	328,900	323,525	335,225	375,300	364,867
14	319,900	238,100	323,525	339,600	324,100	364,867
15	344,800	326,950	323,525	356,000	347,267	277,800
16	347,100	326,950	356,800	340,400	347,267	358,200
17	337,625	326,950	292,300	361,975	347,267	345,200
18	337,625	326,950	267,600	361,975	344,800	367,300
19	337,625	281,300	364,675	361,975	336,700	341,067
20	337,625	356,500	364,675	361,975	350,500	341,067
21	314,700	287,000	364,675	244,300	348,500	341,067
22	336,700	345,440	364,675	358,671	344,933	354,900
23	357,000	345,440	335,600	358,671	344,933	326,600
24	336,300	345,440	344,400	358,671	344,933	355,500
25	336,300	345,440	342,000	358,671	336,600	340,400
26	336,300	345,440	343,250	358,671	359,300	347,633
27	336,300	412,800	343,250	358,671	344,100	347,633
28	349,700	338,460	343,250	358,671	398,800	347,633
29	332,300	338,460	343,250	345,900	333,167	343,000
30	385,500	338,460	364,300	348,200	333,167	334,700
31		338,460		274,100	333,167	
Monthly Total	9,864,900	10,310,340	10,124,160	9,247,699	10,722,900	9,320,901
*Daily Average	328,830	332,592	337,472	298,313	345,900	310,697
Days water pumped	30	31	30	31	31	30

*Value based on number of days water was pumped.

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

Day	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015
1	308,420	286,378	0	286,510	289,837	289,140
2	220,630	286,378	0	286,510	289,837	274,280
3	220,630	286,378	0	286,510	289,837	289,210
4	0	286,378	0	286,510	283,830	278,200
5	0	308,050	0	286,510	278,570	287,195
6	0	302,870	0	286,510	308,250	287,195
7	0	292,450	0	315,980	274,850	287,195
8	170,300	282,023	0	260,480	286,697	287,195
9	218,630	282,023	0	281,300	286,697	298,450
10	70,520	282,023	0	285,533	286,697	265,590
11	70,520	282,023	0	285,533	280,510	287,140
12	70,520	107,810	0	285,533	281,720	300,737
13	0	0	0	285,533	284,570	300,737
14	295,720	0	0	286,050	286,240	300,737
15	302,710	0	0	295,450	287,980	229,900
16	302,310	0	0	305,840	287,980	289,200
17	284,083	0	0	289,048	287,980	282,970
18	291,328	0	0	289,048	283,550	297,240
19	291,328	0	0	289,048	284,530	278,800
20	269,593	0	0	289,048	287,820	278,800
21	290,930	0	0	197,310	284,250	278,800
22	294,580	0	0	252,169	285,563	300,580
23	310,690	0	0	252,169	285,563	275,700
24	294,803	0	0	252,169	285,563	285,280
25	294,803	0	0	252,169	286,640	281,340
26	294,803	0	0	252,169	291,300	141,387
27	294,803	0	0	252,169	283,070	141,387
28	285,670	0	0	252,169	334,580	141,387
29	306,950	0	0	296,270	270,410	275,060
30	372,060	0	402,700	33,150	270,410	280,840
31		0		266,400	270,410	
Monthly Total	6,427,334	3,284,784	402,700	8,320,797	8,875,741	8,091,672
*Daily Average	257,093	273,732	402,700	268,413	286,314	269,722
Days water pumped	25	12	1	31	31	30

*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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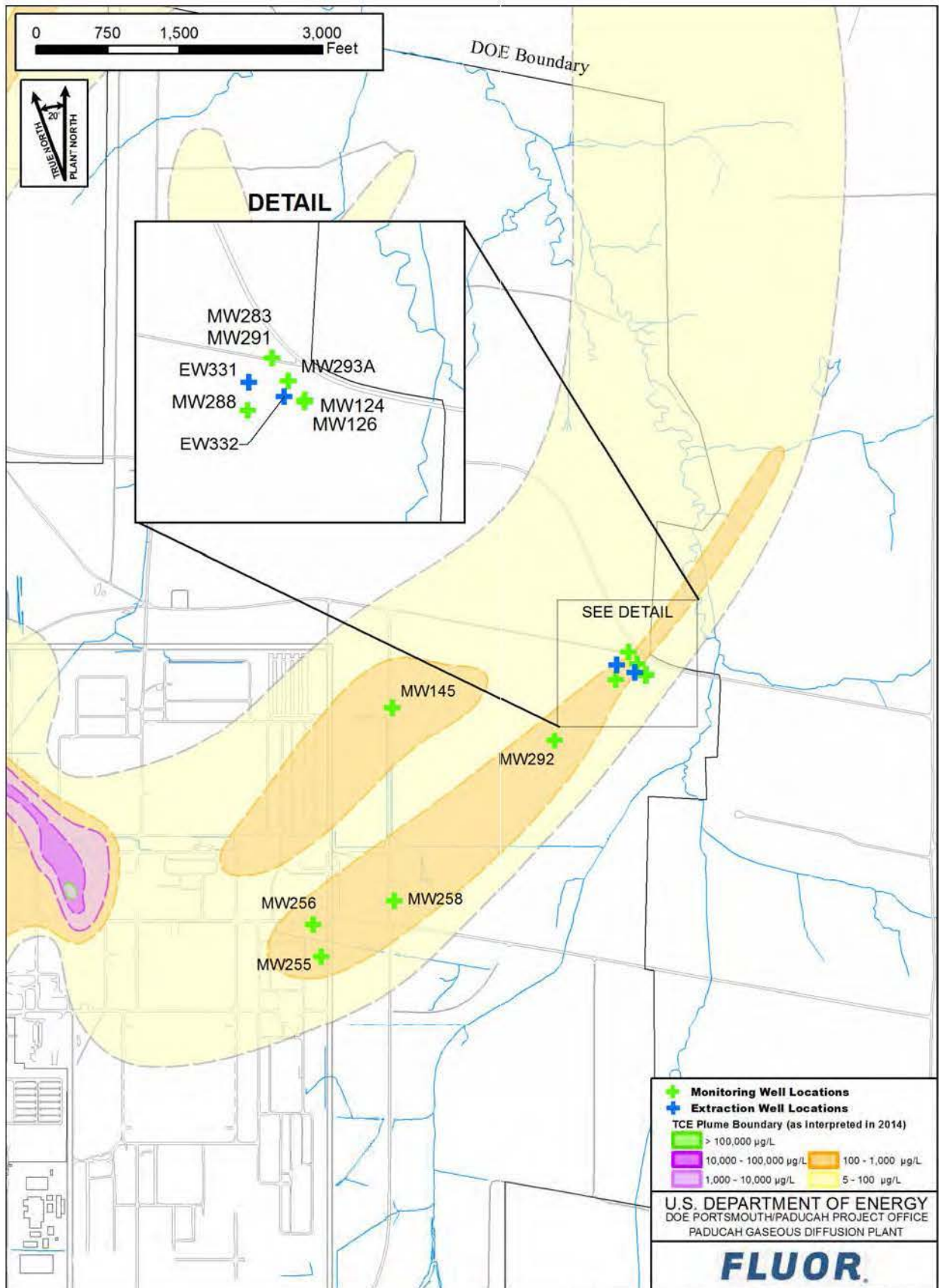


FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual\20150910_NEP.mxd
DATE 9/10/2015

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

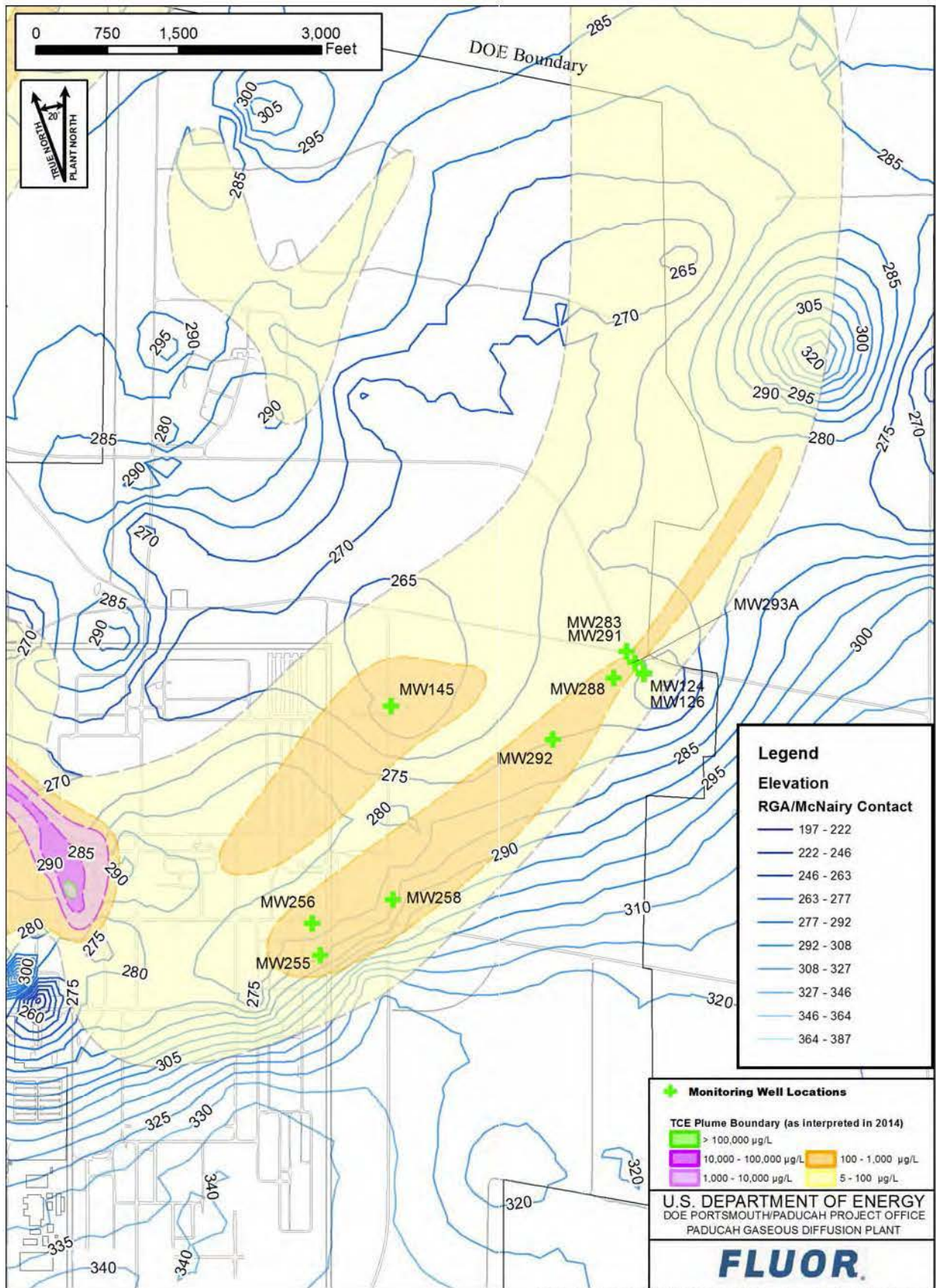
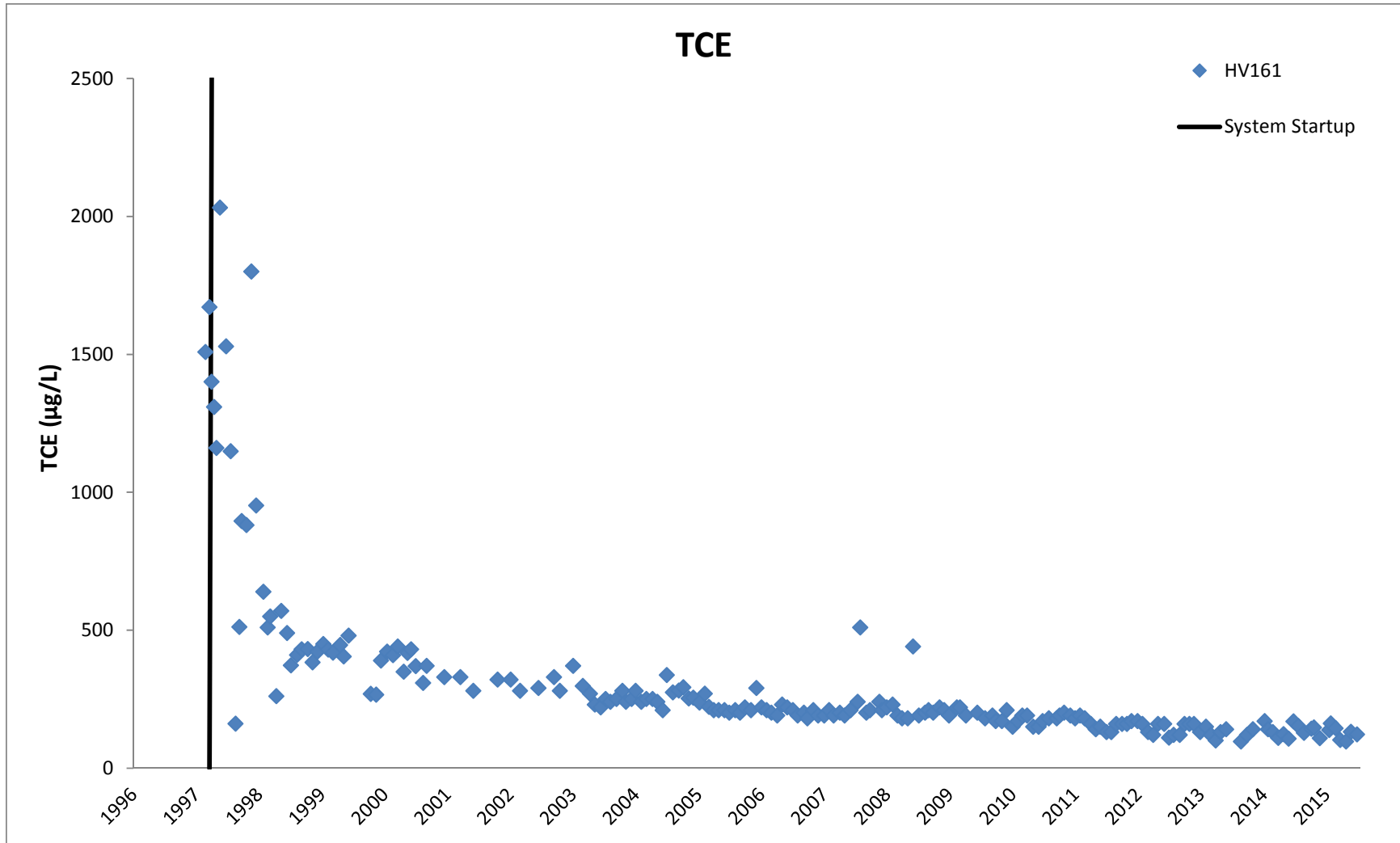


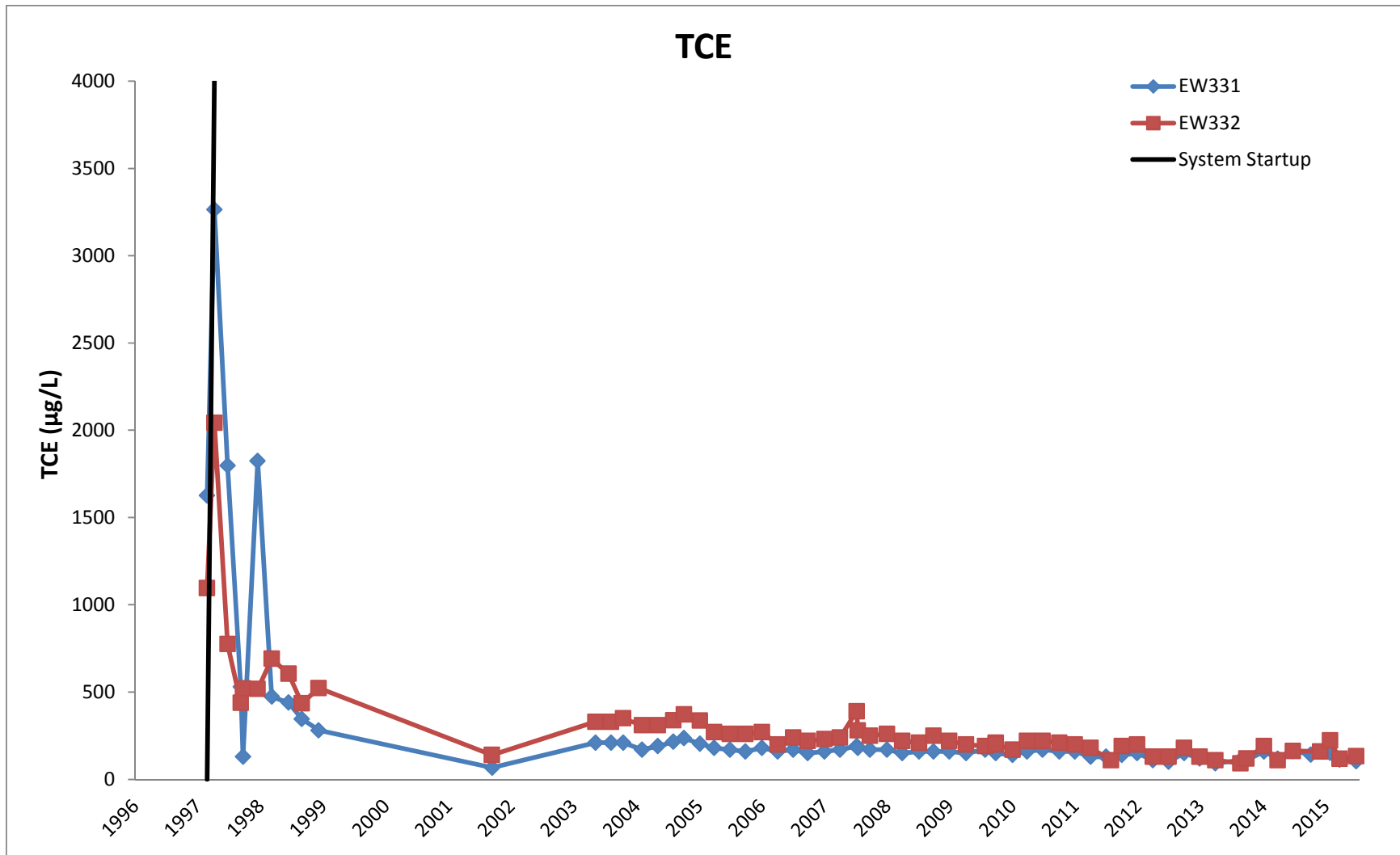
FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual20150910_NEP_RGA.mxd
 DATE 9/10/2015

Figure B.2. Northeast Plume with McNairy Topography



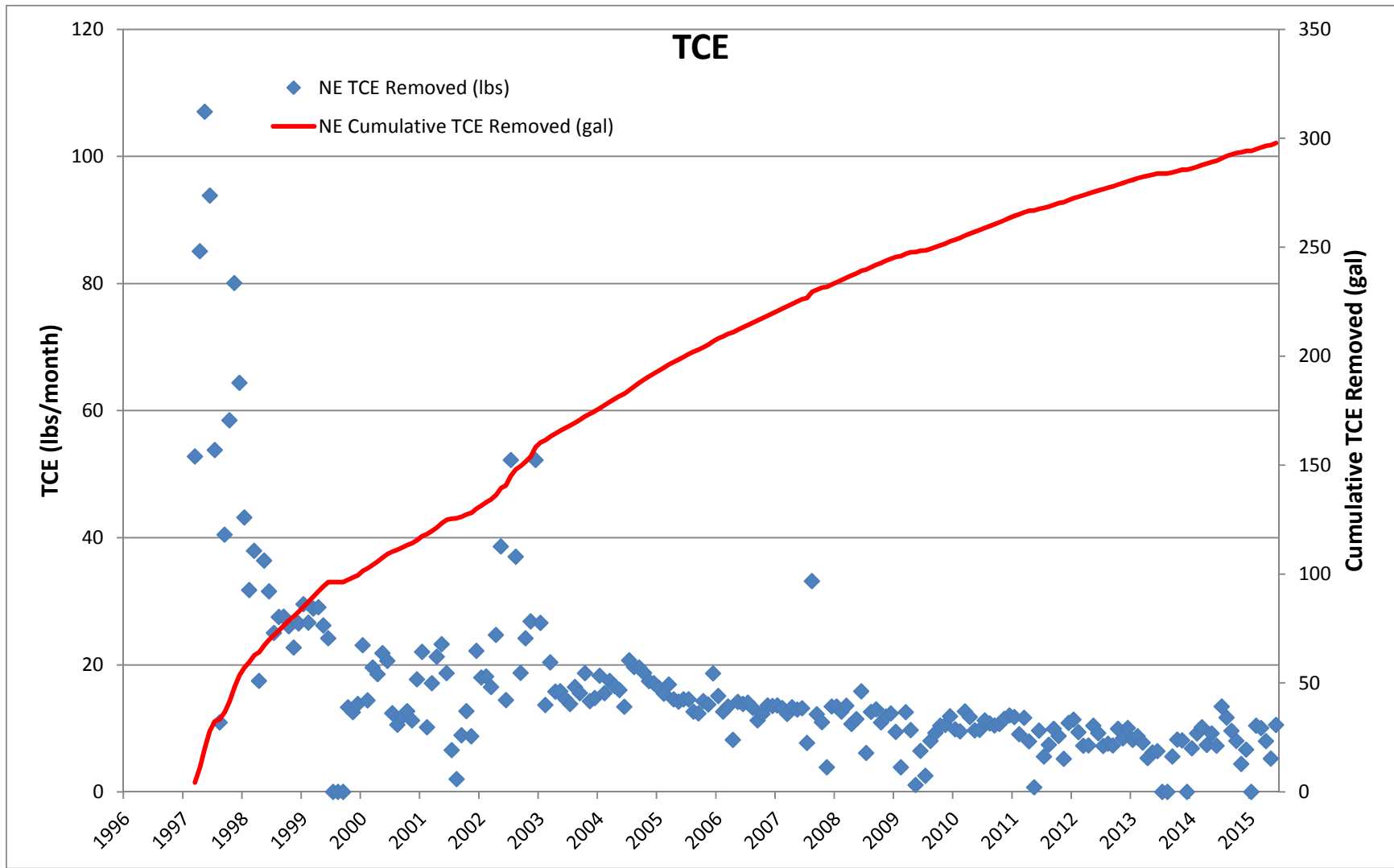
NOTE: Data rejected by validation or assessment have not been graphed.

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

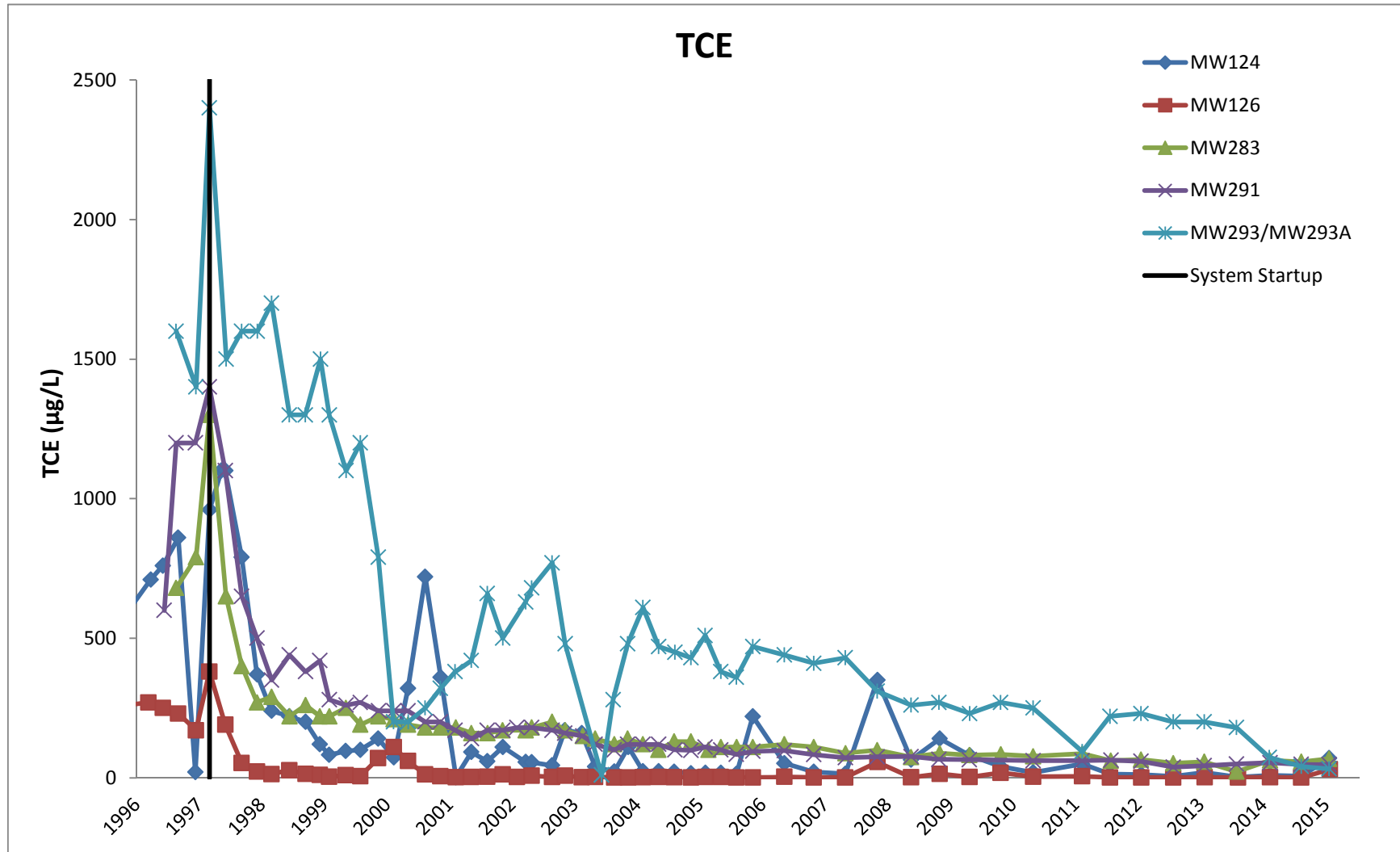
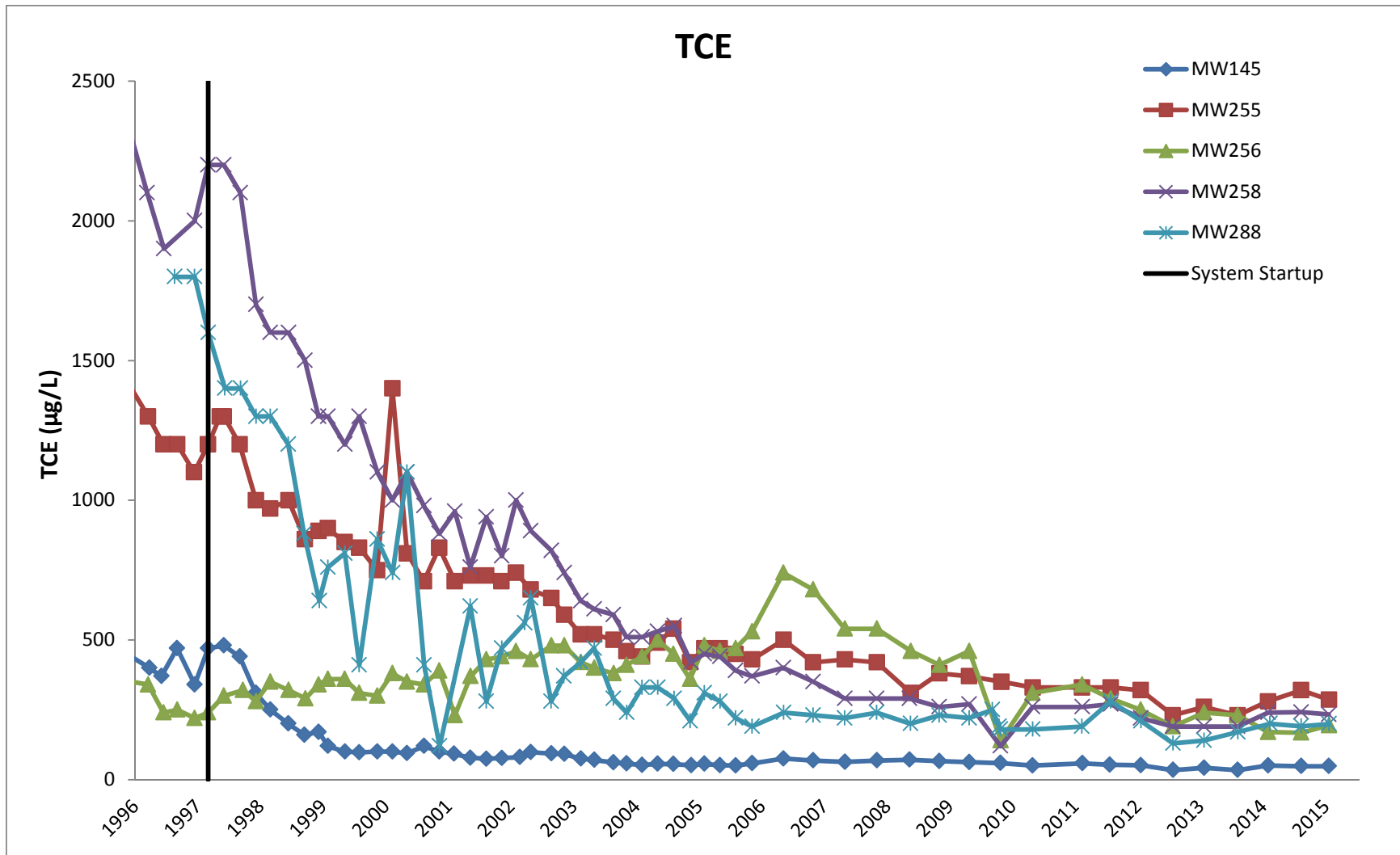


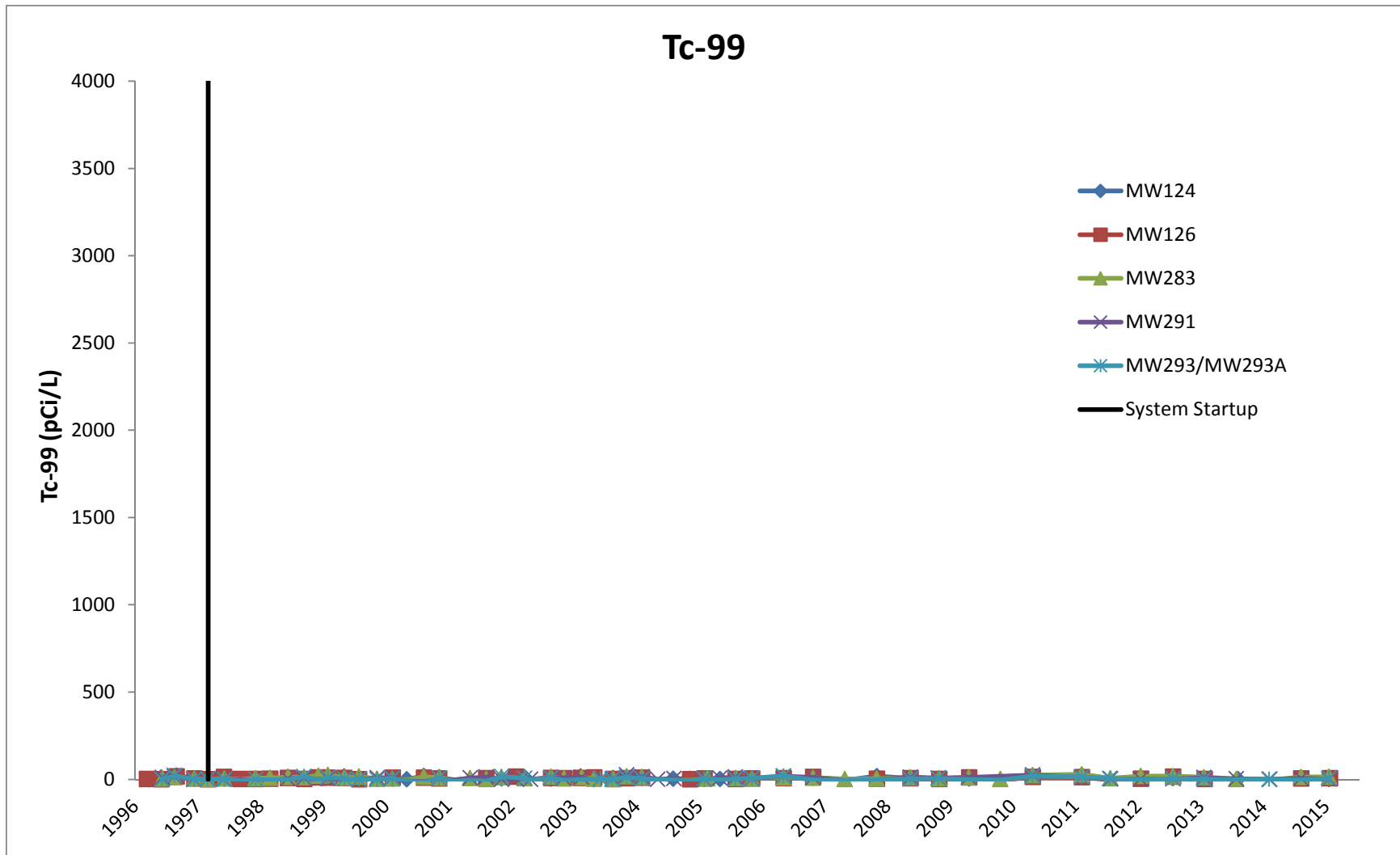
Figure B.6. Northeast Plume—TCE Concentrations in Downgradient Wells



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

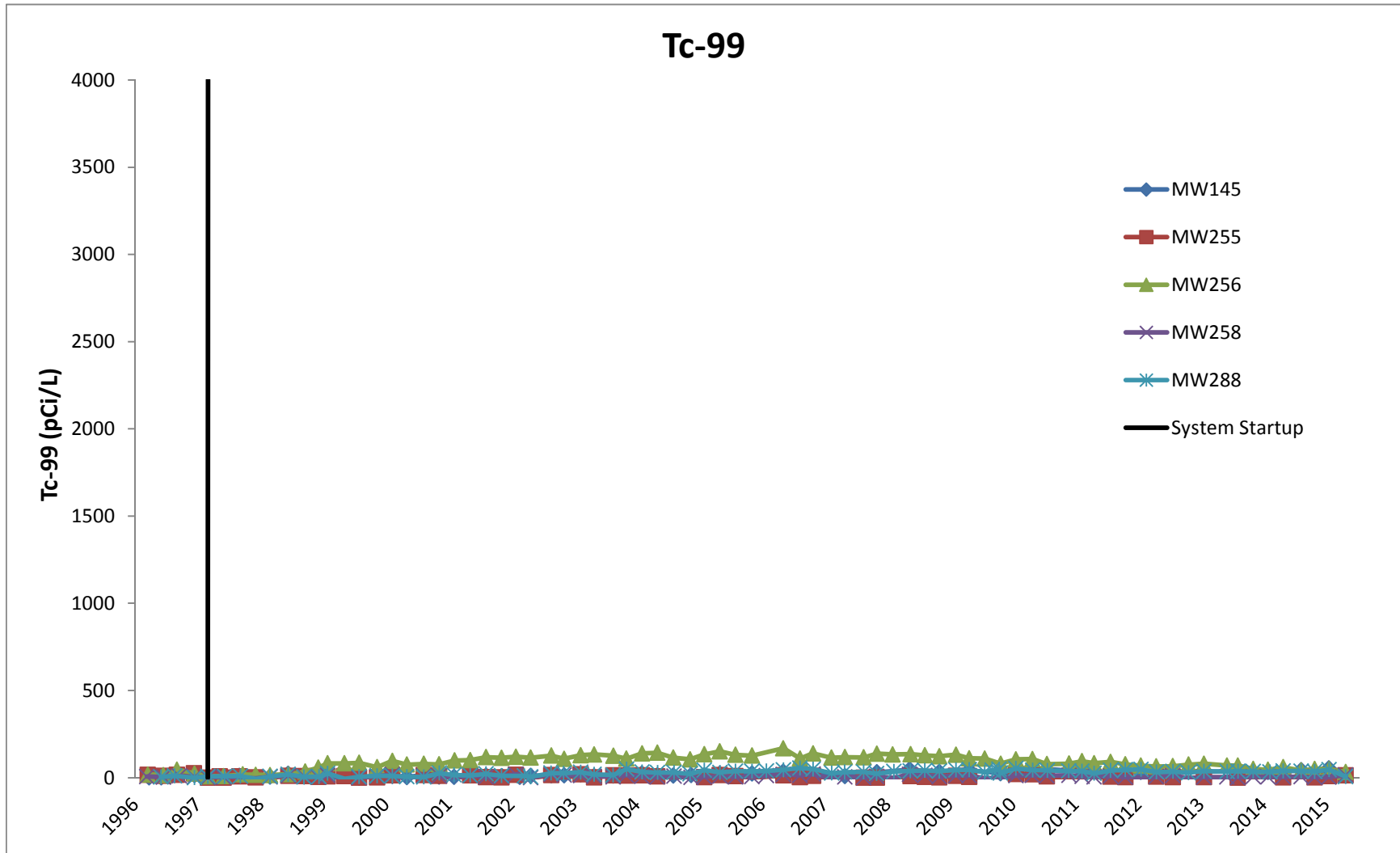
Figure B.7. Northeast Plume—TCE Concentrations in Upgradient Wells

B-10



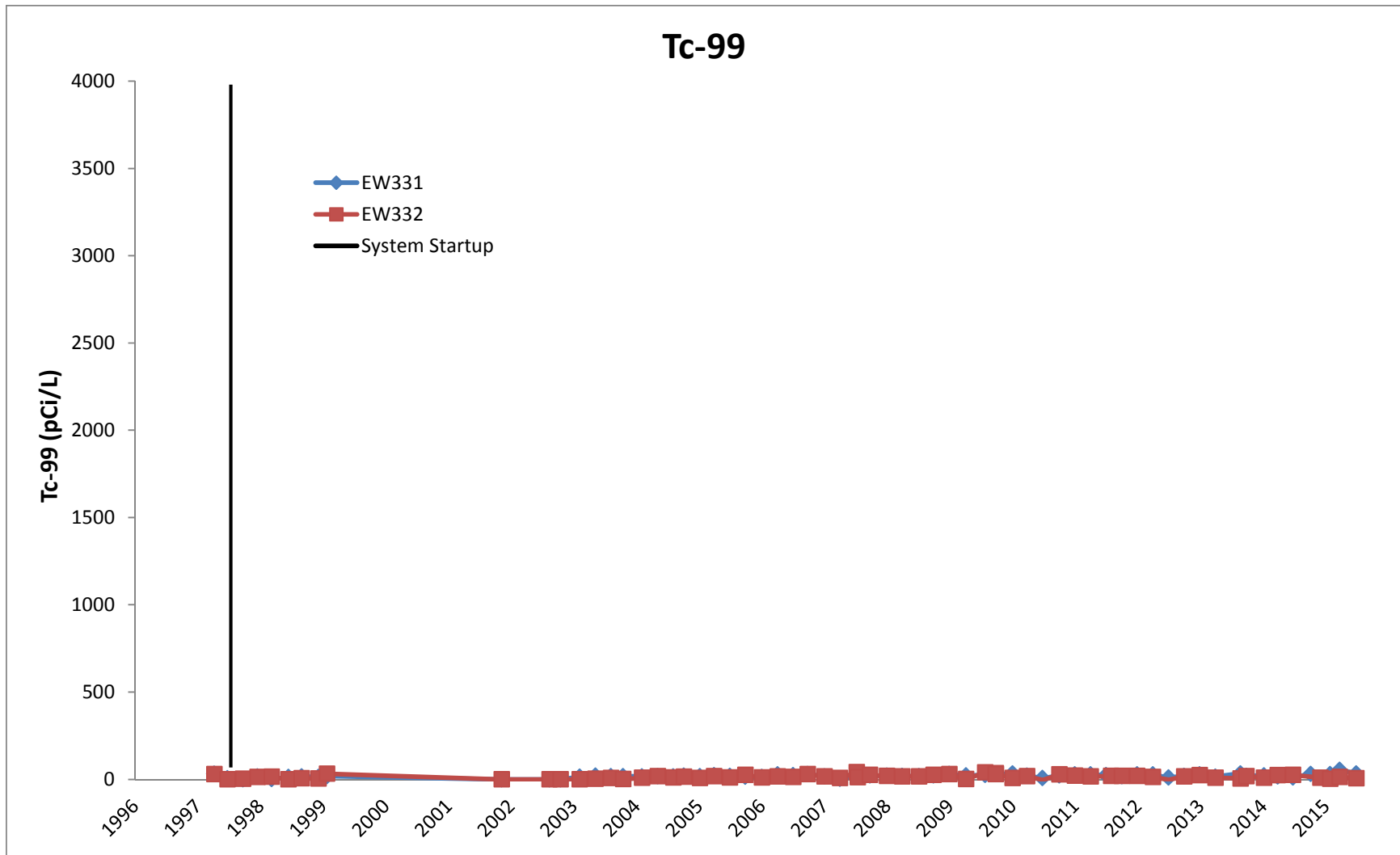
NOTE: Data rejected by validation or assessment have not been graphed.

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

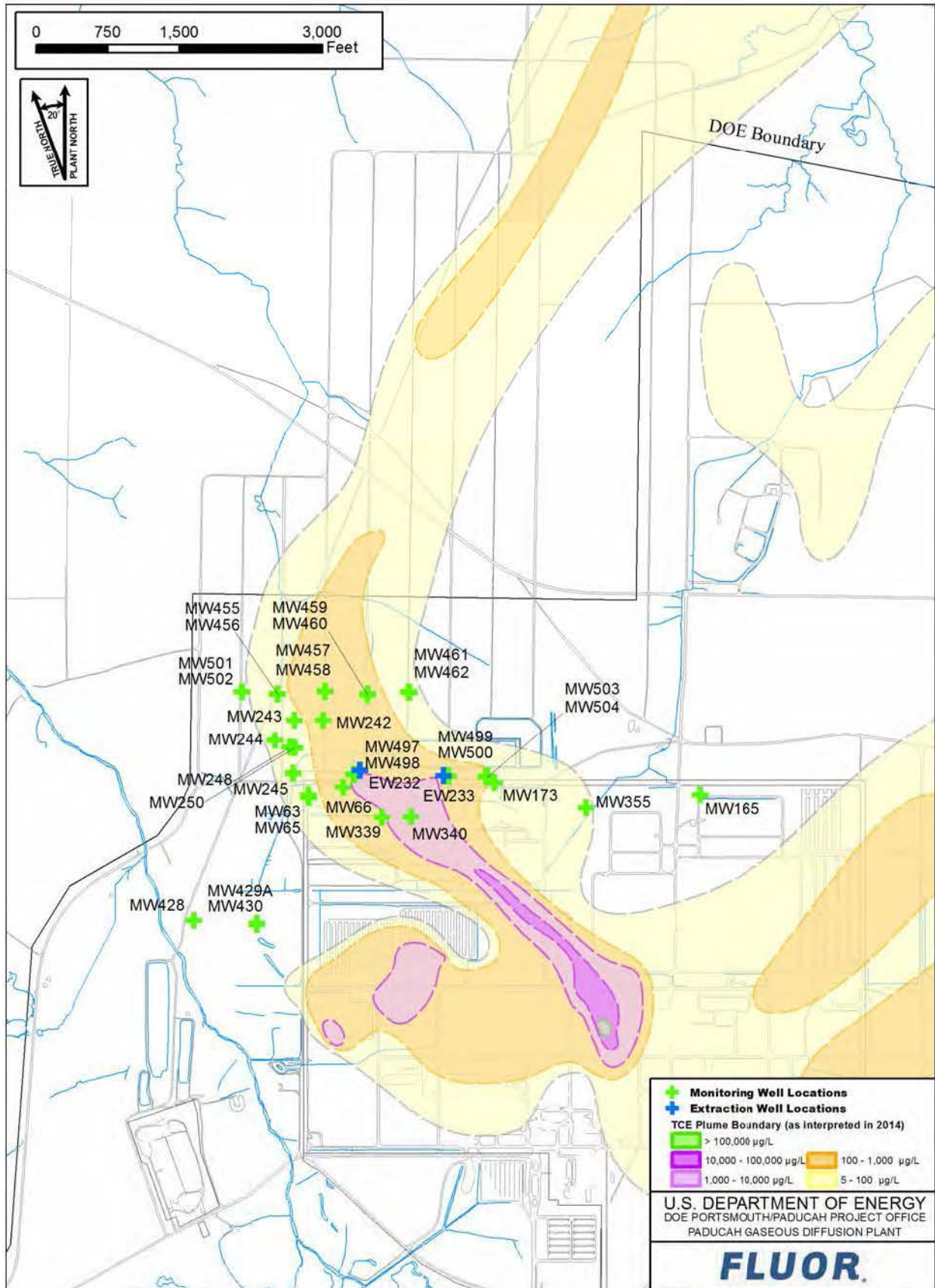


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Figure B.11. Northwest Plume Groundwater Wells

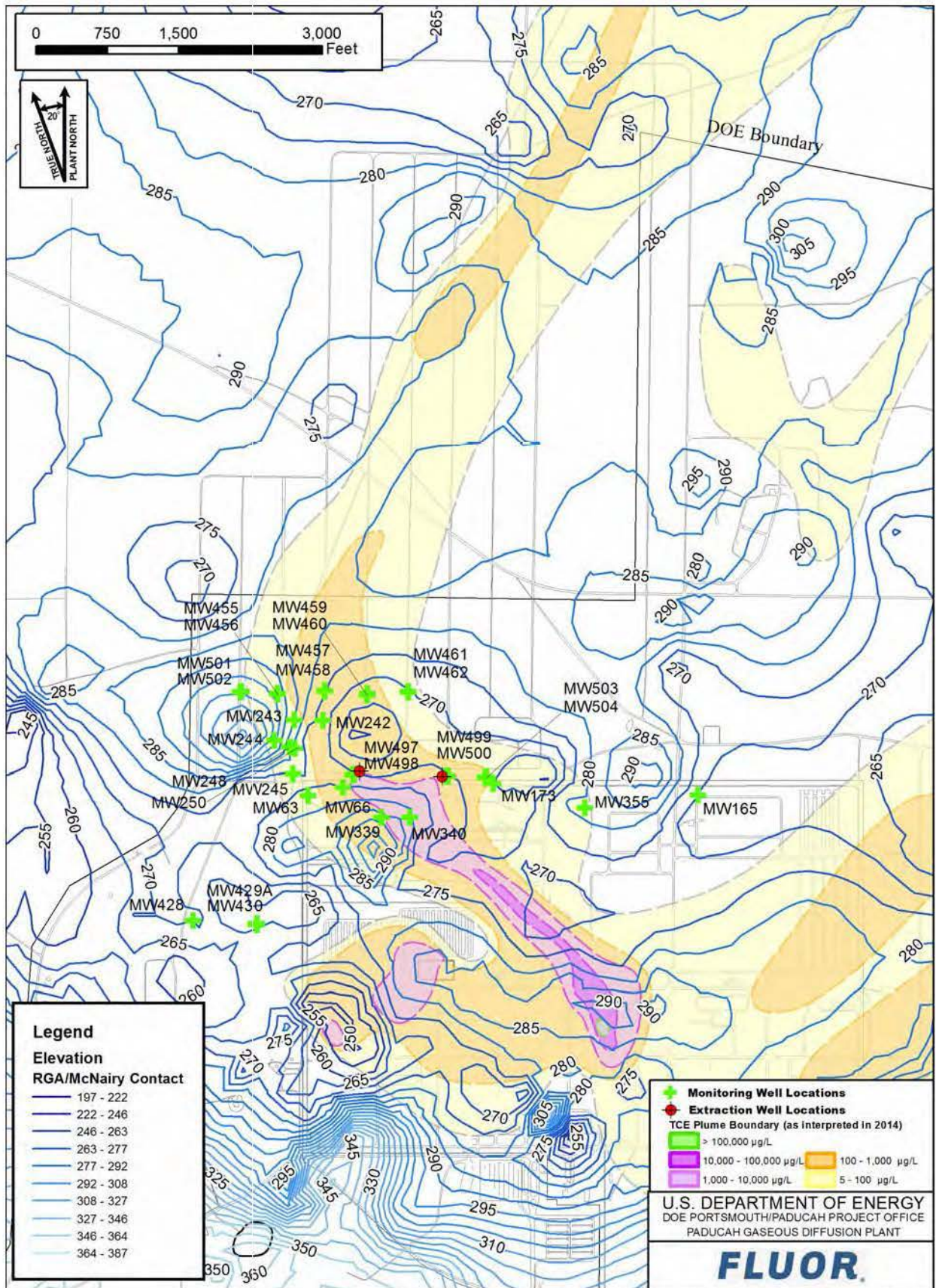
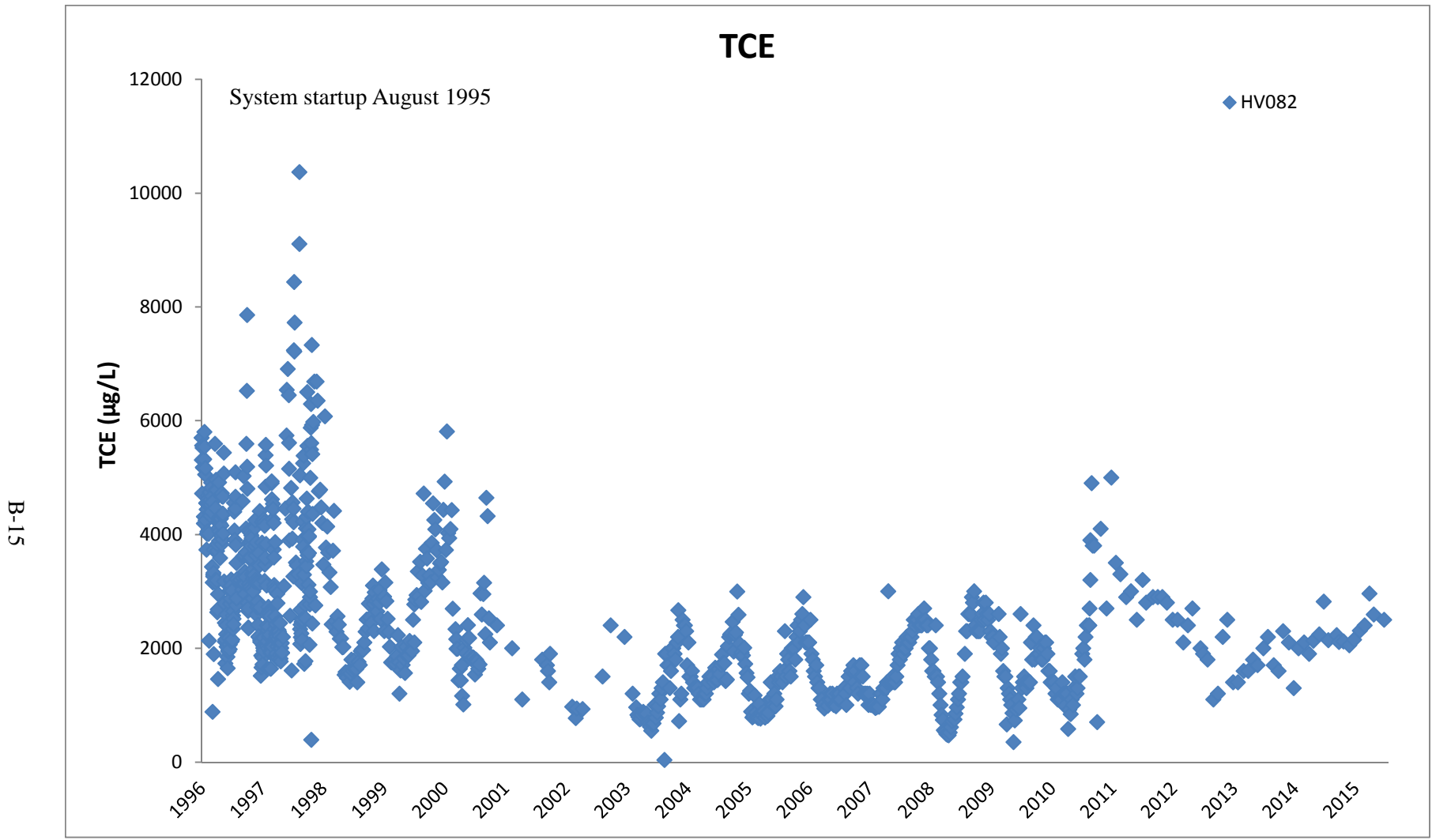


FIGURE No. G:\GIS\ARCVIEWS\PROJECTS\FFA SemiAnnual\20150910_NWP_RGA.mxd
DATE 9/10/2015

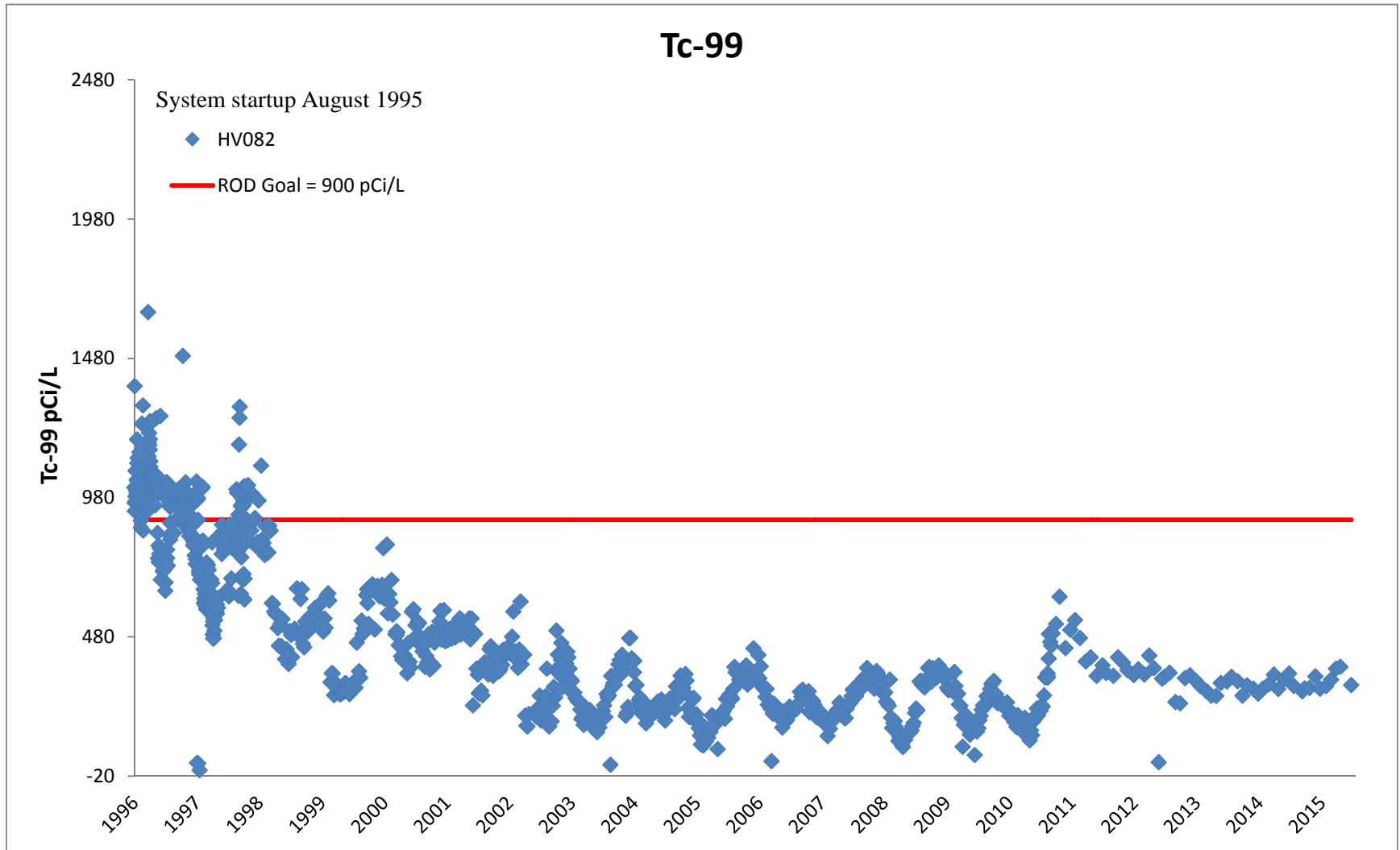
Figure B.12. Northwest Plume with Top of McNairy Topography



B-15

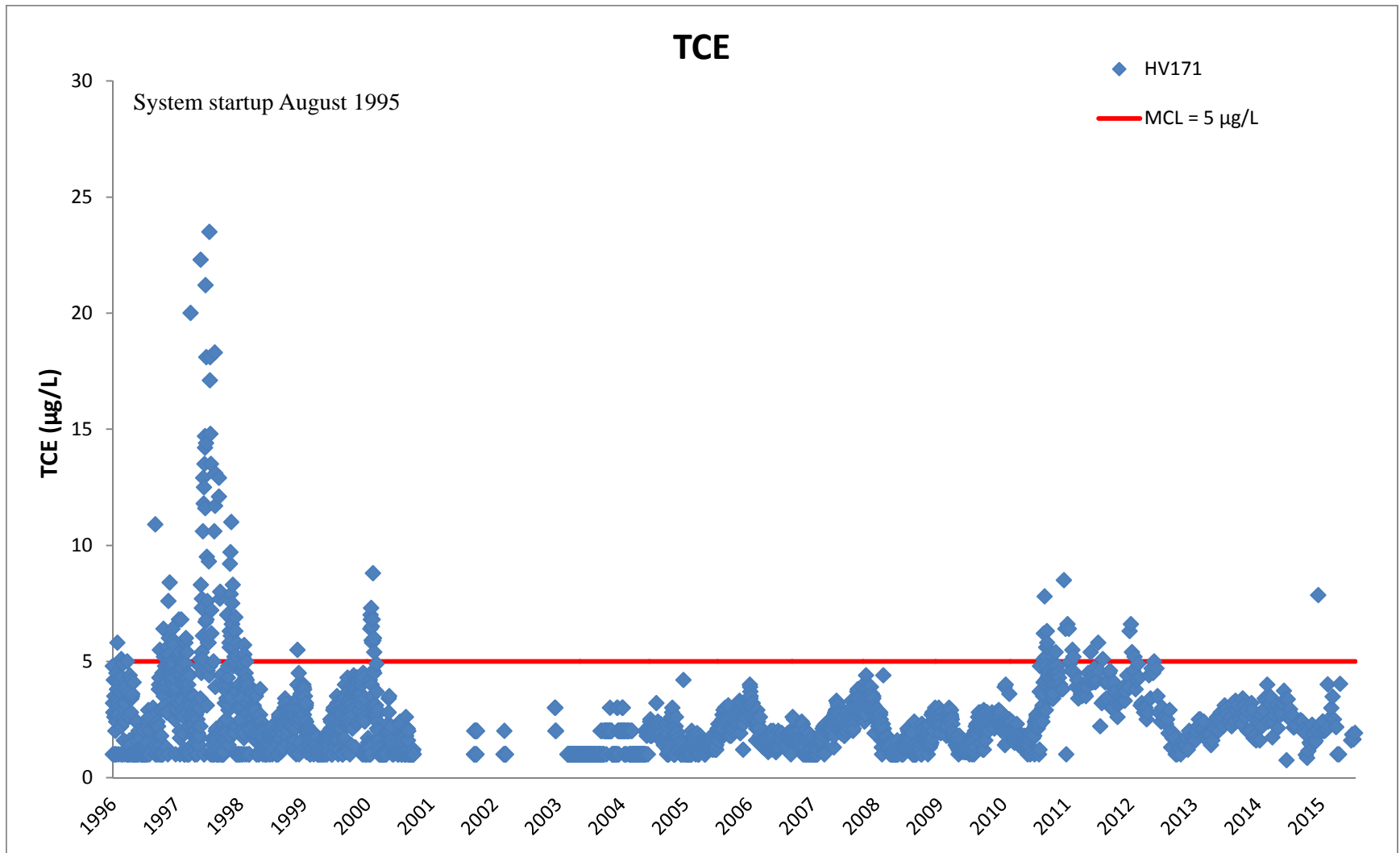
NOTE: Data rejected by validation or assessment have not been graphed.

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



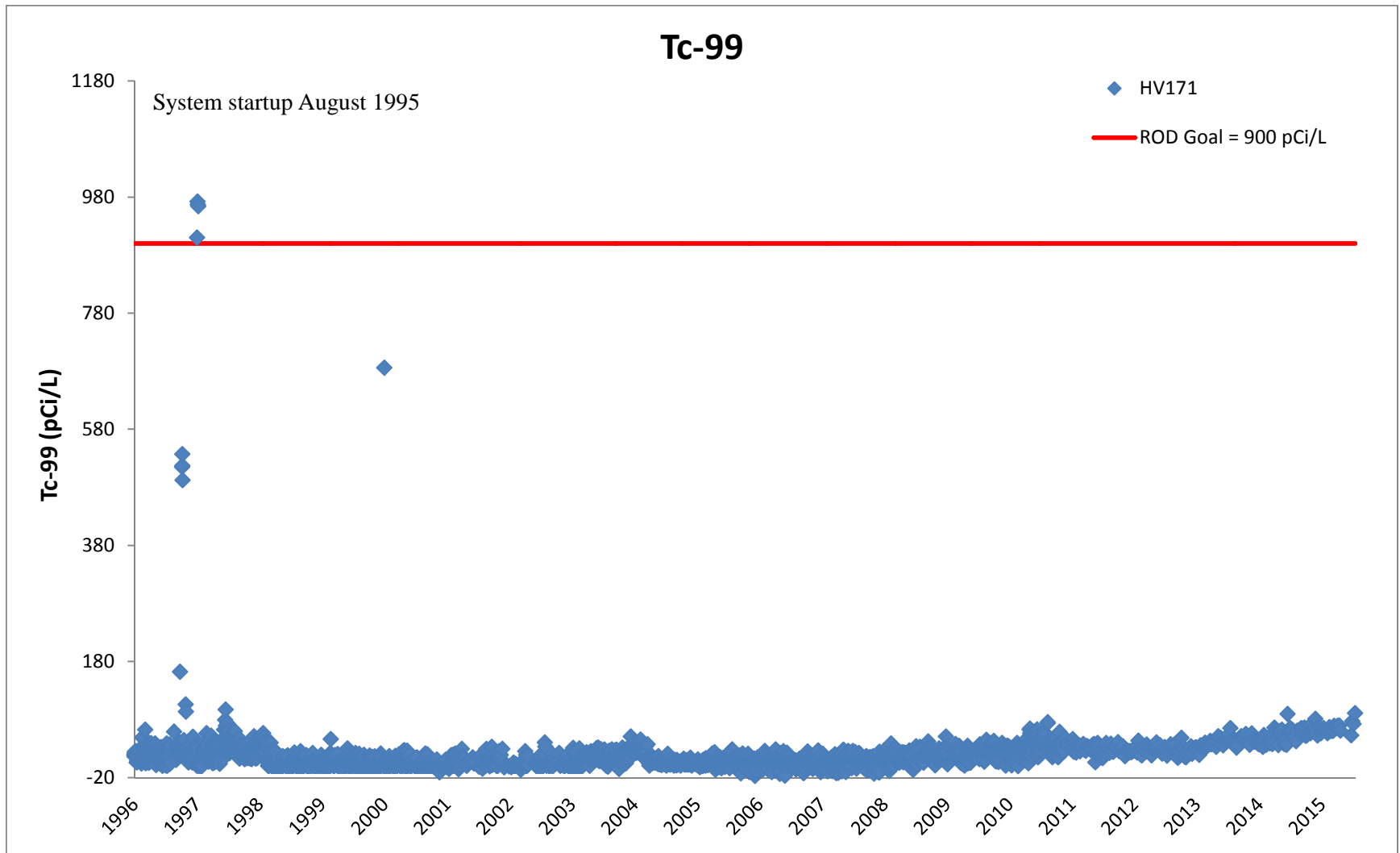
NOTE: Data rejected by validation or assessment have not been graphed.

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



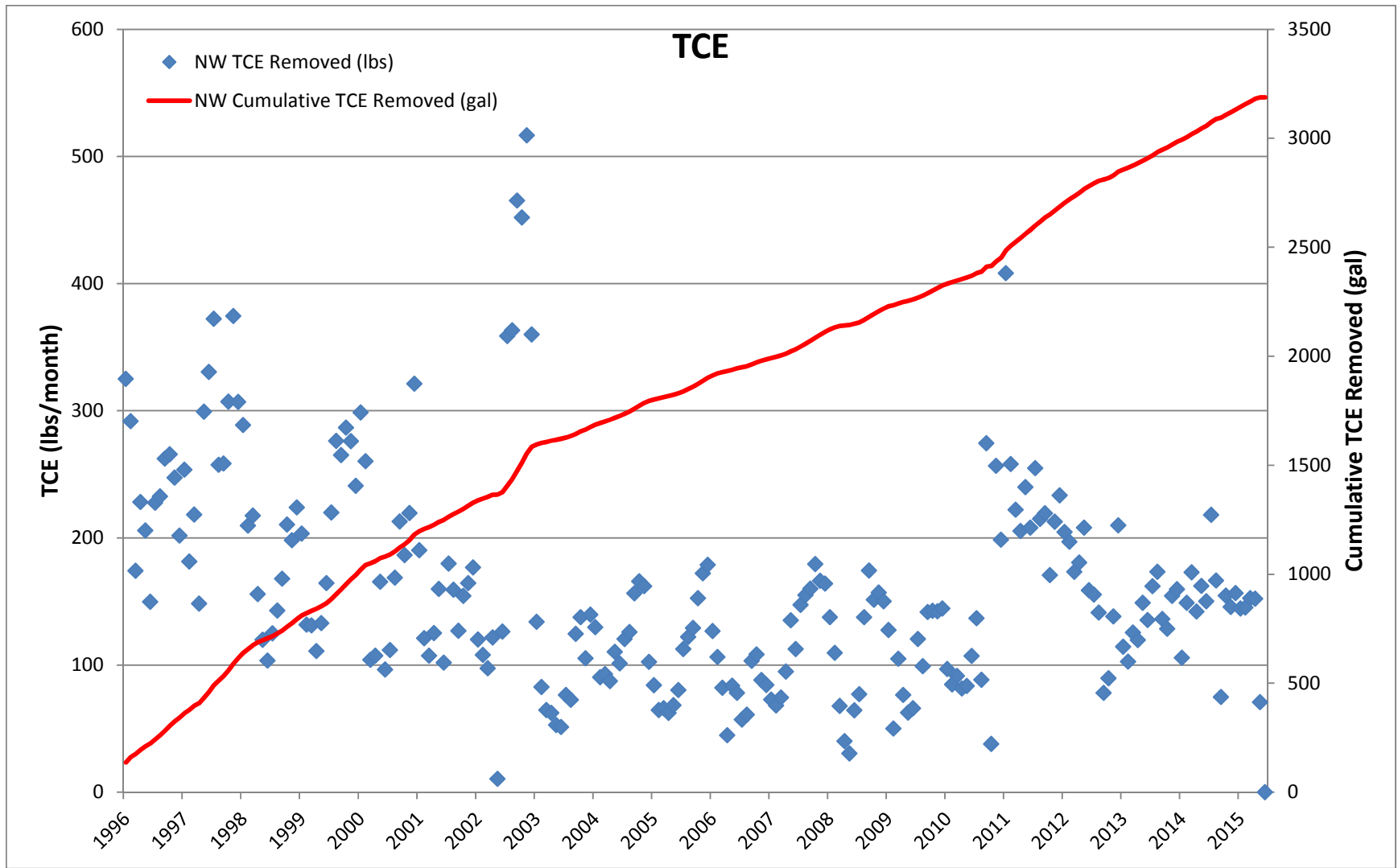
NOTE: Data rejected by validation or assessment have not been graphed.

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



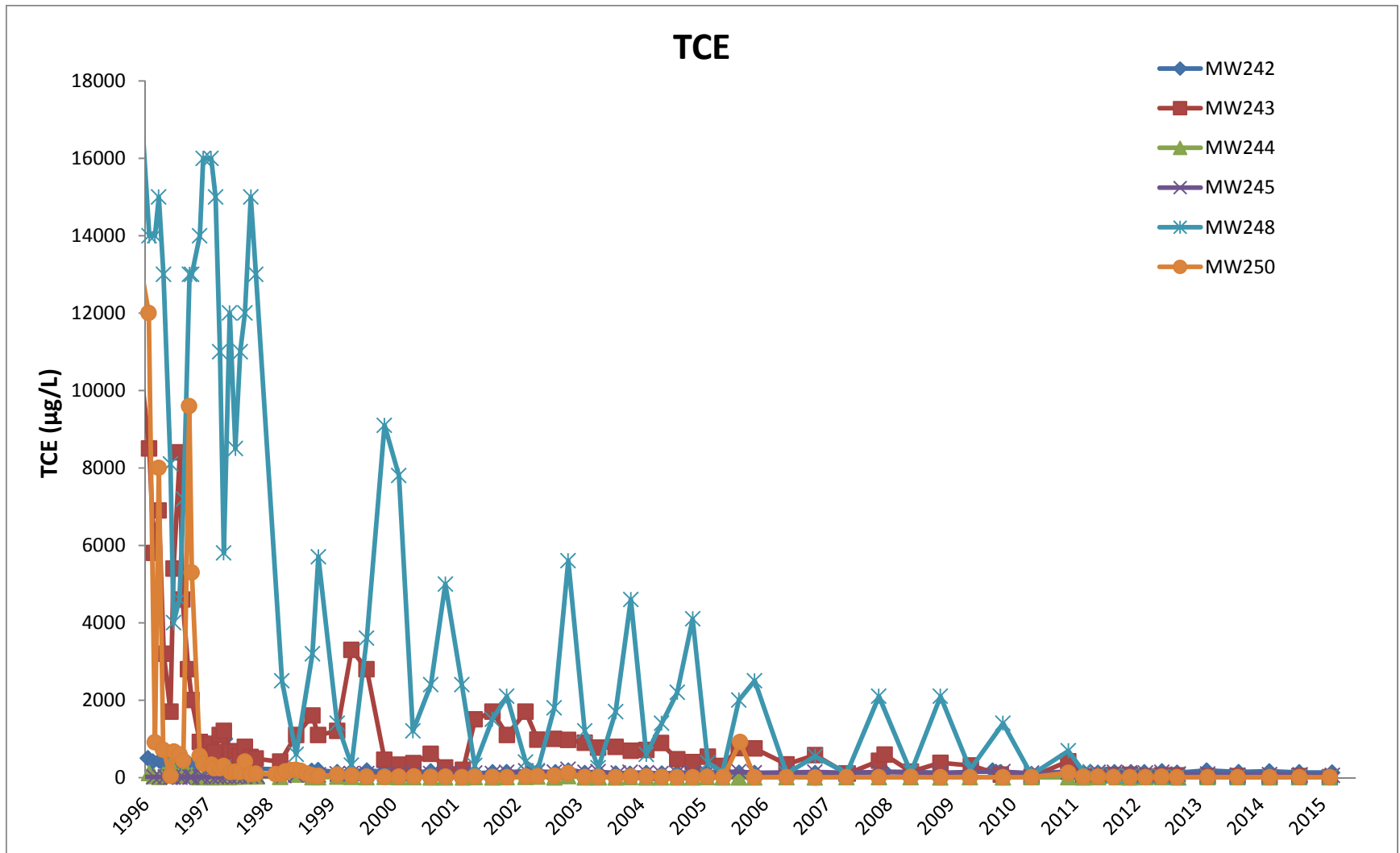
NOTE: Data rejected by validation or assessment have not been graphed.

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



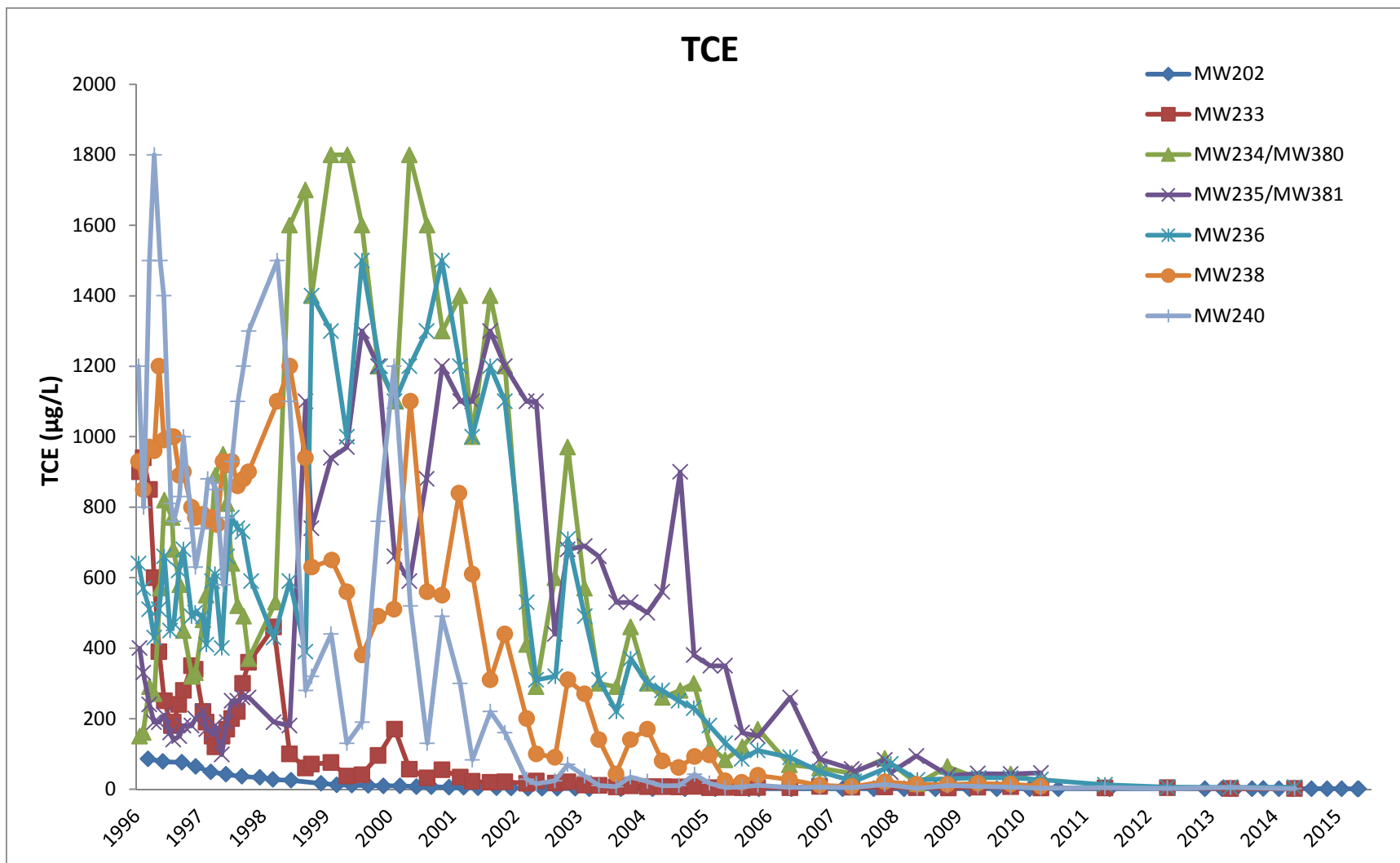
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.17. Northwest Plume Groundwater System TCE Removed



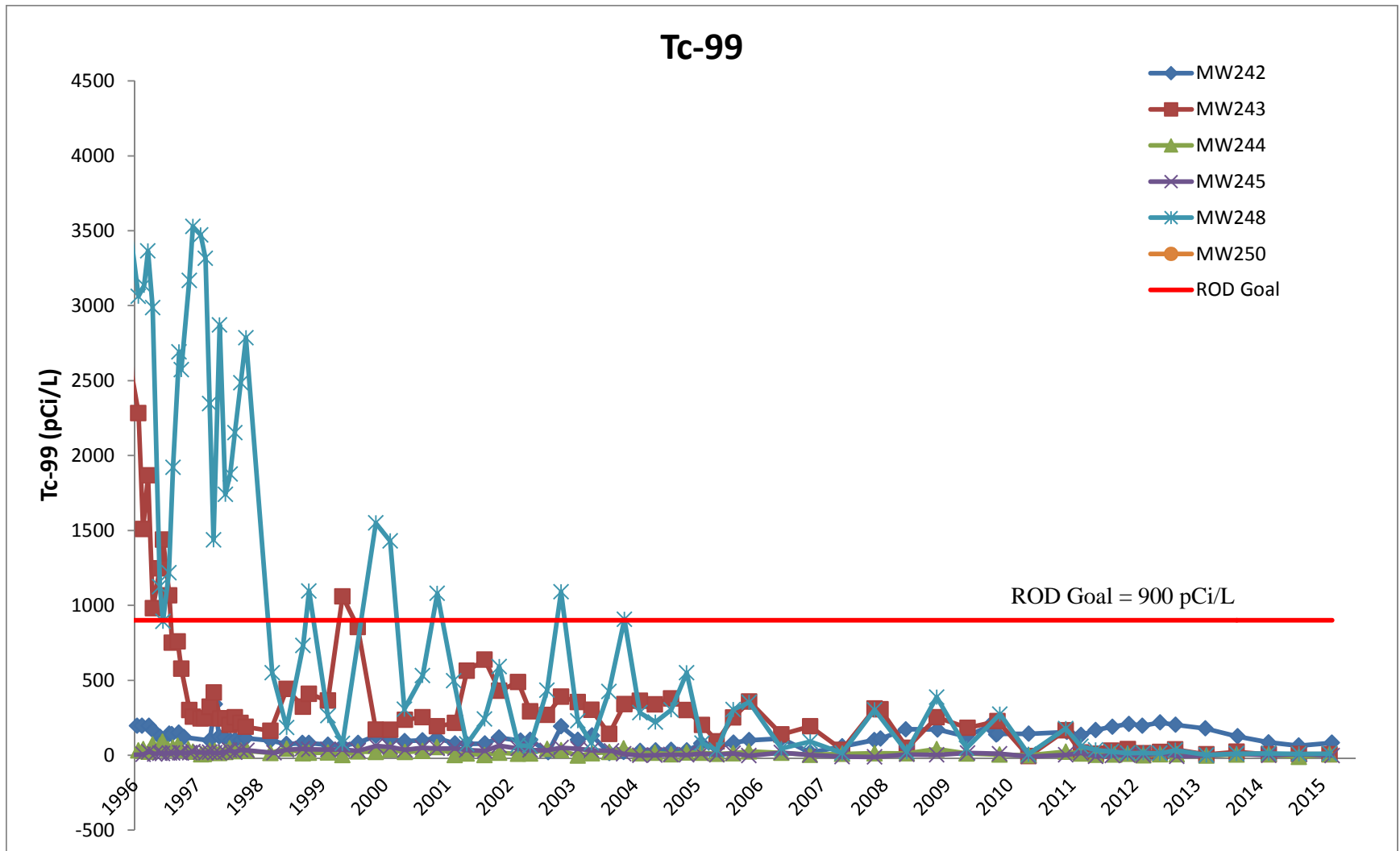
NOTE: Data rejected by validation or assessment have not been graphed.

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



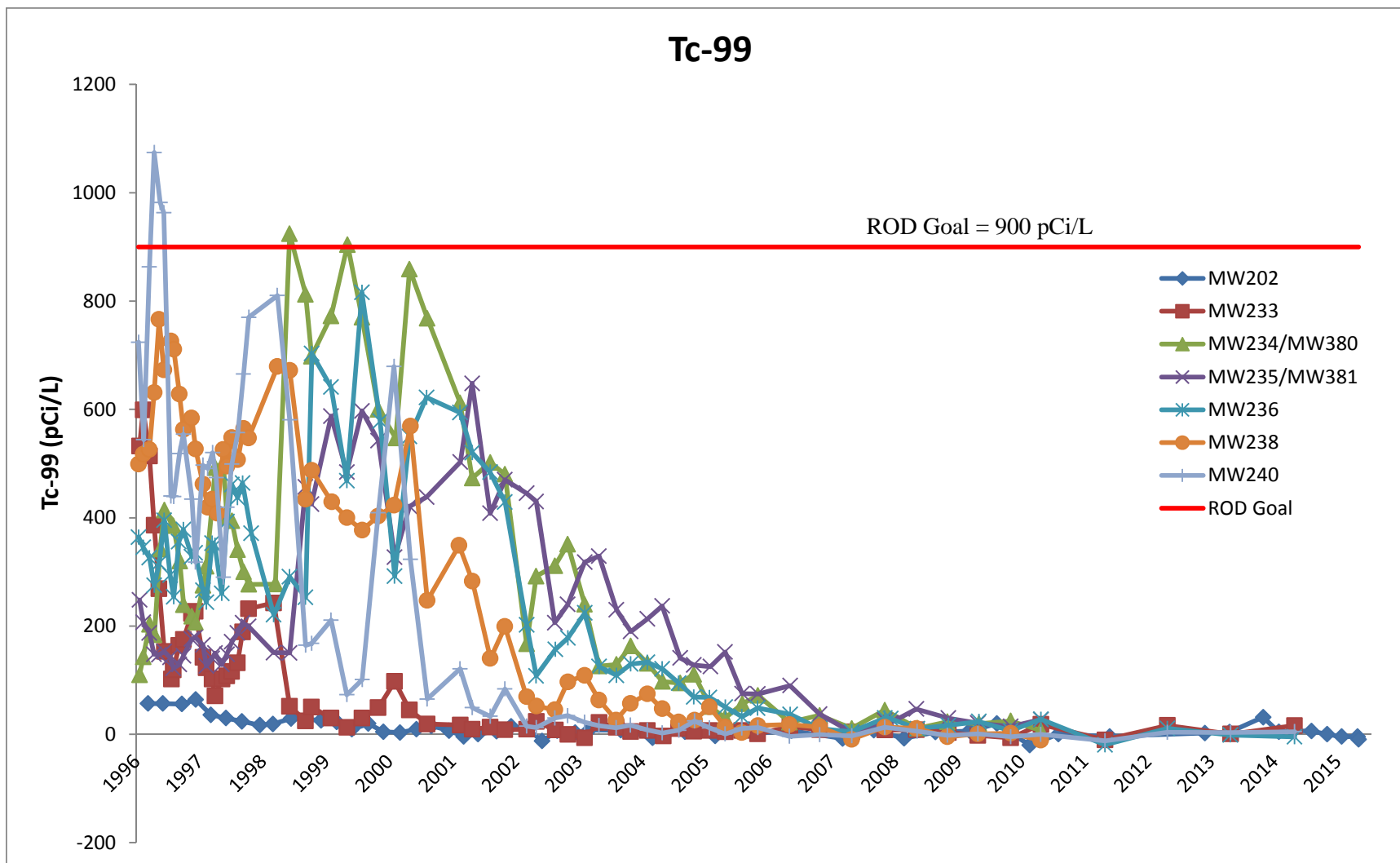
NOTE: Data rejected by validation or assessment have not been graphed.

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

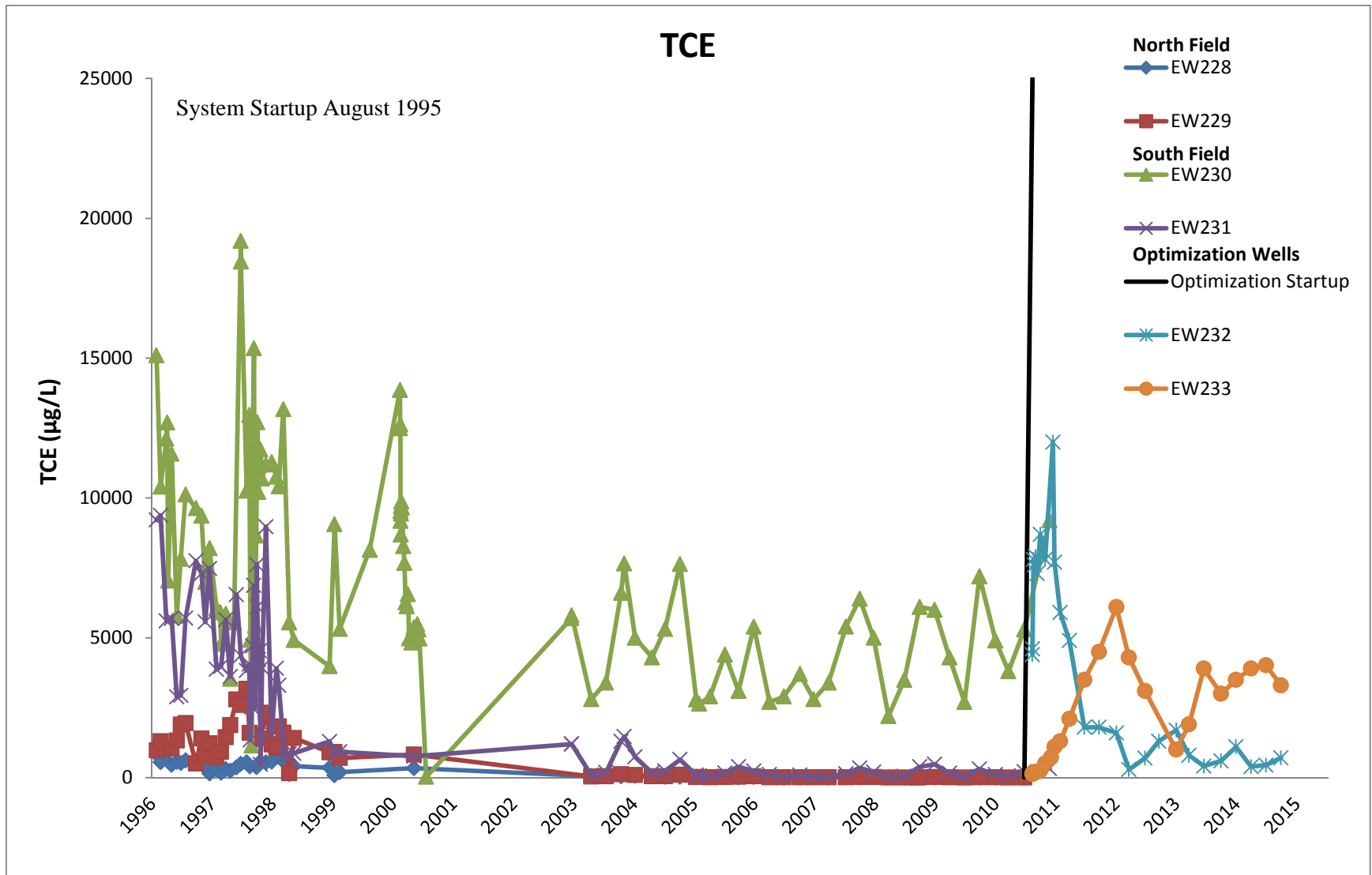
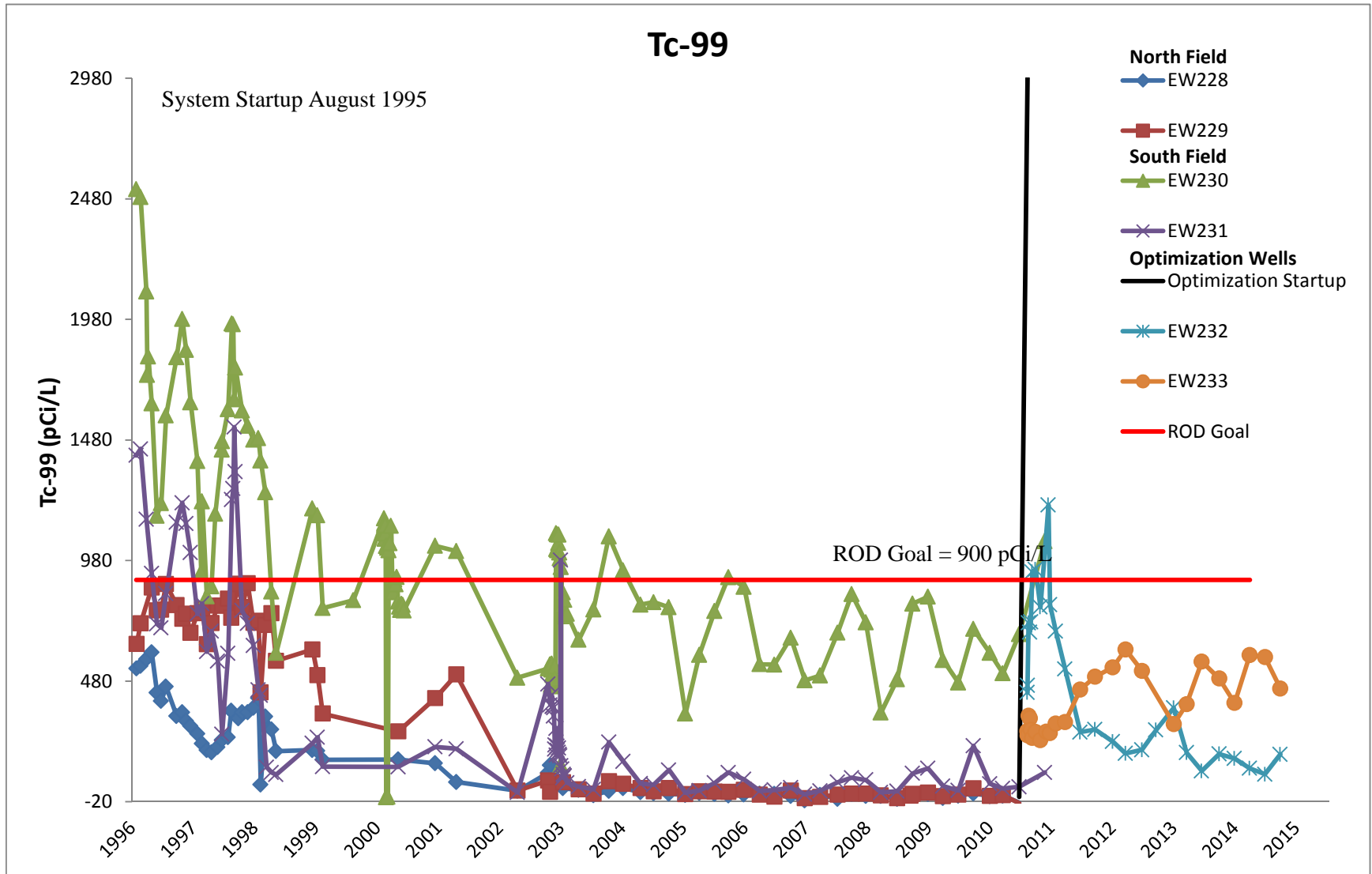
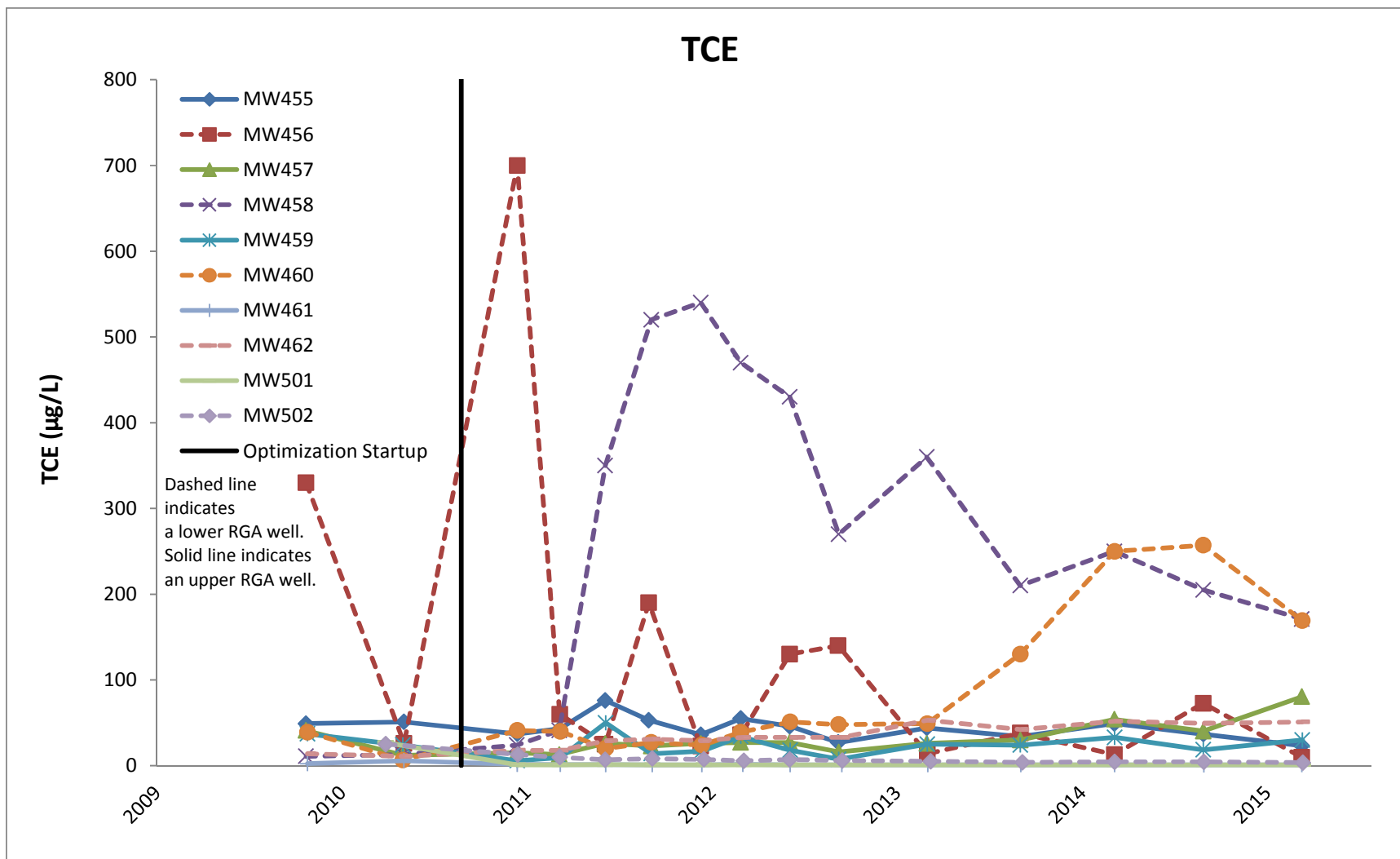


Figure B.22. Northwest Plume—TCE Concentrations in Extraction Wells



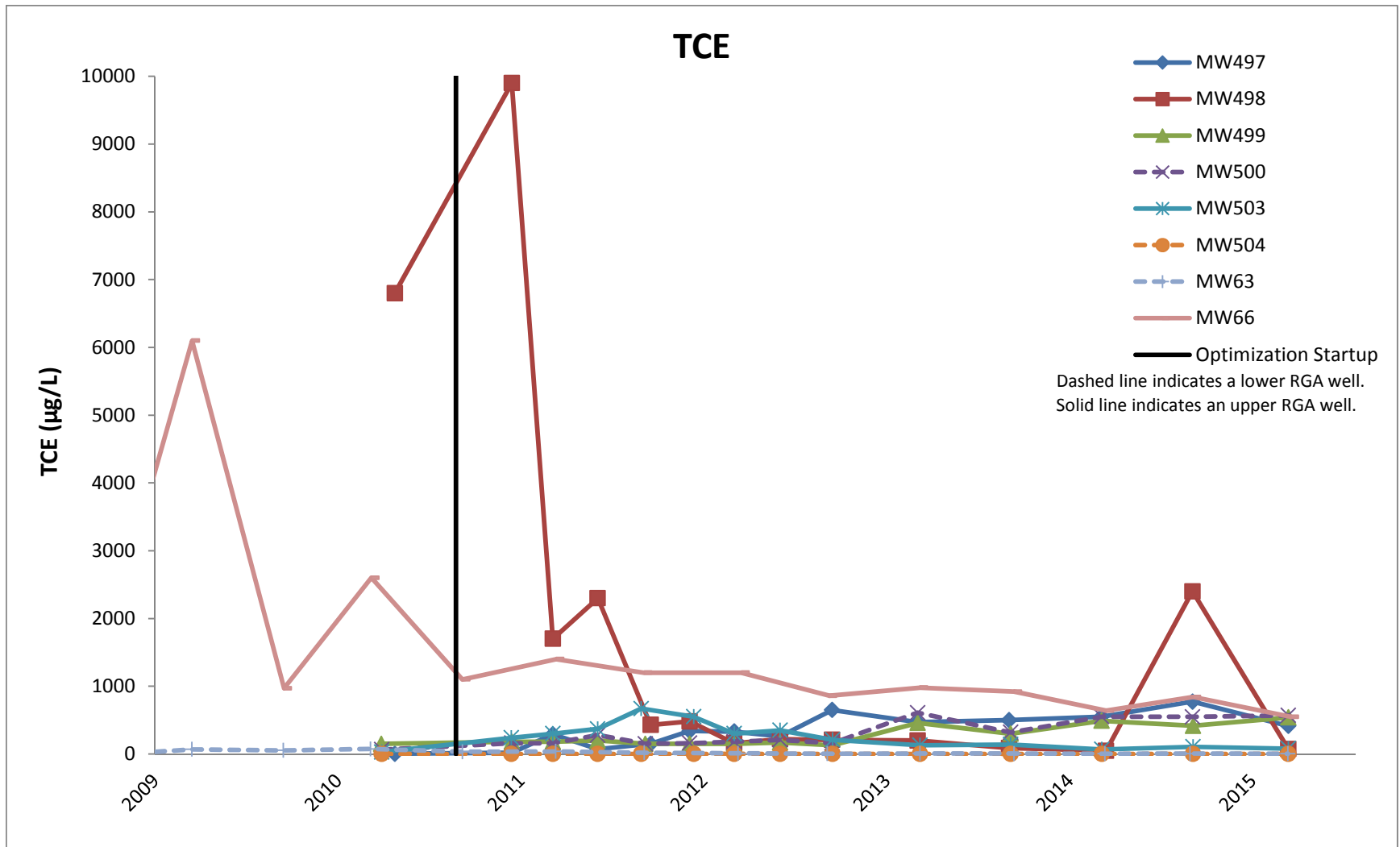
NOTE: Data rejected by validation or assessment have not been graphed.

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 - 6/29/2015

C001

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID*
	TCE µg/L	1,1-DCE µg/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

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* Project Sample ID is used if Lab Sample ID is not available.

NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Northeast Plume CERCLA Outfall Monitoring

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/29/2015

C001

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID*
	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
1/21/2014			21.2				C14021027001
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	5.4	1					C14048023001
2/17/2014	5.7	1					C14048023002
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

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Northeast Plume CERCLA Outfall Monitoring

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/29/2015

C001

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID*
	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
5/7/2014	4.17	1					348446002
5/7/2014	4.29	1					348446001
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
6/29/2014				1		1	QTXC001-0614
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	QTXC001-0714
7/29/2014	4.95	1					353694001
8/5/2014	7.05	1					354137001
8/11/2014	4.35	1					354637001
8/18/2014	4.57	1					355052001

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* Project Sample ID is used if Lab Sample ID is not available.

NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Northeast Plume CERCLA Outfall Monitoring

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/29/2015

C001

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID*
	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
8/25/2014	6.14	1					355488001
9/2/2014	5.39	1					355872001
9/8/2014	4.55	1					356338001
9/15/2014	4.6	1					356868001
9/23/2014	3.92	1					357338002
9/29/2014	4.44	1					357703001
10/7/2014	6.35	1					358590002
10/13/2014	.52	1					358950002
10/13/2014			31.3				358950004
10/20/2014	.51	1					359488004
10/27/2014	2.07	1					360011002
10/31/2014				1		1	QTXC001-1014
11/4/2014	1	1					360615002
11/11/2014	.33	1					361080002
11/17/2014	1	1					361458002
11/17/2014	1	1					361458003
11/24/2014	1	1					361948003
12/1/2014	.35	1					362225002
12/9/2014	1	1					362804003
12/15/2014	5.35	1					363245004

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Northeast Plume CERCLA Outfall Monitoring

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/29/2015

C001

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID*
	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
12/22/2014	5.34	1					363660002
12/29/2014	3.26	1					363851002
1/29/2015	7.68	1					366169002
2/2/2015	5.58	1					366311002
2/4/2015			23.4				366545002
2/4/2015			22.5				366545001
2/6/2015				1		1	QTXC001-0215
2/10/2015	3.96	1					366969005
2/18/2015	3.45	1					367365002
2/18/2015	3.81	1					367365003
2/23/2015	3	1					367607002
3/2/2015	3.36	1					367959002
3/11/2015	4.63	1					368692003
3/16/2015	1.19	1					368893002
3/16/2015	1.13	1					368893003
3/23/2015	4.16	1					369408002
3/30/2015	4.45	1					369759002
4/7/2015	5.84	1					370571006
4/13/2015	5.78	1					370982003
4/20/2015	4.83	1					371423003

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* Project Sample ID is used if Lab Sample ID is not available.

NOTE: This report does not include data that has been rejected during data assessment and/or data validation.

Northeast Plume CERCLA Outfall Monitoring

Water Quality Records for

Sample Date Range: 9/3/2013 - 6/29/2015

C001

Sample Date	Organic Laboratory Analysis Results		Radiological Laboratory Analysis Results	Chronic Toxicity Analysis Results			Lab Sample ID*
	TCE µg/L	1,1-DCE µg/L	Tc-99 pCi/L	Ceriodaphnia dubia	TUc	Pimephales Promelas TUc	
4/20/2015			18.2				371423001
4/24/2015				1		1	QTXC001-0415
4/28/2015	4.26	1					371963002
5/5/2015	5.31	1					372605002
5/5/2015	4.94	1					372605003
5/11/2015	4.8	1					372848003
5/18/2015	4.1	1					373300002
5/26/2015	5.68	1					373775002
6/2/2015	5.36	1					374232002
6/8/2015	6.39	1					374647003
6/15/2015	7.27	1					375139002
6/22/2015	6.12	1					375551002
6/29/2015	6.74	1					375908003

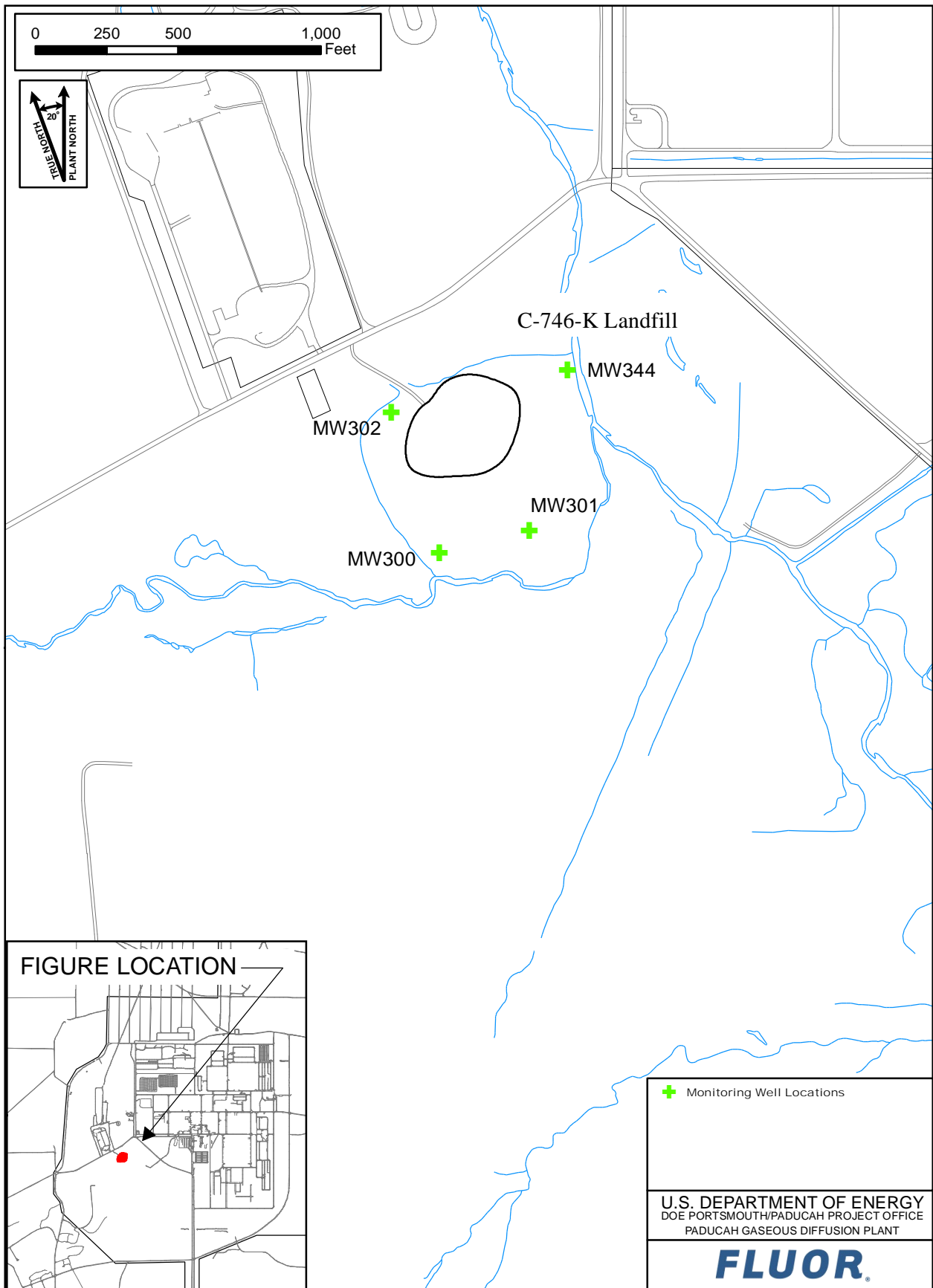
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APPENDIX C

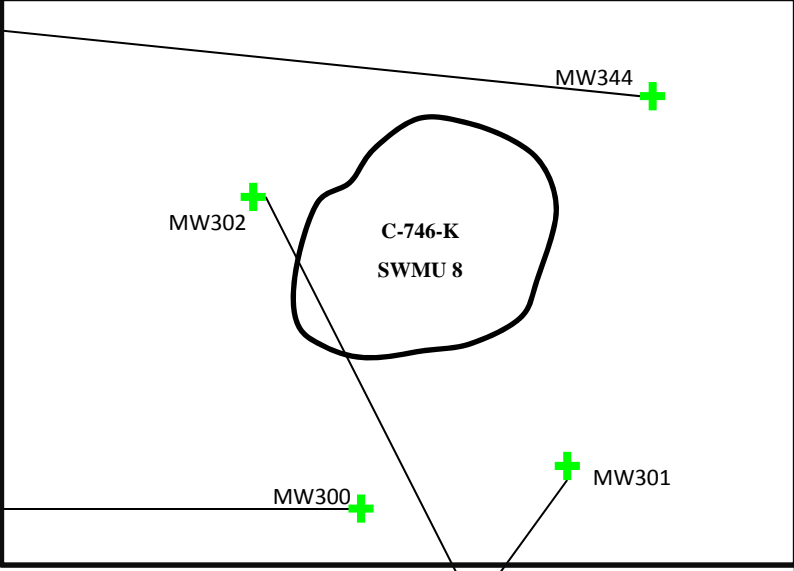
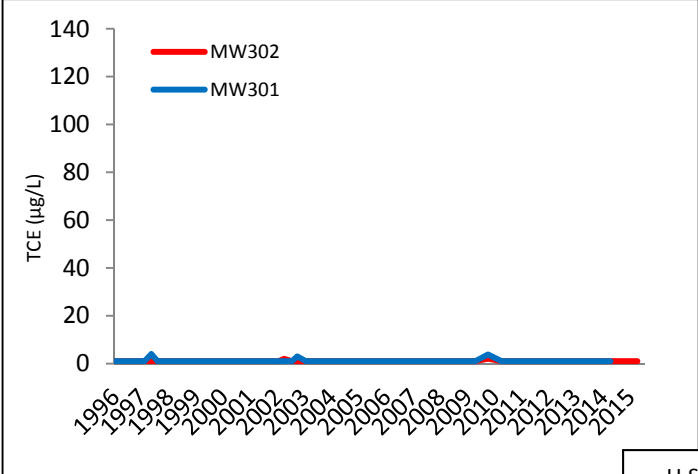
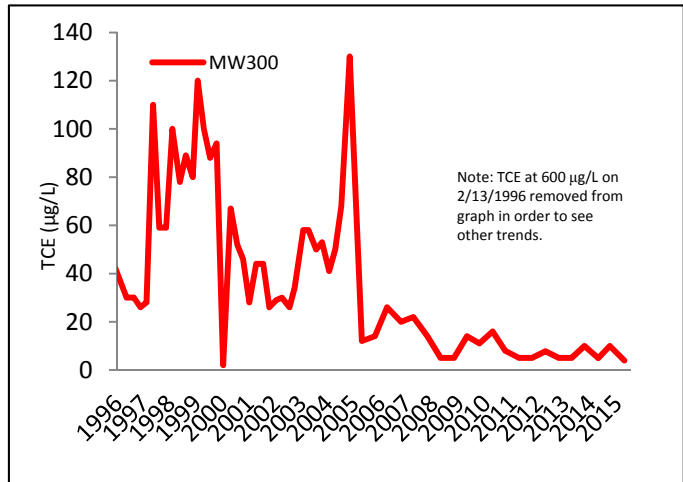
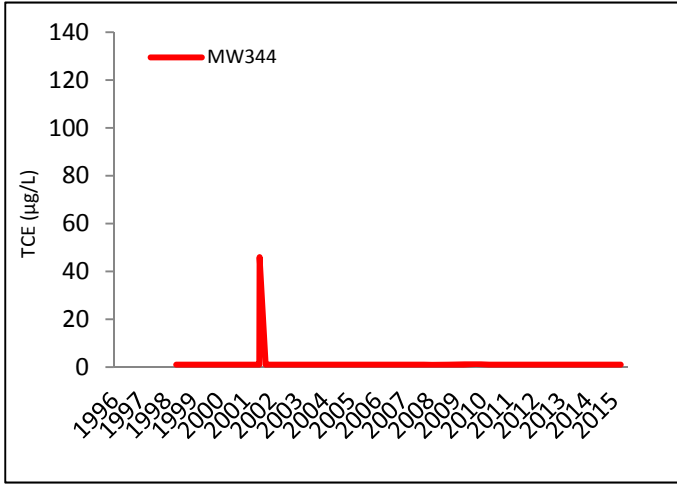
C-746-K LANDFILL DATA

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Figure C.1. Monitoring Well Locations



LEGEND

- Monitoring Well (represented by a green cross)
- Landfill Boundary (represented by a black outline)

NOT TO SCALE

PLANT NORTH
20°
TRUDE NORTH

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT

Figure C.2. TCE Trends in SWMU 8 Wells



C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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
7/24/2002	26	< 100	< 100	< 100	< 100	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003

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C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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
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	14	120	77	< 5	< 5	< .2	162	19.7	< -.658	< 25.1	< 1.82	C072980183
10/25/2007	13	120	75	< 5	< 5	< .2	166	20.2	< 4.54	27.8	< 1.13	C072980184
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	11	39	24	< 2	< 2	< .2	36.9	11.2	< -1.13	28.4	< -8.36	C09292035001
10/19/2009	9	41	24	< 2	< 2	< .2	65	9.73	< -2.41	27.1	< -8.19	C09292035002
4/20/2010	16	130	58	< 25	< 5	< .2	121	19.2	< -4.11	33.6	< -1.74	C10110009002
10/13/2010	8	130	72	< 25	< 5	< .4	241	27.2	< 21.9	48.4	< -7.38	C10286021002
10/13/2010	8	140	78	< 25	< 5	< .4	165	25.5	< 2.34	62.3	< -3.09	C10286021003
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
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

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C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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	
10/29/2012	< 5	100	69	< 5	< 5	1.65	217	25.3	< 12.6	57.8	< -2.74	C12303019002
10/29/2012	< 5	93	56	< 5	< 5	.271	222	25.5	< 1.27	49.6	< -4.68	C12303019003
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
10/7/2014	< 10	64.3	55.2	< 10	< 10	< .05	236	18.9	< 5	23.5	< -2.04	358703001
10/7/2014	< 10	66.7	54	< 10	< 10	.0224	253	19.5	< 2.03	29.1	< -4.11	358703003
4/28/2015	3.9	< 1	< 1	< 1	< 1	< .05	26.9	3.38	< 1.86	21.2	< 3.96	371985001

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C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	146	14.5	< 3.69	< 28.3	< 2.51	C020250055

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Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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	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	4.62	203	16.1	< .197	< 3.65	< 3.3	C030310018
1/30/2003	< 1	< 5	< 5	< 5	< 5	.287	166	15.5	< -1.71	< 6.29	< -.324	C030310017
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	2.9	< 5	< 1		192	15.3	< 25.6	45.9	< -3.1	C081190047
4/28/2008	< 1	< 1	2.8	< 5	< 1		185	14.7	< 20.4	79.9	< -4.91	C081190048
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	3.8	3.9	< 1	< 1	< .2	228	15.9	< 7.32	71	< 7.74	C09120015002
4/30/2009	< 1	4.5	4.4	< 1	< 1	< .2	160	14.5	< 17.8	85	< 12.3	C09120015003
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
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

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Water Quality Records for

MW301

Sample Date Range: 5/31/1994 - 4/28/2015

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	
10/29/2012	< 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 - 4/28/2015

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	
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	2.61	2.14	.099	-5.4	-4	0	960214-058
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.14	1.68	.08	-6	-2	1	960214-054
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	1.64	.19	2.9	3	0	970211-010
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	.31	.157	-2	1	0	970211-011
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	.12	1.6	1	2	970807-145
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	< .1	2.8	1	0	970807-144
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	.167	< -9	8	< 2.8	C981400087
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.164	< 2.3	37	< 2.1	C981400088
8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.143	< 1	< 4	< -1	C982240044
8/11/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .2	.173	< 7.6	11	< -7.6	C982240043
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
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.101	< -4.7	< 3.52	< 2.65	C010100095

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Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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	.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	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.054	< 5.56	< -1.95	< 4.88	C021010050
4/10/2002	2	< 5	< 5	< 5	< 5	< .2	< .2	.062	< 2.37	< -2.75	< -3.64	C021010051
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	.302	1.71	< -1.61	< -.897	< 5.4	C041130036
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.611	1.63	< 6.89	< -1.62	< -.819	C041130035
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	.154	.708	< .394	< .723	< 15.5	C051170051
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	.675	< 1.48	< 3.76	< 15.3	C051170052
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
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

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C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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	
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
10/7/2014	< 1	< 1	< 1	< 1	< 1	.0573	.163	.414	< -1.1	< 1.86	< 12.8	358703005
4/28/2015	< 1	< 1	< 1	< 1	< 1	.0504	.106	.674	< 7.44	< 3.78	< -.946	371985003

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C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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	.797	3.79	.329	< .901	9.99	< -8.48	C012880067
10/15/2001	< 1	< 5	< 5	< 5	< 5	.655	3.55	.399	< 4.6	< 2.4	< -2	C012880066
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
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	12.9	1.61	< .82	< 2.89	< -8.52	C041970170

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C-746-K Landfill Monitoring

Water Quality Records for

Sample Date Range: 5/31/1994 - 4/28/2015

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	
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	13.5	7.9	.279	< 6.28	< 4.88	< -3.22	C071030003
4/12/2007	< 1	< 5	< 5	< 5	< 5	7.87	6.28	.286	8.77	< 7.36	< 7.1	C071030004
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	4.7	8.17	.154	< -.331	< 5.11	< -7.02	C11116009004
4/26/2011	< 1	< 5	< 1	< 5	< 1	4.48	7.89	.155	< .101	5.63	< -3.92	C11116009005
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	2.77	3.82	.107	< 1.89	< 3.93	< -1.43	C13113014002
4/23/2013	< 1	< 1	< 1	< 1	< 1	2.65	4.66	.116	< 4.97	< 3.39	< -3.25	C13113014001
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	3.92	9.31	.138	9.05	7.89	< 1.14	347676001
4/29/2014	< 1	< 1	< 1	< 1	< 1	4.42	10.1	.139	6.34	9.4	< -2.93	347676003
10/7/2014	< 1	< 1	< 1	< 1	< 1	3.61	8.09	.253	< .965	< 11	< 3.57	358703007
4/28/2015	< 1	< 1	< 1	< 1	< 1	.906	1.78	.0971	< -1.64	< 5.21	< -3.42	371985007
4/28/2015	.87	12.6	7.7	< 1	< 1	1.37	3.05	.116	< .878	< 5.5	< -.00901	371985005

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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 CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARF C-410	03/09/15	PPPO-02-2818180-15	RECORD OF CONVERSATION-DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00844
ARF C-410	03/25/15	PPPO-02-2832953-15	C-410 COMPLEX INFRASTRUCTURE DECONTAMINATION AND DECOMMISSIONING PROJECT-ASSESSMENT OF CONTAINMENT CONDITIONS FOR WATER BEING STORED IN ZONE 26	DOE-PPPO	LATA	No	ENV 1.A-00845
ARF C-410	04/23/15	PPPO-02-2906090-15	RECORD OF CONVERSATION - DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00884
ARF C-410	05/06/15	KY-15-1011	EPA's PROPOSED AGREEMENT ON THE U.S. DEPARTMENT OF ENERGY DISPOSITION OF CONTAMINATED WATER COLLECTED IN BASEMENT PIT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00894
ARF C-410	05/13/15	PPPO-02-2936370-15	RECORD OF CONVERSATION-DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00895
ARF C-410	05/29/15	PPPO-02-2960935-15	RECORD OF CONVERSATION-DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00902
ARFBGOU	01/30/15	PPPO-02-2744196-15	DISTRIBUTION OF MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 AT THE PGDP, (DOE/LX/07-1274&D2/R1) AND CLARIFICATION OF THE SUBMITTAL DATE FOR THE D2/R1 FEASIBILITY STUDY	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00830
ARFBGOU	02/02/15	KY-15-0970	CONDITIONAL CONCURRENCE TO THE FEASIBILITY STUDY FOR THE SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1274&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00831
ARFBGOU	03/04/15	KY-15-0993	MINOR MODIFICATION FOR THE BURIAL GROUND OPERABLE UNIT SWMUs 5 AND 6 FOR EXTENSION OF THE D1 RECORD OF DECISION, D1 REMEDIAL DESIGN WORK PLAN, D1 REMEDIAL DESIGN REPORT, D1 REMEDIAL ACTION WORK PLAN, FIELD START, AND D1 REMEDIAL ACTION COMPLETION REPORT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00849
ARFBGOU	03/13/15	PPPO-02-2821241-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE D2 PROPOSED PLAN; DOCUMENTATION OF THE REVISED SUBMITTAL DATE FOR THE D2 PROPOSED PLAN; AND MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SWMUs 5 AND 6 FEDERAL FACILITY AGREEMENT DOCUMENTS	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00832

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Paducah Documents Added to the Administrative Record Files- Second Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	03/13/15	PPPO-02-2821363-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE D2 FEASIBILITY STUDY AND DOCUMENTATION OF THE REVISED SUBMITTAL DATE FOR THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PGDP, PADUCAH, KENTUCKY (DOE/LX/07-1274&D2/R1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00833
ARFBGOU	03/19/15	PPPO-02-2793045-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INVOCATION OF INFORMAL DISPUTE RESOLUTION RELATED TO THE D2 FEASIBILITY STUDY AND DOCUMENTATION OF THE REVISED SUBMITTAL DATE FOR THE BURIAL GROUNDS OPERABLE UNIT FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP, PADUCAH, KENTUCKY (DOE/LX/07-1274&D2/R1)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00846
ARFBGOU	03/20/15	KY-15-0991	FEASIBILITY STUDY FOR SWMUs 2,3,7 AND 30 OF THE BGOU (DOE/XL/07-1274&D2), PROPOSED PLAN FOR THE BGOU SOURCE AREAS FOR SWMUs 5 AND 6 (DOE/LX/07-1275&D2) 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-00850
ARFBGOU	03/20/15	KY-15-0992	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-00847
ARFBGOU	03/27/15	PPPO-02-2756919-15C	PADUCAH FEDERAL FACILITY AGREEMENT NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE RESOLUTION FOR THE CONDITIONAL CONCURRENCE OF THE FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PGDP PADUCAH, KENTUCKY (DOE/LX/07-1274&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00851
ARFBGOU	03/27/15	PPPO-02-2799496-15	PADUCAH FEDERAL FACILITY AGREEMENT NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE RESOLUTION FOR THE CONDITIONAL CONCURRENCE OF THE 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)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00852
ARFBGOU	04/27/15	PPPO-02-2911622-15	PADUCAH FEDERAL FACILITY AGREEMENT-NOTIFICATION OF EXTENSION OF THE INFORMAL DISPUTE PERIOD RELATED TO THE 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)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00880

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Paducah Documents Added to the Administrative Record Files- Second Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	05/01/15	PPPO-02-2911520-15	WRITTEN STATEMENT INITIATING FORMAL DISPUTE RESOLUTION 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	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00887
ARFBGOU	05/12/15	PPPO-02-2939631-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00886
ARFBGOU	06/09/15	PPPO-02-2968558-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO 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	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00903
ARFC-340	04/02/15	PPPO-02-2764230-15B	C-340 METALS REDUCTION PLANT SOLID WASTE MANAGEMENT UNIT STATUS AND UPDATE TO APPENDIX 4 OF THE SITE MANAGEMENT PLAN	DOE-PPPO	USEPA-4,KDWM,KDWM	No	ENV 1.A-00861
ARFCC	03/26/15	PPPO-02-2859611-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSIDERATION OF ADDITIONAL WORK RELATED TO THE HYDROLOGIC CONDITIONS INFORMATION FOR WASTE DISPOSAL ALTERNATIVES CANDIDATE SITES AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00859
ARFCC	03/27/15	PPPO-02-2805854-15	NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE CONCERNING RECEIPT OF ADDITIONAL CONDITIONS RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00860
ARFCC	04/17/15	PPPO-02-2802323-15	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUEST FOR HYDROLOGIC CONDITIONS INFORMATION FOR CANDIDATE SITES FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION AT THE PGDP, PADUCAH, KENTUCKY	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00874
ARFCC	04/23/15	KY-15-1008	CONFIRMATION OF DOE'S APPROACH FOR HYDROLOGIC CONDITIONS INFORMATION FOR THE CANDIDATE SITES FOR THE CERCLA WASTE DISPOSAL (WDA) ALTERNATIVES EVALUATION, PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0244&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00876
ARFCC	04/23/15	KY-15-1007	CONFIRMATION OF DOE'S APPROACH TO ADDRESS US EPA'S HYDROLOGIC CONDITIONS INFORMATION REQUEST (2-10-15) FOR CANDIDATE SITES FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00875

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Paducah Documents Added to the Administrative Record Files- Second Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFCC	04/28/15	PPPO-02-2909746-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSIDERATION OF ADDITIONAL WORK RELATED TO THE HYDRO LOGIC CONDITIONS INFORMATION FOR WASTE DISPOSAL ALTERNATIVES CANDIDATE SITES AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00878
ARFCC	04/28/15	PPPO-02-2909594-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00877
ARFCC	05/13/15	PPPO-02-2926713-15B,DOE/LX/07-2200&D1	TRANSMITTAL OF THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL ACTION FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) FIVE-YEAR REVIEW AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2200&D1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00899
ARFCC	05/13/15	PPPO-02-2924475-15B,DOE/LX/07-2185&D1	TRANSMITTAL OF THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL FIELD INVESTIGATION FOR THE WASTE DISPOSAL ALTERNATIVES REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2185&D1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00898
ARFCC	05/13/15	PPPO-02-2909594-15B	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00888
ARFCC	05/20/15	PPPO-02-2926713-15C,DOE/LX/07-2200&D2	TRANSMITTAL OF REPLACEMENT PAGES FOR THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL ACTION FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) FIVE-YEAR REVIEW AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2200&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00900
ARFCC	05/20/15	KY-15-1018	EPA CONCURRENCE: SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL FIELD INVESTIGATION FOR THE WASTE DISPOSAL ALTERNATIVES REMEDIAL INVESTIGATION FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2185&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00889
ARFCC	05/21/15	KY-15-1020	REPLACEMENT PAGES FOR THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL ACTION FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT(CERCLA) FIVE-YEAR REVIEW AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-2200&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00891
ARFCC	05/21/15	KY-15-1019	CONCURRENCE TO THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL FIELD INVESTIGATION FOR THE WASTE DISPOSAL ALTERNATIVES REMEDIAL INVESTIGATION FEASIBILITY STUDY (DOE/LX/07-2185&D1)	KDWM	DOE-PPPO	No	ENV 1.A-00890

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Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFCC	05/22/15	KY-15-1022	CONCURRENCE WITH THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL ACTION FOR THE CERCLA FIVE-YEAR REVIEW (DOE/LX/07-2200&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00893
ARFCC	05/22/15	KY-15-1021	CONCURRENCE WITH THE SAMPLING AND ANALYSIS PLAN TO SUPPORT THE ADDITIONAL FIELD INVESTIGATION FOR THE WASTE DISPOSAL ALTERNATIVES REMEDIAL INVESTIGATION FEASIBILITY STUDY FIVE-YEAR PLAN (DOE/LX/07-2200&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00892
ARFREF	01/28/15	KY-15-0968	EXTENSION REQUEST FOR COMMENT SUBMITTAL FOR THE 2015 SITE MANAGEMENT PLAN, PADUCAH, KENTUCKY (DOE/LX/07-1301&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00834
ARFREF	01/30/15	KY-15-0969	10-YEAR PADUCAH GASEOUS DIFFUSION PLANT PERMIT REISSUANCE PROJECT DECISION SCHEDULE	KDWM	DOE-PPPO	No	ENV 1.A-00835
ARFREF	02/05/15	KY-15-0973	EXTENSION REQUEST FOR COMMENT SUBMITTAL FOR THE 2015 SITE MANAGEMENT PLAN, PADUCAH, KENTUCKY (DOE/LX/07-1301&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00836
ARFREF	02/06/15	KY-15-0974	EPA COMMENTS ON THE SITE MANAGEMENT PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-1301&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00837
ARFREF	02/09/15	PPPO-02-2751370-15	PADUCAH FEDERAL FACILITY AGREEMENT FISCAL YEAR 2015 PRESIDENT'S BUDGET	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00838
ARFREF	02/13/15	PPPO-02-2768608-15	PADUCAH FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00839
ARFREF	02/19/15	PPPO-02-2772676-15	NOTIFICATION OF SCHEDULE EXTENSION FOR SUBMITTAL OF THE D2 FISCAL YEAR 2015 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1301&D2)	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00840
ARFREF	03/13/15	PPPO-02-2801636-15B	TRANSMITTAL OF MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE ONGOING DISPUTE ON THE NORTHEAST PLUME EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00855
ARFREF	03/24/15	PPPO-02-2849218-15	EXTENSION FOR SUBMITTAL OF THE D2 FISCAL YEAR 2015 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1301&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00848
ARFREF	03/27/15	PPPO-02-2834196-15	PADUCAH FEDERAL FACILITY AGREEMENT FISCAL YEAR 2015 FUNDING ALLOCATION EVALUATION	DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00857
ARFREF	03/27/15	PPPO-02-2700215-15,DOE/LX/07-1301&D2	TRANSMITTAL OF THE D2 FISCAL YEAR 2015 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1301&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00856
ARFREF	03/31/15	PPPO-02-2833640-15	2014 SITE TREATMENT PLAN ANNUAL UPDATE FOR THE U.S. DEPARTMENT OF ENERGY, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, AND THE PADUCAH SITE TREATMENT PLAN WASTE MINIMIZATION PROGRESS REPORT	DOE-PPPO	KDWM	No	ENV 1.A-00858

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Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFREF	04/08/15	PPPO-02-2881608-15	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-FISCAL YEAR 2017 BUDGET TARGET FUNDING GUIDANCE NOTIFICATION	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00869
ARFREF	04/08/15	PPPO-02-2677794-15B,DOE/LX/07-1269&D2/R2	UPDATE TO THE PADUCAH GASEOUS DIFFUSION PLANT PROGRAMMATIC QUALITY ASSURANCE PROJECT PLAN (DOE/LX/07-1269&D2/R2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00863
ARFREF	04/13/15	KY-15-0999	DESIGNATION OF INTERIM FEDERAL FACILITIES AGREEMENT MANAGER	KDWM	DOE-PPPO	No	ENV 1.A-00864
ARFREF	04/14/15	KY-15-1003	EPA CONDITIONAL CONCURRENCE ON THE D2 FISCAL YEAR 2015 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1301&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00865
ARFREF	04/16/15	KY-15-1002	CONDITIONAL CONCURRENCE TO THE 2015 SITE MANAGEMENT PLAN (DOE/LX/07-1301&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00866
ARFREF	04/16/15	KY-15-1004	PADUCAH FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES	KDWM,USEPA-4	DOE-PPPO	No	ENV 1.A-00867
ARFREF	04/22/15	PPPO-02-2899411-15	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-PRELIMINARY ASSESSMENT OF FISCAL YEAR 2017 PLANNING ESTIMATES FUNDING GUIDANCE AND UPDATE OF THE FISCAL YEAR 2017 ASSESSMENT OF PLANNING ESTIMATES IMPACTS ON SITE PRIORITIES (INTEGRATED PRIORITY LIST)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00896
ARFREF	04/27/15	PPPO-02-2898875-15,DOE/LX/07-2181/V1	U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE FIRST HALF OF FISCAL YEAR 2015, PADUCAH, KENTUCKY (DOE/LX/07-2181/V1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00870
ARFREF	04/29/15	PPPO-02-2899411-15A	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-PRELIMINARY ASSESSMENT OF FISCAL YEAR 2017 PLANNING ESTIMATES FUNDING GUIDANCE AND UPDATE OF THE FISCAL YEAR 2017 ASSESSMENT OF PLANNING ESTIMATE IMPACTS ON SITE PRIORITIES (INTEGRATED PRIORITY LIST)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00871
ARFREF	04/29/15	DOE/LX/07-1301&D2/R1,PPPO-02-2902598-15	TRANSMITTAL OF THE D2/R1 FISCAL YEAR 2015 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1301&D2/R1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00872
ARFREF	04/30/15	KY-15-1009	APPROVAL OF THE 2015 SITE MANAGEMENT PLAN (DOE/LX/07-1301&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00873
ARFREF	05/05/15	KY-15-1010	EPA APPROVAL OF THE SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, ANNUAL REVISION-FISCAL YEAR 2015 (DOE/LX/07-13-1&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00897
ARFSOU	05/12/15	PPPO-02-2910184-15A,DOE/LX/07-1256&D1	TRANSMITTAL OF THE SITEWIDE EVALUATION REPORT FOR THE SOILS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1256&D1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00904

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Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARF C-410	06/18/15		RECORD OF CONVERSATION-DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00910
ARF C-410	06/26/15	PPPO-02-3001007-15,DOE/LX/07-0304&D2/R2	TRANSMITTAL OF THE REPLACEMENT PAGES FOR THE REMOVAL ACTION WORK PLAN ADDENDUM FOR C-410 COMPLEX INFRASTRUCTURE DECONTAMINATION AND DECOMMISSIONING PROJECT AT PGDP (DOE/LX/07-0304&D2/R2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00911
ARF C-410	07/01/15	PPPO-02-3016795-15	RECORD OF CONVERSATION-DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00915
ARF C-410	08/04/15	PPP0-02-2932877-15	DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00927
ARF C-410	08/05/15	PPP0-02-3071862-15	RECORD OF CONVERSATION-DISPOSITION OF CONTAMINATED WATER COLLECTED FROM THE BASEMENT OF THE C-410 COMPLEX AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00928
ARFBGOU	03/04/15		MODIFICATION TO THE PADUCAH FEDERAL FACILITY AGREEMENT ACCORDING TO THE TERMS OF SECTION XXXIX-BURIAL GROUNDS OPERABLE UNIT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00905
ARFBGOU	06/26/15	PPPO-02-3013958-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00906
ARFBGOU	06/26/15	PPPO-02-3014525-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE D2 PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT PGDP, SWMUs 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00907
ARFBGOU	07/31/15	PPPO-02-3073541-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE D2 PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PGDP, PADUCAH, KY: SWMUs 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00922
ARFBGOU	08/14/15	PPPO-02-3094545-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE D2 PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PGDP, PADUCAH, KY: SWMUs 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00923

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Paducah Documents Added to the Administrative Record Files- Third Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFBGOU	08/28/15	PPPO-02-3117209-15	PADUCAH FEDERAL FACILITY AGREEMENT-MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE D2 PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PGDP, PADUCAH, KY: SWMUs 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00924
ARFBGOU	08/28/15	PPPO-02-3117326-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00925
ARFBGOU	09/09/15	PPPO-02-3139001-15	PADUCAH FEDERAL FACILITY AGREEMENT - MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE DISPUTE RESOLUTION COMMITTEE RELATED TO THE D2 PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY: SOLID WASTE MANAGEMENT UNIT 5 AND 6, DOE/LX/07-1275&D2	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00931
ARFCC	06/26/15	PPPO-02-3013984-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00912
ARFCC	08/28/15	PPP0-02-3006882-15	DELIVERABLE NO. 169 - APPROVAL OF PUBLIC NOTICE FOR THE COMPLETION OF THE 2013 COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT FIVE-YEAR REVIEW AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO,DOE-PPPO	FPDP	No	ENV 1.A-00929
ARFCC	08/28/15	PPP0-02-3117401-15	MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR INFORMAL DISPUTE RESOLUTION RELATED TO THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00930
ARFREF	06/22/15	PPPO-02-2999012-15	RECORD OF CONVERSATION-FIELD CHANGES ASSOCIATED WITH THE ADDITIONAL ACTION FOR THE FIVE-YEAR REVIEW (VAPOR INTRUSION)	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00918
ARFREF	06/26/15	PPPO-02-2981696-15,DOE/LX/07-0107&D2/R2/V2	TRANSMITTAL OF THE REVISED METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, VOLUME 2. ECOLOGICAL (DOE/LX/07-0107&D2/R2/V2)	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00919
ARFREF	06/30/15	PPPO-02-2956799-15B,PAD-SO-0057	TRANSMITTAL OF THE URANIUM ENRICHMENT TOXIC SUBSTANCES CONTROL ACT COMPLIANCE AGREEMENT 2014 ANNUAL COMPLIANCE AGREEMENT REPORT JANUARY 1-DECEMBER 31, 2014, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, PAD-SO-0057	DOE-PPPO,DOE-PPPO	USEPA-4	No	ENV 1.A-00920

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Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
ARFREF	07/02/15	PPPO-02-3015321-15	MILESTONE MODIFICATION FOR SUBMITTAL OF THE D1 DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT COMPLETION NOTIFICATION LETTER	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00916
ARFREF	07/02/15	PPPO-02-3018545-15	PADUCAH FEDERAL FACILITY AGREEMENT MODIFICATION-FISCAL YEAR 2015 SITE MANAGEMENT PLAN, ENFORCEABLE COMMITMENTS, AND LIST OF SOLID WASTE MANAGEMENT UNITS/AREAS OF CONCERN	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00917
ARFREF	08/04/15	PPPO-02-3071649-1	PADUCAH FEDERAL FACILITY AGREEMENT-MILESTONE MODIFICATION FOR SUBMITTAL OF THE D1 DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT COMPLETION NOTIFICATION LETTER	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00921
ARFSOU	06/11/15	PPPO-02-2914393-15	TRANSMITTAL OF THE RECORD OF CONVERSATION CONCERNING PROJECT ACTION LEVELS FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION 2 PROJECT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00913
ARFSOU	07/23/15	PPPO-02-3047168-15	TRANSMITTAL OF THE SITEWIDE EVALUATION REPORT FOR THE SOILS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1256&D2/R1)	DOE-PPPO,DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00933
ARFSWOU	07/06/15	PPPO-02-2793811-15B,DOE/OR/07-1904&D1/R1	TRANSMITTAL OF THE REVISED OPERATION AND MAINTENANCE PLAN FOR THE SURFACE WATER OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-1904&D1/R1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00914

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Paducah Documents Added to the Post-Decision Files- Second Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
6PHASE-PD	03/19/15	KY-15-0990	EPA RESPONSE TO DOE'S VARIANCE REQUEST FOR WELL ABANDONMENT AS SPECIFIED IN THE REMEDIAL ACTION WORK PLAN FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1271&D2/R2	USEPA-4	DOE-PPPO	No	ENV 1.A-00854
6PHASE-PD	04/29/15	PPPO-02-2917940-15	EXPECTATION TO FOLLOW THE APPROVED C-400 GROUNDWATER OPERABLE UNIT PROJECT TREATABILITY STUDY DESIGN, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE C-400 INTERIM REMEDIAL ACTION PHASE IIB STEAM INJECTION TREATABILITY STUDY AND THE TREATABILITY STUDY WORK PLAN FOR STEAM INJECTION	DOE-PPPO	LATA	No	ENV 1.A-00881
GW1-PD	04/24/15	PPPO-02-2889518-15	RECORD OF CONVERSATION C-612 NORTHWEST PLUME GROUNDWATER TREATMENT SYSTEM UPGRADES	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00882
GW3-PD	02/27/15	PPPO-02-2801636-15A	TRANSMITTAL OF THE U.S. DEPARTMENT OF ENERGY'S POSITION ON THE DISPUTED CONDITIONS RELATED TO THE ONGOING DISPUTE ON THE NORTHEAST PLUME EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	USEPA-4,KDEP,DOE-PPPO	No	ENV 1.A-00853
GW3-PD	04/17/15	PPPO-02-2895260-15	TRANSMITTAL OF MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE ONGOING DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHWEST PLUME	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00883
GW3-PD	05/13/15	PPPO-02-2939238-15	TRANSMITTAL OF MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE ONGOING DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00885
SWP-PD	03/03/15	KY-15-0981	APPROVAL OF THE DOE'S REQUEST TO SUBSTITUTE THE GAS CHROMATOGRAPH AND FLAME IONIZING DETECTOR FOR A PHOTOACOUSTIC ANALYZER IN THE APPROVED 100% REMEDIAL DESIGN REPORT IN SITU TREATMENT USING DEEP SOIL MIXING FOR THE SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT THE C-747-C OIL LANDFARM (SOLID WASTE MANAGEMENT UNIT 1) (DOE/LX/07-1276&D2/R1)	USEPA-4,USEPA-4	DOE-PPPO	No	ENV 1.A-00841
SWP-PD	03/04/15	KY-15-0983	APPROVAL OF THE ADDENDUM TO THE REMEDIAL DESIGN WORK PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME SAMPLING AND ANALYSIS PLAN (DOE/LX/07-1268&D2/R2/A1)	KDWM	DOE-PPPO	No	ENV 1.A-00842

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Paducah Documents Added to the Post-Decision Files- Second Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
SWP-PD	03/09/15	KY-15-0985	EPA APPROVAL OF THE ADDENDUM TO THE REMEDIAL DESIGN WORK PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211-A, AND 211-B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, SAMPLING AND ANALYSIS PLAN (DOE/LX/07-1268&D2/R2/A1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00843
SWP-PD	03/13/15	KY-15-0989	EPA APPROVAL OF DOE'S REQUEST TO SUBSTITUTE GAS CHROMATOGRAPH AND FLAME IONIZATION DETECTOR FOR PHOTOACOUSTIC ANALYZER FOR DEEP SOIL MIXING AT SOLID WASTE MANAGEMENT UNIT 1	USEPA-4	DOE-PPPO	No	ENV 1.A-00862
SWP-PD	04/17/15	PPPO-02-2635172-15C	TRANSMITTAL OF THE TECHNICAL MEMORANDUM TO THE POST-DECISION RECORD FILE FOR RESULTS OF ADDITIONAL SOIL SAMPLING OF HISTORIC AERIAL PHOTOGRAPH AND WASTE AREA GROUP 27 TEST PITS AREAS	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00879
SWP-PD	04/17/15	PPPO-02-2635172-15B	RESULTS OF ADDITIONAL SOIL SAMPLING OF HISTORIC AERIAL PHOTOGRAPH AND WASTE AREA GROUP 27 TEST PITS AREAS	DOE-PPPO	DOE-PPPO	No	ENV 1.A-00868
SWP-PD	06/05/15	PPPO-02-2974748-15	RECORD OF CONVERSATION-DEEP SOIL MIXING FIELD ADJUSTMENTS FOR SOUTHWEST PLUME SOLID WASTE MANAGEMENT UNIT 1	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00901

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Paducah Documents Added to the Post-Decision Files- Third Quarter CY2015

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Notes	Name
GW3-PD	06/15/15	PPPO-02-2984982-15	TRANSMITTAL OF MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE ONGOING DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00908
GW3-PD	06/26/15	PPPO-02-3014073-15	TRANSMITTAL OF MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE ONGOING DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00909
GW3-PD	07/27/15	PPPO-02-3065194-15	TRANSMITTAL OF A MINOR MODIFICATION TO EXTEND THE TIME PERIOD FOR CONSULTATION OF THE SENIOR EXECUTIVE COMMITTEE RELATED TO THE ONGOING DISPUTE ON THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00926
GW3-PD	08/04/15	PPPO-02-3079083-15	PADUCAH FEDERAL FACILITY AGREEMENT - TRANSMITTAL OF THE MEMORANDUM OF AGREEMENT FOR RESOLUTION OF FORMAL DISPUTE OF THE EXPLANATION OF SIGNIFICANT DIFFERENCES AND REMEDIAL ACTION WORK PLAN FOR THE NORTHEAST PLUME OPTIMIZATION	DOE-PPPO,DOE-PPPO	KDWM,USEPA-4	No	ENV 1.A-00934
GW3-PD	08/31/15	PPPO-02-3100686-15	EXPLANATION OF SIGNIFICANT DIFFERENCES TO THE RECORD OF DECISION FOR THE INTERIM REMEDIAL ACTION OF THE NORTHEAST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-1291&D2/R1, AND REMEDIAL ACTION WORK PLAN FOR OPTIMIZATION OF THE NORTHEAST PLUME INTERIM REMEDIAL ACTION AT THE PGDP, PADUCAH, KENTUCKY, DOE/LX/07-1280&D2/R1	DOE-PPPO,DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00935
SWP-PD	09/09/15	PPPO-02-3132890-15	RECORD OF CONVERSATION - SOUTHWEST PLUME SOLID WASTE MANAGEMENT UNIT 1 DEEP SOIL MIXING IN TRANSURANIC CONTAMINATION AREA	DOE-PPPO,DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00932

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APPENDIX E

C-400 PROJECT GROUNDWATER MONITORING WELLS DATA

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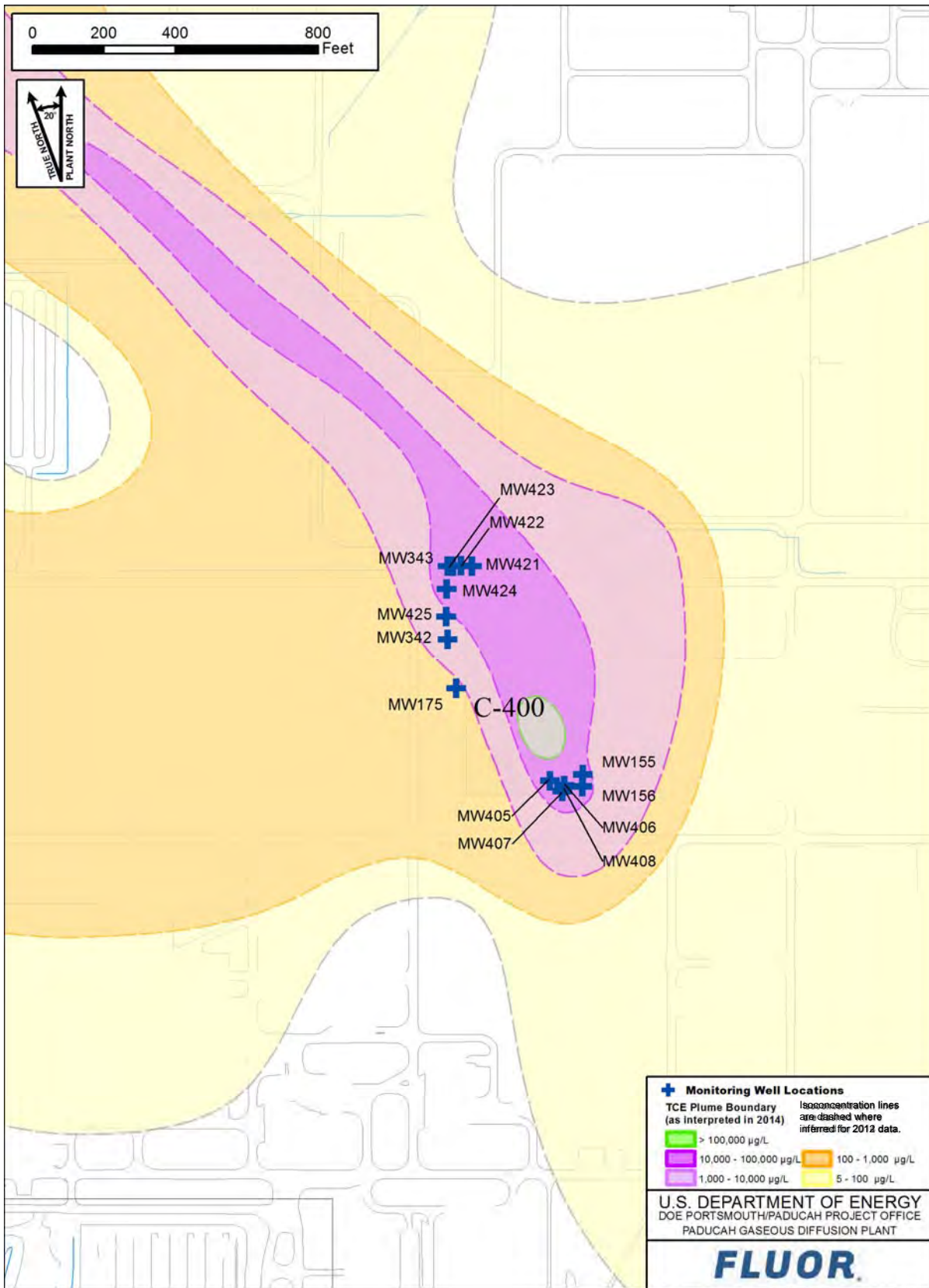


Figure E.1. C-400 Monitoring Wells

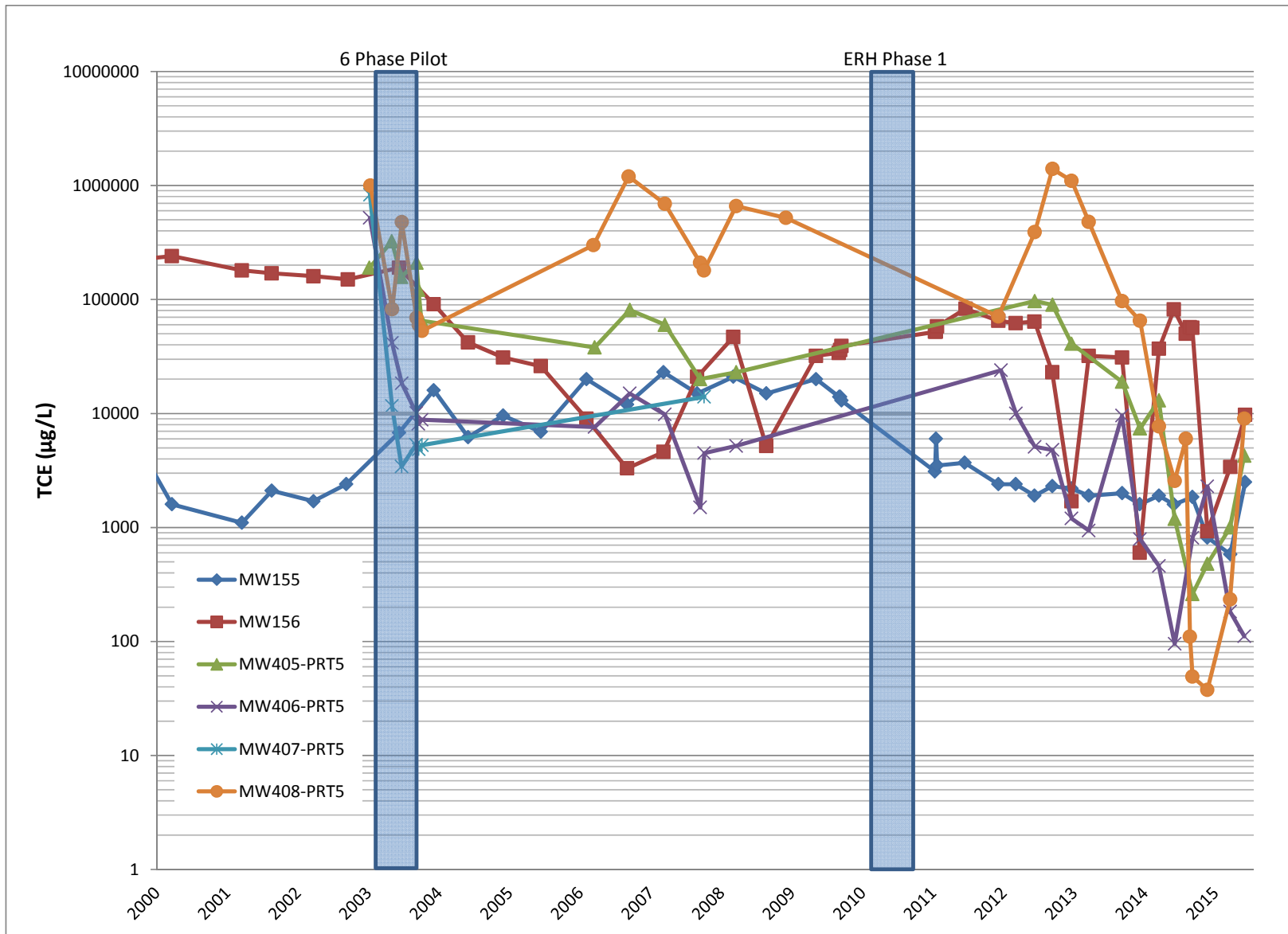


Figure E.2. C-400 TCE Trends in MWs in Source Areas

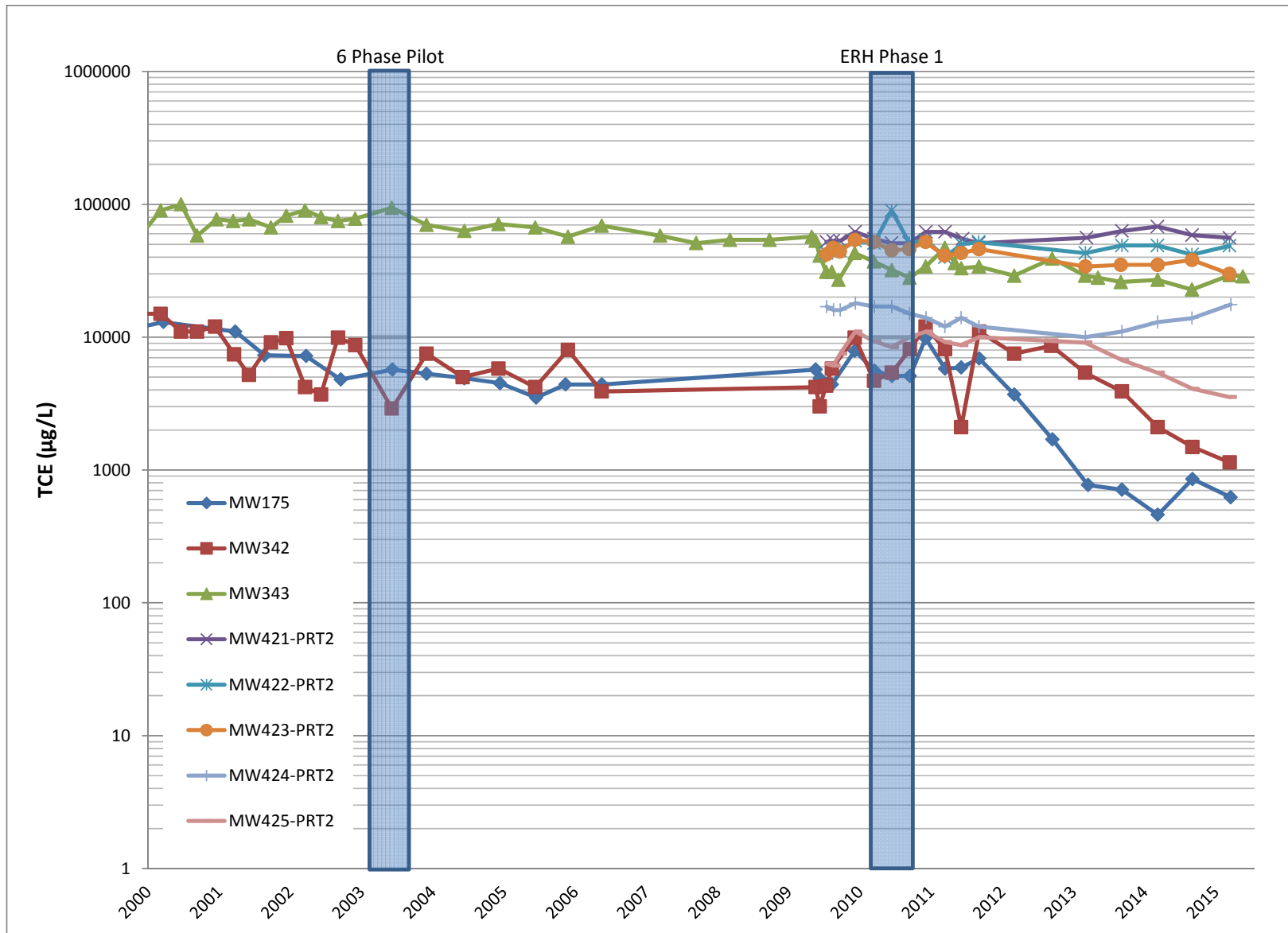


Figure E.3. C-400 TCE Trends in MWs Downgradient of Source Areas

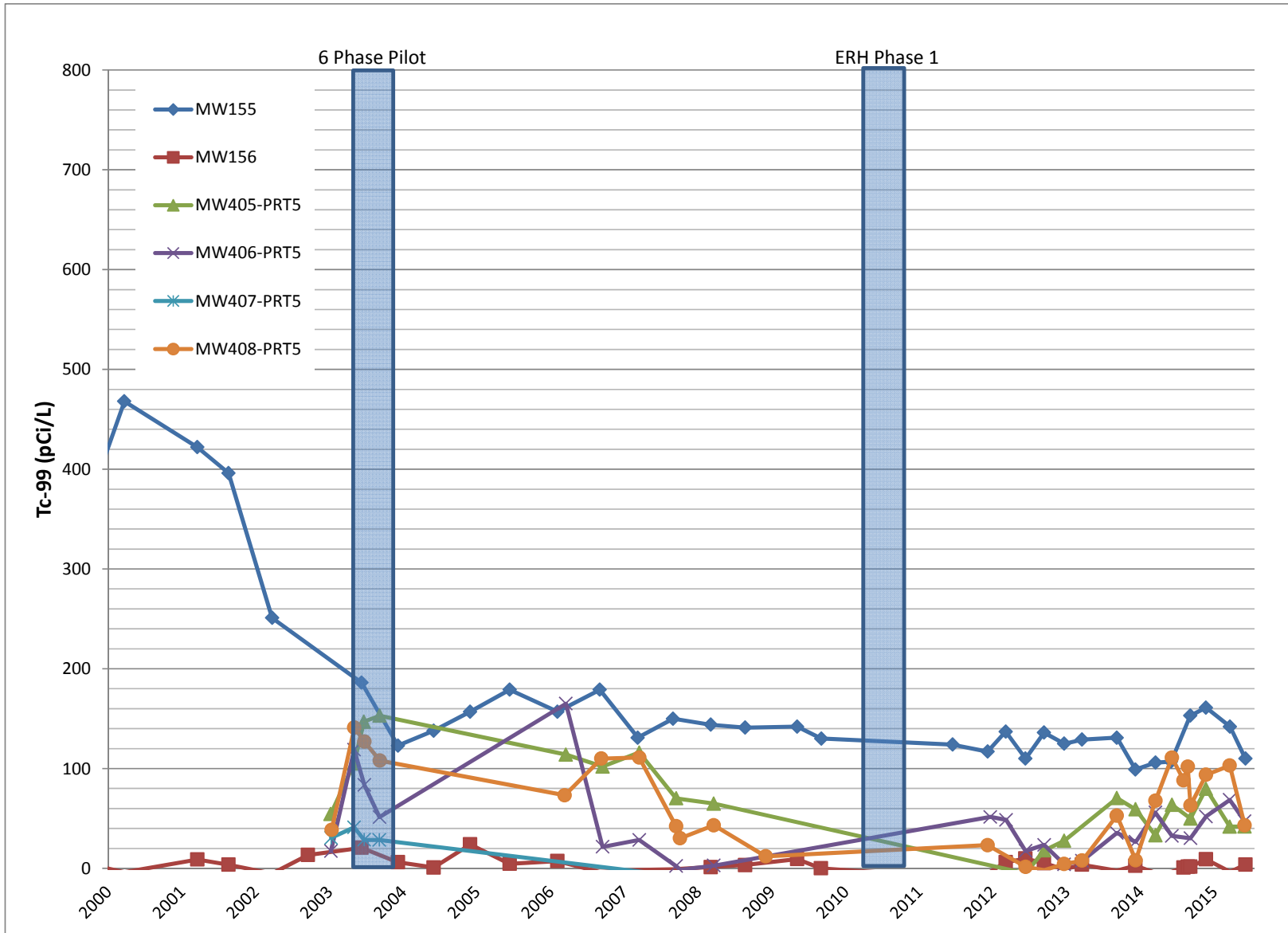


Figure E.4. C-400 Tc-99 Trends in MWs in Source Areas

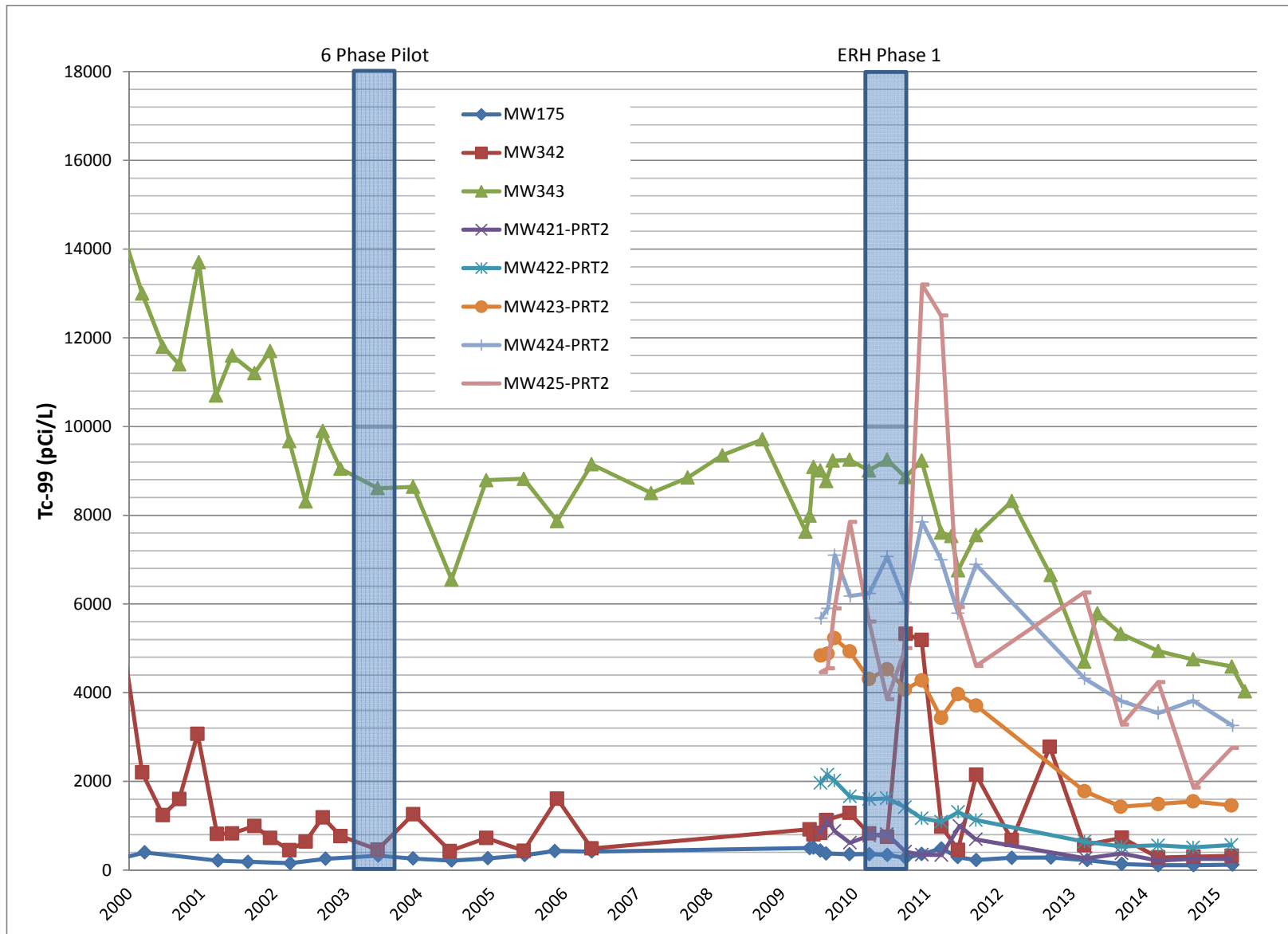


Figure E.5. C-400 Tc-99 Trends in MWs Downgradient of Source Areas

C-400 Monitoring
Water Quality Records for
MW155

Sample Date Range: 6/16/2009 - 6/16/2015

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
1/19/2011	3100	< 25			< 25					< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11019028004
1/25/2011	6000	< 250			< 50													C11026001005
1/25/2011	3800	< 250			< 50													C11026001006
1/31/2011	3500	< 250			< 50													C11031038005
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			120										C12363012002
12/28/2012	2200	< 20			< 20			125										C12363012001
3/27/2013	1900	< 20			< 20			129										C13086008001
9/16/2013	2000	< 100			< 20			131										C13259034001
12/17/2013	1600	< 20			< 20			98.6										C13351094006
12/17/2013	1600	< 20			< 20			99.1										C13351094007
3/26/2014	1900	< 20			< 20			106										C14085027001
6/12/2014	1590	< 25			< 25			107										350627004
9/15/2014	1850	.44			.31			153										356931002

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C-400 Monitoring
Water Quality Records for
MW155

Sample Date Range: 6/16/2009 - 6/16/2015

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	
12/2/2014	817	< 1			< 1			160									362435001	
12/2/2014	810	< 1			< 1			161									362435002	
3/31/2015	583	< 10			< 10			142									369938002	
6/16/2015	2500	< 50			< 50			110									375398002	

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C-400 Monitoring
Water Quality Records for
MW156

Sample Date Range: 6/16/2009 - 6/16/2015

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
1/20/2011	52000	< 1000			< 1000					< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11020026003
1/25/2011	52000	< 2500			< 500													C11026003001
1/31/2011	58000	< 2500			< 500													C11031038006
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
8/13/2014	50000	< 20			< 20			< .723										160-7947-6
9/3/2014	57000	< 40			< 40			< 1.81										160-8215-12
9/15/2014	56500	15.2			3.67			< 1.62										356931003
12/2/2014	925	< 500			8.79			< 9.1										362435003

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C-400 Monitoring
Water Quality Records for
MW156

Sample Date Range: 6/16/2009 - 6/16/2015

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	
3/31/2015	3390	< 500			< 500			< -3.32										369938003
6/16/2015	9720	< 500			< 500			< 3.72										375398003
6/16/2015	8270	< 500			< 500			< 1.43										375398004

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C-400 Monitoring
Water Quality Records for
MW175

Sample Date Range: 6/16/2009 - 6/16/2015

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	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	< -.722	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	5100	< 250			< 50	12.9	301	315	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017002
6/23/2010	4800	< 250			< 50	< 4.95	292	343	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017001
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	6730	< 88.2	C11082024002
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-01
6/13/2011	5900	< 250			< 50	13.5	201	292	< .005									C11165011004
6/13/2011	5900	< 250			< 50	9.43	190	267	< .005									C11165011003
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-02
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	< 3.18	245	282	< .005									C12269015003
9/25/2012	1700	< 20			< 20	< 3.25	245	284	< .005									C12269015004
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
MW175

Sample Date Range: 6/16/2009 - 6/16/2015

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	
9/15/2014	855	< 10			< 10			111										356931004
3/30/2015	575	< 10			5.2			98.2										369938004
3/30/2015	623	< 10			6.1			124										369938005

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C-400 Monitoring
Water Quality Records for
MW342

Sample Date Range: 6/16/2009 - 6/16/2015

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	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	9900	< 250			< 50	< .633	926	1280	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09348024003
12/14/2009	9500	< 250			< 50	< -6.46	978	1290	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024002
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	41	4120	5000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023002
12/13/2010	12000	< 200			< 200	56	3960	5190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023003
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
9/15/2014	1490	5.8			.6			303										356931001

E-14

C-400 Monitoring
Water Quality Records for
MW342

Sample Date Range: 6/16/2009 - 6/16/2015

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	
3/26/2015	1140	5.96			.66			322									369707001	

E-15

C-400 Monitoring
Water Quality Records for
MW343

Sample Date Range: 6/16/2009 - 6/16/2015

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	39000	< 400			< 400	134	5310	7600	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .53	< .09	C11081023003
3/22/2011	47000	< 400			< 400	46.5	6570	7610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .13	< .09	C11081023004
5/12/2011	36000	< 2500	< 500	< 500	< 500	150	5510	7530	< .005									C11132027003
6/15/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-02
6/15/2011	33000	< 2000			< 400	< -4.39	7110	6760	< .005									C11166026001
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

E-16

C-400 Monitoring
Water Quality Records for
MW343

Sample Date Range: 6/16/2009 - 6/16/2015

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	
9/12/2013	25000	< 1000			< 200			5330										C13255009004
9/12/2013	26000	< 1000			< 200			5150										C13255009005
3/20/2014	27000	< 200			< 200			4940										C14079016011
9/12/2014	22800	< 50			< 50			4710										356931006
9/12/2014	22000	< 50			< 50			4750										356931005
3/26/2015	29300	9.73			2.09			4590										369707002
6/1/2015	28600	< 500	< 500	< 500	< 500			4030										374452006

E-17

C-400 Monitoring
Water Quality Records for
MW405

Sample Date Range: 6/16/2009 - 6/16/2015

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

E-18

C-400 Monitoring
Water Quality Records for
MW405-PRT5

Sample Date Range: 6/16/2009 - 6/16/2015

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
9/16/2014	261	2.45			< 5			50										356931007
12/2/2014	481	< 10			< 10			79.8										362435004
3/30/2015	1000	< 20			< 20			41.8										369938006
6/12/2015	4270	< 100	< 100	< 100	< 100			34.4										375135001
6/12/2015	4010	< 50			< 50			41.9										375132002

E-19

C-400 Monitoring
Water Quality Records for
MW406

Sample Date Range: 6/16/2009 - 6/16/2015

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

E-20

C-400 Monitoring
Water Quality Records for
MW406-PRT5

Sample Date Range: 6/16/2009 - 6/16/2015

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
9/16/2014	812	< 10			< 10			30.1										356931008
12/2/2014	2290	1.1			.87			52										362435005
3/30/2015	183	< 4			< 4			68.6										369938007
6/12/2015	111	< 2	< 2	< 2	< 2			43.2										375135002
6/12/2015	100	< 2			< 2			47.1										375132003

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C-400 Monitoring
Water Quality Records for
MW407-PRT4

Sample Date Range: 6/16/2009 - 6/16/2015

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	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
9/16/2014	23800	< 500			< 500				< 11.5									356931009
12/2/2014	13900	< 1			.8				< 2.74									362435006
3/30/2015	10300	< 200			< 200				45.8									369938008
6/12/2015	18600	< 250	< 250	< 250	< 250				< 11.3									375135003
6/12/2015	18200	< 250			< 250				< 11.6									375132001

E-22

C-400 Monitoring
Water Quality Records for
MW408

Sample Date Range: 6/16/2009 - 6/16/2015

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 - 6/16/2015

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
8/13/2014	6000	< 2			< 2			88.2										160-7947-7
9/3/2014	110	< .08			< .08			102										160-8215-10
9/16/2014	49.1	< 1			< 1			63										356931010
12/2/2014	37.6	< 1			< 1			93.7										362435007
3/30/2015	234	< 4			< 4			103										369938009
6/12/2015	3490	< 50			< 50			43.1										375132004
6/12/2015	8990	< 200	< 200	< 200	< 200			36										375135004

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C-400 Monitoring
Water Quality Records for
MW421-PRT1

Sample Date Range: 6/16/2009 - 6/16/2015

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	
7/21/2009	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
9/10/2014	26000	< 500			< 500			944										356723001
3/24/2015	19300	< 500			< 500			892										369707003

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C-400 Monitoring
Water Quality Records for
MW421-PRT2

Sample Date Range: 6/16/2009 - 6/16/2015

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	
7/21/2009	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	55000	< 2500			< 500	< -24.9	853	996	< .005									C11173026002
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-02
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
9/12/2014	58600	< 50			< 50			255										356931011
3/24/2015	55900	< 1000			< 1000			249										369707004

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C-400 Monitoring
Water Quality Records for
MW421-PRT3

Sample Date Range: 6/16/2009 - 6/16/2015

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	
7/21/2009	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	72000	< 2500			< 500	15.7	289	399	< .005									C11173026003
6/22/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106092-03
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
9/12/2014	62800	< 50			< 50			181										356931012
3/24/2015	45500	4.96			1.92			200										369707005

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C-400 Monitoring
Water Quality Records for
MW422-PRT1

Sample Date Range: 6/16/2009 - 6/16/2015

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	
7/21/2009	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
9/12/2014	10800	32.8			< 25			10400										356931013
3/24/2015	9330	< 100			< 100			7120										369707006

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C-400 Monitoring
Water Quality Records for
MW422-PRT2

Sample Date Range: 6/16/2009 - 6/16/2015

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	
7/21/2009	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
9/12/2014	41800	< 50			< 50			514										356931014
3/24/2015	48700	< 100			< 100			567										369707007

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C-400 Monitoring
Water Quality Records for
MW422-PRT3

Sample Date Range: 6/16/2009 - 6/16/2015

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	
7/21/2009	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										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-05
6/15/2011	49000	< 2500			< 500	13.5	864	1140	< .005									C11166026004
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
9/12/2014	46700	< 50			< 50			496										356931015
3/24/2015	44600	< 100			< 100			550										369707008

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C-400 Monitoring
Water Quality Records for
MW423-PRT1

Sample Date Range: 6/16/2009 - 6/16/2015

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	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
9/12/2014	8980	32.8			< 25			9080										356931016
3/24/2015	8970	35.5			< 50			8220										369707009

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C-400 Monitoring
Water Quality Records for
MW423-PRT2

Sample Date Range: 6/16/2009 - 6/16/2015

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	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
9/12/2014	38100	< 500			< 500			1550										356937007
3/24/2015	29900	< 1000			< 1000			1460										369707010

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C-400 Monitoring
Water Quality Records for
MW423-PRT3

Sample Date Range: 6/16/2009 - 6/16/2015

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	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
9/13/2014	38300	< 50			< 50			1500										356931017
3/24/2015	34900	< 1000			< 1000			1470										369707011

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C-400 Monitoring
Water Quality Records for
MW424-PRT1

Sample Date Range: 6/16/2009 - 6/16/2015

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	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
9/13/2014	2630	18.8			< 25			3070										356931018
3/26/2015	2520	18.5			< 50			5140										369707012

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C-400 Monitoring
Water Quality Records for
MW424-PRT2

Sample Date Range: 6/16/2009 - 6/16/2015

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	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										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-10
6/14/2011	14000	< 500			< 100	< -51.5	4820	5790	< .005									C11165038003
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
9/13/2014	13900	< 250			< 250			3820										356931019
3/31/2015	17600	< 250			< 250			3260										369938010

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C-400 Monitoring
Water Quality Records for
MW424-PRT3

Sample Date Range: 6/16/2009 - 6/16/2015

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
9/13/2014	11100	< 250			< 250			2600										356931020
3/31/2015	14000	< 250			< 250			2570										369938011

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C-400 Monitoring
Water Quality Records for
MW425-PRT1

Sample Date Range: 6/16/2009 - 6/16/2015

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
9/15/2014	2260	< 50			< 50			2220										356937001
3/26/2015	1820	12.8			< 25			2220										369707013

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C-400 Monitoring
Water Quality Records for
MW425-PRT2

Sample Date Range: 6/16/2009 - 6/16/2015

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
9/15/2014	4080	< 50			< 50			1860										356937002
3/26/2015	3540	< 50			< 50			2750										369707014

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C-400 Monitoring
Water Quality Records for
MW425-PRT3

Sample Date Range: 6/16/2009 - 6/16/2015

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	
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										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-05
6/13/2011	7400	< 500			< 100	< -23.1	3310	4310	< .005									C11165011007
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
9/15/2014	8610	< 100			< 100			1950										356937003
3/26/2015	7170	< 100			< 100			2340										369707015

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C-400 Monitoring
Water Quality Records for
MW505

Sample Date Range: 6/16/2009 - 6/16/2015

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	
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
9/13/2014	150	< 1			< 1			63.4										356937004
12/2/2014	22.8	< 1			< 1			71.4										362435008
3/30/2015	16.3	< 1			< 1			61.1										369938012
6/16/2015	16.8	< 1			< 1			53.1										375398001

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C-400 Monitoring
Water Quality Records for
MW506

Sample Date Range: 6/16/2009 - 6/16/2015

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
9/13/2014	641	< 10			< 10			59.6										356937005
12/2/2014	1080	< 1			.47			72.7										362435009
3/30/2015	906	< 10			< 10			66.8										369938001
6/16/2015	2690	< 50			< 50			73.4										375398005

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C-400 Monitoring
Water Quality Records for
MW507

Sample Date Range: 6/16/2009 - 6/16/2015

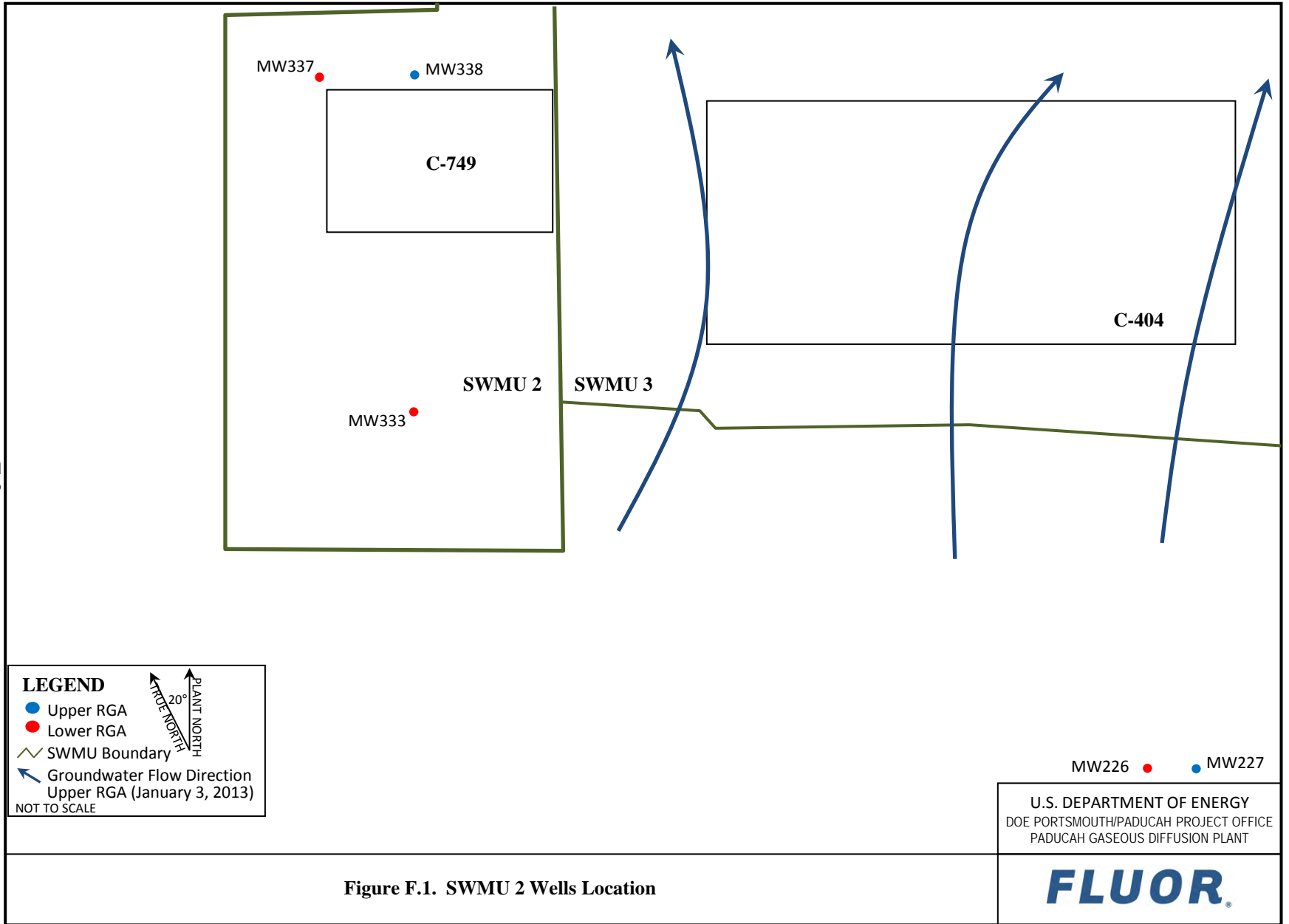
Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal Uranium mg/L	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L		PCB 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	
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	245	< 5			< 5			77.6										350627001
6/12/2014	260	< 5			< 5			80.4										350627006
9/13/2014	582	< 10			< 10			57.3										356937006
12/2/2014	510	< 1			< 1			71.7										362435010
3/30/2015	265	< 5			< 5			74.1										369938013
6/16/2015	913	< 20			< 20			52.1										375398006

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APPENDIX F

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

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LEGEND

- Upper RGA
 - Lower RGA
 - SWMU Boundary
 - ↙ Groundwater Flow Direction
Upper RGA (January 3, 2013)
- NOT TO SCALE

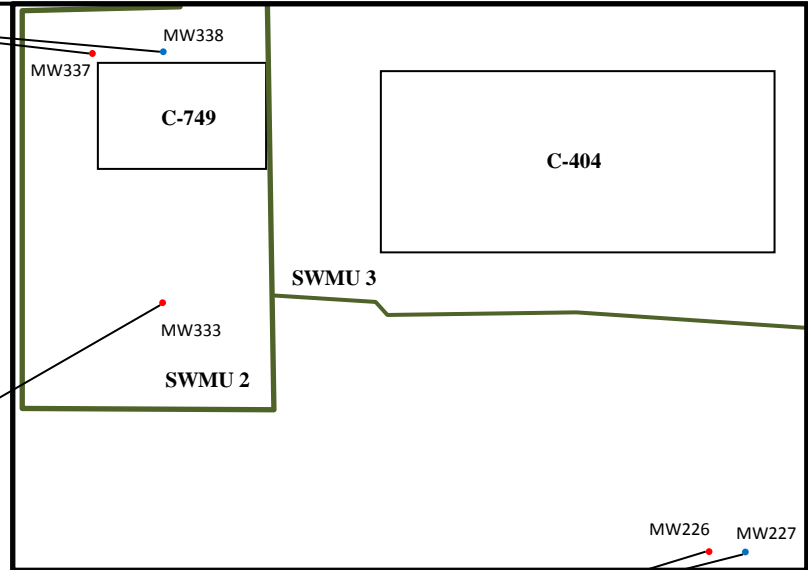
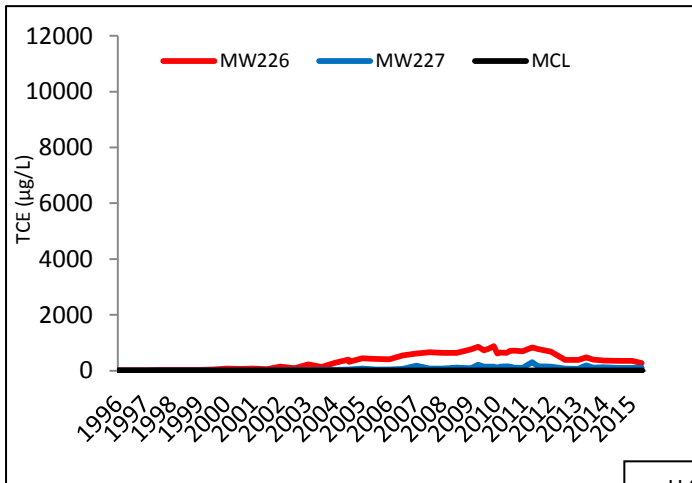
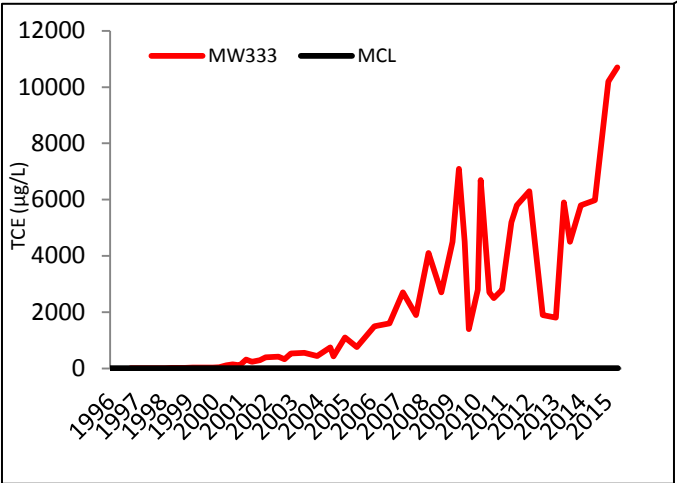
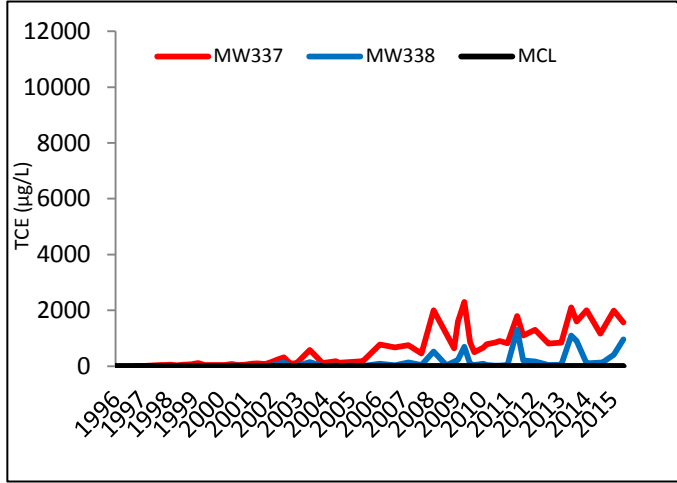


MW226 ● MW227

U.S. DEPARTMENT OF ENERGY
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PADUCAH GASEOUS DIFFUSION PLANT



Figure F.1. SWMU 2 Wells Location



LEGEND

- Upper RGA
- Lower RGA
- SWMU Boundary
- Upper RGA Results
- Lower RGA Results

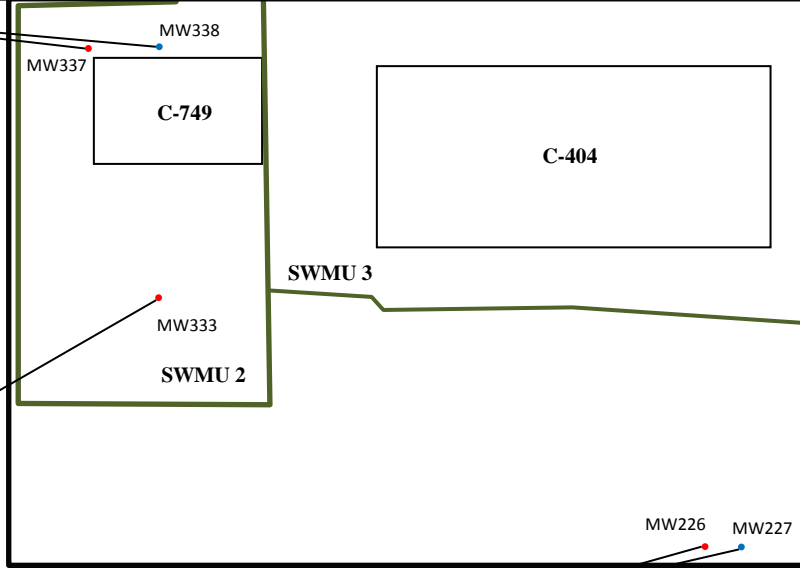
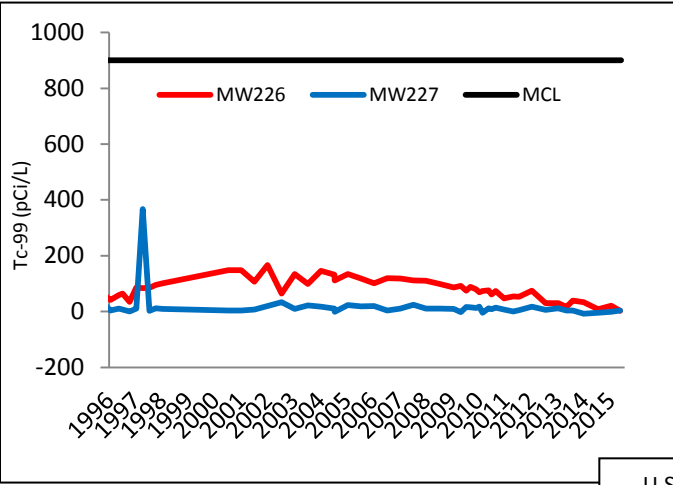
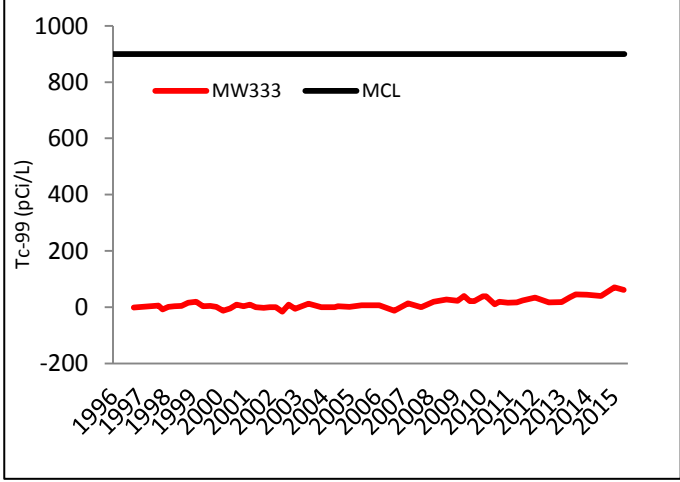
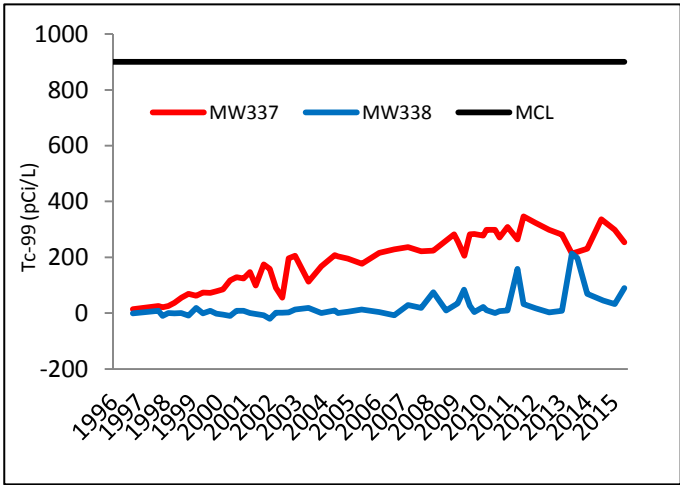
NOT TO SCALE

↑ 20° PLANT NORTH
↑ TRUE NORTH

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT

Figure F.2. TCE Trends in SWMU 2 Wells





LEGEND

- Upper RGA
- Lower RGA
- SWMU Boundary

NOT TO SCALE

- Upper RGA Results
- Lower RGA Results

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT

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 - 6/11/2015

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 - 6/11/2015

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								43				950815-023
8/14/1995								30				950815-031
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 - 6/11/2015

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	40											C992020007
7/20/1999	42											C992020008
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 - 6/11/2015

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
1/26/2015	351							20.5				365824001
6/1/2015	267	5.4	< 1	.32	< 1			< 2.55				374452002

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

Sample Date Range: 5/6/1993 - 6/11/2015

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	3	< 5	< 5	< 5	< 5							S408081-01V
8/10/1994	4							10				940811-075
8/10/1994	4							14				940811-063
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 - 6/11/2015

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								20				950425-162
4/24/1995								23				950425-178
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	29	.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 - 6/11/2015

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 - 6/11/2015

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
1/26/2015	97.8							< -1.45				365824002
6/2/2015	110	1.68	< 2	< 2	< 2			< 3.74				374344008

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

Sample Date Range: 5/6/1993 - 6/11/2015

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	10				< .48							96M04623-3717
10/14/1996									9.66		.14	96M04623-3731
10/14/1996								-1.1				96M04623-3761
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										< -3.95		C020720129
3/13/2002	410	< 25	< 25	< 25	< 25	< 1.13	< .94	< -.654				C020720130

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

Sample Date Range: 5/6/1993 - 6/11/2015

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 - 6/11/2015

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
1/26/2015	10200							70				365824003
6/3/2015	10700	< 200	< 200	< 200	< 200			61				374344009

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

Sample Date Range: 5/6/1993 - 6/11/2015

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								14				96M04622-3760
10/4/1996	8.3				< .48							96M04622-3716
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 - 6/11/2015

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	1100							333				C11222050003	

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

Sample Date Range: 5/6/1993 - 6/11/2015

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	880							347				C11222050002
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
1/27/2015	1990							298				365920001
6/11/2015	1570	.8	< 1	< 1	3.37			254				374981003

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

Sample Date Range: 5/6/1993 - 6/11/2015

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									.56		.67	96M04621-3729
10/4/1996								-82				96M04621-3759
10/4/1996	.7				< .48							96M04621-3715
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										< 0		C020720127
3/13/2002	78	< 5	< 5	< 5	< 5	< -.652	< 4	< 1.2				C020720128
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 - 6/11/2015

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							< -3.51				C10195017002
7/14/2010	14							< .779				C10195017003
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 - 6/11/2015

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
1/27/2015	404							32.6				365920002
6/11/2015	963	.71	< 1	> 1	.74			89.3				374981004

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