



Department of Energy

Portsmouth/Paducah Project Office
1017 Majestic Drive, Suite 200
Lexington, Kentucky 40513
(859) 219-4000

JAN 22 2014

Mr. Todd Mullins
Federal Facility Agreement Manager
Division of Waste Management
Kentucky Department for Environmental Protection
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-2191605-14

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

Ms. April Webb
Kentucky Department for Environmental Protection
Division of Waste Management
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

Dear Mr. Mullins, Ms. Tufts, and Ms. Webb:

**TRANSMITTAL OF REPLACEMENT PAGE FOR TABLE 2 OF THE U.S.
DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL
FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE FIRST
HALF OF FISCAL YEAR 2013 PADUCAH, KENTUCKY (DOE/LX/07-1290/V1)**

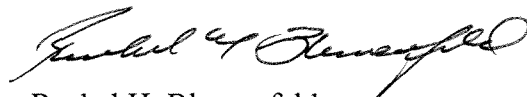
Reference: Letter from J. Woodard to T. Mullins, J. Tufts, and A. Webb, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2013, Paducah, Kentucky (DOE/LX/07-1290/V2)," (PPPO-02-2157260-14B), dated November 14, 2013

Enclosed is the certified replacement page for Table 2 of the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2013, Paducah, Kentucky*, DOE/LX/07-1290/V1. The enclosed replacement page has been prepared to correct the amount of trichloroethene (TCE) removed from the Northwest Plume Pump-and-Treat system. The error in reporting was attributed to a calculation error that duplicated the amount of TCE removed from the system in 1996. This error was discovered during an independent assessment of the data presented in Table 2 of the

report that was conducted in November 2013 and noted in the transmittal letter for the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2013, Paducah, Kentucky*, DOE/LX/07-1290/V2. This error was unique to the Northwest Plume calculations and impacted only the progress report for the first half of fiscal year 2013.

If you have any questions or require additional information, please contact Jennifer Woodard at (270) 441-6820.

Sincerely,



Rachel H. Blumenfeld
Acting Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. Table 2-Replacement Page

e-copy w/enclosures:

brandy.mitchell@lataky.com, LATA/Kevil
brian.begley@ky.gov, KDEP/Frankfort
craig.jones@lataky.com, LATA/Kevil
darla.bowen@lataky.com, LATA/Kevil
gaye.brewer@ky.gov, KDEP/Paducah
jana.white@lataky.com, LATA/Kevil
jeffrey.gibson@ky.gov, KDEP/Frankfort
jennifer.woodard@lex.doe.gov, PPPO/PAD
leo.williamson@ky.gov, KDEP/Frankfort
mark.duff@lataky.com, LATA/Kevil
myrna.redfield@lataky.com, LATA/Kevil
pad.dmc@swiftstaley.com, SST/Kevil
reinhard.knerr@lex.doe.gov, PPPO/PAD
rob.seifert@lex.doe.gov, PPPO/PAD
stephaniec.brock@ky.gov, KYRHB/Frankfort
sunny.osborne@lataky.com, LATA/Kevil
todd.mullins@ky.gov, KDEP/Frankfort
tracey.duncan@lex.doe.gov, P2S/PAD
tufts.jennifer@epamail.epa.gov, EPA/Atlanta

CERTIFICATION

Document Identification: **Replacement Pages for Table 2 of the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2013, Paducah, Kentucky (DOE/LX/07-1290/V1)***

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.

LATA Environmental Services of Kentucky, LLC



Craig S. Jones, Manager of Projects

01/22/14
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 (DOE)



Rachel H. Blumenfeld, Acting Paducah Site Lead
Portsmouth/Paducah Project Office

1/22/14
Date Signed

**DOE/LX/07-1290/V1
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
First Half of Fiscal Year 2013
Paducah, Kentucky**



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**DOE/LX/07-1290/V1
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
First Half of Fiscal Year 2013
Paducah, Kentucky**

Date Issued—April 2013

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

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

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ACRONYMS

ACM	asbestos-containing material
AR	Administrative Record
BGOU	Burial Grounds Operable Unit
CAB	Citizens Advisory Board
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRP	Community Relations Plan
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EIC	Environmental Information Center
EPA	U.S. Environmental Protection Agency
EQ	equalization
EW	extraction well
FFA	Federal Facility Agreement
FS	feasibility study
FY	fiscal year
GDP	gaseous diffusion plant
GWOU	Groundwater Operable Unit
HVAC	heating, ventilation, and air conditioning
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
PPPO	Portsmouth/Paducah Project Office
RAWP	Removal Action Work Plan
RGA	Regional Gravel Aquifer
RI	remedial investigation
ROD	record of decision
SMP	Site Management Plan
SOU	Soils Operable Unit
SST	Swift and Staley, Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
TBD	to be determined
WAG	waste area group

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

INTRODUCTION

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

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

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

Section XXIII of the FFA requires that DOE prepare a regulatory progress report that describes the actions that DOE has taken during the previous six months to implement FFA requirements, as well as the schedules¹ of activities to be taken during the upcoming six months. Activities that have taken place after the reporting period closed are not included in this report. Projects and activities reported in this update are grouped by the media-specific OUs listed in Table 1.

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

- I. Work performed during the reporting period (including summaries of findings and any deviations from the work plan)
- II. Schedules of activities to be performed during next reporting period (including projected work/crucial phases of construction)
- III. Identity and assigned tasks of DOE contractors for work to be performed during this reporting period

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-410/420 Complex • C-340 Metals Reduction Plant 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 (SMP) • CERCLA Waste Disposal Alternatives Evaluation

* The Comprehensive Site Operable Unit work scope, including GDP shutdown, is defined more clearly in the fiscal year 2013 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.

- Appendix C contains a map depicting the monitoring well (MW) locations; a figure summarizing the trichloroethene (TCE) concentrations in these wells over time; and a summary of the C-746-K Landfill groundwater monitoring data from January 1996 through October 2012. This data currently are collected semiannually. Sampling of these MWs is outlined in the Record of Decision (ROD) for Waste Area Groups (WAGs) 1 and 7.
- Appendix D contains updates to the Administrative Record (AR) index since the last progress report. This is required by the Paducah FFA (Section XXXII.F).
- Appendix E contains a map depicting the C-400 MW location; and a summary of the C-400 groundwater MW data trending TCE and technetium-99 (Tc-99) from 2000 through December 2012. Groundwater data from January 2013 through September 2013 will be included in the next semiannual report scheduled for October 2013.
- 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 January 2013.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

GROUNDWATER OPERABLE UNIT

The scope of the GWOU includes performing investigations, 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 by various actions through December 31, 2012. Additionally, the table provides the current understanding of the remaining estimated mass yet to be addressed. Some of the mass amounts still are continuing to be updated or estimated and are listed as to be determined (TBD).

Table 2. Cumulative TCE Removed and Remaining TCE Estimate at Paducah

Source Area	Cumulative TCE Removed (gal)*	Remaining TCE Estimate (gal)
Northwest Plume Pump-and-Treat	2,880	TBD
Northeast Plume Pump-and-Treat	279	TBD
C-400 Six-Phase Treatability Study	1,900	N/A
C-400 Phase I	535	TBD
C-400 Phase IIa and Phase IIb	0	600–7,000**
Dissolved-Phase Plume	N/A	1,600
Southwest Plume***	0	70**
SWMU 4***	0	TBD
Other sources (i.e., SWMU 91, LASAGNA™)	246	TBD
Total	5,840	2,270–8,670

* Cumulative through December 31, 2012.

** This estimate is currently under review.

*** Additional investigation is ongoing.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

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:

- Completed in March 2013, the subsurface fieldwork effort (initiated fieldwork on September 27, 2012) for the installation of electrodes, Digitams[®], vacuum extraction wells (EWs), and other subsurface remediation equipment as part of construction supporting Phase IIa IRA.
- Initiated fieldwork on March 6, 2013, for construction of surface treatment/facilities to support operations of Phase IIa Electrical Resistance Heating (ERH) during the next reporting period.
- Prepared and submitted the *D1 Operations and Maintenance Plan for the 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/07-1285&D1*, to EPA and Kentucky on March 1, 2013, for review and approval.

Phase IIb:

- Conducted during the reporting period a supplemental technical evaluation in the form of digital modeling of steam enhanced extraction in the RGA to support continued technical discussions for the selection of a Phase IIb IRA for the lower RGA.
- Continued groundwater monitoring for the C-400 project required by the *Remedial Action Work Plan for the Interim Remedial Action the Volatile Organic Compound Contamination at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0004&D2/R2*. The TCE and Tc-99 groundwater monitoring trends from October 2012 through December 2012 are included as Appendix E of this report.

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

- Complete construction activities associated with the implementation of Phase IIa IRA at the C-400 Building.
- Following startup and integration testing, full operations will be initiated for the Phase IIa ERH during the reporting period.

- Continue working decision elements associated with selection of a remedial measure for Phase IIb and development of necessary decision or testing documents supporting the remedial selection.

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

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

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

The requirements and schedules are being met for the GWOU C-400 phased IRA subproject, consistent with the SMP and as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

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

- *Operations and Maintenance Plan for the 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/07-1285&D1 (Secondary Document).*

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

- Not applicable.

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

ERH did not reach target temperature in the lower Regional Gravel Aquifer (RGA). DOE conducted an evaluation of the Phase I IRA (detailed in the Technical Evaluation Report). DOE has evaluated other viable technologies for addressing the RGA. This evaluation resulted in the bifurcation of the C-400 IRA. Further discussions and evaluations for remedial technologies that could be applied to the Phase IIb area have been continuing with FFA parties through this current reporting period, including development of a digital model of the expected results for the application of steam enhanced extraction at the C-400 Phase IIb area. The FFA parties will continue the evaluation of technologies into the next reporting period.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of the Portsmouth/Paducah Project Office (PPPO).

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

Sampling of the C-400 wells has been incorporated into the Environmental Monitoring Program. O&M cost is not broken out separately.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

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):

- Issued the D1 *90% Remedial Design Report In Situ Source 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) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1276&D1, (RDR) to EPA and Kentucky on February 19, 2013.
- Received and completed resolution of comments from EPA on the *60% Remedial Design Report In Situ Source 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) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1276&D1, on November 16, 2012. Comments were received from Kentucky on November 9, 2012. Comments received on the 60% RDR were incorporated into the development of the 90% RDR as appropriate, and a comment response summary for the resolved comments was issued along with the 90% RDR.
- Completed planned field activities for implementation of the Southwest Plume Final Characterization and the Remedial Design Support Investigation on October 26, 2012. Reentered the field on February 26, 2013, to collect additional soil samples for C-720 Northeast site (SWMU 211-A) as agreed to by the FFA parties. This activity was complete on March 6, 2013.
- Initiated development of the Final Characterization Report for the C-720 Building SWMUs 211-A and 211-B for completion during the next reporting period.

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

- Complete development of the Certified for Construction *Remedial Design Report In Situ Source 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) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1276&D1, for use in remedy implementation expected in fiscal year (FY) 2014.
- Complete development of the Final Characterization Report during the next reporting period. The report will be used by the FFA parties in selecting the remedial measure for the C-720 Building SWMUs 211A and 211B to be designed and implemented in later reporting periods.

- Continue development and submit as a D1 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&D1.
- Initiate development of procurement activities to support the implementation of the approved remedial action at SWMU 1 for implementation expected in FY 2014.

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

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

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

The requirements and schedules are being met for the Southwest Plume Sources remedial action subproject consistent with the SMP and as agreed to by the FFA parties. Development and submittal of planning documents for the Southwest Plume source areas are being met consistent with the negotiated timelines as agreed to by the FFA parties.

V. Primary/Secondary Document Tracking System:

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

- *90% Remedial Design Report In Situ Source 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) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1276&D1.

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):

The FFA parties have agreed to evaluate the potential for reduction in the treatment footprint associated with the C-747-C Oil Landfarm (SWMU 1). This has resulted in an extended review period for the D1 Remedial Design Report. As a result, subsequent FFA documents (e.g., D1 Remedial Action Work Plan, D1 Remedial Action Completion Report) associated with the Southwest Plume Sources will be delayed. Mitigation efforts are not required for this activity because this delay will not impact the actual completion of the remedial action, currently scheduled for implementation in mid-FY 2014.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

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):

None. This project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

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

This project has been resequenced and no activities are scheduled for this project during the upcoming reporting period.

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

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

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

Project implementation has been resequenced as described in Section II.

V. Primary/Secondary Document Tracking System:

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

None.

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

None.

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

None.

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

None.

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

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):

Continued with the planning and development of project information to optimize the Northeast Plume IRA. Activities associated with the optimization of the Northeast Plume IRA have included the following:

- Issued the *D1 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&D1, to EPA and Kentucky on March 28, 2013, for review and approval.
- Initiated development of the *Operations and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1535&D3/R3, for issuance to EPA and Kentucky during the next reporting period.

During this reporting period, the Northeast Plume Containment System (NEPCS) (non-optimized) treated 44,017,800 gal of contaminated groundwater and achieved an operational efficiency of 97.7%. The average system treatment rate for the reporting period was 168 gal/min and was calculated assuming 100% operational uptime. Operational online efficiencies for the reporting period were as follows: October 2012, 100%; November 2012, 86%; December 2012, 100%; January 2013, 100%; February 2013, 100%; and March 2013, 100%.

A) Process Operations:

The NEPCS consists of two EWs, an underground equalization (EQ) tank, transfer piping, a cooling tower for air stripping, and MW network.

B) Process Testing:

Operation of the NEPCS began February 28, 1997. As of March 31, 2013, the NEPCS has processed a total of approximately 1,319,235,126 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 July through December 2012.

Influent sample results, compared to the effluent (cooling tower shower) sample results, indicated that TCE was effectively removed below 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 December 2012 are presented in Appendix B. Environmental samples were collected monthly from the treatment system influent and effluent for the period of July through December 2012. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 3. Values reported as less than the reporting limit of 1 $\mu\text{g/L}$ are considered to be 1 $\mu\text{g/L}$ for averaging and graphing purposes.

Table 3. TCE Concentrations for Northeast Plume

	TCE ($\mu\text{g/L}$)		
	High	Low	Average
Influent (EQ Tank)	160	110	140
Effluent (Cooling Tower Effluent)*	< 1	< 1	< 1

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

As presented in Table 3, the NEPCS continued to remove TCE effectively. The system operated with an average removal efficiency of approximately 100% for TCE. All effluent TCE samples showed less than the reporting limit.

The EWs were sampled quarterly during this reporting period. The results of the sampling showed no significant change in TCE levels since the last reporting period. Extraction well EW331 had an average TCE concentration of 125 $\mu\text{g/L}$, while EW332 had an average concentration of 163 $\mu\text{g/L}$.

Concentrations of Tc-99 in water samples collected from the EQ tank did not exceed shut down action level of 3,600 pCi/L. The highest Tc-99 concentration from the EQ tank was 23.0 pCi/L.

D) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Calibration, and Testing Plan*, PAD-ENM-001, September 2010.

Instances of downtime occurred during the reporting period relating to power outages, lightning strikes, routine maintenance, and calibration of system components.

Nonroutine Maintenance Activities:

On November 17, 2012, a new flow meter was installed at EW331 because the existing flow meter failed to register flow properly.

On November 8, 2012, the EQ pump kicked off and would not restart. On November 12, 2012, troubleshooting revealed that fuses were blown and the system had shut down. The system was down for 88 hours.

On December 5, 2012, the EQ tank level probe was replaced because it was falsely indicating a high level. The spare probe that was installed would not calibrate. Technical help was called to repair the old probe, which was reinstalled to restore the system to operable conditions with little or no down time.

Testing of the C-614 underground EQ Tank and associated pipelines, which are used in transferring contaminated groundwater to the C-637 cooling tower for treatment, are periodically tested to determine operational integrity. This testing is performed on a five-year cycle and was scheduled to have been performed in 2012, but the testing has been rescheduled for May 2013. USEC notified DOE that USEC could discontinue enrichment operations at PGDP as early as May 2013. This termination of enrichment operations would impact the Northeast Plume IRA by discontinuing use of the cooling tower for stripping TCE from the groundwater. To prepare for this event, a new water treatment unit along with newly constructed pipelines will be tied into the existing EQ tank and pipeline system during the next reporting period. The newly constructed pipelines also will require integrity testing as part of quality control during construction. For efficiency, the existing EQ tank and pipelines and the newly constructed pipelines will be integrity tested as a system prior to resuming groundwater treatment operations.

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 third and fourth quarters of calendar year 2012, Tc-99 activity at MW292 was 56 and 28 pCi/L, respectively.

F) Modification of the NEPCS Operations or Configuration:

No modifications were made to the NEPCS operation or configuration during the reporting period.

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

- Issue the *D2 Remedial Action Work Plan for the Optimization of the Northeast Plume Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1280&D2, within 30-days of receipt of EPA and Kentucky comments.
- Issue the *Operations and Maintenance Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1535&D3/R3, to EPA and Kentucky for review and approval. The project team will continue to conduct and document the necessary tasks required for equipment maintenance, calibration, and operations, as specified within the *Operations and Maintenance*

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

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

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

The effluent concentration goal of 5 µg/L for TCE was met during the reporting period. The NEPCS remained operational 97.7% of the time during this reporting period.

V. Primary/Secondary Document Tracking System:

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

None.

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

None.

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

No future operational problems or delays are anticipated.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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 \$215,000.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

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 54,804,936 gal of contaminated groundwater with an average monthly operational efficiency of 97.3%. The average system treatment rate for the reporting period was 211 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: October 2012, 98.7%; November 2012, 86.5%; December 2012, 100%; January 2013, 100%; February 2013, 100%; March 2013, 99%.

A) Process Operations:

The NWPGS previously consisted of two EW fields (north and south with each field having two EWs), for a total of four wells, underground pipeline, treatment facility, and MW network. In August 2010, an optimized system with two new EWs (EW232 and EW233) became operational in the south well field near the north fence line of PGDP. The north well field EWs (EW228 and EW229) were removed from service in August 2010, and the new EWs were placed into operation at that time. EW230 and EW231, also located in the south well field, are kept in standby mode and may be returned to service, if needed.

B) Process Testing:

Operation of the NWPGS began on August 28, 1995. As of March 31, 2013, the NWPGS has processed a total of 1,776,667,272 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 July through December 2012.

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

1995. The influent sample results, compared to the NWPGS effluent results, indicated that the NWPGS continues to effectively remove TCE and Tc-99.

TCE values reported as less than the reporting limit of 1 µg/L are considered to be 1 µg/L for averaging and graphing purposes. High, low, and average influent and effluent TCE and Tc-99 concentrations from July through December 2012 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	2,500	1,100	1,889	350	240	309
Effluent	3.0	1.0	1.8	48.1	13.6	26.0

The treatment system influent, a composite from two EWs, was sampled monthly. The effluent was sampled weekly. These sampling frequencies were conducted in accordance with the revised O&M Plan for the Northwest Plume Groundwater System IRA D4/R5, which DOE submitted on September 13, 2010, and was approved in correspondence from Kentucky on October 4, 2010, with concurrence from EPA on October 8, 2010. As presented in Table 4, the NWPGS continued to effectively remove TCE and Tc-99. The system operated with an average removal efficiency of 99.9% for TCE and 91.6% for Tc-99.

The average TCE effluent concentration for this reporting period was 1.8 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 26.0 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. EWs 228 and 229 were removed from operation in August 2010. These wells are not tied physically into the Northwest Plume Treatment Facility and no longer are sampled. EWs 230 and 231 also were removed from operation in August 2010. These wells, however, are sampled only when they are operated (these wells were not operated during this reporting period). EWs 232 and 233 were sampled quarterly in accordance with the revised O&M Plan for the Northwest Plume.

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

	TCE (µg/L)			Tc-99 (pCi/L)		
	High	Low	Average	High	Low	Average
EW232	1,700	1,300	1,500	369	277	323
EW233	1,000	990	995	301	284	293

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 (VOCs) 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 during the last reporting period on September 26, 2012, with new and recycled carbon. During this reporting period, the activated carbon was changed out on March 26, 2013.

E) Maintenance Activities:

Routine Maintenance Activities:

Daily, monthly, quarterly, and annual routine maintenance activities were conducted in accordance with the *Paducah Plume Operations Maintenance, Calibration, and Testing Plan*, PAD-ENM-0001, September 2010. Instances of minor downtime occurred during the reporting period relating to power outages, maintenance, and calibration of the system. Carbon was changed out in the treatment system on March 26, 2013.

Nonroutine Maintenance Activities:

An input/output fault was received on standby wells EW230 and EW231 on May 21, 2012. Troubleshooting revealed that the input/output dip switch block was faulty. A new switch block was ordered in July 2012 and replaced in October 2012. If the standby wells were required to be used, the block from other abandoned wells would have been used to operate the wells.

On August 29, 2012, a lightning strike occurred at EW233. The strike damaged several surge protectors. New surge protectors were installed, but the well would not come back on line. Several attempts to fix the problem were made, but the well would not run. EW232 has been increased to 212 gpm to make up the difference in the well problem. A pump drive unit and new communications cards were ordered in October 2012. The new drive was installed on December 6, 2012, and the systems were restored to approximately 110 gpm for each EW.

In October 2012, the flow meter stopped, indicating a flow rate at EW232; however, the totalizer continued to work. The unit was replaced with a spare unit.

On November 1, 2012, a lightning strike occurred at EW232. All surge protectors were burned, and the pump drive was making noise. On November 5, 2012, the surge protectors were replaced and the pump restarted after 97 hours of down time. In addition, on November 5, 2012, a new surge protector was installed in the controller for standby wells EW230 and EW231 to put them back in standby mode following the lightning strike. A new surge protector also was required for standby wells EW230 and EW231.

On January 24, 2013, a maintenance request was initiated to repair two minor leaks near the sand filters in C-612. Parts were received in February 2013 and repairs were made.

F) Effectiveness Monitoring—Monitoring Well Results:

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

G) Modification of the NWPGS Operations or Configuration:

EW232 and EW233, became operational on August 24, 2010. These EWs replace the previous EWs for recovery of TCE contaminated groundwater from the Northwest Plume. Each of the new wells has a design capacity of 220 gal per minute and is operated full time at approximately 110–115 gpm. EW228 and EW229 have been disconnected from the Northwest Plume Treatment facility. EW230 and EW231 are kept in standby mode and can be operated, as needed.

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

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

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

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

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

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

The average NWPGS water effluent concentrations met the operational goals of 5 µg/L for TCE and 900 pCi/L for Tc-99 during the reporting period. The NWPGS has remained operational 97.4% 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 managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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 \$203,000.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

BURIAL GROUNDS OPERABLE UNIT

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

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

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

**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):

- Resolved informal dispute on the D2/R2 *Feasibility Study for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1030a&D2/R2, and documented the December 19, 2012, resolution in a *Memorandum of Agreement for Resolution of Informal Dispute for the D2/R2 Feasibility Study for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1030a&D2/R2.
- Prepared and submitted the D2/R3 *Feasibility Study for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1030a&D2/R3, to EPA and Kentucky on February 8, 2013, for review and approval.
- Received approvals from Kentucky and EPA on the *Feasibility Study for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1030a&D2/R3, on February 14 and February 15, 2013, respectively.
- Received comments from Kentucky and EPA 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&D1, on February 21, 2013, and March 15, 2013, respectively, and initiated resolution of comments.
- Continued development of the draft *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&D1, which is due to EPA and Kentucky on May 16, 2013, for review and approval.
- Completed Phase I sampling activities associated with the *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan*, DOE/OR/07-2179&D2/A2/R2.

- Initiated field activities associated with Phase II of the *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan*, DOE/OR/07-2179&D2/A2/R2.
 - PVC liners rather than Teflon liners were used to collect DPT soil cores.
 - The five minute period for sealing VOC samples in the EnCore began at the time of opening the sample liner rather than at the time of retrieving the sample liner.
 - One water sample for VOCs was collected with a peristaltic pump rather than a bladder pump.
 - Water samples from the seven locations identified for piezometers will be collected once the piezometers are installed, rather than from the soil borehole.

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

- Continue resolution of comments 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&D1.
- Prepare and submit 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&D1, to EPA and Kentucky by May 16, 2013, in accordance with the terms of the dispute resolution.
- Initiate development of the ROD and Land Use Control Implementation Plan for SWMUs 5 and 6.
- Complete Phase II and III field activities (exclusive of test pits) associated with the *Addendum to the Work Plan for the Burial Grounds Operable Unit Remedial Investigation/Feasibility Study at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Solid Waste Management Unit 4 Sampling and Analysis Plan*, DOE/OR/07-2179&D2/A2/R2.
- Work associated with SWMUs 2, 3, 7, 9, 10, 30, and 145 of the BGOU has been resequenced based upon agreement with the FFA managers and their respective senior managers. With the exception of finalization of the FS for SWMUs 2, 3, 7, and 30, no activities are scheduled for these SWMUs during the upcoming reporting period.

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

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

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

- The requirements and time schedules are being met; however, extensions on document review and modification periods, as well as resolution of informal dispute and the need for additional document versions, have resulted in an overall impact to the project schedule for the BGOU.
- Work associated with SWMUs 2, 3, 7, 9, 10, 30, and 145 of the BGOU has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window. With the exception of finalization of the FS for SWMUs 2, 3, 7, and 30, no activities are scheduled for these SWMUs during the upcoming reporting period.

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&D1*
- *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*
- *Feasibility Study for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1030a&D2/R2*
- *Feasibility Study for Solid Waste Management Units 5 and 6 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1030a&D2/R3*
- *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&D1*

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

- 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&D1*, will be submitted to EPA and Kentucky for review no later than May 16, 2013.
- The *Feasibility Study for Solid Waste Management Units 2, 3, 7, and 30 of the Burial Grounds Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-1274&D2*, is due to EPA and Kentucky 60 days after receipt of EPA and Kentucky comments on the D1 FS. An extension request to modify the submittal date of the D2 FS will be submitted during the next reporting period as previously agreed by the FFA Managers.

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

Additional time will be needed to resolve the comments on the D1 *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&D1, and to develop the D2 *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.

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

DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff. Kentucky Division of Waste Management has observed SWMU 4 field activities and split environmental samples.

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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).]

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
FIRST HALF OF FISCAL YEAR 2013**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 10/1/2012–3/31/2013**

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):

Groundwater monitoring continued 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 January 2013, have been included as part of this report. The results of the groundwater monitoring trends from 1996 through January 2013 are presented in Appendix F.

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

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

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

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

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

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

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

The following document is under development: *Five-Year Review for Remedial Actions at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-01289&D1, and is scheduled for submittal to EPA and Kentucky by July 15, 2013.

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:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

Sampling of the C-749 Uranium Burial Ground has been incorporated into the Environmental Monitoring Program. O&M cost is approximately \$1,000.00 per year.

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Reporting Period: 10/1/2012–3/31/2013**

SURFACE WATER OPERABLE UNIT

The SWOU includes the Surface Water Removal Action and Surface Water Remedial Action projects. Additionally, O&M is performed on North-South Diversion Ditch Sections 1 and 2 and institutional controls, as required by the *Operations and Maintenance Plan for Sections 1 and 2 of the North-South Diversion Ditch*, DOE/OR/07-2057&D2, and *Operations and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1904&D1; and O&M activities for the C-613 Basin are maintained in accordance with the *Operations and Maintenance Plan for the Northwest Storm Water Control Facility at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-2044&D1/R4, respectively. Inspection reports are filed in the Document Management Center, managed by SST. The estimated annual cost of this O&M is \$66,000.

Per the *Operations and Maintenance Plan for the Northwest Storm Water Control Facility at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-2044&D1/R4, the relationship of turbidity to total suspended solids is compared on a quarterly basis. No change in the existing linear regression model has occurred since July 2009 and the current maximum discharge limit for turbidity is 53 nephelometric turbidity units (NTU) with a 30-day average not to exceed 29 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):

- Initiated the revision of the *Operation and Maintenance Plan for the Surface Water Operable Unit at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2600&D1*, as required by the CERCLA Five-Year Review.

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*, as required by the CERCLA Five-Year Review.
- Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers. As a result, no activities are scheduled for this project during the upcoming reporting period.

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

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

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

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

V. Primary/Secondary Document Tracking System:

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

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

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 prior to the submittal of the D1 CERCLA Five-Year Review.

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

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

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

None.

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SOILS OPERABLE UNIT

The SOU is being implemented in a phased approach (i.e., pre-GDP shutdown and post-GDP shutdown). The SOU consists of 86 SWMUs/areas of concern; three inactive facilities [C-218 Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), C-410-B HF Neutralization Lagoon (SWMU 19)]; and the soil/rubble areas that have been identified to date. Prior to GDP shutdown, the SOU will focus on accessible plant surface soils (ground surface to 10 ft below ground surface and 16 ft below ground surface in the vicinity of pipelines) not associated with PGDP operations. Following PGDP shutdown, slabs and underlying soils associated with facilities that have undergone D&D will be addressed as part of a subsequent action (e.g., post-GDP shutdown for the Soils and Slabs OU). Actions to address a total of 20 of the 86 SWMUs have been deferred to Soils and Slabs OU. Of the 66 SWMUs remaining, 50 will be addressed as part of the Soils OU FS. The remaining 16 SWMUs will be further evaluated under a subsequent Soils OU RI and addressed by a subsequent Soils OU feasibility study.

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

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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):

- The D2 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2, was submitted to EPA and Kentucky on October 1, 2012, for review and approval. Conditional concurrence was received from EPA and Kentucky on December 31, 2012, and December 27, 2012, respectively. Addendum to the conditional concurrence was received from EPA on January 9, 2013.
- Prepared and submitted the D2/R1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1, to EPA and Kentucky on February 7, 2013. Approval was received from EPA and Kentucky on February 25, 2013.
- Initiated revisions of SWMU Assessment Reports for SWMU 99, SWMU 225, and SWMU 474, as agreed to by the FFA parties during comment resolution of the D1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D1.

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

- Finalize the SWMU Assessment Reports for SWMU 99, SWMU 225, and SWMU 474.
- Additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers. As a result, no activities are scheduled for this project during the upcoming reporting period.

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

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

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

- With the exception of finalization of the D2/R1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1, additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

V. Primary/Secondary Document Tracking System:

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

- The D2/R1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1, has been under development during this reporting period.

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

- The D2/R1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1, was due to EPA and Kentucky by March 16, 2013. The document was submitted to the regulatory agencies on February 7, 2013.

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

- With the exception of finalization of the D2/R1 *Soils Operable Unit Remedial Investigation Report at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0358&D2/R1, additional work associated with this project has been resequenced based upon agreement with the FFA managers and their respective senior managers; it no longer falls within the five-year window.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

None.

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DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT

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

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

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

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

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

- RAWP requires removal of cold traps:
 - Completed final capping of all 20 cold traps to prepare for placement into storage containers.
 - Placed 11 of the 20 cold traps into storage containers and stored outside of the C-410 Facility to prepare for relocation to C-746-Q. These included the 5 outside traps and 6 traps from Zone 39.
- RAWP requires removal of the fluorine system.
 - Completed accessible fluorine piping removal. There are two fluorine lines that cannot be accessed until building transite is removed or a mezzanine inside the building is removed; these two lines will be stabilized and removed when made accessible.
- RAWP requires heating, ventilation, and air-conditioning (HVAC) system stabilization and or removal in all 65 zones.
 - Completed HVAC system stabilization.
- RAWP required asbestos-containing materials (ACM) to be removed prior.
 - Continue ACM removal in Sectors 2, 3, 5, 6, 7, and 8.
 - Accessible thermal surface insulation removal complete in all zones, except Sector 6. Small quantities will require removal when made accessible.
 - Accessible conduit with ACM wiring complete in Sectors 2 and 3. Minor amounts require removal when made accessible.
- Completed stabilization of 12 of the 13 abandoned UF₆ sample cylinders. Remaining cylinder has been determined to contain Freon in addition to UF₆; preparations underway to stabilize this cylinder.

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

- Continue waste management activities for the HVAC system and UF₆ piping.
- Cold traps:
 - Containerize remaining nine cold traps.
 - Relocate all 20 cold traps to C-746-Q.
- Continue asbestos insulated electrical wire removal.
- Initiate vacuuming and fixative application in preparation for demolition.
- Complete stabilization of the last of the 13 UF₆ sample cylinders present in C-410.

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

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

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

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

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

None.

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

None.

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

None.

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

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

Participated in teleconferences, provided photos, and provided a narrated video for representatives of the Kentucky Division of Air Quality and EPA to discuss management of asbestos-containing wire present inside conduit in the C-410 Complex. Also hosted a tour and

visit into the C-410 viewing area of the transite sandwiched structural steel of the facility for Kentucky Division of Air Quality personnel.

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

None.

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**D&D OPERABLE UNIT:
C-340 Metals Reduction Plant Complex**

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

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

- Completed transite removal from the C-340 Facility on December 19, 2012.
- Completed structural demolition on February 12, 2013.
- Completed removal of structural demolition debris from the C-340 pad on March 27, 2013.
- Packaged over 1,750 tons of PCB remediation waste in railcars for shipment and disposal at Clive, Utah.
- Transported and disposed over 1,600 tons of demolition debris to the on-site C-746-U Landfill.
- Filled on-site sumps, slabs, and pits with concrete.
- Initiated development of removal action completion letter.

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

- Complete C-340 Complex slab preparation and fixative application, and waste disposition.
- Complete demolition subcontractor demobilization and site restoration (grading and seeding, fence removal).
- Complete packaging and shipping of remaining 100 tons (for a total of 1,850 tons) of PCB remediation waste in railcars for disposal at Clive, Utah.
- Complete the removal action completion letter.

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

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

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

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

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

The removal action completion letter is under development.

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

None.

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

None.

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

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

Briefed FFA Managers on demolition status and provided notification of outfall sampling result for uranium and PCBs at January FFA Managers Meeting.

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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, and CERCLA Waste Disposal Alternatives Evaluation.

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Reporting Period: 10/1/2012–3/31/2013**

**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):

Surface water and groundwater monitoring continued 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 October 2012 are presented graphically in Appendix C.

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

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

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

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

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

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

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

None.

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

None.

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

None.

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

None.

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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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**Facility: Paducah Gaseous Diffusion Plant
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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):

Initiated development of revision 8 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/OR/07-2099&D2/R8, including updates to Appendix A to reflect changes to key contacts for PGDP and updates to Appendix B to reflect more recent significant activities in public involvement history. The FFA parties have 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). The next revision to the CRP (Revision 8) is due in July 2013.

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

Submit Revision 8 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/OR/07-2099&D2/R8, to EPA and Kentucky for comment and/or approval no later than July 1, 2013.

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

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

The FFA parties have 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:

Not applicable.

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/07-2099&D2/R8.

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

Revision 8 of the *Community Relations Plan under the Federal Facility Agreement at the U.S. Department of Energy Paducah Gaseous Diffusion Plant*, DOE/OR/07-2099&D2/R8, is due to EPA and Kentucky by July 1, 2013.

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

None.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

Not applicable.

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PROJECT: Site Management Plan

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

- The D1 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision Fiscal Year (FY) 2013*, DOE/LX/07-1284&D1, was developed and submitted to EPA and Kentucky on November 14, 2012.
- DOE received comments on the D1 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision Fiscal Year (FY) 2013*, DOE/LX/07-1284&D1, on December 4, 2012, and December 5, 2012, from EPA and Kentucky, respectively.
- The FFA parties held a comment resolution meeting on December 10, 2012. All comments were resolved and the D2 *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision Fiscal Year (FY) 2013*, DOE/LX/07-1284&D2, was submitted to EPA and Kentucky on December 17, 2012.
- The FY 2103 SMP was approved by Kentucky and EPA on December 20, 2012, and January 29, 2013, respectively.

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

DOE will initiate discussions for the development of FY 2014 D1 SMP.

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

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

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

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

V. Primary/Secondary Document Tracking System:

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

- The D1 FY 2013 SMP has been under development and EPA and Kentucky review during this reporting period.
- The D2 FY 2013 SMP has been under development and EPA and Kentucky review during this reporting period.

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

- D1 FY 2014 SMP is due to EPA and Kentucky no later than November 15, 2013.
- Comments on the D1 FY 2014 SMP are due to DOE within 30 days of the document's being issued or December 15, 2013.
- D2 FY 2014 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):

The FFA managers and their respective senior managers reached consensus on a path forward for establishing out-year enforceable milestone time frames. The final FY 2013 SMP was issued to and approved by EPA and Kentucky ahead of schedule.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

Not applicable.

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PROJECT: CERCLA Waste Disposal Alternatives Evaluation

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

- Submitted the D1 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D1, to Kentucky and EPA on May 8, 2012. Comments were received from Kentucky and EPA on September 6, 2012, and September 12, 2012, respectively. EPA submitted additional comments 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&D1, on October 29, 2012.

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

- Develop and submit the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, to EPA and Kentucky for review during the next reporting period.
- Develop and submit the D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, to EPA and Kentucky for review by July 23, 2013.
- Conduct a Public Information Workshop within the next reporting period. DOE is co-sponsoring 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:

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

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

EPA submitted additional comments on the D1 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D1, on October 29, 2012. DOE requested a 120-day

extension for the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, on January 24, 2013; this moved the FFA date for submittal of the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, to May 27, 2013. Following submittal of the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, the standard FFA review and comment periods for primary documents are expected to apply.

V. Primary/Secondary Document Tracking System:

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

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

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

- Comments on the D2 *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-0244&D2, are due to DOE within 30 days of the issuance to EPA and Kentucky for review.
- D1 *Proposed Plan for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1279&D1, is due to EPA and Kentucky no later than July 23, 2013.

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

There are no FFA dates that are being impacted.

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

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

VIII. Changes in relevant personnel:

Robert Edwards was appointed the Deputy Manager of PPPO.

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

Not applicable.

APPENDIX A

**NORTHEAST AND NORTHWEST PLUME
WATER WITHDRAWAL REPORTS**

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

Day	October 2012	November 2012	December 2012	January 2013	February 2013	March 2013
1	202,300	258,725	249,475	258,900	244,850	244,950
2	241,400	258,725	249,475	224,600	244,850	244,950
3	320,100	258,725	251,100	242,275	244,850	244,950
4	239,325	258,725	249,900	242,275	285,800	241,100
5	239,325	285,700	231,300	242,275	199,300	265,300
6	239,325	240,800	254,575	242,275	248,000	253,200
7	239,325	226,300	254,575	250,000	250,525	257,725
8	239,800	106,700	254,575	233,700	250,525	257,725
9	244,400	0	254,575	249,700	250,525	257,725
10	243,500	0	254,000	245,775	250,525	257,725
11	246,375	0	255,800	245,775	243,700	261,300
12	246,375	108,100	249,700	245,775	251,000	267,500
13	246,375	13,500	241,975	245,775	256,200	295,500
14	246,375	244,880	241,975	244,000	250,775	248,150
15	245,500	244,880	241,975	236,200	250,775	248,150
16	245,500	244,880	241,975	243,000	250,775	248,150
17	242,700	244,880	225,800	247,140	250,775	248,150
18	233,867	244,880	224,800	247,140	247,700	239,300
19	233,867	250,300	230,800	247,140	249,600	258,300
20	233,867	257,100	258,900	247,140	248,100	260,200
21	0	257,100	258,900	247,140	254,750	256,650
22	257,400	257,100	258,900	241,500	254,750	256,650
23	250,200	257,100	258,900	249,800	254,750	256,650
24	255,500	257,100	258,900	244,625	254,750	256,650
25	255,675	257,100	258,900	244,625	249,500	326,000
26	255,675	250,300	258,900	244,625	256,300	182,600
27	255,675	251,600	258,900	244,625	258,300	274,520
28	255,675	257,100	258,900	239,100	244,950	274,520
29	253,000	249,475	258,900	209,800		274,520
30	254,100	249,475	258,900	253,100		274,520
31	249,200		258,900	244,850		274,520
Monthly Total	7,411,700	6,291,250	7,765,150	7,544,650	6,997,200	8,007,850
* Daily Average	247,057	233,009	250,489	243,376	249,900	258,318
Days water pumped	30	27	31	31	28	31

* Value based on number of days water was pumped

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

Day	October 2012	November 2012	December 2012	January 2013	February 2013	March 2013
1	301,000	0	302,495	343,182	318,570	315,710
2	295,060	0	302,495	309,920	318,570	315,710
3	306,700	0	305,290	314,928	318,570	315,710
4	304,643	0	281,990	314,928	377,920	313,780
5	304,643	0	320,640	314,928	247,940	318,000
6	304,643	290,940	315,610	314,928	310,350	317,910
7	304,643	293,480	315,610	321,260	316,553	325,175
8	293,070	302,978	315,610	306,440	316,553	325,175
9	301,380	302,978	315,610	320,020	316,553	325,175
10	302,500	302,978	313,870	309,450	316,553	325,175
11	302,703	302,978	321,720	309,450	239,240	273,900
12	302,703	303,290	317,130	309,450	321,150	319,010
13	302,703	298,390	315,993	309,450	317,860	312,130
14	302,703	304,440	315,993	314,860	314,363	314,898
15	301,240	303,938	315,993	313,000	314,363	314,898
16	304,750	303,938	315,993	313,790	314,363	314,898
17	173,370	303,938	316,920	326,178	314,363	314,898
18	302,410	303,938	313,510	326,178	316,300	287,930
19	302,410	294,040	317,390	326,178	317,090	341,450
20	302,410	301,888	343,182	326,178	313,170	320,200
21	302,410	301,888	343,182	326,178	316,863	318,288
22	305,590	301,888	343,182	266,480	316,863	318,288
23	298,290	301,888	343,182	319,070	316,863	318,288
24	302,400	301,888	343,182	316,035	316,863	318,288
25	302,400	301,888	343,182	316,035	317,720	323,100
26	302,400	301,210	343,182	316,035	324,340	211,040
27	302,400	304,120	343,182	316,035	316,910	318,588
28	302,400	297,970	343,182	310,140	315,710	318,588
29	302,400	302,495	343,182	319,760		318,588
30	302,400	302,495	343,182	312,750		318,588
31	0		343,182	318,570		318,588
Monthly Total	8,938,774	7,531,860	10,058,040	9,781,782	8,782,520	9,711,960
* Daily Average	297,959	301,274	324,453	315,541	313,661	313,289
Days water pumped	30	25	31	31	28	31

* 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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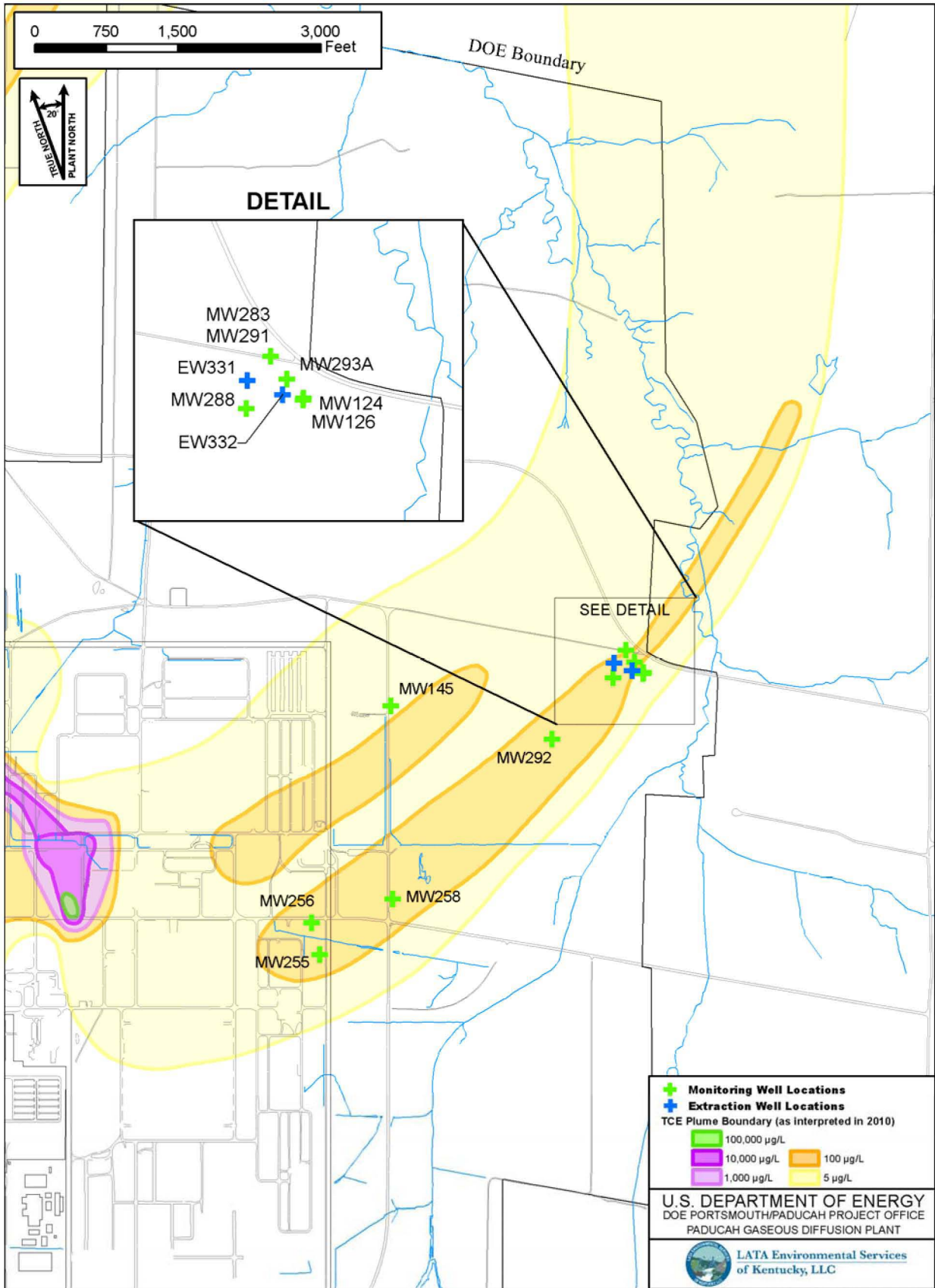


Figure B.1. Northeast Plume Groundwater Wells and Extraction Wells

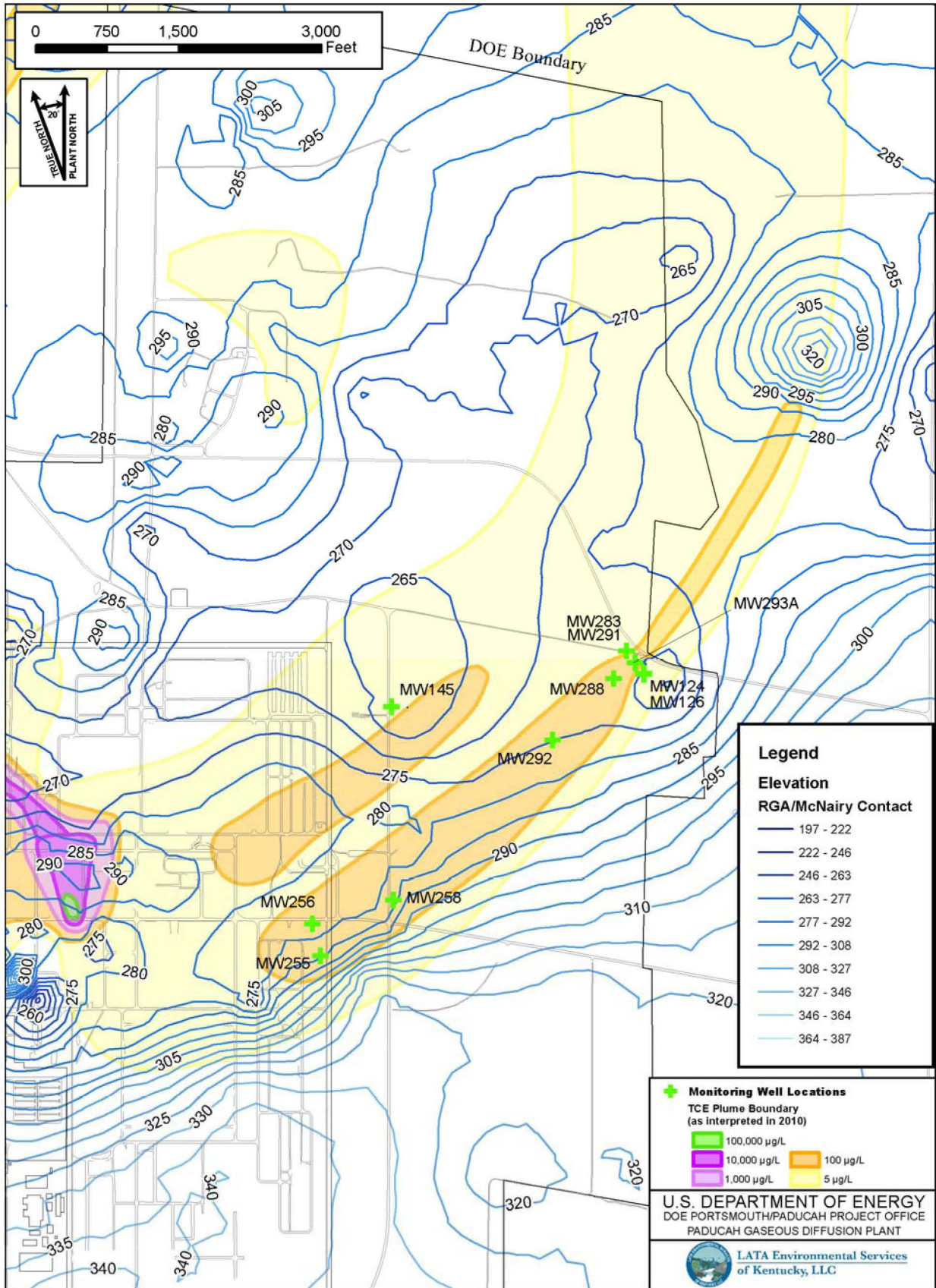
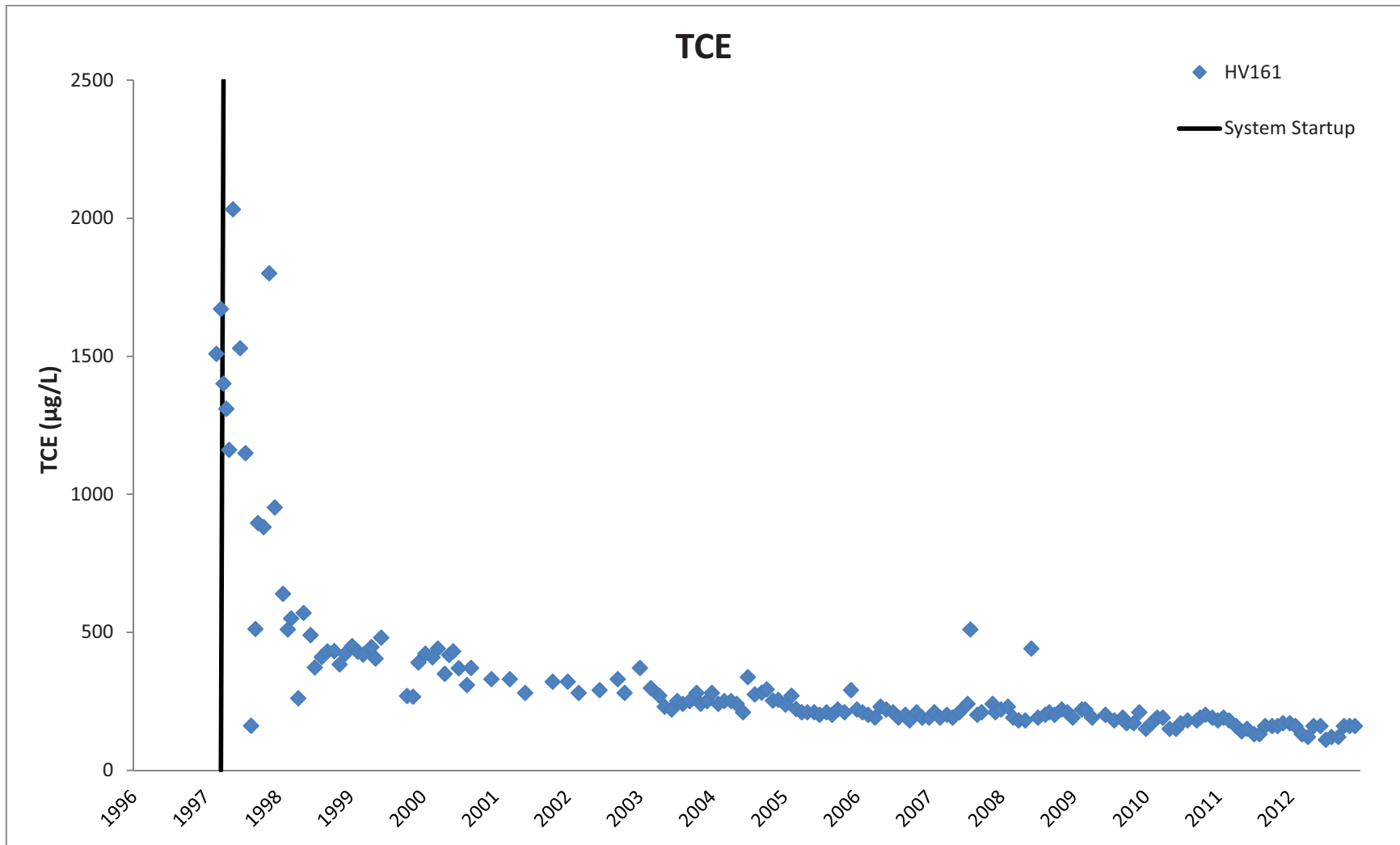


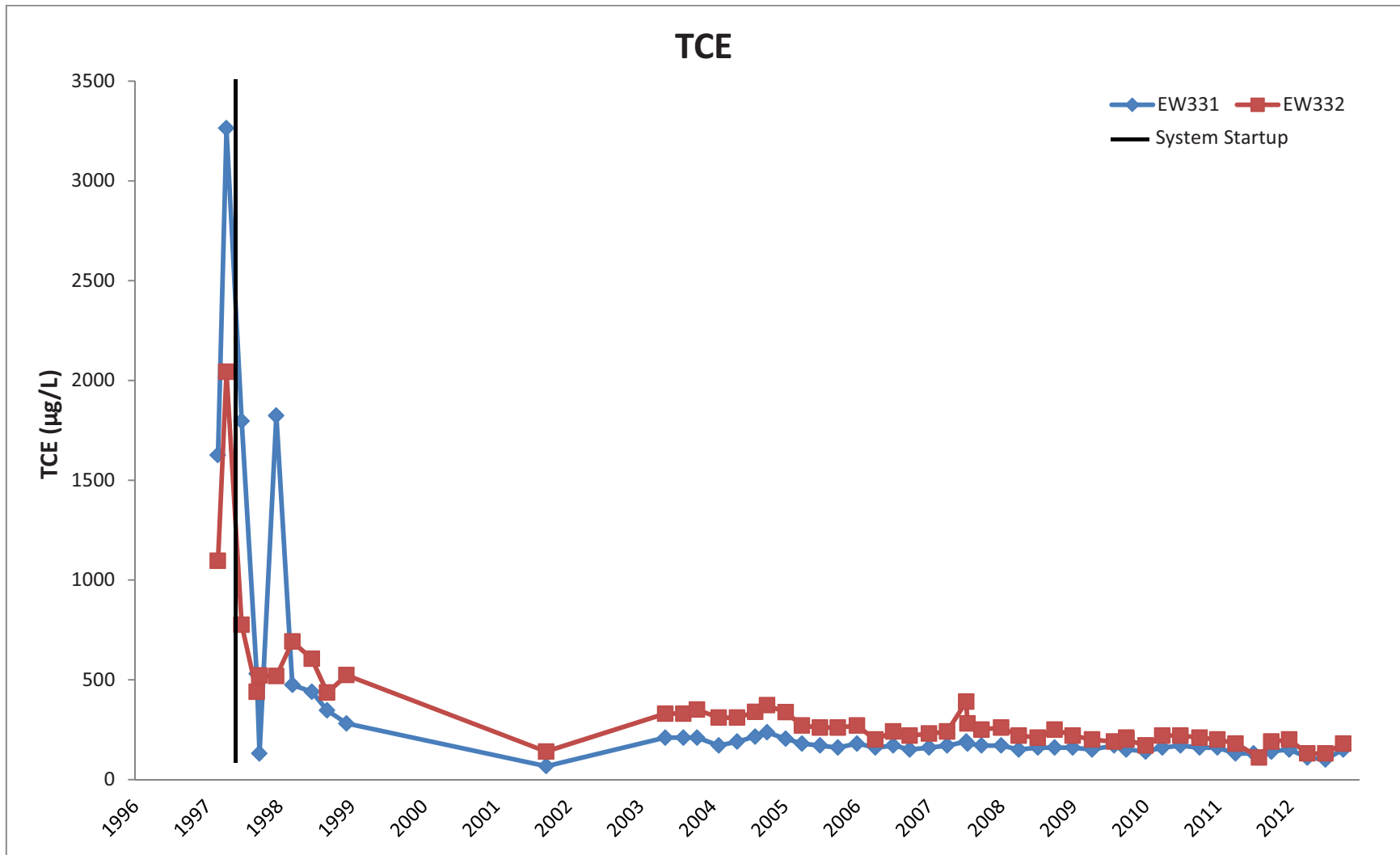
FIGURE No. FFA SemiAnnual20110906_NEP RGA_R0.mxd
 DATE 09-06-2011

Figure B.2. Northeast Plume with McNairy Topography



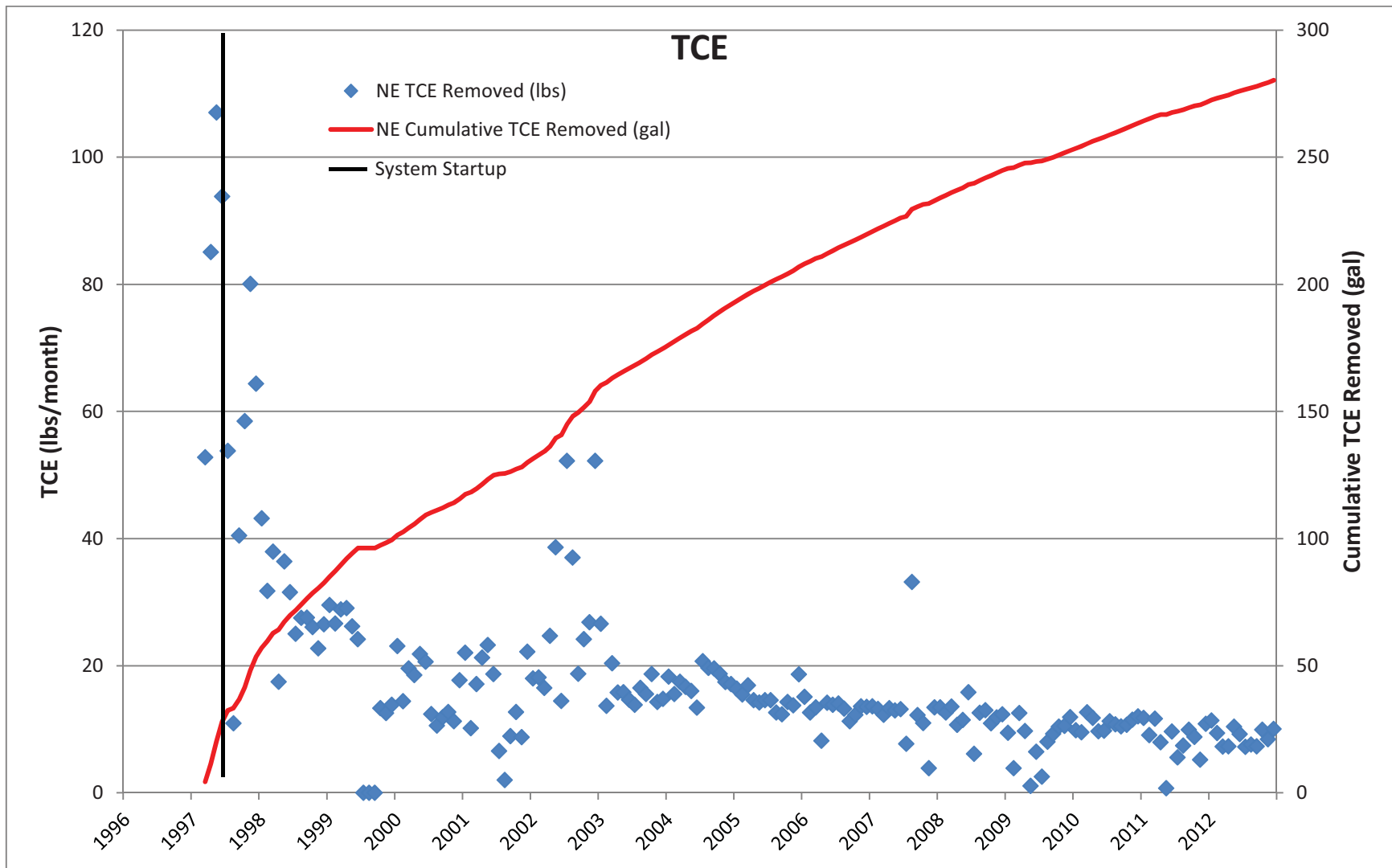
NOTE: Data rejected by validation or assessment have not been graphed.

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



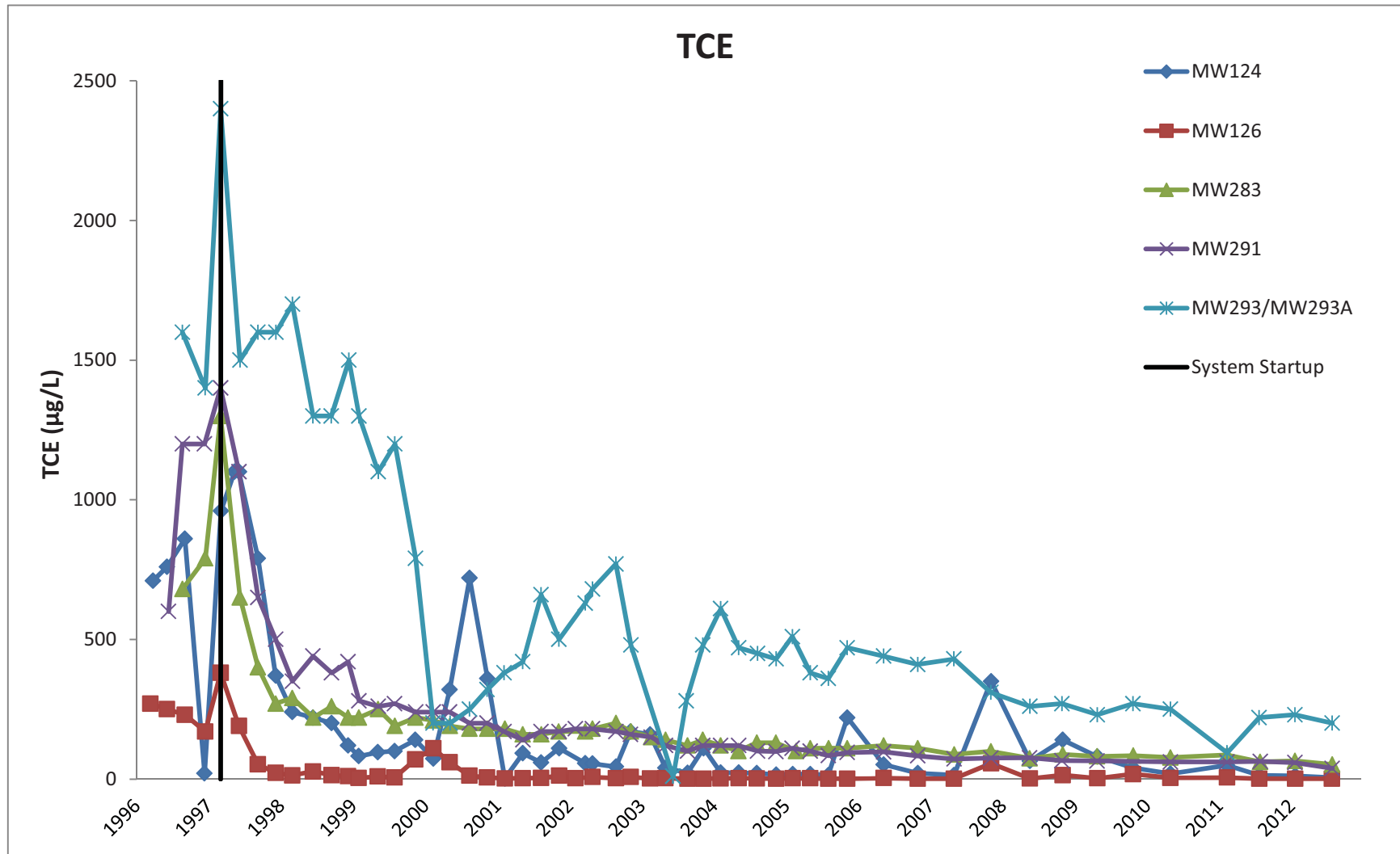
NOTE: Data rejected by validation or assessment have not been graphed.

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



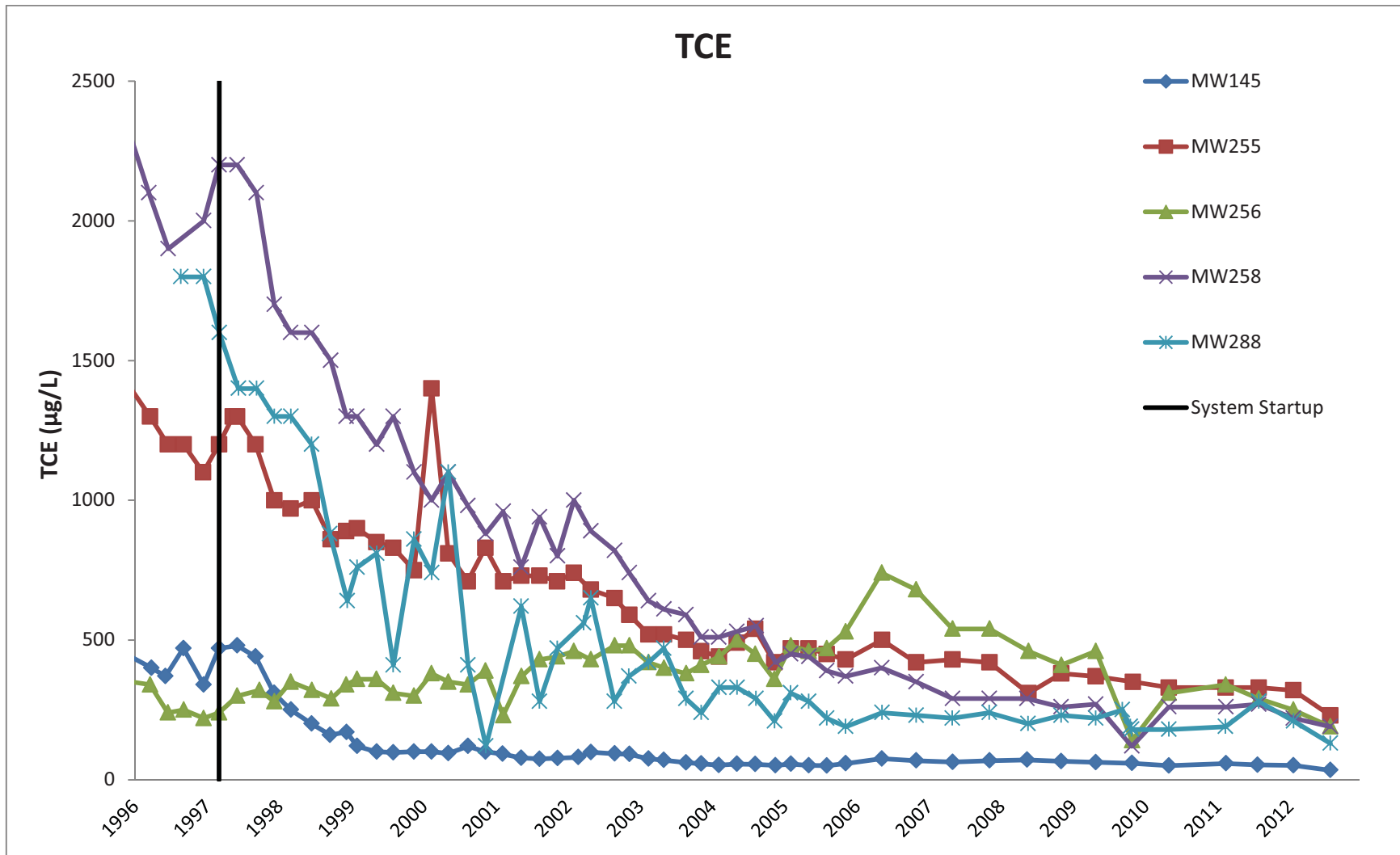
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.5. Northeast Plume Containment System TCE Removed



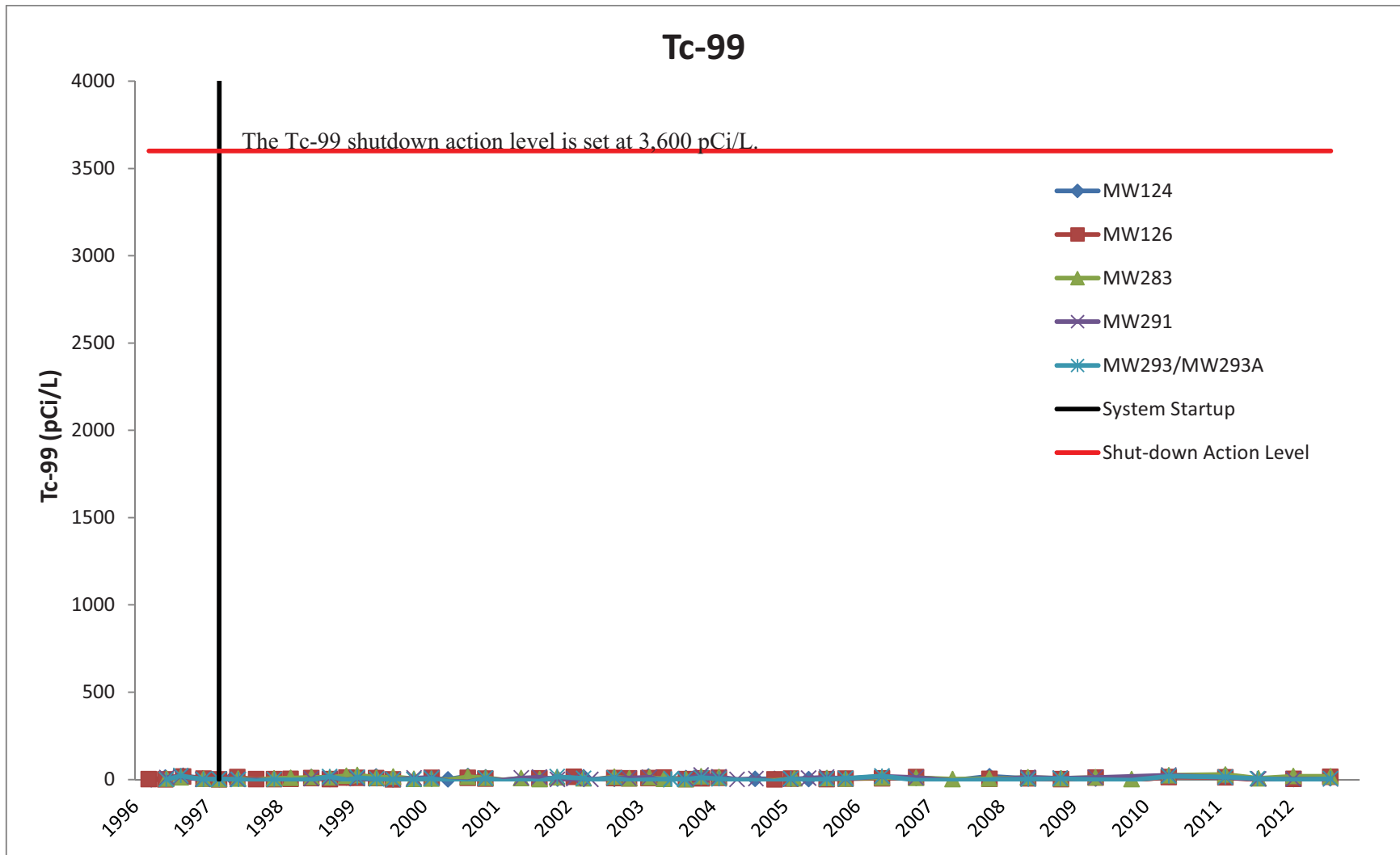
NOTE: Data rejected by validation or assessment have not been graphed.

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



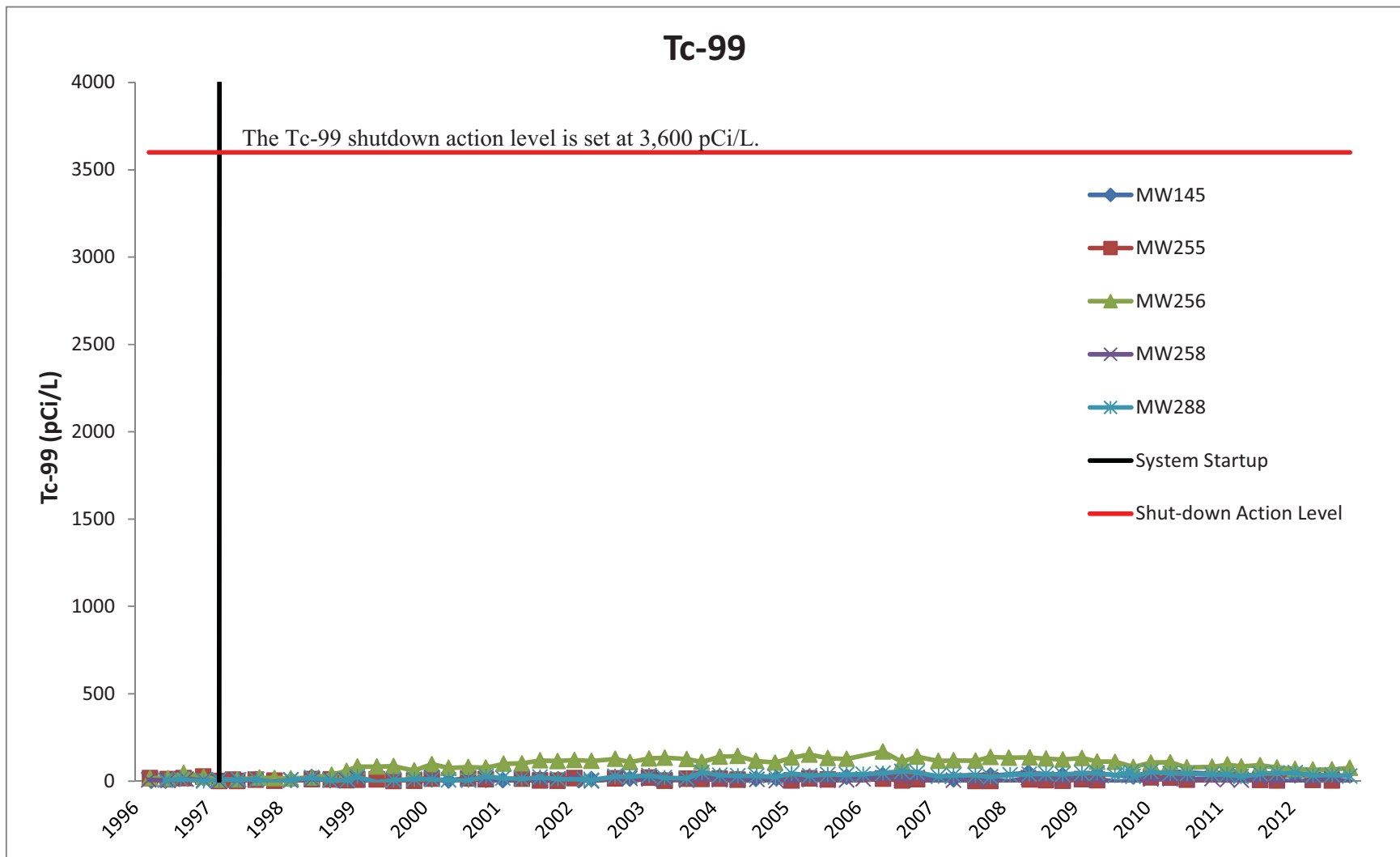
NOTE: Data rejected by validation or assessment have not been graphed.

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



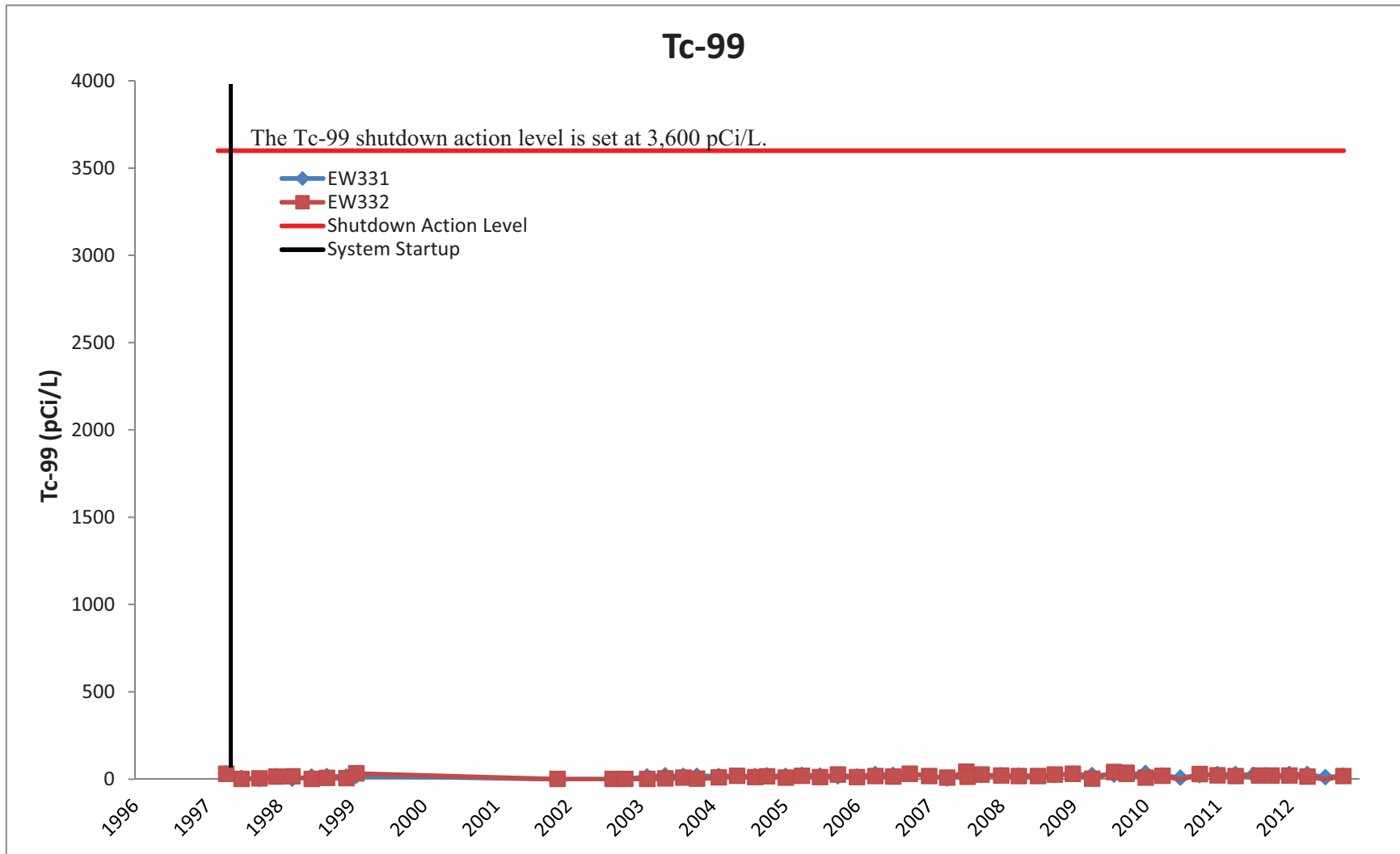
NOTE: Data rejected by validation or assessment have not been graphed.

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



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

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



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

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

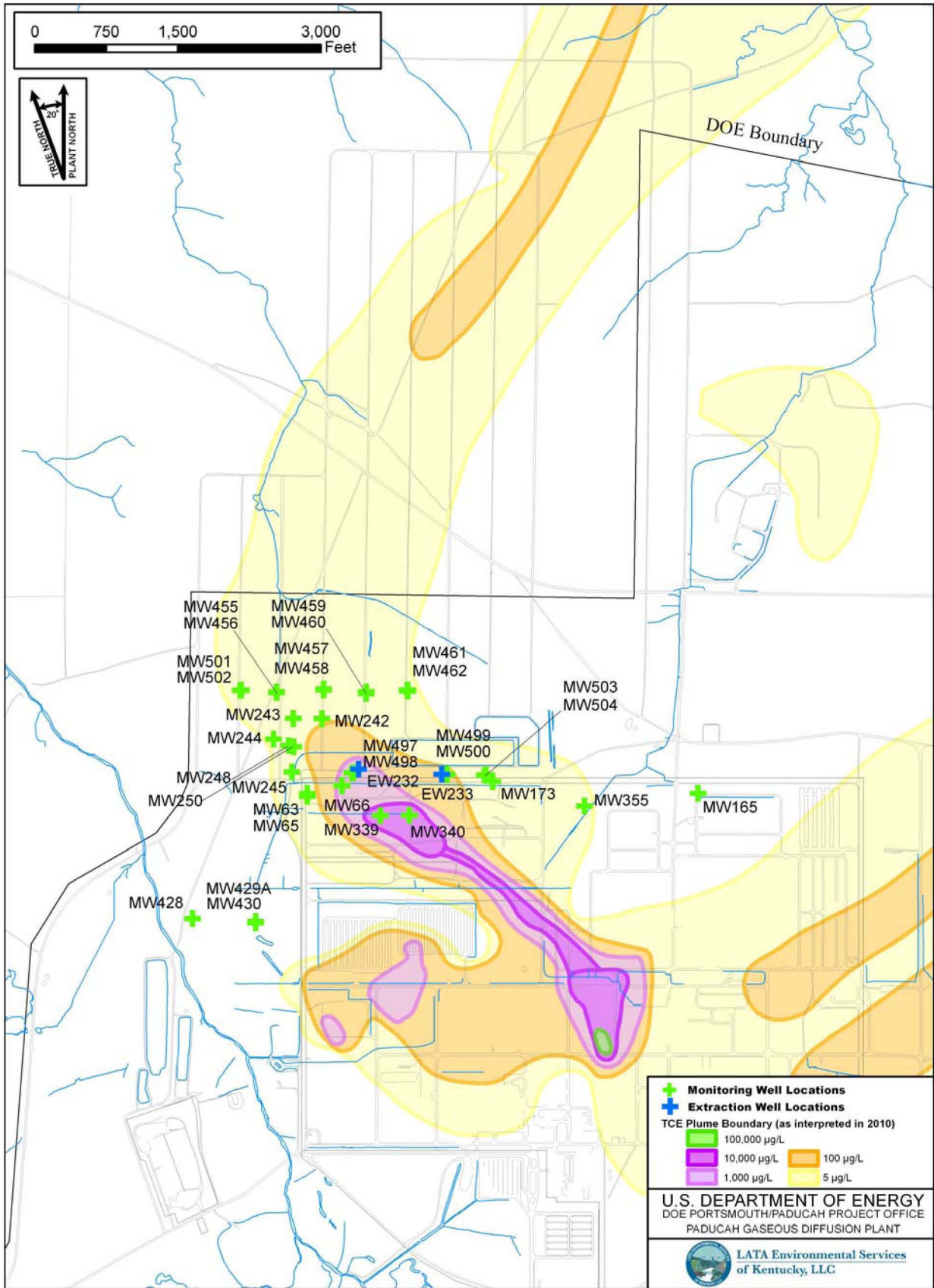


Figure B.11. Northwest Plume Groundwater Wells

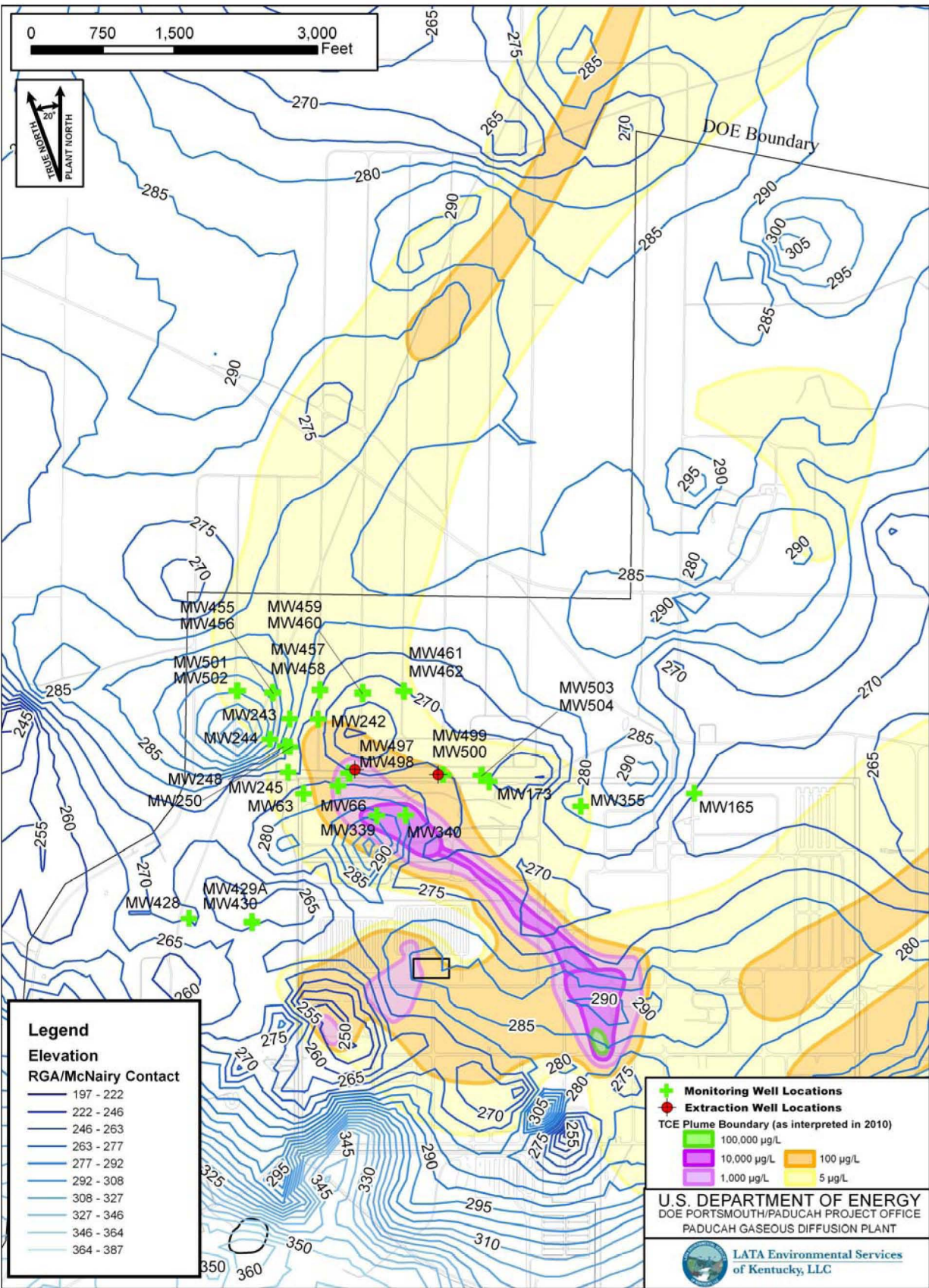
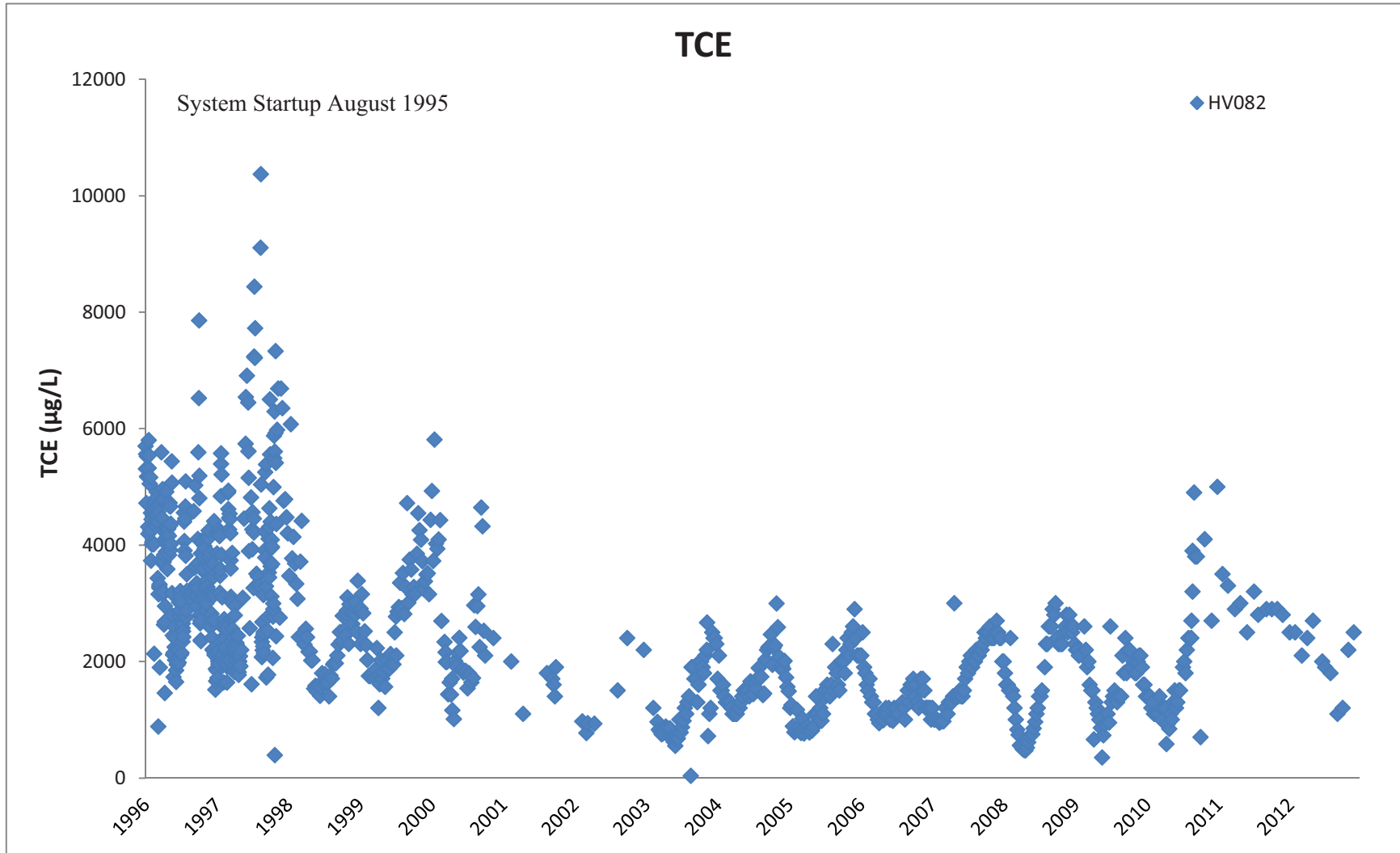


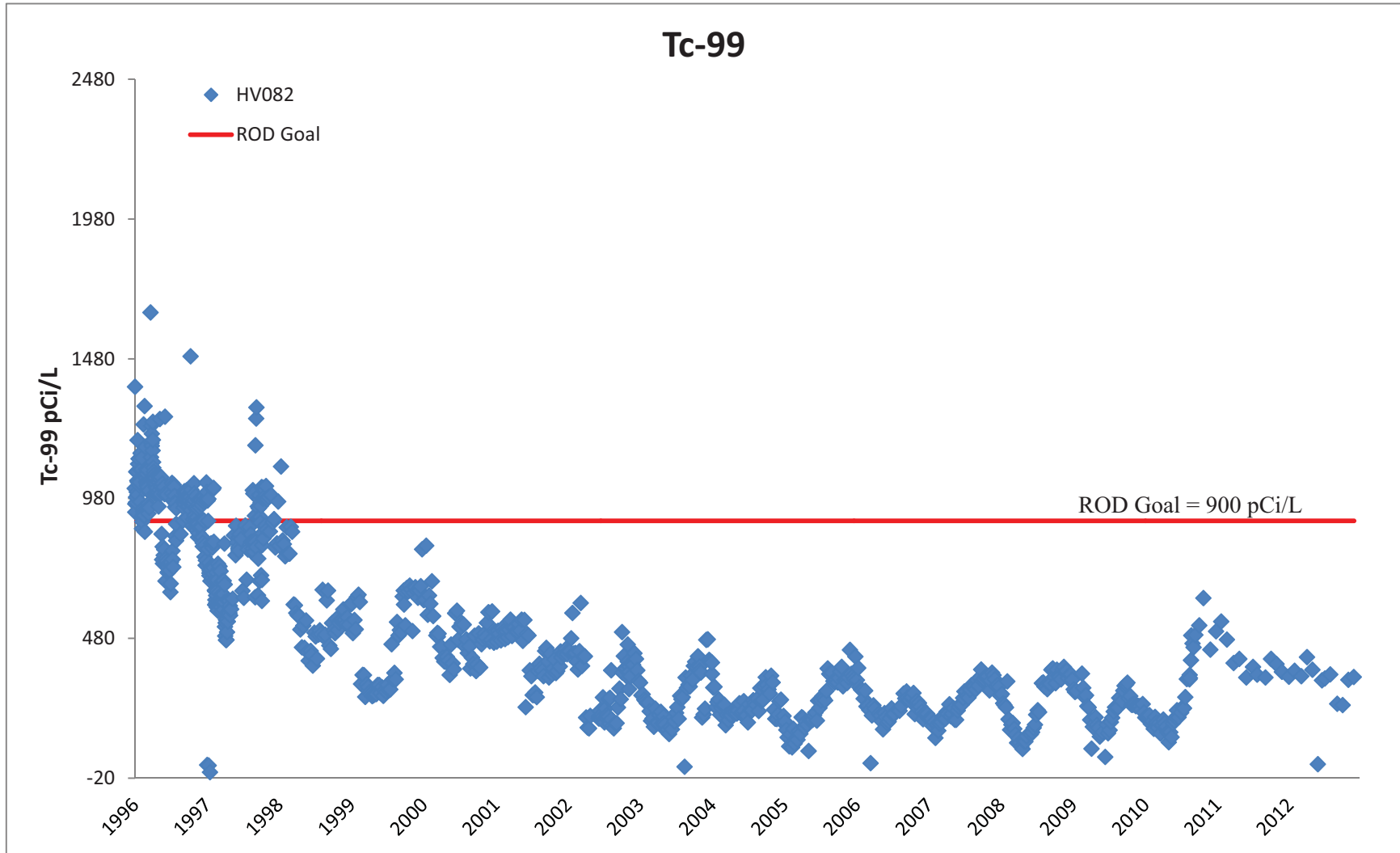
FIGURE No. FFA SemiAnnual20110906_NWP RGA_R1.mxd
DATE 09-15-2011

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



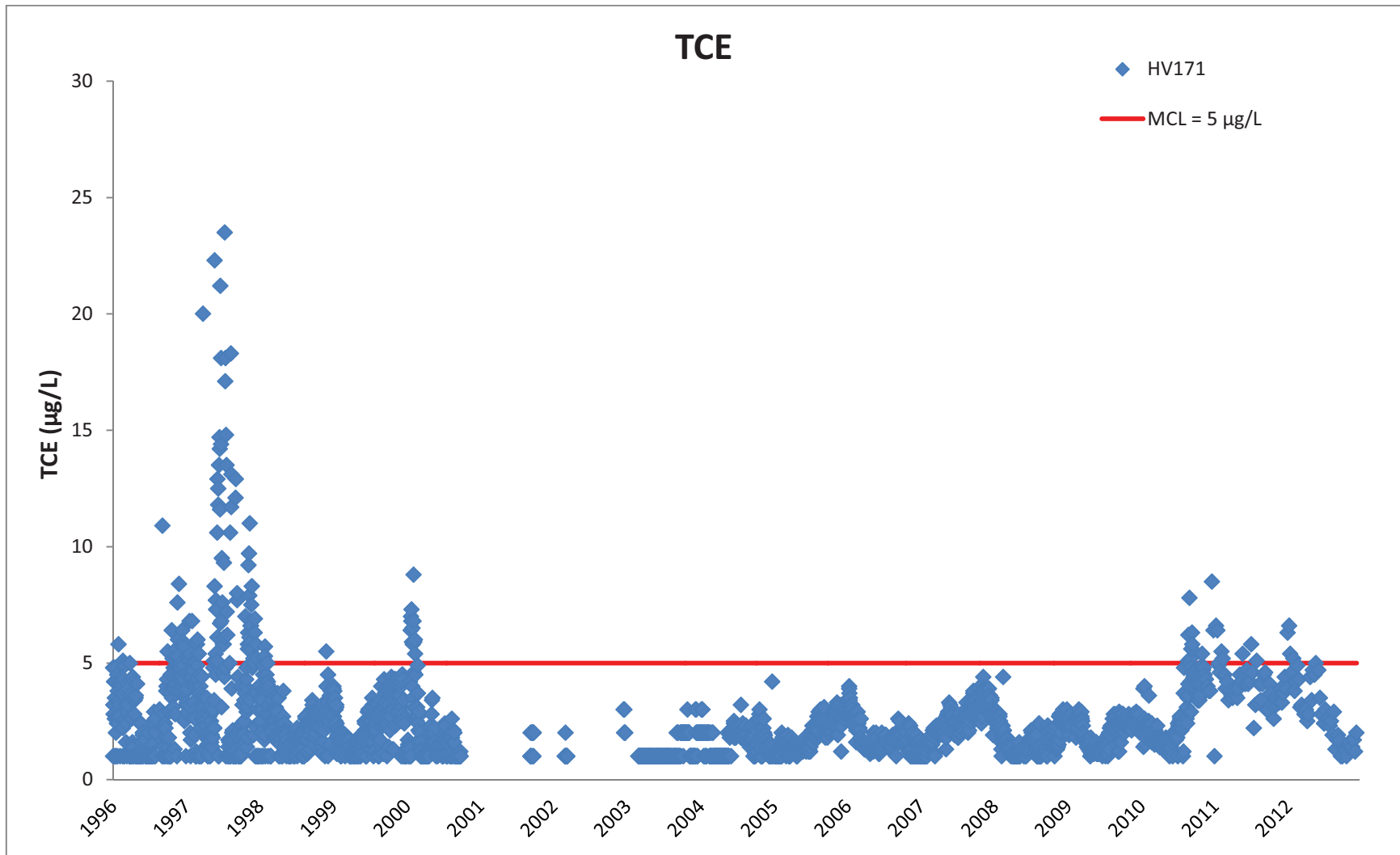
NOTE: Data rejected by validation or assessment have not been graphed.

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



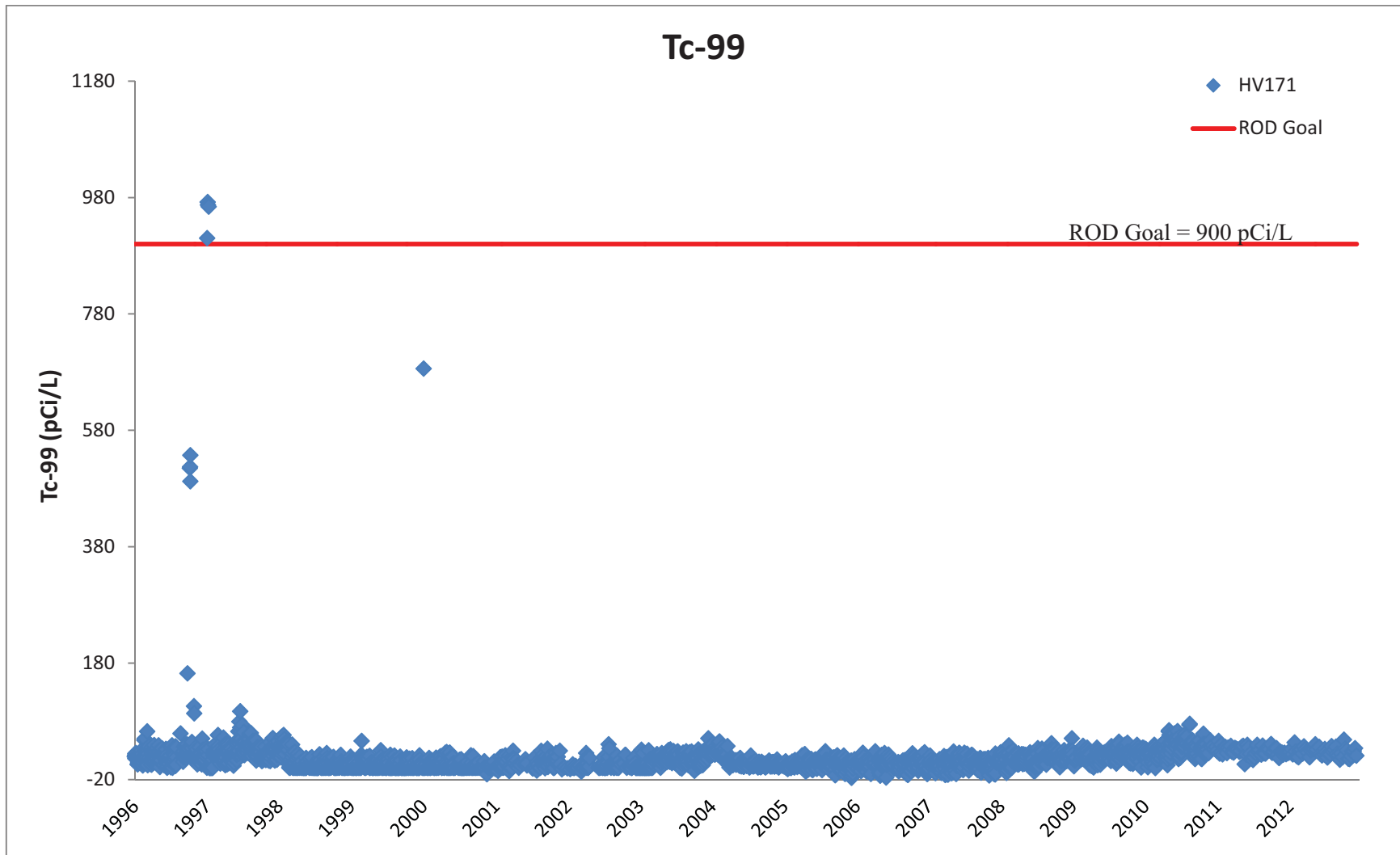
NOTE: Data rejected by validation or assessment have not been graphed.

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



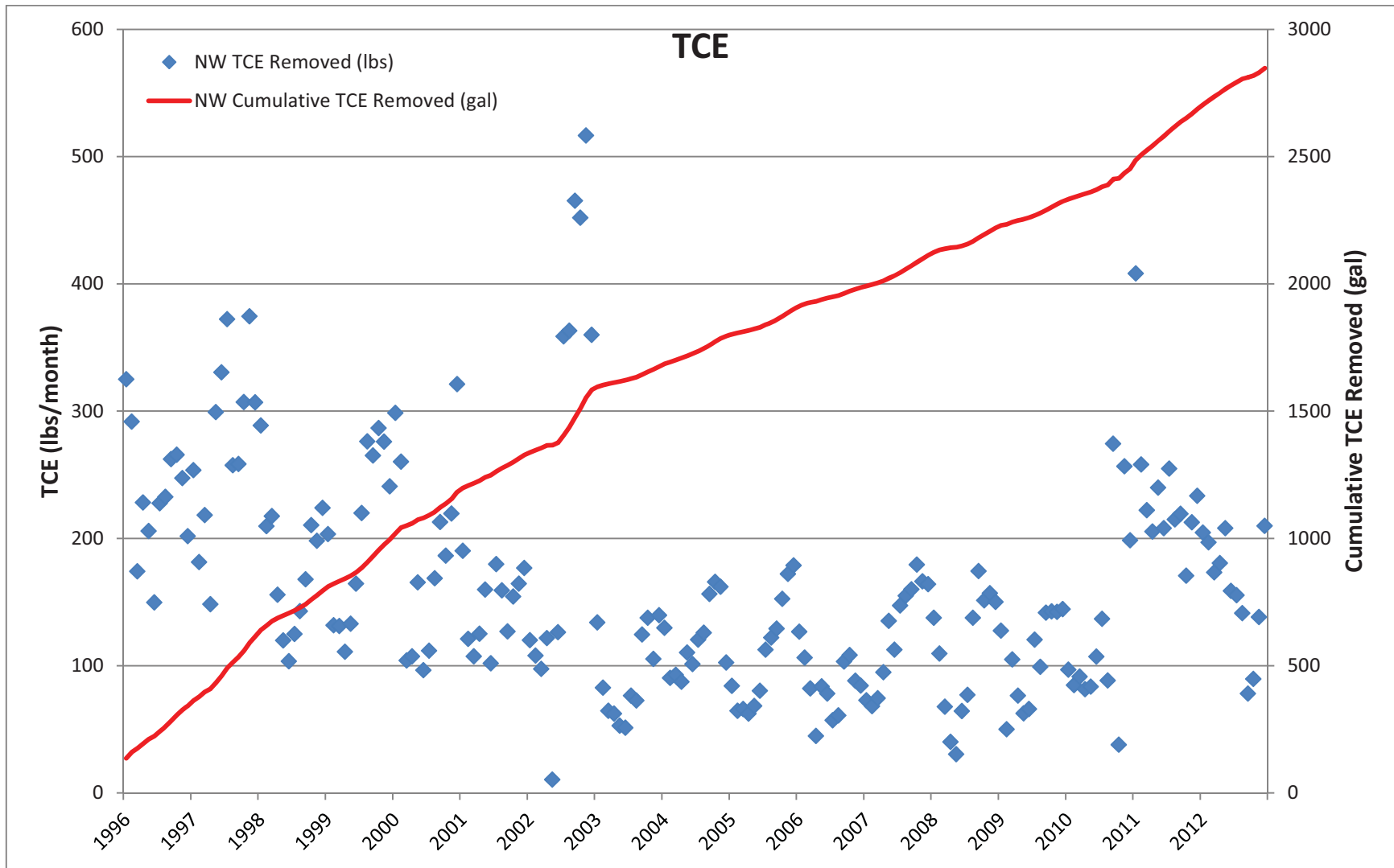
NOTE: Data rejected by validation or assessment have not been graphed.

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



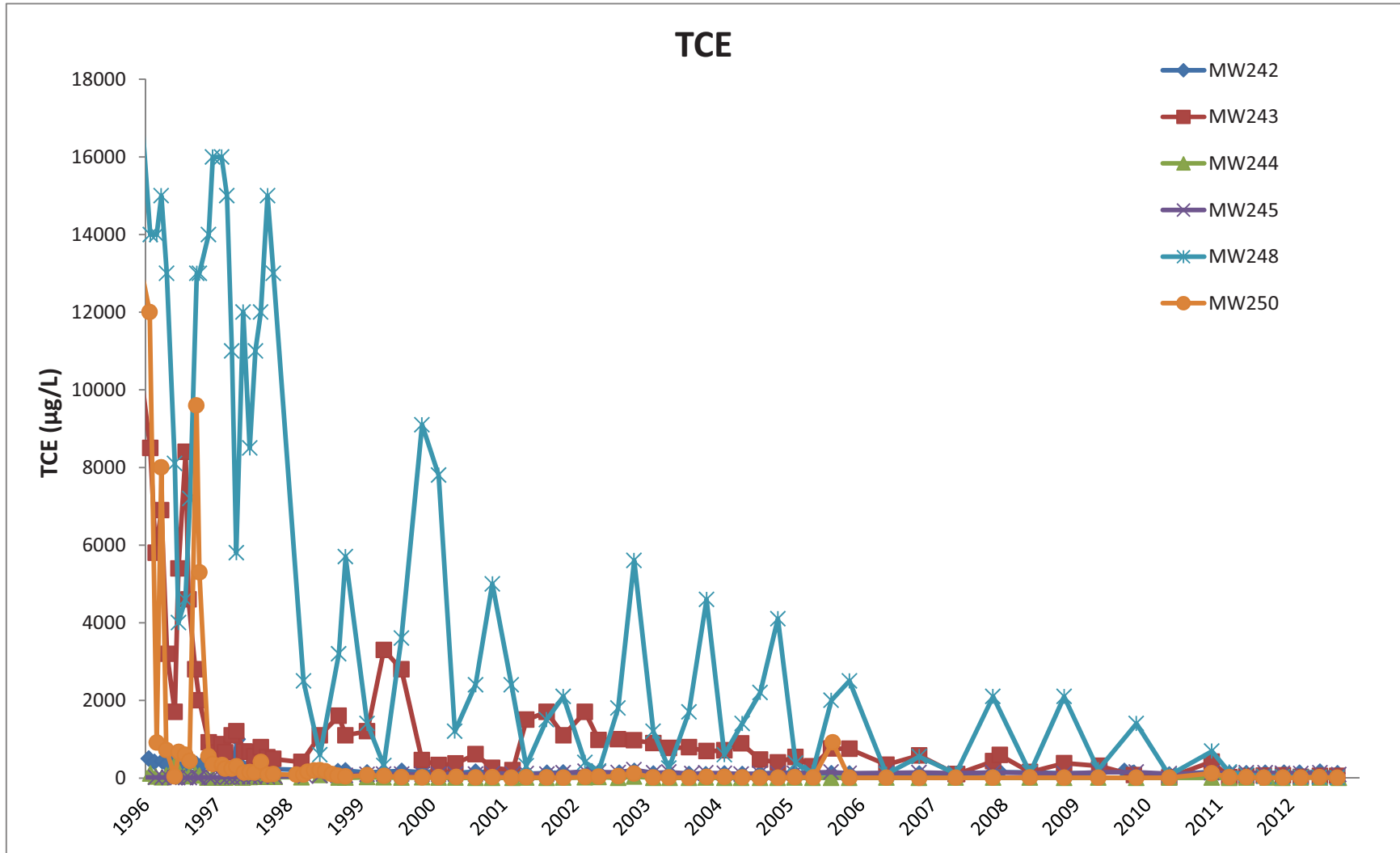
NOTE: Data rejected by validation or assessment have not been graphed.

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



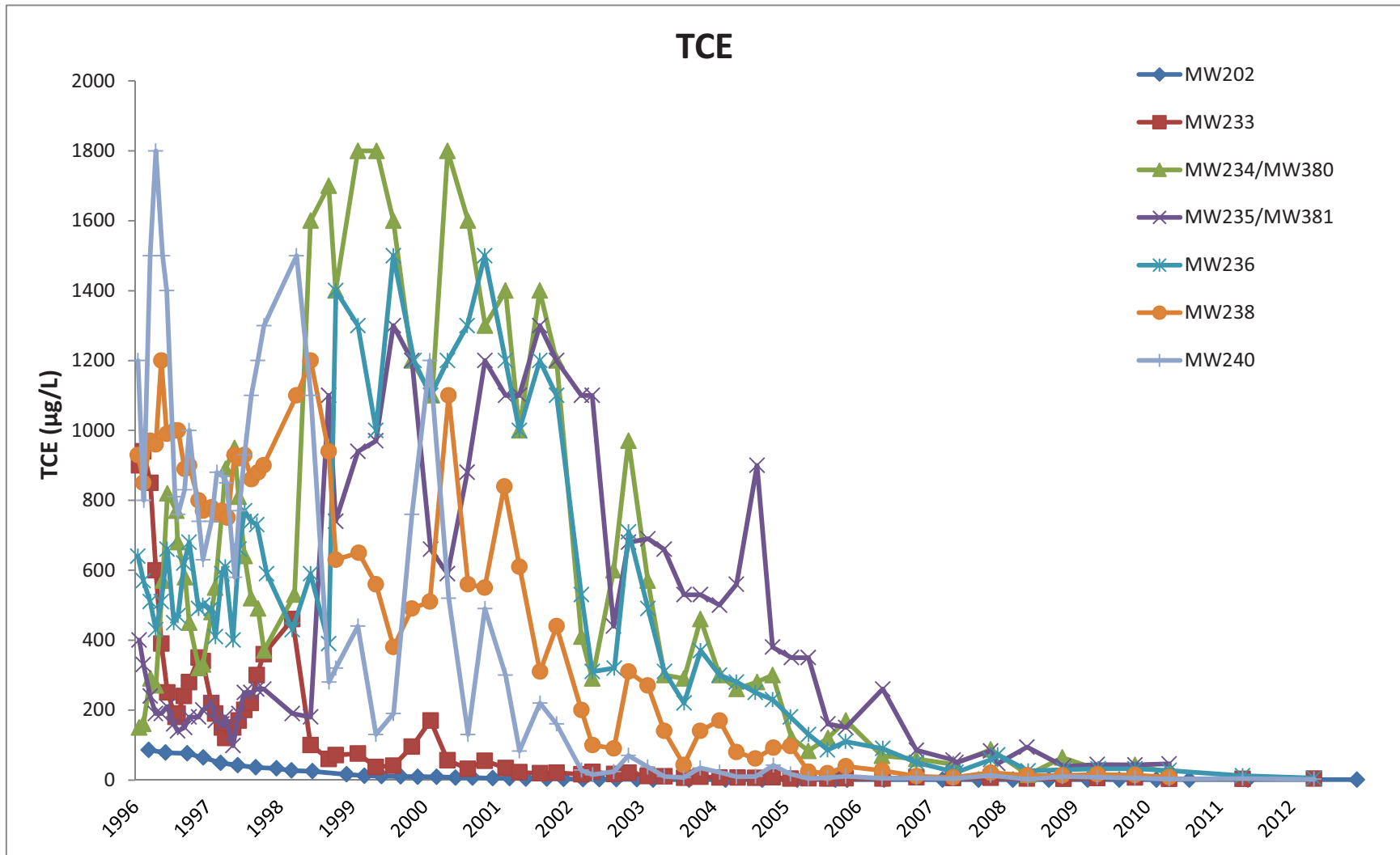
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.17. Northwest Plume Groundwater System TCE Removed



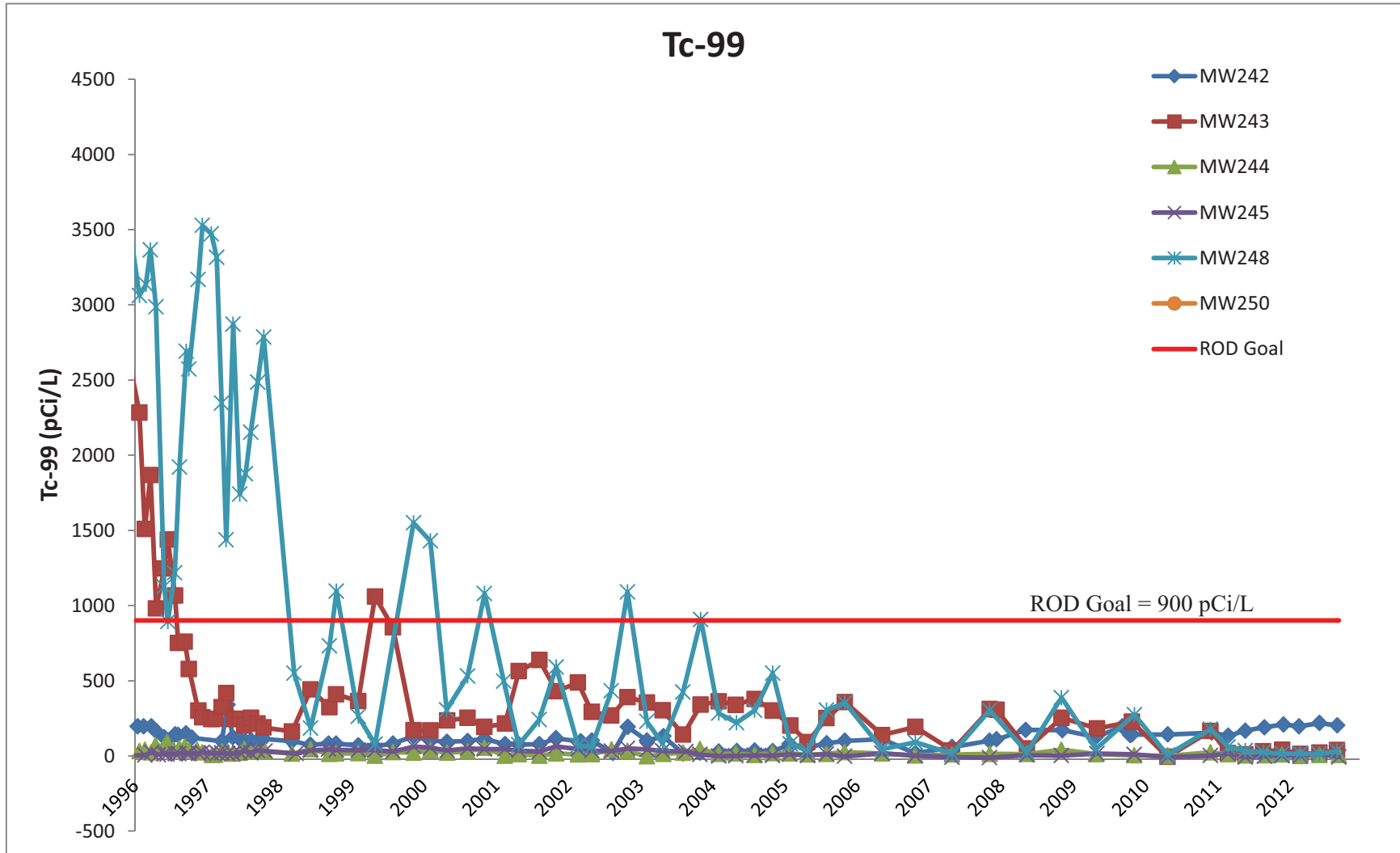
NOTE: Data rejected by validation or assessment have not been graphed.

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



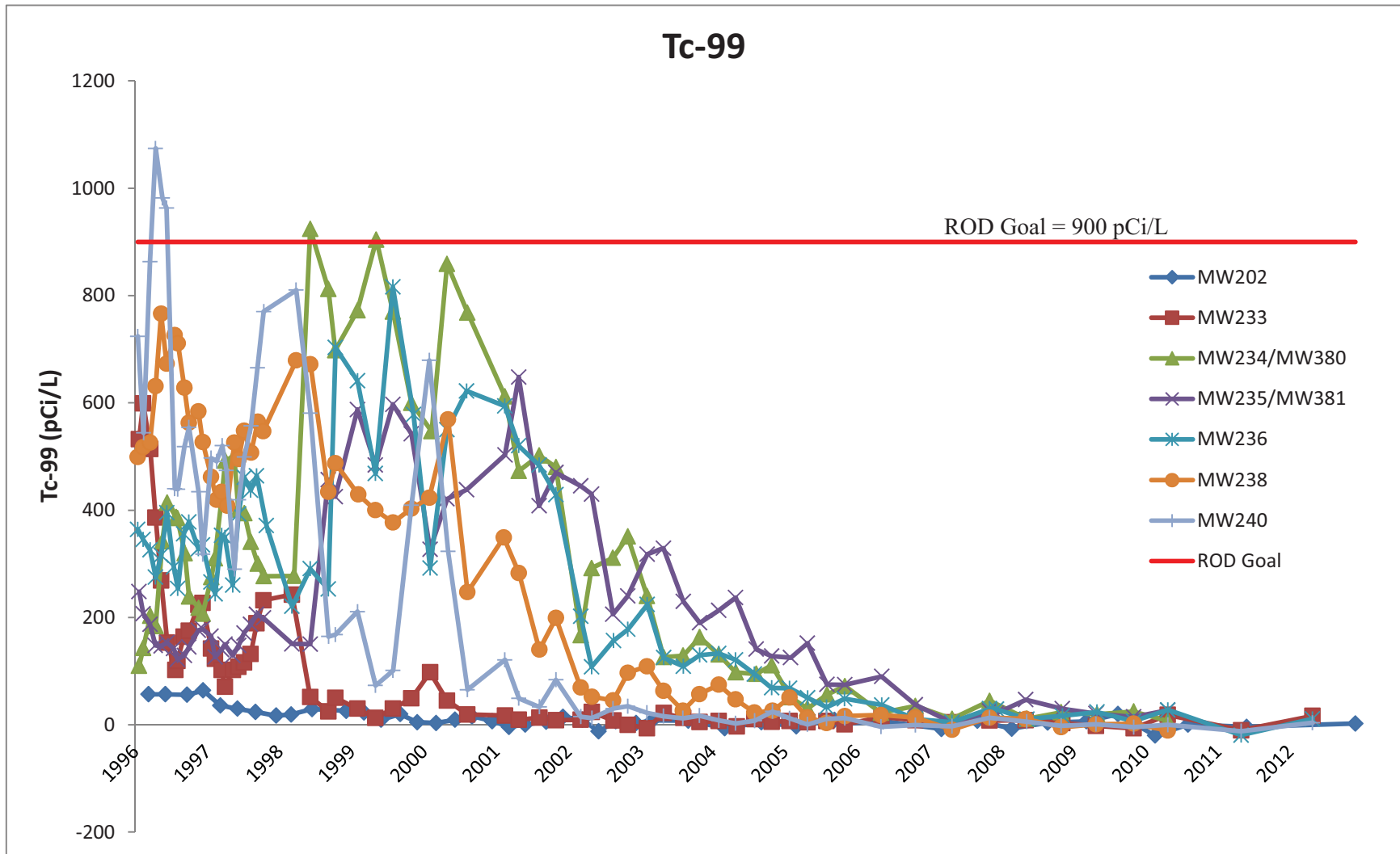
NOTE: Data rejected by validation or assessment have not been graphed.

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



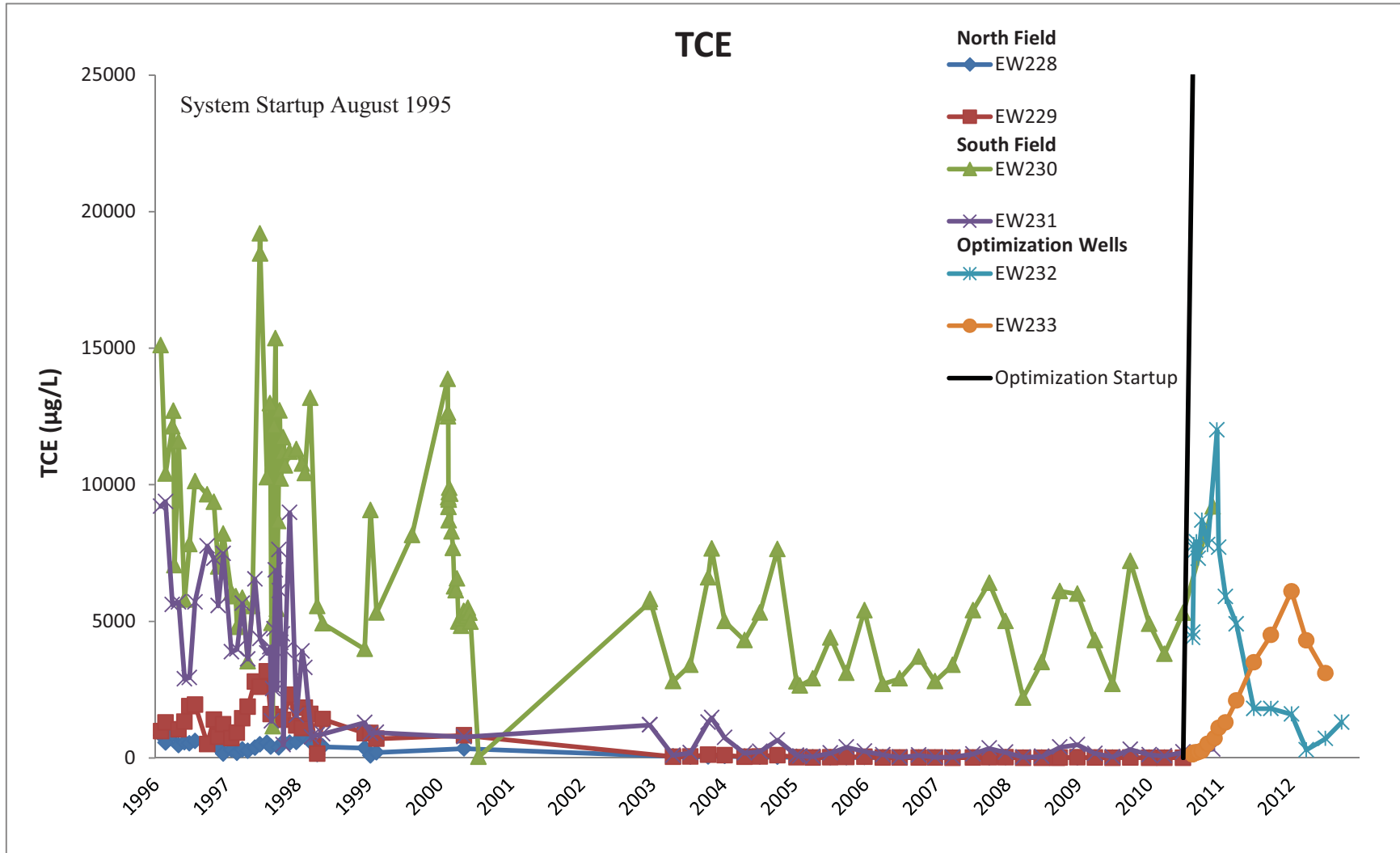
NOTE: Data rejected by validation or assessment have not been graphed.

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



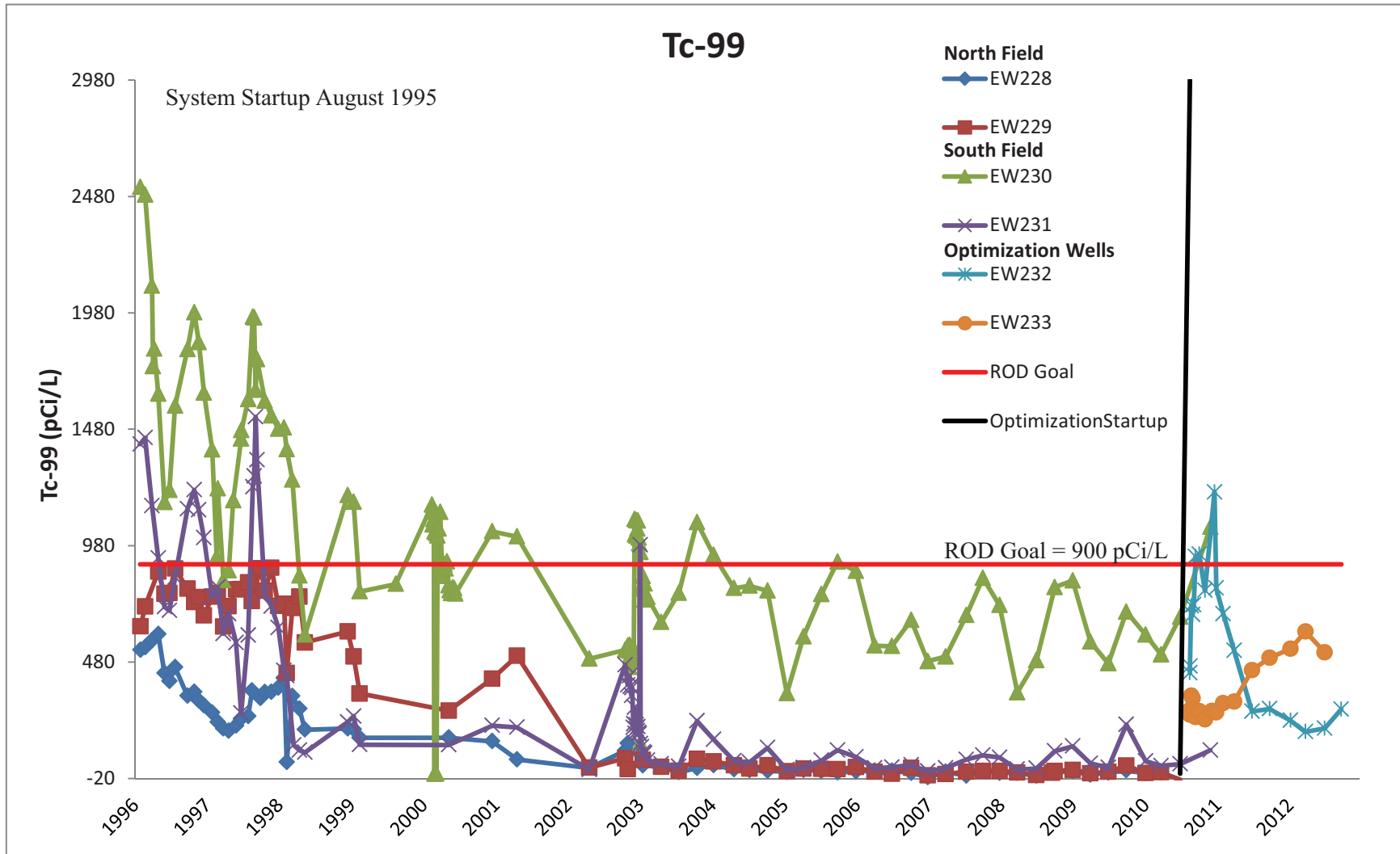
NOTE: Data rejected by validation or assessment have not been graphed.

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



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

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



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

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

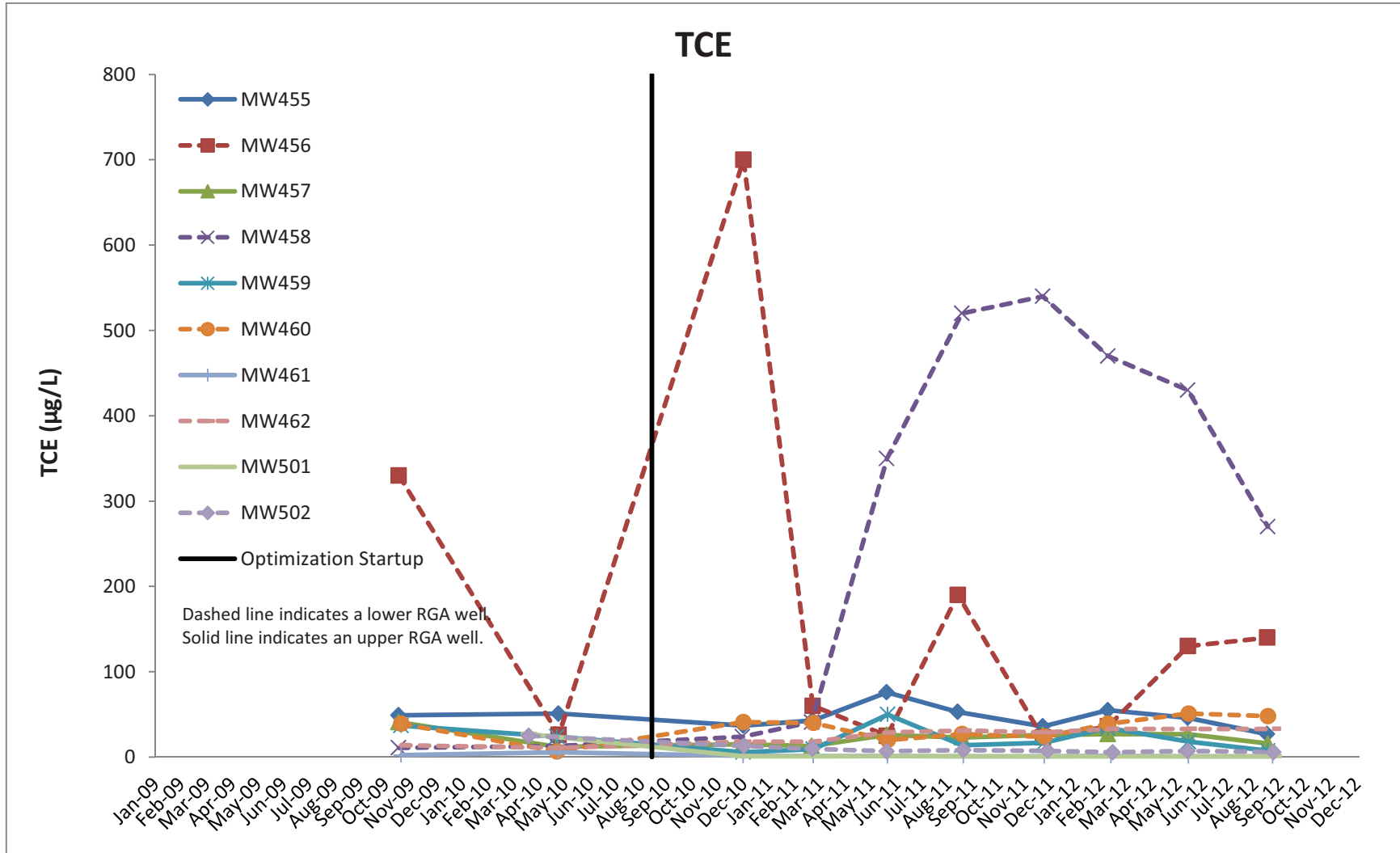


Figure B.24. Northwest Plume—New Well Field TCE Concentrations

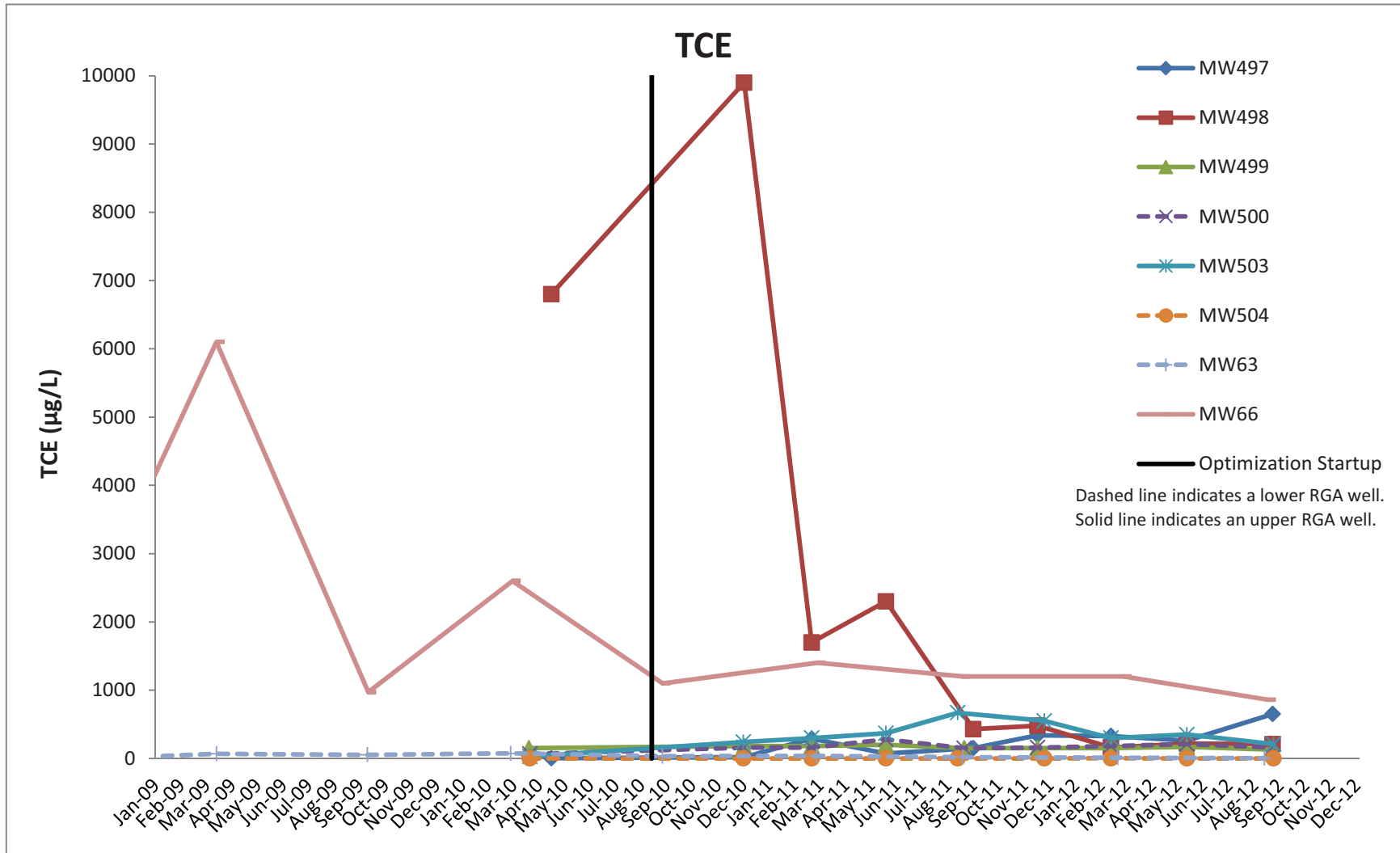


Figure B.25. Northwest Plume—Additional Well Field TCE Concentrations

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APPENDIX C

C-746-K LANDFILL DATA

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C-746-K Landfill groundwater data for reporting period 4/1/2012–10/31/2012 have been included.

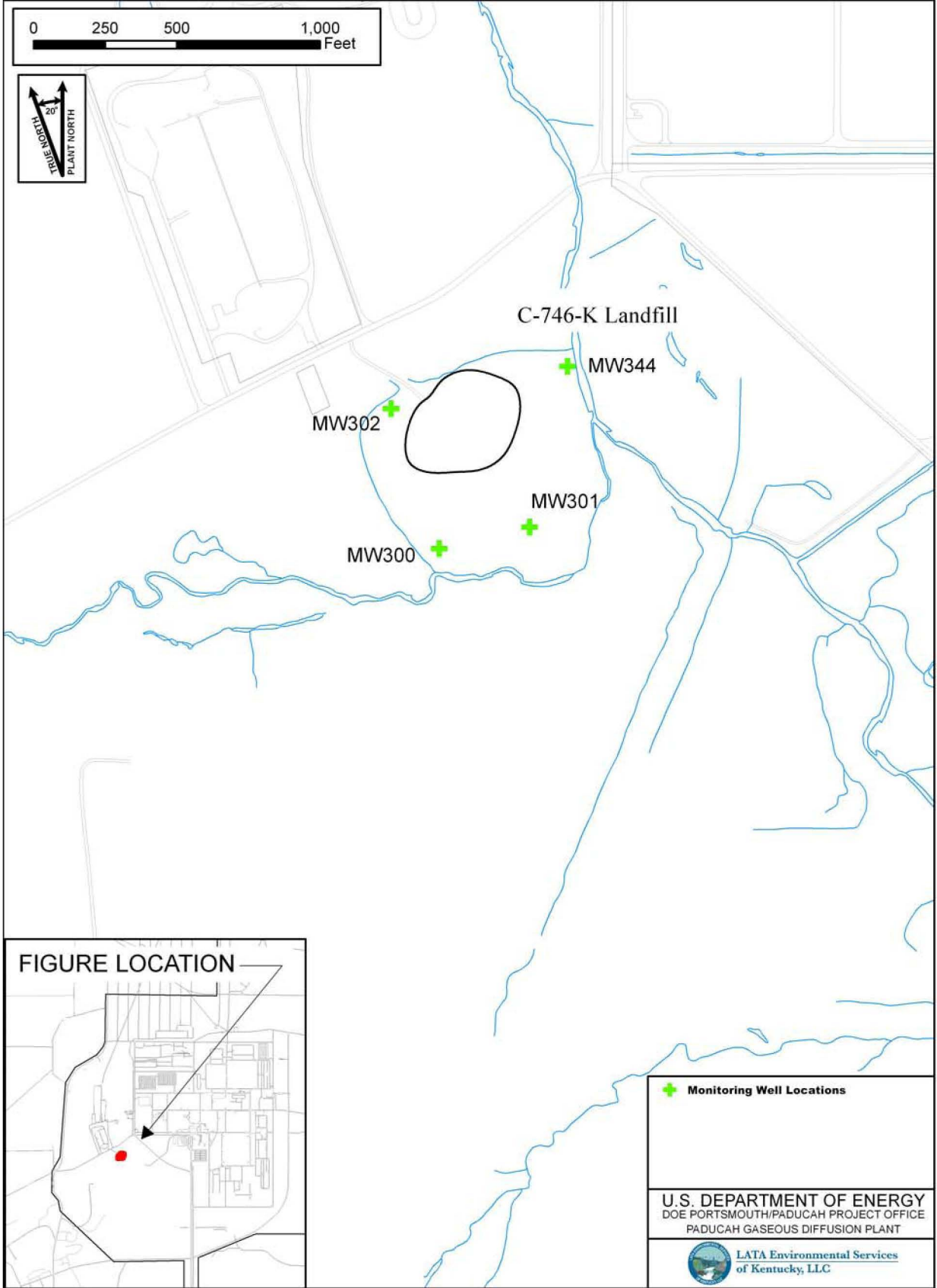


Figure C.1. Monitoring Well Locations

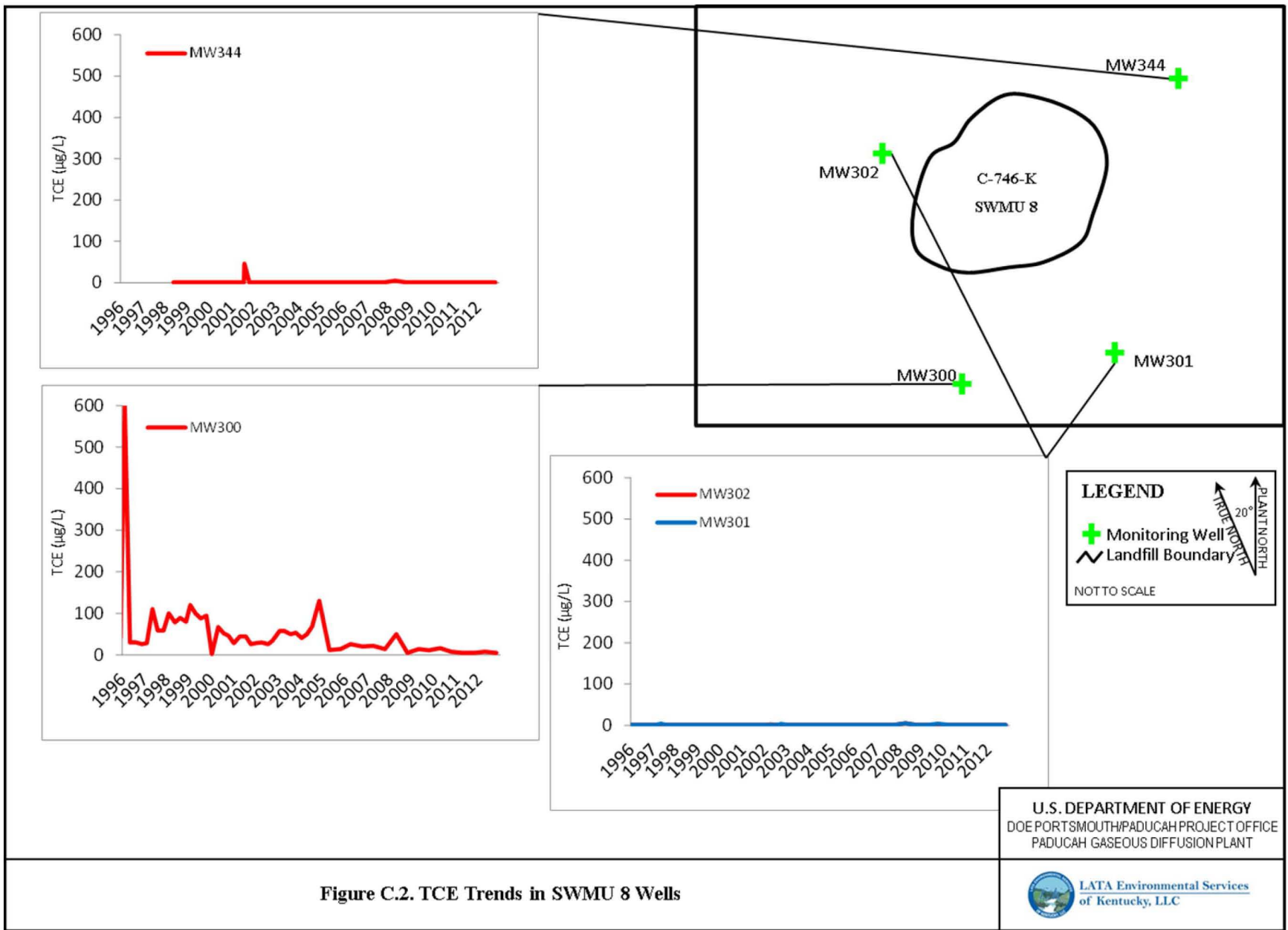


Figure C.2. TCE Trends in SWMU 8 Wells

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



C-746-K Landfill Monitoring

Water Quality Records for

MW300

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

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C-746-K Landfill Monitoring

Water Quality Records for

MW300

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
7/24/2002	26	< 100	< 100	< 100	< 100	12.9	339	26.8	< 47.4	62.2	< 8.97	C022060004
7/24/2002	26	< 100	< 100	< 100	< 100	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003
10/3/2002	34	66	< 50	< 50	< 50	.0101	.33	36.9	< 26.9	< 24.9	17.5	C022760027
1/30/2003	58	160	100	< 50	< 50	10.8	395	23.5	< 3.65	< 3.52	< 1.19	C030310020
4/15/2003	58	180	< 100	< 100	< 100	6.86	437	22.9	< 2.47	< 20.3	< 4.19	C031050068
7/30/2003	42	< 100	< 100	< 100	< 100	21.9	409	27	< 9.4	< 48.7	< 1.31	C032110044
7/30/2003	50	< 100	< 100	< 100	< 100	14.3	382	25.4	< 51.5	53.5	< 4.26	C032110045
10/21/2003	53	92	63	< 50	< 50	.55	497	24.9	< 39.1	< 38	< -4.59	C032950017
1/26/2004	41	120	< 100	< 100	< 100	.471	414	1.91	< 50.1	< 1.36	< 6.71	C040260079
4/21/2004	50	140	< 100	< 100	< 100	.591	327	17.2	< -5.55	< 8.26	< -1.58	C041130033
7/15/2004	68	160	< 100	< 100	< 100	.69	424	24.2	< 21.8	< -11.1	< -7.47	C041970166
7/15/2004	55	140	< 100	< 100	< 100	.882	396	22.9	< 15	< 17.4	< -6.91	C041970167
11/9/2004	130	110	< 100	< 100	< 100	.99	369	22.9	< 12	< 29.7	< -2.6	C043150018
4/27/2005	12	51	< 50	< 50	< 50	.289	126	11.8	< 19.1	39.8	< -2.41	C051170049
10/25/2005	13	55	< 50	< 50	< 50	.259	199	16.1	< 18.1	38.4	< 8.37	C052990007
10/25/2005	14	65	< 50	< 50	< 50	.344	178	15.2	< 2.14	29.6	< 6.49	C052990006
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	46	29	< 25	< 5	< .2	110	16.9	< 5.22	34.8	< 6.45	C08304013002
10/29/2008	< 5	48	32	< 25	< 5	< .2	63.9	15	< 6.06	43.7	< 11.7	C08304013001
4/30/2009	14	93	52	< 5	< 5	< .2	104	27.4	< -.39	37	< 5.55	C09120015001
10/19/2009	9	41	24	< 2	< 2	< .2	65	9.73	< -2.41	27.1	< -8.19	C09292035002
10/19/2009	11	39	24	< 2	< 2	< .2	36.9	11.2	< -1.13	28.4	< -8.36	C09292035001
4/20/2010	16	130	58	< 25	< 5	< .2	121	19.2	< -4.11	33.6	< -1.74	C10110009002
10/13/2010	8	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

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Water Quality Records for

MW300

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
10/19/2011	< 5	71	44	< 5	< 5	.358	78.8	15.8	< 13.2	53.9	< -4.3	C11292015002
4/24/2012	7.8	100	59	< 5	< 5	< 2	218	18.2	< 3.57	80.6	< 3.84	C12115011001
10/29/2012	< 5	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

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C-746-K Landfill Monitoring

Water Quality Records for

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	73.7	10.6	17.2	50.79	< 2.57	C992870106
10/14/1999	< 1	< 5	< 5	< 5	< 5	< .2	73.1	10.3	< 1.83	41.56	< .419	C992870105
1/13/2000	< 1	< 5	< 5	< 5	< 5	< .2	77.8	9.32	< 6.93	52.05	< 6.54	C000130122
4/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	152	15.6	< 4.87	< -6.93	< -12.6	C001190010
7/27/2000	< 1	< 5	< 5	< 5	< 5	< .2	135	14.9	< 2.09	< 4.03	< -2.23	C002090105
10/16/2000	< 1	< 5	< 5	< 5	< 5	< .2	70.6	10.6	< -16.56	63.66	< -2.02	C002910045
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	95.6	12.2	< 6.56	27.9	< -1.62	C010100098
4/16/2001	< 1	< 5	< 5	< 5	< 5	.231	128	13.8	< 11.1	30.1	< 5.23	C011060088
4/16/2001	< 1	< 5	< 5	< 5	< 5	1.86	139	13.8	< 16.1	32.7	< 10.7	C011060087
7/24/2001	< 1	< 5	< 5	< 5	< 5	< .2	106	13.1	< -.871	54.4	< 7.08	C012060010
10/15/2001	< 1	< 5	< 5	< 5	< 5	< .2	107	12.8	< 21.9	37.9	< 5.53	C012880075

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Water Quality Records for

MW301

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	146	14.5	< 3.69	< 28.3	< 2.51	C020250055
1/25/2002	< 1	< 5	< 5	< 5	< 5	< .2	154	15.4	< -2.44	51.6	< 6.3	C020250056
4/10/2002	< 1	< 5	< 5	< 5	< 5	.317	172	16.2	< 19	< 5.09	< .617	C021010049
7/24/2002	< 1	< 5	< 5	< 5	< 5	< .2	186	15.4	< 36.1	< 23.5	17.8	C022060005
10/3/2002	3	< 5	< 5	< 5	< 5	< .002	< .2	14.5	< 5.72	46.8	< 15	C022760029
1/30/2003	< 1	< 5	< 5	< 5	< 5	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	.577	266	19.3	< 17.7	73	< 11.7	C040260081
1/26/2004	< 1	< 5	< 5	< 5	< 5	.39	267	19.6	< 14.9	53.3	< 10.8	C040260080
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	2.9	< 5	< 1	< .2	196	13.7	< -7.51	45.2	< -8.84	C10110009005
4/20/2010	< 1	< 5	3	< 5	< 1	< .2	198	13.8	< 11.5	50.7	< -8.41	C10110009004
10/13/2010	< 1	< 5	1.9	< 5	< 1	< .4	133	11	< -.711	56.4	< -4.72	C10286021005
4/26/2011	< 1	< 5	< 1	< 5	< 1	.247	176	14.5	< 8.21	68	< -13.4	C11116009002

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Water Quality Records for

MW301

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
10/19/2011	< 1	< 5	1.7	< 1	< 1	.298	183	11.8	< 8.7	86.5	< 4.3	C11292015003
4/24/2012	< 1	2.1	< 1	< 1	< 1	< 2	119	9.63	< 5.31	< 35.7	< 2.86	C12115011002
10/29/2012	< 1	< 1	< 1	< 1	< 1	6.98	163	8.35	< 15.1	58.9	< 1.99	C12303019004

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C-746-K Landfill Monitoring

Water Quality Records for

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

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Water Quality Records for

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
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.101	< -4.7	< 3.52	< 2.65	C010100095
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	< .2	< .1	.263	< 3.99	< -.184	< -5.34	C081190049
10/29/2008	< 1	< 1	< 1	< 5	< 1	.23	.281	.319	< 1.16	< .994	< 10.6	C08304013004
4/30/2009	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.215	< 1.78	< 1.17	< 1.39	C09120016001
10/19/2009	2.1	< 1	< 1	< 1	< 1	.493	.425	.433	< .942	< 1.51	< -6.33	C09292035004

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C-746-K Landfill Monitoring

Water Quality Records for

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	
4/20/2010	< 1	< 5	< 1	< 5	< 1	.933	1.5	1.01	< 1.13	< 1.46	< -.868	C10110009001
10/13/2010	< 1	< 5	< 1	< 5	< 1	< .4	.21	.245	< 4.95	< 2.61	< 2.66	C10286021004
4/26/2011	< 1	< 5	< 1	< 5	< 1	< .2	.112	.095	< .402	< 3.67	< -.163	C11116009003
10/19/2011	< 1	< 5	< 1	< 1	< 1	< .2	.235	.208	< 1.9	6.89	< 2.99	C11292015004
4/24/2012	< 1	< 1	< 1	< 1	< 1	< .4	.333	.163	< .867	< .188	< 3.89	C12115011003
10/29/2012	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.0704	< .308	< -.308	< -6.18	C12303019001

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C-746-K Landfill Monitoring

Water Quality Records for

MW344

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

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C-746-K Landfill Monitoring

Water Quality Records for

MW344

Sample Date	Organic Laboratory Analysis Results					Inorganic Laboratory Analysis Results			Radiological Laboratory Analysis Results			Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Al mg/L	Fe mg/L	Mn mg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	12.9	1.61	< .82	< 2.89	< -8.52	C041970170
10/19/2004	< 1	< 5	< 5	< 5	< 5	2.51	13.2	1.56	< -.79	9.99	< -3.88	C042940034
10/19/2004	< 1	< 5	< 5	< 5	< 5	2.99	11.8	1.63	< -2.19	< .172	< 4.34	C042940035
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	4.39	7.54	.167	< 3.64	< 3.59	< -.511	C12115011004
4/24/2012	< 1	< 1	< 1	< 1	< 1	3.92	6.46	.118	< 6.28	< 5.53	< 7.1	C12115011005
10/29/2012	< 1	< 1	< 1	< 1	< 1	2.12	3.89	.143	< .405	< 3.49	< -8.39	C12303019005

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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- Fourth Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFBGOU	08/06/12	PPPO-02-1506073-12B,DOE/LX/07-0130A&D2/R2	TRANSMITTAL OF THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS (SWMUs) 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (BGOU), PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-0130A&D2/R2) AND THE ASSOCIATED CONDITION RESPONSE SUMMARY	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00261
ARFBGOU	08/22/12	KY-12-0336	COMMENTS TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 3, 7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00245
ARFBGOU	08/22/12	PPPO-02-1553058-12	SIGNED MILESTONE MODIFICATION FOR THE BURIAL GROUNDS OPERABLE UNIT SOLID WASTE MANAGEMENT UNITS 2, 3, 7, AND 30 DOCUMENTS	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00247
ARFBGOU	09/04/12	KY-12-0352	EPA REQUESTS EXTENSION FOR REVIEW OF THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS (SWMUs) 2, 3, 7, AND 30 OF THE BURIAL GROUND OPERABLE UNIT AT THE PGDP, PADUCAH, KENTUCKY (DOE/LX/07-1274&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00259
ARFBGOU	09/04/12	KY-12-0341	EXTENSION OF THE REVIEW PERIOD FOR THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130A&D2/R2)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00246
ARFBGOU	09/05/12	KY-12-0344	EPA NOTIFICATION OF EXTENSION REQUEST OF REVIEW PERIOD FOR FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUND OPERABLE UNIT (DOE/LX/07-0130A&D2/R2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00248
ARFBGOU	09/18/12	KY-12-0351	EPA NON-CONCURRENCE OF THE FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUND OPERABLE UNIT AT PGDP (DOE/LX/07-0130a&D2/R2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00254
ARFBGOU	09/25/12	KY-12-0354	EPA CLARIFICATION OF NON-CONCURRENCE OF THE FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUND OPERABLE UNIT AT PGDP (DOE/LX/07-0130a&D2/R2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00255
ARFBGOU	09/26/12	KY-12-0356	[KDEP NON-CONCURRENCE] FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R2)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00257
ARFBGOU	09/26/12	KY-12-0355	EPA EXTENSION REQUEST FOR PROPOSED PLAN FOR SWMUs 5 AND 6 OF THE BURIAL GROUND OPERABLE UNIT AT PGDP (DOE/LX/07-1275&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00256
ARFBGOU	09/28/12	PPPO-02-1597150-12	NOTIFICATION OF FIELD START FOR SAMPLING ACTIVITIES AT SOLID WASTE MANAGEMENT UNIT (SWMU) 4	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00260
ARFBGOU	10/01/12	KY-13-0357	[KDEP] EXTENSION REQUEST FOR COMMENT SUBMITTAL TO THE PROPOSED PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT SOURCE AREAS SWMUs 5 AND 6 (DOE/LX/07-1275&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00258
ARFBGOU	10/23/12	PPPO-02-1700898-13	EXTENSION OF INFORMAL DISPUTE RESOLUTION ON THE FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00273
ARFBGOU	11/09/12	PPPO-02-1719238-13	EXTENSION OF INFORMAL DISPUTE RESOLUTION ON THE FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00279

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Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFBGOU	11/15/12	KY-13-0374	[EPA] EXTENSION REQUEST FOR REVIEW OF THE FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-1274&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00287
ARFBGOU	11/30/12	PPPO-02-1745998-13,DOE/LX/07-0130a&D2/R2	EXTENSION OF INFORMAL DISPUTE RESOLUTION ON THE FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R2)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00292
ARFC-340	10/01/12	PPPO-02-1633890-12	NOTIFICATION OF REMOVAL ACTION START FOR THE PADUCAH C-340 URANIUM METALS PLANT COMPLEX	DOE-PPPO,DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00266
ARFCC	08/28/12	KY-12-0342	[KDEP] APPROVAL OF THE MILESTONE MODIFICATION FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00249
ARFCC	08/30/12	MEM-12-0060	(RECORD OF CONVERSATION) WASTE DISPOSAL ALTERNATIVES EVALUATION PWAC DISCUSSION NOTES (REF: DOE/LX/07-0244&D1)	DOE-PPPO	USEPA-4,USEPA-4	No	ENV 1.A-00250
ARFCC	09/05/12	KY-12-0343	REQUEST FOR EXTENSION OF THE REVIEW PERIOD FOR THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00251
ARFCC	09/06/12	KY-12-0345	EPA COMMENTS ON THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP (DOE/LX/07-0244&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00252
ARFCC	09/12/12	KY-12-0347	COMMENTS ON THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00253
ARFCC	10/29/12	DOE/LX/07-0244&D1,KY-13-0366	EPA COMMENTS ON THE REMEDIAL INVESTIGATION FEASIBILITY STUDY FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, PADUCAH, KY (DOE/LX/07-0244&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00274
ARFCC	11/16/12		MEMORANDUM TO ADMINISTRATIVE RECORD FILE-CERCLA STATUS CODE TITLE CHANGE (FORMERLY 'ON SITE CERCLA CELL WASTE DISPOSITION' to 'CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP')	LATA	SST	No	ENV 1.A-00282
ARFCC	12/06/12	PPPO-02-1737434-13,DOE/LX/07-0244&D2	NOTIFICATION OF SCHEDULE EXTENSION AND MILESTONE MODIFICATION FOR REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP (DOE/LX/07-0244&D2) AND SUBSEQUENT WASTE DISPOSAL ALTERNATIVES EVALUATION DOCUMENTS	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00293
ARFREF	10/26/12	PPPO-02-1630854-13	PADUCAH FEDERAL FACILITY AGREEMENT MODIFICATION FISCAL YEAR 2013 ENFORCEABLE COMMITMENTS APPENDIX C	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00275
ARFREF	10/31/12	KY-13-0367	[KDEP SIGNED] PADUCAH FEDERAL FACILITY AGREEMENT MODIFICATION FISCAL YEAR 2013 ENFORCEABLE COMMITMENTS APPENDIX C	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00276

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Paducah Documents Added to the Administrative Record Files- Fourth Quarter CY2012

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFREF	11/08/12	KY-13-0372	[KDEP APPROVAL] PADUCAH FEDERAL FACILITY AGREEMENT MODIFICATION-FISCAL YEAR 2013 ENFORCEABLE COMMITMENTS-APPENDIX C	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00280
ARFREF	11/15/12	PPPO-02-1630453-12	FEDERAL FACILITY AGREEMENT BUDGET NOTIFICATION CONTINUING RESOLUTION	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00284
ARFS0U	08/01/01	DOE/OR/07-1928&D1	BASELINE HUMAN HEALTH RISK ASSESSMENT AND SCREENING ECOLOGICAL RISK ASSESSMENT FOR THE PROPOSED SITE OF THE UF6 CONVERSION FACILITY, INCLUDING THE EASTERN PORTION OF SWMU 194, MCGRAW CONSTRUCTION FACILITIES (SOUTH SIDE), AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE-PPPO		No	ENV 1.A-00271
ARFS0U	12/01/09	DOE/LX/07-0220&D2/R1	REMOVAL ACTION WORK PLAN FOR SOILS OPERABLE UNIT INACTIVE FACILITIES SWMU 19 AND SWMU 181 AT PADUCAH GASEOUS DIFFUSION PLANT	PRS		No	ENV 1.A-00285
ARFS0U	07/19/11	PPPO-02-1206564-11C	TRANSMITTAL OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0358&D1)	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00288
ARFS0U	10/22/12	KY-13-0363	EXTENSION NOTIFICATION FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT PGDP (DOE/LX/07-0358&D2)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00270
ARFS0U	11/01/12	KY-13-0370	EXTENSION NOTIFICATION FOR THE D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0358&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00277
ARFS0U	11/19/12	KY-13-0376	[KDEP] EXTENSION REQUEST FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-358&D2)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00286
ARFS0U	11/30/12	KY-13-0378	[EPA] EXTENSION REQUEST FOR THE D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0358&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00289
ARFSWOU	01/11/12	PPPO-02-1312714-12B	TRANSMITTAL OF THE WORK PLAN FOR THE SURFACE WATER OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT PGDP, PADUCAH, KENTUCKY (DOE/LX/07-0361&D2)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00267

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6PHASE-PD	04/30/12	PPPO-02-1409494-12B,DOE/LX/07-1271&D1	TRANSMITTAL OF 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, KY (DOE/LX/07-1271&D1)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00265
6PHASE-PD	06/18/12	PPPO-02-1482766-12,DOE/LX/07-1272&D2	TRANSMITTAL OF REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE, FOR THE GROUNDWATER OPERABLE UNIT FOR PHASE IIA VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BLDG AT PGDP	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00281
6PHASE-PD	09/18/12	KY-12-0349	[KDEP] APPROVAL OF THE REMEDIAL ACTION WORK PLAN (RAWP) FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION (IRA) FOR THE VOLATILE ORGANIC COMPOUND (VOC) CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1271&D2/R1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00263
6PHASE-PD	09/18/12	KY-12-0350	[KDEP] APPROVAL OF THE REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE GROUNDWATER OPERABLE UNIT FOR THE PHASE IIa VOC CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1272&D2/R1), PGDP, PADUCAH, KY	KDEP	DOE-PPPO	No	ENV 1.A-00262
6PHASE-PD	09/27/12	PPPO-02-1634296-12	NOTIFICATION [TO KDEP AND USEPA-4] OF FIELD START FOR C-400 PHASE IIa REMEDY IMPLEMENTATION (REF: DOE/LX/07-1272&D2)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00264
6PHASE-PD	10/16/12	KY-13-0361	EPA-REVIEW OF SUPPLEMENTAL TECHNICAL AND COST EVALUATIONS OF IN SITU CHEMICAL OXIDATION AND STEAM ENHANCED EXTRACTION FOR PHASE IIb OF C-400 INTERIM REMEDIAL ACTION AT PGDP (DOE/LX/07-1271&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00268
6PHASE-PD	10/23/12	PPPO-02-1706362-13	TRANSMITTAL OF SCHEDULE FOR MODELING OF STEAM ENHANCED EXTRACTION AS PART OF THE SUPPLEMENTAL TECHNICAL EVALUATION FOR PHASE IIB OF THE C-400 INTERIM REMEDIAL ACTION AT PGDP, PADUCAH, KY	DOE-PPPO,DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00272
GW3-PD	08/21/12	KY-12-0335	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D1 GROUNDWATER OPERABLE UNIT NORTHEAST PLUME REMEDIAL ACTION WORK PLAN	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00244
GW3-PD	10/22/12	KY-13-0379	EPA COMMENTS ON GROUNDWATER FLOW MODEL FOR NORTHEAST PLUME EXTRACTION SYSTEM DESIGN AND EVALUATION AT PGDP	USEPA-4	DOE-PPPO	No	ENV 1.A-00290
SWP-PD	08/28/12	KY-12-0338	(KDWM) APPROVAL OF THE 30% REMEDIAL DESIGN REPORT IN SITU SOURCE TREATMENT USING DEEP SOIL MIXING FOR THE SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT THE C-747-C OIL LANDFARM (SWMU 1) (DOE/LX/07-1276&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00243

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SWP-PD	09/25/12	PPPO-02-1564738-12B	TRANSMITTAL OF THE 60% 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 SWMU 1 AT PGDP (DOE/LX/07-1276&D1)	DOE-PPPO,DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00269
SWP-PD	11/09/12	KY-13-0373	[KDEP] APPROVAL OF THE 60% REMEDIAL DESIGN REPORT IN SITU SOURCE TREATMENT USING DEEP SOIL MIXING FOR THE SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT THE C-747-C OIL LANDFARM (SWMU 1) (DOE/LX/07-1276&D1)	KDEP,KDEP	DOE-PPPO	No	ENV 1.A-00278
SWP-PD	11/16/12	KY-13-0375	[EPA] 60% REMEDIAL DESIGN REPORT IN SITU SOURCE TREATMENT USING DEEP SOIL MIXING FOR SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT C-747-C OIL LANDFARM (SWMU 1) AT PGDP (DOE/LX/07-1276&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00283
SWP-PD	11/29/12	PPPO-02-1642274-12	RECORD OF CONVERSATION REGARDING FINAL CHARACTERIZATION DATA COLLECTION FOR THE SOUTHWEST PLUME SOURCES REMEDIAL ACTION AT C-720 NORTHEAST SWMU 211-A	DOE-PPPO,DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00291

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Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARF4-1	02/11/13	PPPO-02-1780306-13,DOE/OR/07-2179&D2/A2/R2	FINALIZATION OF PHASE 2 BORING LOCATIONS AT SOLID WASTE MANAGEMENT UNIT 4	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00322
ARFBGOU	11/03/06	PPPO-02-169-07,DOE/OR/07-2179&D2/R1	SUBMISSION OF NEW AND MODIFIED PAGES FOR WORK PLAN AND NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE RESOLUTION FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/OR/07-2179&D2/R1)	DOE-PPPO	KDEP,KDEP,US EPA-4	No	ENV 1.A-00294
ARFBGOU	01/23/07	PPPO-02-193-07,DOE/OR/07-2179&D2/R1	CERTIFIED REVISIONS TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/OR/07-2179&D2/R1)	DOE-PPPO	KDEP,USEPA-4	No	ENV 1.A-00295
ARFBGOU	12/17/12	KY-13-0389,DOE/LX/07-1274&D1	EXTENSION REQUEST REVIEW OF DRAFT FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1274&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00305
ARFBGOU	12/19/12	PPPO-02-1757482-13,DOE/LX/07-0130a&D2/R2	TRANSMITTAL OF RESOLUTION AGREEMENT OF INFORMAL DISPUTE FOR THE D2/R2 FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-0130a&D2/R2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00306
ARFBGOU	01/29/13	KY-13-0408,DOE/LX/07-1274&D1	EXTENSION REQUEST REVIEW OF DRAFT FEASIBILITY STUDY FOR SWMUs 2, 3, 7, AND 30 AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-1274&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00314
ARFBGOU	02/08/13	PPPO-02-1815290-13B,DOE/LX/07-0130a&D2/R3	TRANSMITTAL OF THE FEASIBILITY STUDY FOR SWMUs 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130a&D2/R3)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00329
ARFBGOU	02/08/13	PPPO-02-1807741-13,DOE/LX/07-0130a&D2/R2	MILESTONE MODIFICATION FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00323
ARFBGOU	02/12/13	KY-13-0415,DOE/LX/07-0130&D2/R2	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE RESOLUTION OF INFORMAL DISPUTE CONCERNING D2/R2 FEASIBILITY STUDY FOR SWMUs 5 AND 6 BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130&D2/R2) AND SUBSEQUENT DOCUMENTS	KDWM	KNERR R.	No	ENV 1.A-00324
ARFBGOU	02/14/13	KY-13-0416,DOE/LX/07-0130a&D2/R3	LETTER OF CONCURRENCE FOR THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R3)	KDWM	DOE-PPPO	No	ENV 1.A-00325
ARFBGOU	02/15/13	DOE/LX/07-0130a&D2/R3,KY-13-0418	EPA APPROVAL OF THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 5 AND 6 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130a&D2/R3)	USEPA-4	DOE-PPPO	No	ENV 1.A-00330
ARFBGOU	02/21/13	DOE/LX/07-1274&D1,KY-13-0419	ADDITIONAL COMMENTS TO THE FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2,3,7 AND 30 OF THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1274&D1)	KDWM	DOE-PPPO	No	ENV 1.A-00331

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ARFCC	12/11/12	KY-13-0385,DOE/LX/07-0244&D2	[KDWM] APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00304
ARFCC	01/25/13	PPPO-02-1789703-13	EXTENSION REQUEST FOR SUBMITTAL OF THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AT PGDP, DOE/LX/07-0244&D2, AND MILESTONE MODIFICATION OF SUBSEQUENT WASTE DISPOSAL ALTERNATIVES EVALUATION DOCUMENTS	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00317
ARFCC	01/28/13	KY-13-0405,DOE/LX/07-0244&D2	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION FOR THE REMEDIAL INVESTIGATION FEASIBILITY STUDY REPORT FOR CERCLA WASTE DISPOSAL ALTERNATIVES EVALUATION AND SUBSEQUENT DOCUMENTS (DOE/LX/07-0244&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00318
ARFREF	08/23/12	PPPO-02-1546130-12,DOE/LX/07-0244&D1	MILESTONE MODIFICATION FOR THE WASTE DISPOSAL ALTERNATIVES FEDERAL FACILITY AGREEMENT DOCUMENTS (DOE/LX/07-0244&D1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00338
ARFREF	11/14/12	PPPO-02-1703565-13,DOE/LX/07-1284&D1	TRANSMITTAL OF THE D1 FISCAL YEAR 2013 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1284&D1)	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00297
ARFREF	12/04/12	KY-13-0382,DOE/LX/07-1284&D1	EPA COMMENTS ON THE D1 FISCAL YEAR 2013 SITE MANAGEMENT PLAN FOR PGDP (DOE/LX/07-1284&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00298
ARFREF	12/05/12	KY-13-0383,DOE/LX/07-1284&D1	[KDWM] COMMENTS ON THE SITE MANAGEMENT PLAN PADUCAH GASEOUS DIFFUSION PLANT PADUCAH, KENTUCKY ANNUAL REVISION FY 2013 (DOE/LX/07-1284&D1)	KDEP	DOE-PPPO	No	ENV 1.A-00299
ARFREF	12/17/12	PPPO-02-1747378-13,DOE/LX/07-1284&D2	TRANSMITTAL OF THE D2 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, ANNUAL REVISION FY 2013 (DOE/LX/07-1284&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00307
ARFREF	12/20/12	KY-13-0391	[KDWM] APPROVAL OF THE SITE MANAGEMENT PLAN PADUCAH GASEOUS DIFFUSION PLANT PADUCAH, KENTUCKY ANNUAL REVISION FY 2013 (DOE/LX/07-1284&D2)	KDEP	DOE-PPPO	No	ENV 1.A-00300
ARFREF	01/29/13	KY-13-0407	EPA APPROVAL OF D2 FY 2013 SITE MANAGEMENT PLAN FOR PADUCAH GASEOUS DIFFUSION PLANT	USEPA-4	DOE-PPPO	No	ENV 1.A-00313
ARFREF	02/08/13	PPPO-02-1809629-13	EXTENSION OF THE PADUCAH FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00320
ARFREF	03/08/13	PPPO-02-1825834-13,DOE/LX/07-1269&D2/R1	TRANSMITTAL OF THE PADUCAH GASEOUS DIFFUSION PLANT PROGRAMMATIC QUALITY ASSURANCE PROJECT PLAN (DOE/LX/07-1269&D2/R1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00339

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ARFS0U	12/27/12	KY-13-0392,DOE/LX/07-0358&D2	[KDWM] CONDITIONAL CONCURRENCE OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT PGDP (DOE/LX/07-0358&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00301
ARFS0U	12/31/12	KY-13-0393,DOE/LX/07-0358&D2	[EPA] CONDITIONAL CONCURRENCE OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT PGDP (DOE/LX/07-0358&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00302
ARFS0U	01/09/13	DOE/LX/07-358&D2	ADDENDUM TO THE DECEMBER 31, 2012 CONDITIONAL CONCURRENCE OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-358&D2)	USEPA-4	DOE-PPPO	No	ENV 1.A-00308
ARFS0U	01/25/13	PPPO-02-1791285-13,DOE/LX/07-0358&D2	EXTENSION REQUEST OF DEADLINE FOR INVOKING INFORMAL DISPUTE REGARDING CONDITIONAL CONCURRENCE ON THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT PGDP (DOE/LX/07-0358&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00315
ARFS0U	01/28/13	KY-13-0404,DOE/LX/07-0358&D2	APPROVAL OF THE EXTENSION REQUEST FOR INVOKING INFORMAL DISPUTE REGARDING CONDITIONAL CONCURRENCE OF THE D2 SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT (DOE/LX/07-0358&D2)	KDWM	DOE-PPPO	No	ENV 1.A-00316
ARFS0U	02/06/13	KY-13-0412,DOE/LX/07-358&D2	APPROVAL OF THE EXTENSION REQUEST OF DEADLINE FOR INVOKING INFORMAL DISPUTE REGARDING CONDITIONAL CONCURRENCE ON THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT PGDP	USEPA-4	DOE-PPPO	No	ENV 1.A-00319
ARFS0U	02/25/13	KY-13-0422,DOE/LX/07-0358&D2/R1	LETTER OF CONCURRENCE FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT (DOE/LX/07-0358&D2/R1)	KDWM	DOE-PPPO	No	ENV 1.A-00327
ARFS0U	02/25/13	KY-13-0423,DOE/LX/07-0358&D2/R1	APPROVAL OF THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-0358&D2/R1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00326

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6PHASE-PD	09/14/12	PPPO-02-1612644-12,DOE/LX/07-1263&D1	TRANSMITTAL OF SUPPLEMENTAL TECHNICAL AND COST EVALUATIONS OF IN SITU CHEMICAL OXIDATION AND STEAM ENHANCED EXTRACTION FOR PHASE IIB OF THE C-400 INTERIM REMEDIAL ACTION AT PGDP	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00310
6PHASE-PD	12/17/12	KY-13-0388,DOE/LX/07-1263&D1	EXTENSION REQUEST REVIEW OF DRAFT REVISE PROPOSED PLAN FOR THE C-400 CLEANING BUILDING INTERIM REMEDIAL ACTION	USEPA-4	DOE-PPPO	No	ENV 1.A-00303
6PHASE-PD	01/10/13	KY-13-0396,DOE/LX/07-1263&D1	EPA FINAL COMMENTS ON REVISED PROPOSED PLAN FOR VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BLDG AT PGDP (DOE/LX/07-1263&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00309
6PHASE-PD	01/18/13	PPPO-02-1780546-13	TRANSMITTAL OF NUMERICAL SIMULATIONS OF STEAM INJECTION IN THE REGIONAL GRAVEL AQUIFER AT THE C-400 AREA, PGDP, CONDUCTED BY RONALD W. FALTA, PH.D., FALTA ENVIRONMENTAL, LLC, JANUARY 4, 2013	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00311
6PHASE-PD	01/29/13	KY-13-0406,DOE/LX/07-1263&D1	KENTUCKY'S POSITION ON A PATH FORWARD FOR PHASE Iib ACTION TO ADDRESS VOLATILE ORGANIC COMPOUND CONTAMINATION AT C-400 CLEANING BUILDING	KDWM	DOE-PPPO	No	ENV 1.A-00312
6PHASE-PD	02/08/13	PPPO-02-1808339-13,DOE/LX/07-1263&D2	NOTIFICATION OF SCHEDULE EXTENSION FOR THE GROUNDWATER OPERABLE UNIT REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT PGDP (DOE/LX/07-1263&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00321
6PHASE-PD	03/01/13	PPPO-02-1775566-13,DOE/LX/07-1285&D1	TRANSMITTAL OF THE OPERATIONS AND MAINTENANCE PLAN FOR PHASE IIa OF THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC CONTAMINATION AT THE C-400 CLEANING BUILDING AT PGDP (DOE/LX/07-1285&D1)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00335
6PHASE-PD	03/05/13	PPPO-02-1832305-13,DOE/LX/07-1263&D2	EXTENSION REQUEST FOR SUBMITTAL OF THE GROUNDWATER OPERABLE UNIT REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT PGDP (DOE/LX/07-1263&D2)	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00336
6PHASE-PD	03/06/13	KY-13-0428,DOE/LX/07-1263&D2	APPROVAL OF THE EXTENSION REQUEST FOR THE GROUNDWATER OPERABLE UNIT PHASE Iib REVISED PROPOSED PLAN FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING (DOE/LX/07-1263&D2) AND SUBSEQUENT DOCUMENTS	KDWM	DOE-PPPO	No	ENV 1.A-00337
GW3-PD	12/12/12	PPPO-02-1745334-13	TRANSMITTAL OF RESPONSES TO EPA COMMENTS ON NORTHEAST PLUME EXTRACTION SYSTEM WELLFIELD DESIGN AND EVALUATION	DOE-PPPO	USEPA-4,KDEP	No	ENV 1.A-00296
GW3-PD	02/25/13	PPPO-02-1822606-13	MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D1 NORTHEAST PLUME REMEDIAL ACTION WORK PLAN FOR THE GROUNDWATER OPERABLE UNIT AT PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO	USEPA-4,KDWM	No	ENV 1.A-00328
GW3-PD	02/27/13	KY-13-0424	APPROVAL OF THE FEDERAL FACILITY AGREEMENT MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D1 GROUNDWATER OPERABLE UNIT NORTHEAST PLUME REMEDIAL ACTION WORK PLAN	KDWM	DOE-PPPO	No	ENV 1.A-00332

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Paducah Documents Added to the Post-Decision Files- First Quarter CY2013

Document Status	Document Date	Document ID	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
SWP-PD	03/01/13	KY-13-0426,DOE/LX/07-1276&D1	NOTIFICATION OF EXTENSION FOR REVIEW OF 90% REMEDIAL DESIGN REPORT IN SITU SOURCE TREATMENT USING DEEP SOIL MIXING FOR SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT C-747-C OIL LANDFARM (SWMU 1) (DOE/LX/07-1276&D1)	KDWM	DOE-PPPO	No	ENV 1.A-00333
SWP-PD	03/05/13	DOE/LX/07-1276&D1,KY-13-0427	EXTENSION NOTIFICATION FOR THE 90% REMEDIAL DESIGN REPORT IN SITU SOURCE TREATMENT USING DEEP SOIL MIXING FOR THE SOUTHWEST GROUNDWATER PLUME VOLATILE ORGANIC COMPOUND SOURCE AT C-747-C OIL LANDFARM (SWMU 1) (DOE/LX/07-1276&D1)	USEPA-4	DOE-PPPO	No	ENV 1.A-00334

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APPENDIX E

C-400 PROJECT GROUNDWATER MONITORING WELLS DATA

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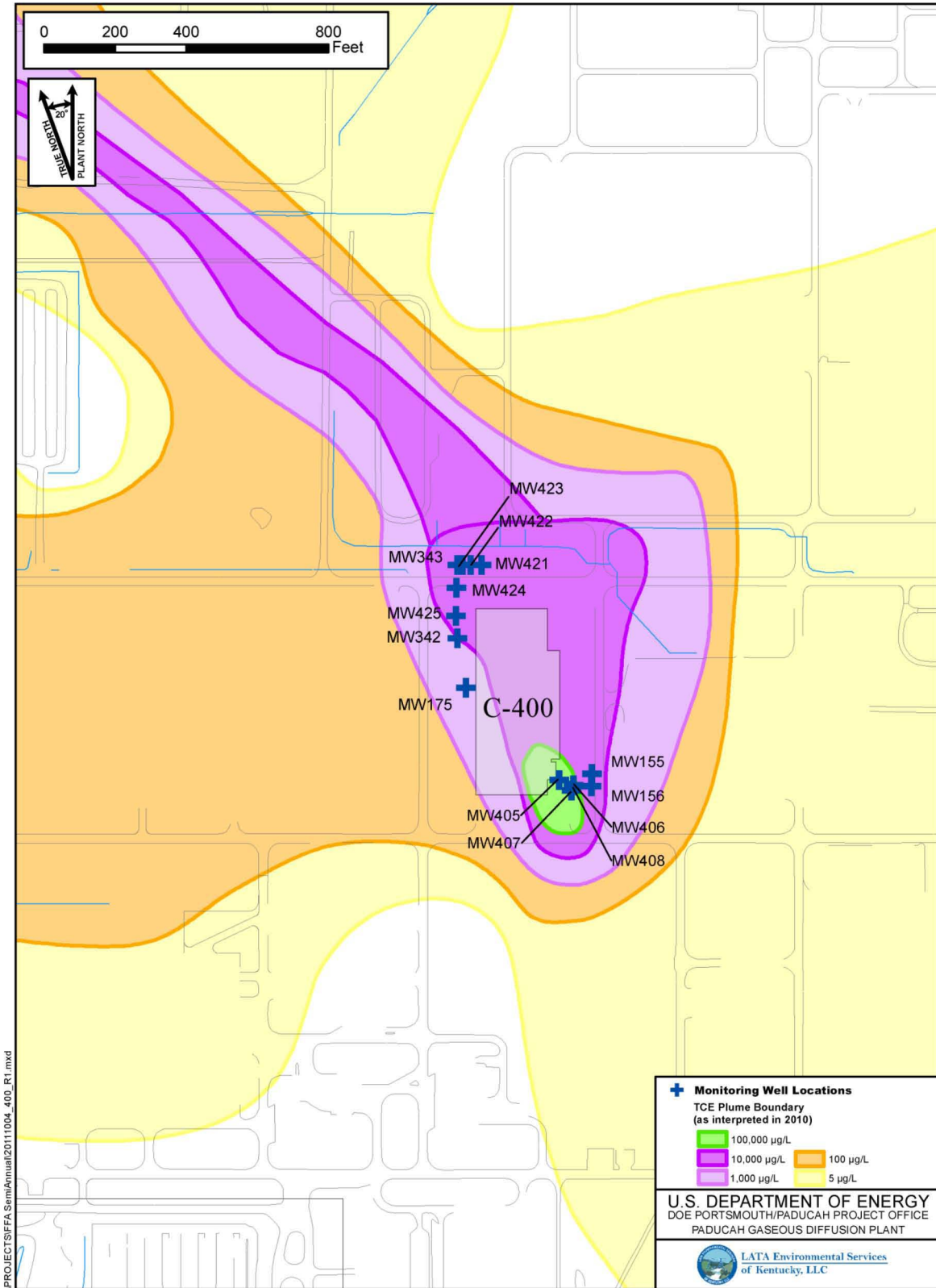


Figure E.1. C-400 Monitoring Wells

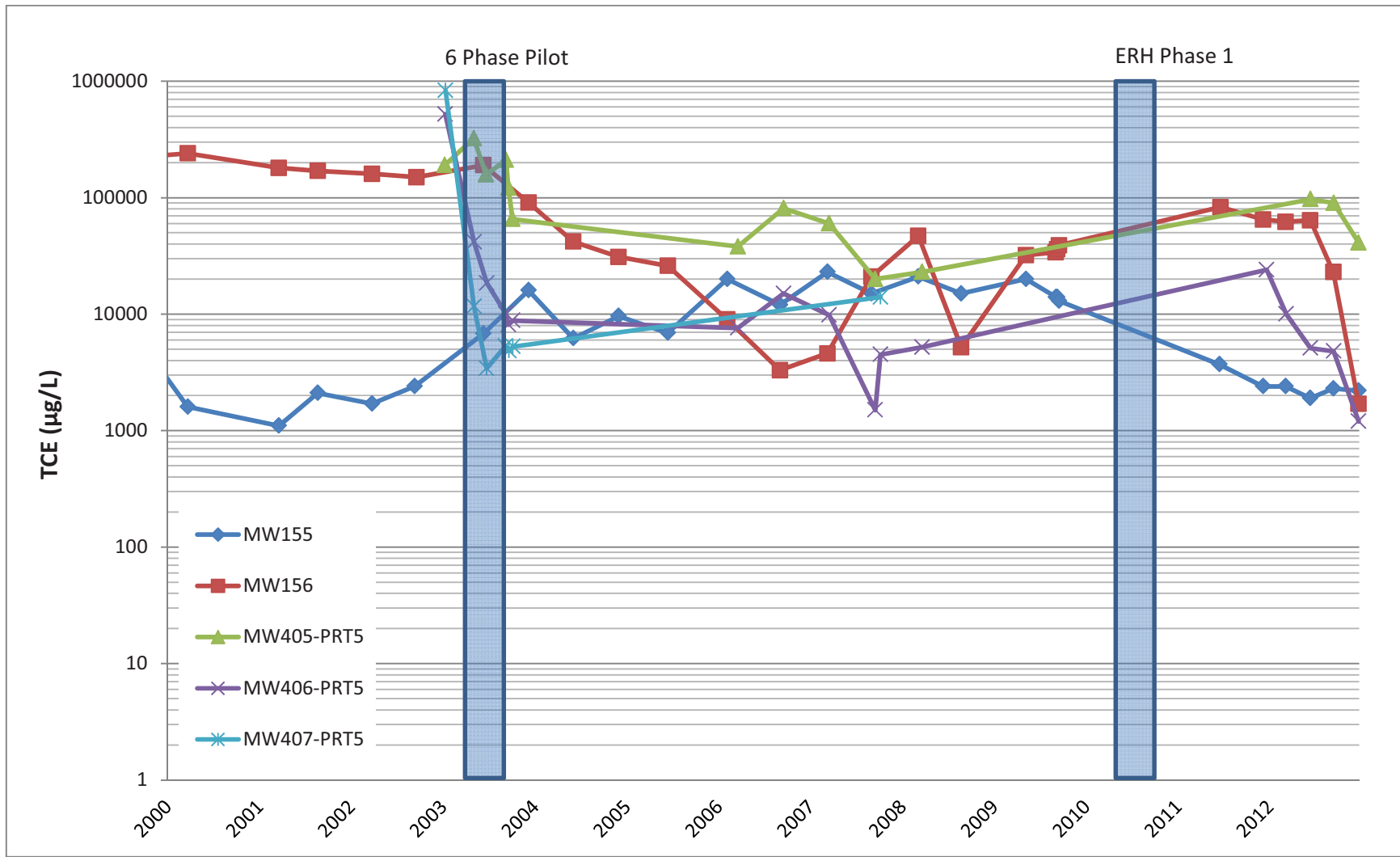


Figure E.2. C-400 TCE Trends in MWs in Source Areas

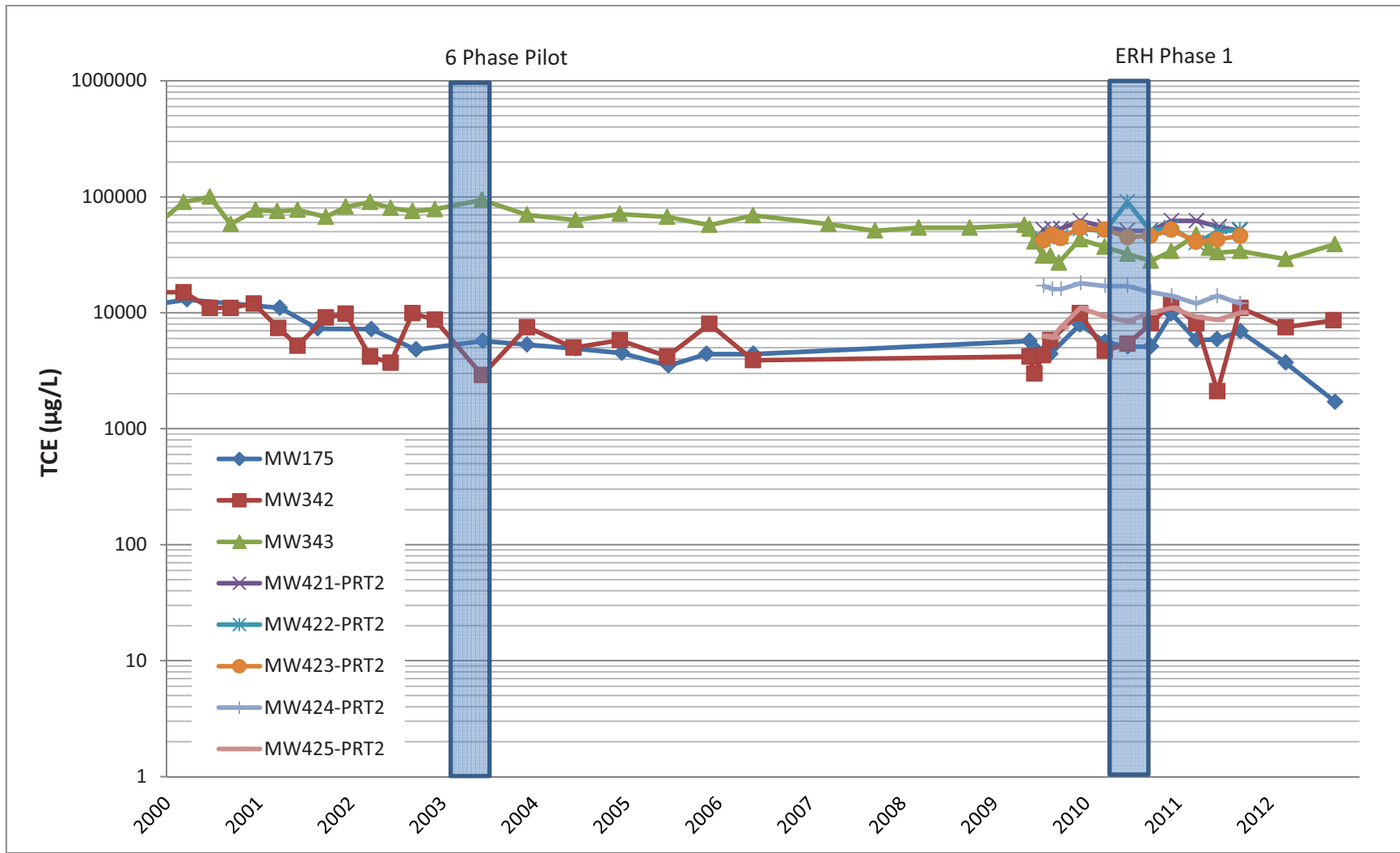


Figure E.3. C-400 TCE Trends in MWs Downgradient of Source Areas

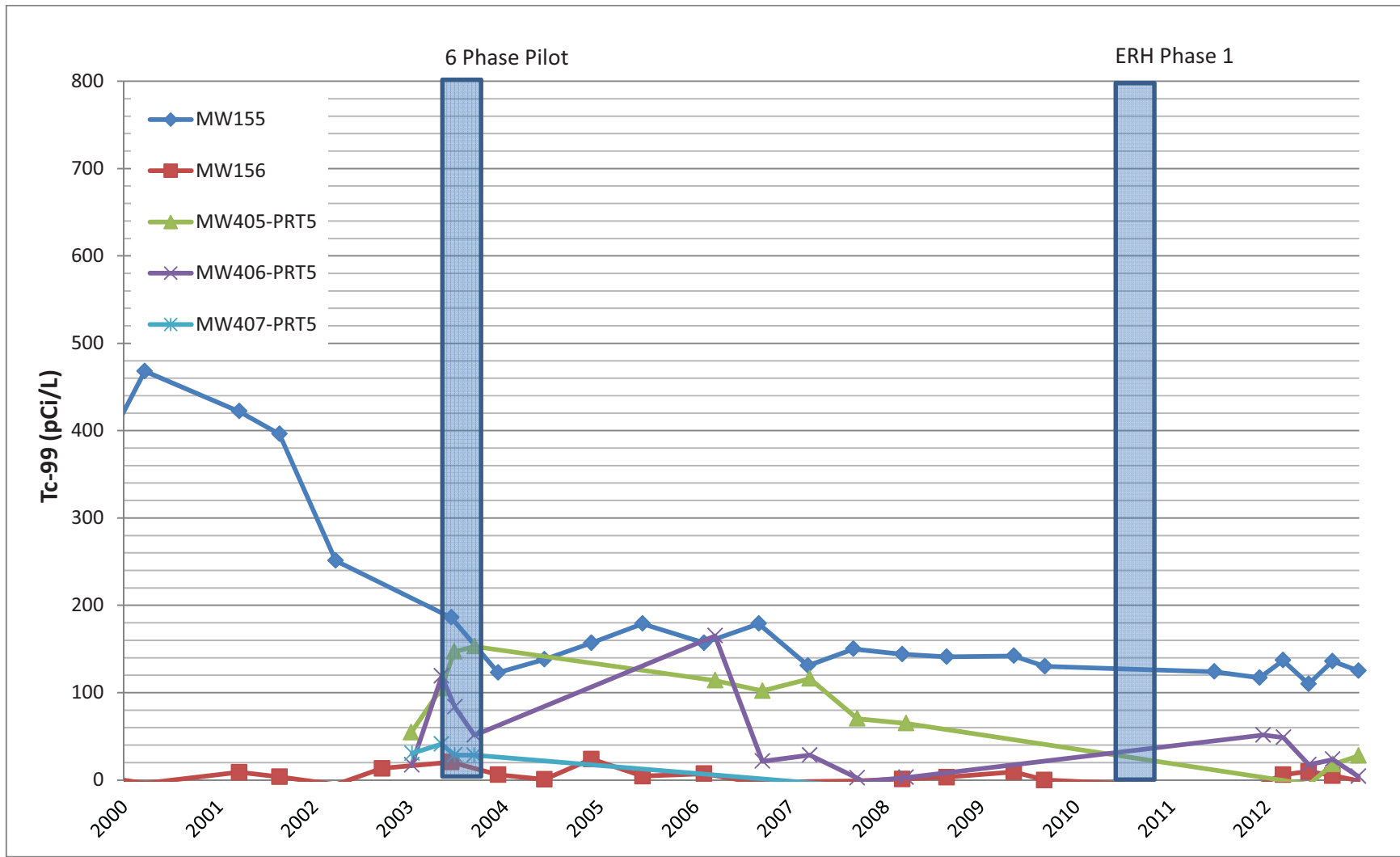


Figure E.4. C-400 Tc-99 Trends in MWs in Source Areas

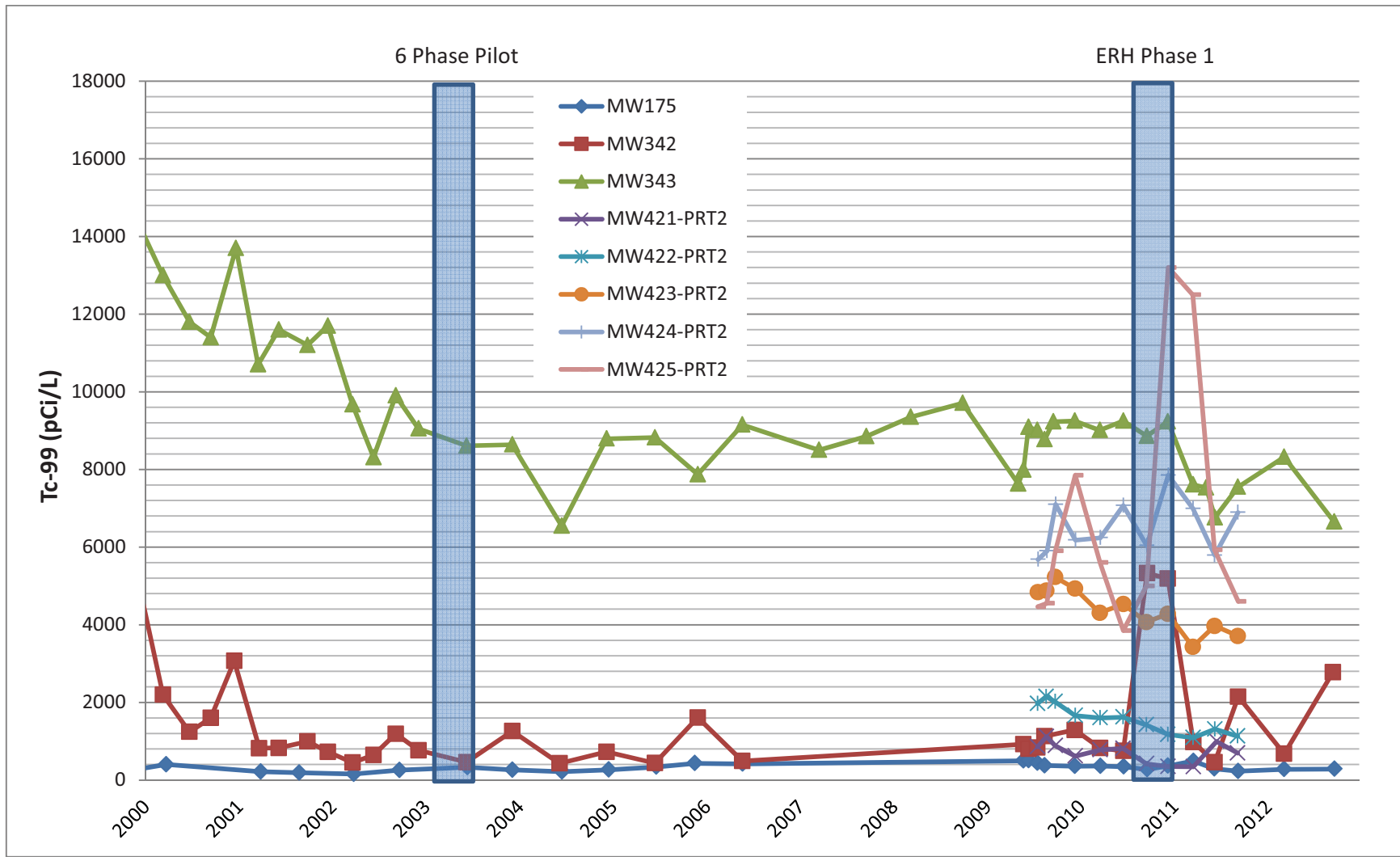


Figure E.5. C-400 Tc-99 Trends in MWs Downgradient of Source Areas

C-400 Monitoring
Water Quality Records for
MW155

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

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C-400 Monitoring
Water Quality Records for
MW156

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

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C-400 Monitoring
Water Quality Records for
MW175

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	4800	< 250			< 50	< 4.95	292	343	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10174017001
6/23/2010	5100	< 250			< 50	12.9	301	315	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017002
9/23/2010	5100	< 250			< 50	7.46	226	275	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013001
12/13/2010	9800	< 250			< 50	26.6	274	363	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023005
3/23/2011	5800	< 100			< 100	24.3	366	488	< .005	< 167	< 176	< 137	< 98	< 118	< 68.6		< 88.2	C11082024002
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-01
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-02
6/13/2011	5900	< 250			< 50	9.43	190	267	< .005									C11165011003
6/13/2011	5900	< 250			< 50	13.5	201	292	< .005									C11165011004
9/14/2011	6900	< 250			< 50	< -1.01	218	228	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087005
3/12/2012	3700	< 50			< 50	< 5.16	156	279	< .005									C12072031011
9/25/2012	1700	< 20			< 20	< 3.25	245	284	< .005									C12269015004
9/25/2012	1700	< 20			< 20	< 3.18	245	282	< .005									C12269015003

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C-400 Monitoring
Water Quality Records for
MW342

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	9500	< 250			< 50	< -6.46	978	1290	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024002
12/14/2009	9900	< 250			< 50	< .633	926	1280	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09348024003
3/23/2010	4700	< 50			< 50	10.3	386	827	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025007
6/22/2010	5400	< 250			< 50	11.4	642	750	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173039001
9/23/2010	7600	< 250			< 50	< -52	3690	5330	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013002
9/23/2010	8100	< 250			< 50	< -57.1	3720	4720	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013003
12/13/2010	12000	< 200			< 200	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	10000	< 250			< 50	< -4.68	1750	1930	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087004
9/14/2011	11000	< 250			< 50	< -9.47	1800	2150	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087003
3/12/2012	7500	< 100			< 100	< 2.56	420	678	< .005									C12072031010
9/19/2012	8600	< 100			< 100	10.4	2820	2780	< .005									C12263022003

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C-400 Monitoring
Water Quality Records for
MW343

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	< 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
3/22/2010	37000	< 400	< 250	< 250	< 250	< -90.6	5370	8960	< .005									C10082002001
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	29000	< 400			< 400	< -56.9	4670	7030	< .005									C12072031007
3/12/2012	28000	< 400			< 400	< -85.1	4680	8320	< .005									C12072031006
9/24/2012	39000	< 500			< 500	< -23.7	4970	6650	< .005									C12268086002

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C-400 Monitoring
Water Quality Records for
MW405

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

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C-400 Monitoring
Water Quality Records for
MW405-PRT5

Sample Date	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

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C-400 Monitoring
Water Quality Records for
MW406

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

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C-400 Monitoring
Water Quality Records for
MW406-PRT5

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
12/28/2011	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

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C-400 Monitoring
Water Quality Records for
MW407-PRT4

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
12/28/2011	4900	< 500			< 100	< 3.09	10.7	< 5.26	< .005									C11362008001
3/14/2012	14000	< 100			< 100	< 3.36	5.57	< -5.15	< .005									C12074017002
6/20/2012	13000	< 500			< 100	< 4.76	8.43	< 8.61	< .005									C12172011003
9/20/2012	13000	< 100			< 100	< .291	< 3.11	< -10.2	< .005									C12264031003
12/28/2012	7000	< 50			< 50			< .433										C12363012006

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C-400 Monitoring
Water Quality Records for
MW408

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	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
12/14/2011	71000	< 5000			< 1000	< 1.93	32.9	23.2	< .005									C11348026001
6/20/2012	390000	< 2000			< 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

E-19

C-400 Monitoring
Water Quality Records for
MW421-PRT1

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
E-20 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

C-400 Monitoring
Water Quality Records for
MW421-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	52000	< 2500			< 500	15.2	830	856	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09202027002
8/25/2009	53000	< 500			< 500	6.73	865	1120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237029002
9/29/2009	53000	< 500			< 500	27.9	639	882	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002002
12/16/2009	62000	< 2500			< 500	4.74	475	618	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025005
3/23/2010	55000	< 500			< 500	12.7	417	777	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025005
6/21/2010	51000	< 500			< 500	26.9	514	813	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10172026002
9/21/2010	51000	< 500			< 500	8.44	255	416	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016002
12/14/2010	62000	< 500			< 500	10.4	280	348	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026002
E-21 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

C-400 Monitoring
Water Quality Records for
MW421-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	63000	< 2500			< 500	< 3.73	327	302	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09202027003
8/25/2009	66000	< 500			< 500	< 3.62	398	451	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237029003
9/29/2009	61000	< 500			< 500	8.99	323	335	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09273002003
12/16/2009	77000	< 2500			< 500	4.67	226	345	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025006
3/23/2010	70000	< 500			< 500	12.8	218	376	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025006
6/21/2010	68000	< 500			< 500	< 4.02	278	251	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173001001
9/21/2010	64000	< 500			< 500	6.83	215	285	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016003
12/14/2010	65000	< 500			< 500	< 5.08	209	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026003
E-22 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

C-400 Monitoring
Water Quality Records for
MW422-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/21/2009	10000	< 500			< 100	< -96.7	10400	13600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202018001
8/24/2009	13000	< 100			< 100	95	12900	15600	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09237007001
9/28/2009	12000	< 100			< 100	59.7	14200	16900	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021004
12/16/2009	16000	< 1000			< 200	< -15.7	10200	13900	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09350025001
3/23/2010	14000	< 100			< 100	< -25.6	8460	13400	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025001
6/21/2010	14000	< 100			< 100	< -60.6	11600	15500	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173001002
9/20/2010	15000	< 200			< 200	< -51	8500	12900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039004
12/13/2010	23000	< 1000			< 200	< -3.47	5090	6610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024004
E-23 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

C-400 Monitoring
Water Quality Records for
MW422-PRT2

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

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C-400 Monitoring
Water Quality Records for
MW422-PRT3

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
E-25 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

C-400 Monitoring
Water Quality Records for
MW423-PRT1

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

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C-400 Monitoring
Water Quality Records for
MW423-PRT2

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

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C-400 Monitoring
Water Quality Records for
MW423-PRT3

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

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C-400 Monitoring
Water Quality Records for
MW424-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	7200	< 500			< 100	< -7	2300	1790	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09204021001
8/27/2009	7100	< 50			< 50	< 3.09	2680	3330	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09239018001
9/30/2009	7700	< 100			< 100	125	4580	6150	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09273021001
12/17/2009	9200	< 100			< 100	< -31.9	7760	10000	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09351022002
3/24/2010	7900	< 100			< 100	86.8	4420	6540	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10083023002
6/23/2010	7900	< 250			< 50	14	4020	5080	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10174017003
9/22/2010	7900	< 1000			< 200	< -79.8	7420	10300	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020001
12/15/2010	8400	< 100			< 100	< -325	9940	13900	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020001
E-29 6/14/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106059-09
6/14/2011	7900	< 500			< 100	< -211	7890	8220	< .005									C11165038002
9/13/2011	9000	< 500			< 100	< -150	5730	6730	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11256019001

C-400 Monitoring
Water Quality Records for
MW424-PRT2

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

C-400 Monitoring
Water Quality Records for
MW424-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/23/2009	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
E-31 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

C-400 Monitoring
Water Quality Records for
MW425-PRT1

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	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

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C-400 Monitoring
Water Quality Records for
MW425-PRT2

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	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

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C-400 Monitoring
Water Quality Records for
MW425-PRT3

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
7/22/2009	6200	< 250			< 50	< .86	3380	4420	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09203011003
8/26/2009	4700	< 50			< 50	< -23.2	3770	4120	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09238024003
9/29/2009	6900	< 50			< 50	96.2	3490	4570	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002006
12/17/2009	8100	< 100			< 100	39.3	3620	5210	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09351022001
3/23/2010	7600	< 50			< 50	57	2590	4290	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005008
6/22/2010	7700	< 250			< 50	33.6	2790	3760	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10173039004
9/21/2010	8500	< 500			< 100	< -22.6	3270	5070	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10264016006
12/15/2010	9100	< 100			< 100	< -325	7150	8570	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10349020006
E-34 6/13/2011	7400	< 500			< 100	< -23.1	3310	4310	< .005									C11165011007
6/13/2011										< .4	< .4	< .4	< .4	< .4	< .4	< .4	< .4	1106040-05
9/14/2011	8500	< 500			< 100	< -99.4	4540	4360	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11257087008
3/12/2012	8000	< 100			< 100	< -25.1	3230	5410	< .005									C12072031009
9/19/2012	9900	< 100			< 100	< -28.6	4490	5320	< .005									C12263022004

C-400 Monitoring
Water Quality Records for
MW487

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
12/30/2009	31	< 1	< 1	< 1	< 1	< .087	< 2.52	< 10.3	< .005									C09365015001
6/13/2011	14	< 5	< 1	< 1	< 1	< 7.26	< 1.75	< 4.03	< .005									C11164036005

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C-400 Monitoring
Water Quality Records for
MW505

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
3/13/2012	160	< 5			< 5	< -2.14	48.8	51.6	< .005									C12073014003
6/18/2012	18	< 5			< 1	< -1.58	54	51.4	< .005									C12170024001
9/19/2012	22	< 1			< 1	< 1.39	45.1	61.8	< .005									C12263015001
12/5/2012	22	< 5			< 1			56.2										C12340029002

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C-400 Monitoring
Water Quality Records for
MW506

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

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C-400 Monitoring
Water Quality Records for
MW507

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
3/13/2012	1200	< 10			< 10	< 3.11	38.7	53.4	< .005									C12073014005
6/18/2012	1200	< 100			< 20	< 5.7	51.2	41.2	< .005									C12170024003
9/19/2012	1800	< 10			< 10	< .808	34.4	30.7	< .005									C12263015003
12/5/2012	1900	< 100			< 20			42.9										C12340029005

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APPENDIX F

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

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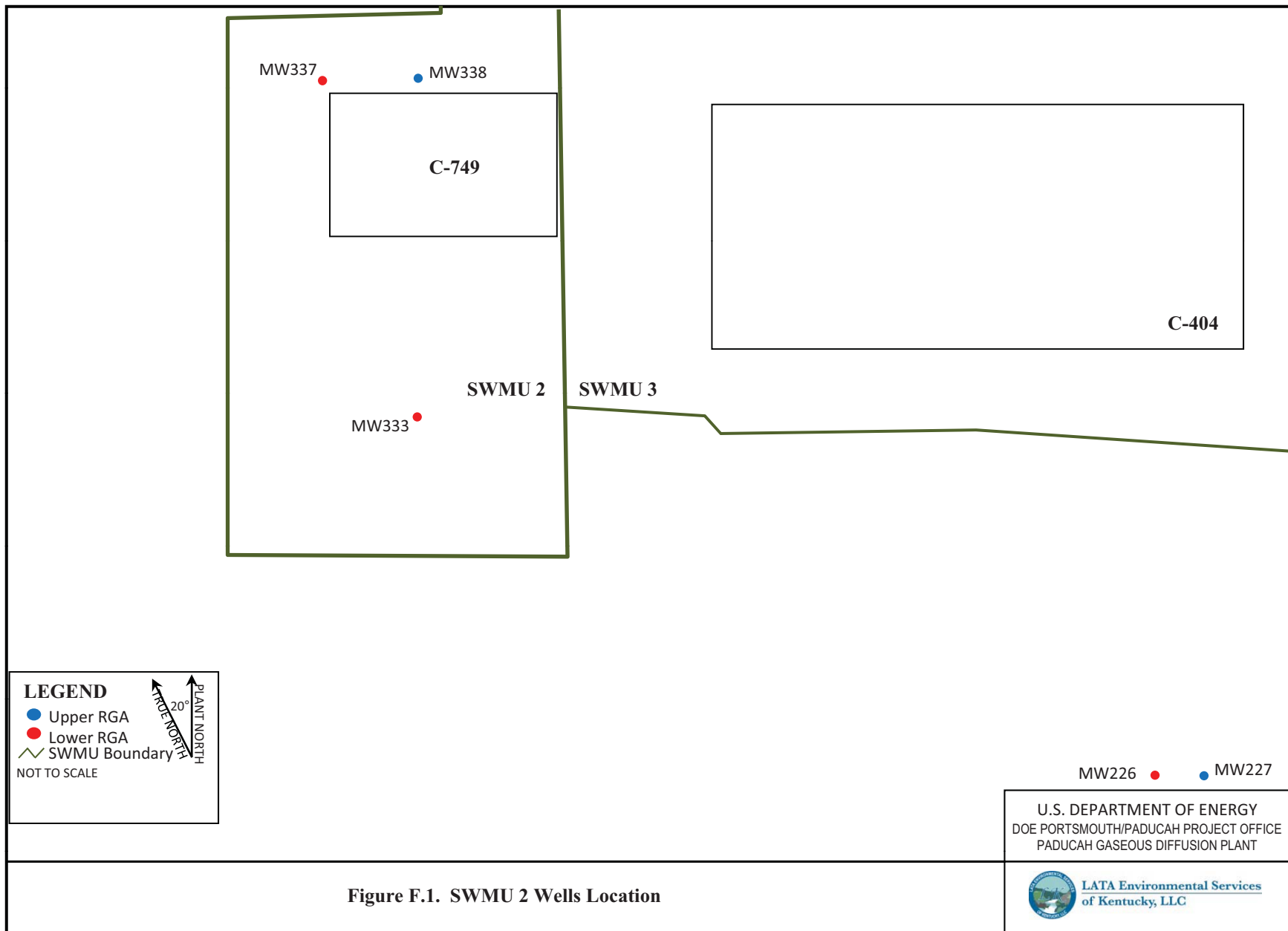



Figure F.1. SWMU 2 Wells Location

MW226 ● MW227 ●

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

 LATA Environmental Services
of Kentucky, LLC

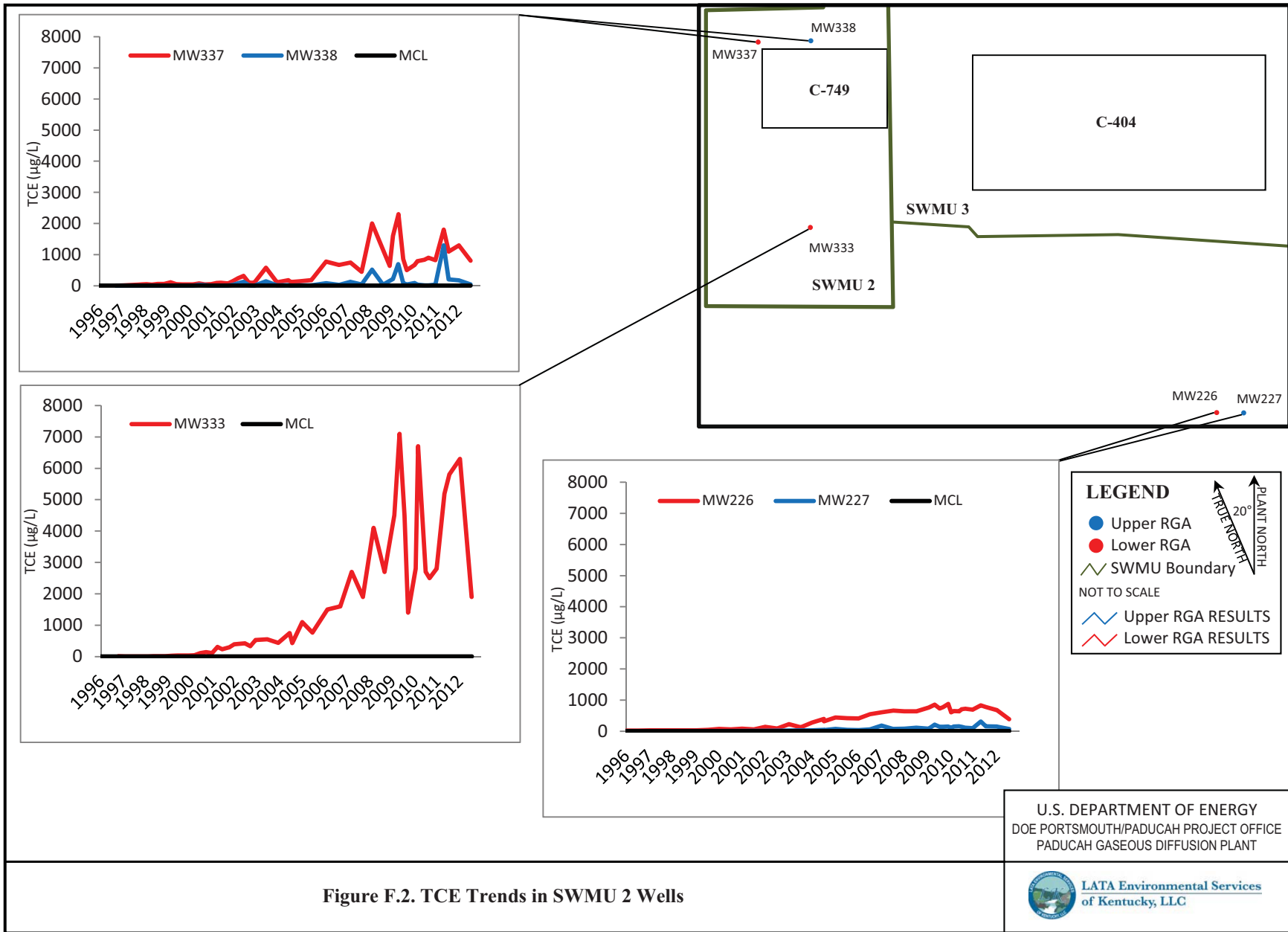
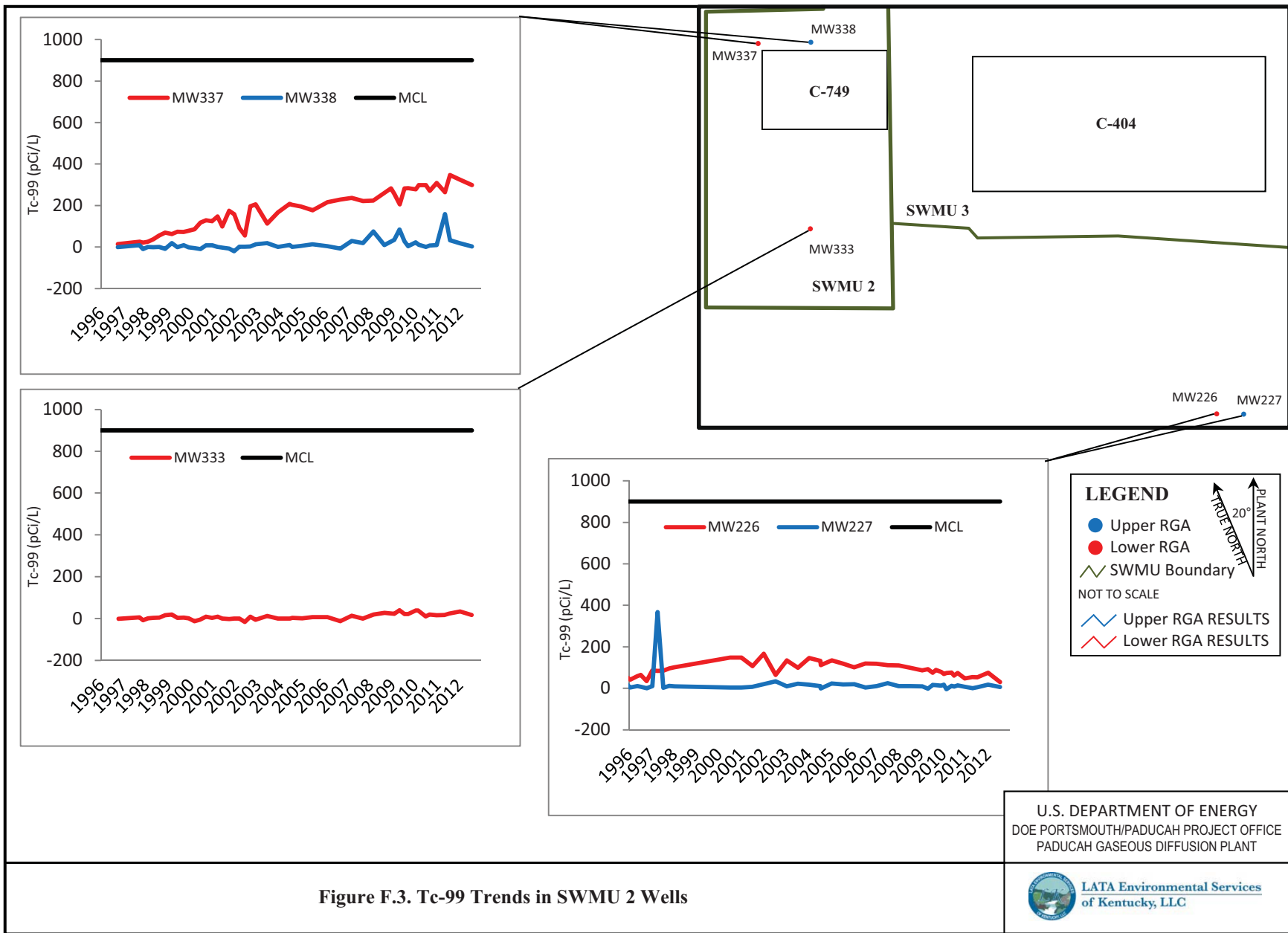


Figure F.2. TCE Trends in SWMU 2 Wells



C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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							30				950117-119
1/17/1995	17							26				950117-115
1/23/1995	17							31				950125-081

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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

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	340	12	< 5	< 5	< 5	< .668	57.7	132	< .0902	< .0122	< .348	C042050009
7/22/2004	394											C042050002
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

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW227

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

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				951024-040
10/23/1995								0				951024-032
10/30/1995								6				951031-064
11/8/1995								7				951110-063
11/15/1995								22				951116-024
1/22/1996	4							3	2.9	.18	6.69	960122-115
1/22/1996	4							4				960122-123
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

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

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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	1500	< 50	< 50	< 50	< 50	< -.267	< 3.66	< 6.25				C060450089
2/14/2006	1300	< 50	< 50	< 50	< 50	< 2.43	< 3.19	< 5.18				C060450088
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

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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									.38		.27	96M04622-3730
10/4/1996	8.3				< .48							96M04622-3716
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	240	< 25	< 25	< 25	< 25	< 4.6	68	91.3				C020720126
3/13/2002										< -7.31	< 0	C020720125
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

MW337

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW337

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results						Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	U-234 pCi/L	U-235 pCi/L	U-238 pCi/L	
8/10/2011	1100							333				C11222050003
1/23/2012	1300							324				C12023024006
7/30/2012	800							298				C12212050001
7/30/2012	810							294				C12212050002
1/24/2013	840							281				C13024007001

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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								-82				96M04621-3759
10/4/1996	.7				< .48							96M04621-3715
10/4/1996									.56		.67	96M04621-3729
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

C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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	< 1.36	7.27	18.2				C072630053	
9/19/2007	44	< 1	< 1	< 5	< 1	< 2.72	9.39	< 12.3				C072630054	
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

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

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