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SEP 20 2013

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PPPO-02-2064393-13

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

**TRANSMITTAL OF REPLACEMENT PAGES FOR APPENDICES C, E, AND F OF
THE U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT
FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE
SECOND HALF OF FISCAL YEAR 2011 PADUCAH, KENTUCKY
(DOE/LX/07-0366/V2)**

References:

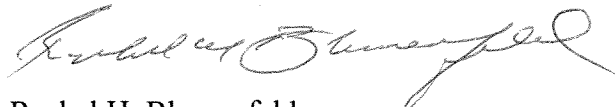
1. Letter from R. Blumenfeld to C. Collins, T. Mullins, and A. Webb, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2013, Paducah, Kentucky (DOE/LX/07-1290/V1)," (PPPO-02-1896411)-13, dated April 30, 2013
2. Letter from R. Knerr to T. Ballard, A. Webb, and E. Winner, "U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2011, Paducah, Kentucky (DOE/LX/07-0366/V2)," (PPPO-02-1311982-12B), dated October 27, 2011

Enclosed are the certified replacement pages for Appendices C, E, and F of the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2011, Paducah, Kentucky*, DOE/LX/07-0366/V2.

The enclosed replacement pages have been prepared to correct reporting errors that occurred as a result of an unintentionally limiting data query. This error was discovered during an independent assessment conducted in April 2013 of the data tables presented in the appendices (C, E, and F) of the report. The submission of these replacement pages has been previously discussed between the Federal Facilities Agreement parties.

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. Appendix C Replacement Pages—C-746-K Landfill Data
2. Appendix E Replacement Pages—C-400 Project Groundwater Monitoring Wells Data
3. Appendix F Replacement Pages—C-749 Uranium Burial Ground (SWMU 2)
Groundwater Monitoring Wells Data

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CERTIFICATION

Document Identification: Replacement Pages for Appendices C, E, and F of the U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the Second Half of Fiscal Year 2011, Paducah, Kentucky (DOE/LX/07-0366/V2)

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

LATA Environmental Services of Kentucky, LLC



Mark J. Duff, Paducah Project Manager

9-20-13

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

9-20-13

Date Signed

**DOE/LX/07-0366/V2
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2011
Paducah, Kentucky**



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**DOE/LX/07-0366/V2
Secondary Document**

**U.S. Department of Energy
Paducah Gaseous Diffusion Plant
Federal Facility Agreement
Semiannual Progress Report for the
Second Half of Fiscal Year 2011
Paducah, Kentucky**

Date Issued—October 2011

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

ARAR	applicable or relevant and appropriate requirements
ARRA	American Recovery and Reinvestment Act
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
EPA	U.S. Environmental Protection Agency
EQ	equalization
ERH	electrical resistance heating
EW	extraction well
FFA	Federal Facility Agreement
FS	Feasibility Study
FY	fiscal year
GDP	Gaseous Diffusion Plant
GWOU	Groundwater Operable Unit
IRA	Interim Remedial Action
KDOW	Kentucky Division of Water
LATA Kentucky	LATA Environmental Services of Kentucky, LLC
MW	monitoring well
NEPCS	Northeast Plume Containment System
NWPGS	Northwest Plume Groundwater System
O&M	operation and maintenance
OU	operable unit
PGDP	Paducah Gaseous Diffusion Plant
RAR	Removal Action Report
RAWP	Removal Action Work Plan
RGA	Regional Gravel Aquifer
RI	remedial investigation
ROD	Record of Decision
SER	Site Evaluation Report
SEWP	Sitewide Evaluation Work Plan
SMP	Site Management Plan
SOU	Soils Operable Unit
SST	Swift and Staley Mechanical Contractors, Inc.
SWMU	solid waste management unit
SWOU	Surface Water Operable Unit
TBD	to be determined
UCRS	Upper Continental Recharge System
WAC	waste acceptance criteria
WAG	waste area group

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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 · Southwest Plume Sources Interim Remedial Action · Dissolved-Phase Plumes Remedial Action · Northeast Plume Interim Remedial Action · Northwest Plume Interim Remedial Action
Burial Grounds Operable Unit	<ul style="list-style-type: none"> · Burial Grounds Operable Unit · C-749 Uranium Burial Ground (SWMU 2)
Surface Water Operable Unit	<ul style="list-style-type: none"> · Removal Action · Remedial Action
Soils Operable Unit	<ul style="list-style-type: none"> · Remedial Action · Soils Inactive Facilities · Soil and Rubble Areas
Decontamination and Decommissioning Operable Unit	<ul style="list-style-type: none"> · C-410/420 Complex · C-746-A East End Smelter and 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 · CERCLA Waste Disposal Alternatives Evaluation

* The Comprehensive Site Operable Unit work scope, including GDP shutdown, is defined more clearly in the fiscal year 2011 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 April 2011. This data currently are collected semiannually. C-746-K Landfill groundwater monitoring data for reporting dates May 2011 through September 2011 will be included in the next semiannual report scheduled for April 2012. 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 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 1995 through April 2011. Groundwater data from May through September 2011 will be included in the next semiannual report scheduled for April 2012.
- Appendix F contains a map depicting the C-749 Uranium Burial Ground [Solid Waste Management Unit (SWMU) 2] groundwater MWs and a summary of the SWMU 2 trends for TCE and Tc-99 for reporting dates May 1993 through April 2011. SWMU 2 groundwater monitoring data from May through September 2011 will be included in the next semiannual report scheduled for April 2012.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

GROUNDWATER OPERABLE UNIT

The scope of the GWOU includes investigation, a baseline risk assessment, evaluation of removal/remedial alternatives, and selection 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 Interim Remedial Action (IRA), Southwest Plume Sources, 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 concentrations. The most predominant contaminant of concern in the groundwater is TCE. Table 2 provides an overall broad picture of the TCE mass removed by various actions through June 30, 2011. Additionally, the table provides the current understanding of the remaining masses yet to be addressed. Some of the components still are being 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	2,602	TBD
Northeast Plume Pump-and-Treat	265	TBD
C-400 Six-Phase Treatability Study	1,900	N/A
C-400 Phase I	580	TBD
C-400 Phase II	0	600–7,000**
Dissolved-Phase Plume	N/A	1,600
Other sources (i.e., SWMU 91, LASAGNA™)	246	TBD
Total	5,593	2,200-8,600

* Cumulative through June 30, 2011.

** This estimate is currently under review.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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):

- Based on results of the lessons learned evaluation, DOE recommended to the FFA managers on January 20, 2011, to split Phase II into Phase IIa, Upper Continental Recharge System (UCRS), and Phase IIb, Regional Gravel Aquifer (RGA), and to proceed with the use of electrical resistance heating (ERH) in the UCRS, while evaluating alternate technologies for the RGA. Discussion has continued in subsequent FFA managers meetings during this period.
- Submitted to EPA and Kentucky on August 23, 2011, the *Technical Performance Evaluation for the C-400 Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/LX/07-1260&D1 (Technical Evaluation Report).
- Continued developing an *Evaluation of Technologies and Alternatives for C-400 Phase IIb, Regional Gravel Aquifer, at the Paducah Gaseous Diffusion Plant* (RGA Alternatives Evaluation Report).
- Completed Phase I postoperation sampling fieldwork.
- Completed Phase II TCE Mass Verification sampling activities.
- 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 1995 through April 2011 are included as Appendix E of this report. The results of the groundwater monitoring for May through September 2011 will be included in the April 2012 report.

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

- Complete the evaluation of technologies for remediation of the Phase II RGA and select an alternative to replace ERH.

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 and Staley Mechanical Contractors, Inc., (SST) manages the Administrative Record and the Environmental Information Center.

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

The requirements are being met for the GWOU C-400 action subproject.

V. Primary/Secondary Document Tracking System:

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

- The Technical Performance Evaluation Report was under EPA and Kentucky review during this reporting period. EPA and Kentucky provided concurrence on September 19, 2011, and September 21, 2011, respectively.
- An RGA Alternatives Evaluation Report has been under development during this reporting period and is targeted for submission in October 2011.

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 RGA. DOE conducted an evaluation of the Phase I IRA (detailed in the Technical Evaluation Report). DOE is evaluating other viable technologies for addressing the RGA. This will be detailed in an upcoming report (RGA Alternatives Evaluation Report) and submitted to EPA and Kentucky for review.

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:

None.

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

O&M for Phase I was completed in December 2010.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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):

- Received approval from EPA on May 19, 2011, and Kentucky on May 18, 2011, on the D2 version of the *Revised Focused Feasibility Study for Solid Waste Management Units 1, 211A, and 211B Volatile Organic Compound Sources for the Southwest Groundwater Plume*.
- Received approval from EPA on September 26, 2011, and Kentucky on September 27, 2011, on the *Revised Proposed Plan for Solid Waste Management Units 1, 211A, 211B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume (D2/R2)*.
- DOE submitted on July 22, 2011, to EPA and Kentucky the *Record of Decision for Solid Waste Management Units 1, 211A, 211B, and Part of 102 Volatile Organic Compound Sources for the Southwest Groundwater Plume (D1)*.

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

- Conduct 45-day public review and comment on the proposed plan.
- Complete preparation and submit a D2 Revised ROD to EPA and Kentucky.

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

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

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

Development and submission of decision 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:

- D1 ROD was submitted to EPA and Kentucky on July 22, 2011, for review and comment.

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

- EPA and Kentucky comments on D1 ROD for the Southwest Plume sources are anticipated in October 2011.

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

None.

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

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

VIII. Changes in relevant personnel:

None.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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.

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

This project has been resequenced and the milestone for submittal of the D1 Remedial Investigation Work Plan has been moved from fiscal year (FY) 2012 to FY 2013. 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 Administrative Record and the Environmental Information Center.

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:

Updated TCE and Tc-99 plume maps were provided to EPA and Kentucky for informational purposes on August 30, 2011.

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:

None.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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):

During this reporting period, the Northeast Plume Containment System (NEPCS) treated 39,782,724 gal of contaminated groundwater and achieved an operational efficiency of 99.5%. The average system treatment rate for the reporting period was 151 gal/min and was calculated assuming 100% operational uptime. Operational online efficiencies for the reporting period were as follows: April, 99.3%; May, 97.9%; June, 100%; July, 100%; August, 100%; and September 2011, 100%.

A) Process Operations:

The NEPCS consists of two extraction wells (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 September 30, 2011, the NEPCS has processed a total of approximately 1,197,650,000 gal of water. The monthly withdrawal volumes this reporting period are presented in Appendix A, Table A.1, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

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

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2011.

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 June 2011 are presented in Appendix B, Figure B.1. Environmental samples were collected monthly from the treatment system influent and effluent for the period of January through June 2011. 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)	190	140	162
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 140 $\mu\text{g/L}$, while EW332 had an average concentration of 190 $\mu\text{g/L}$.

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 40.2 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, routine maintenance, and calibration of system components.

Nonroutine Maintenance Activities:

On April 28, 2011, the pressure switches on C-637-2A and C-637-2B cooling towers were replaced. This corrected the problem identified during the previous quarter. The Northeast Plume Treatment System was out of service for five hours for the repairs.

On May 4, 2011, the Northeast Plume Treatment System was removed from operation for two hours to replace the motor saver relay on EW 331.

On May 23, 2011, the Northeast Plume Treatment System was out of service for 14 hours when the electrical power supply was interrupted and the circuit breaker for the transfer pump had to be reset.

On July 11, 2011, the pressure switch on EW 332 became inoperable and the well was removed from service. The Northeast Plume Treatment System continued operating using only EW 331. A replacement pressure switch was procured and installed at 0830 on August 9, 2011, and EW 332 was returned to operation.

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. Figure B.3 shows system influent TCE concentrations, and Figure B.4 includes a summary of the TCE removed since the NEPCS began operations in 1997. Figures B.5 through B.10 presented in Appendix B, show TCE concentrations and Tc-99 activities in MWs downgradient and upgradient and the EWs.

MW292 is located approximately 1,200 ft upgradient of the pumping wells to provide an early detection point for Tc-99 migration. During the first and second quarters of calendar year 2011, Tc-99 activity at MW292 was 39.2 and 45.1 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):

- 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 Plan for the Northeast Plume Containment System Interim Remedial Action at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, DOE/OR/07-1535&D3.
- The project team will conduct an analysis of the existing Northeast Plume extraction and treatment system based on information from new monitoring locations installed as part of the environmental monitoring system upgrade performance system and the goals of the interim ROD to identify and assess potential options for Northeast Plume optimized system configuration and operation.

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 Administrative Record and the Environmental Information Center.

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 99.5% 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:

None.

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 \$228,000.

**FEDERAL FACILITY AGREEMENT
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SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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 56,156,226 gal of contaminated groundwater with an average monthly operational efficiency of 99.8%. The average system treatment rate for the reporting period was 213 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: April, 100%; May, 100%; June, 100%; July, 100%; August, 100%; and September, 98.9%.
- DOE conducted quarterly sampling of 22 MWs associated with effectiveness monitoring for the optimized NWPGS in June and August 2011.
- DOE conducted a performance assessment analysis of the optimized NWPGS, including analysis of hydraulic monitoring and testing and chemical monitoring of groundwater as described in the *Operation 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. These results were presented at the FFA Managers Meeting on September 29, 2011.

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, 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 are returned to service, as needed.

B) Process Testing:

Operation of the NWPGS began on August 28, 1995. As of September 31, 2011, the NWPGS has processed a total of 1,619,320,000 gal of water. The monthly withdrawal volumes for the reporting period are presented in Appendix A, Table A.2, of this report. This table includes a summary of the withdrawn water volumes and average daily rates.

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

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from January through June 2011.

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 and effluent TCE and Tc-99 analytical data are presented in Appendix B on Figures B.13 and B.14. Figure B.15 includes a summary of the TCE removed since the Northeast Plume system began operations in 1995. Figures B.16 and B.17 present the Tc-99 influent and effluent activity versus time. 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 January through June 2011 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	5,000	2,500	3,260	539	339	445
Effluent	6.6	1.0	4.46	46.1	6.55	28.9

The treatment system influent, a composite from two to four 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 99.86% for TCE and 93.5% for Tc-99.

The average TCE effluent concentration for this reporting period was 4.46 µg/L, which is less than the treatment goal of 5 µg/L. The average Tc-99 effluent value was 28.9 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. 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	7,700	4,500	5,750	797	493	627
EW233	2,100	1,000	1,375	310	259	284

D) Treatment Media:

Ion Exchange Resins:

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

Activated Carbon Media:

The NWPGS is equipped with two carbon columns containing granular activated carbon for adsorption of volatile organic compounds from the vapor-phase effluent of the air stripper unit. The carbon in each column is replaced routinely. The carbon in both columns was replaced on September 21, 2011, with new and recycled carbon. The current inventory of recycled carbon has been depleted and the purchase of additional virgin carbon will be required.

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.

Nonroutine Maintenance Activities:

On June 15, 2011, the C-612 facility sump was replaced due to mechanical difficulties with the previous pump. Installation of this pump was completed without shutting down the treatment facility.

On the evening of July 12, 2011, an electrical storm caused damage to the variable frequency drive to EW 232. The extraction well was removed from service and the pumping rate of EW 233 was increased to approximately 220 gpm. EW 232 was repaired and returned to service at approximately 1400 hours on July 14, 2011.

On the evening of July 24, 2011, an electrical storm caused damage to the variable frequency drive to EW 233. The extraction well was removed from service and the pumping rate of EW 232 was increased to approximately 220 gpm. EW 233 was repaired and returned to service at approximately 1300 hours on July 27, 2011.

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:

The new EWs, EW232 and EW233, became operational on August 24, 2010. These EWs supplant the existing 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 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 Administrative Record and the Environmental Information Center.

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 99.8% 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:

None.

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 \$228,000.

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**FEDERAL FACILITY AGREEMENT
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Reporting Period: 4/1/2011–9/30/2011**

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); C-746-P/P1 Scrap Yard (SWMU 13); the residential/inert borrow area (SWMU 145); and the C-746-S&T Landfills (SWMUs 9 and 10, respectively).

DOE has conducted a site investigation for the C-746-P/P1 Scrap Yard (SWMU 13) under the BGOU project. Additional sampling has been performed pursuant to the field sampling plan and results included in a Site Evaluation Report (SER). Per agreement among the FFA parties, SWMU 13 will be removed from the BGOU scope, and SWMU 13 will be addressed in its entirety (both surface and subsurface) as part of the SOU. As a result, SWMU 13 will be removed from this section of the report during the next reporting period, and discussions regarding SWMU 13 will be included in the SOU section of this report.

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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Reporting Period: 4/1/2011–9/30/2011**

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); the C-746-S&T Landfills (SWMUs 9 and 10); and A Site Investigation for the C-746-P/P1 Scrap Yard (SWMU 13)

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

- The milestone date of February 28, 2011, for the proposed plan was stayed as a result of the dispute.
- The parties worked to resolve the dispute on the D2 feasibility study (FS) during this reporting period. The parties were successful in resolving 109 of 116 comments.
- The D2/R1 FS for SWMUs 5 and 6 has been under development during this reporting period.
- The D2/R1 FS for SWMUs 2, 3, 7, and 30 has been under development during this reporting period.
- Submitted the D1 SWMU 13 SER to EPA and Kentucky on July 18, 2011, for review and approval.

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

- Resolve the BGOU formal dispute.
- Develop and submit a D2/R1 FS to EPA and Kentucky.
- Prepare and submit the SWMU 4 R1 Work Plan addendum by October 31, 2011.
- Submit a revised SWMU Assessment Report for SWMU 13 by October 6, 2011.
- Develop the D1 proposed plan for SWMUs 5 and 6 for submittal by May 31, 2012.

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 Administrative Record and the Environmental Information Center, and maintains existing burial ground caps.

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

In order to facilitate the development of subsequent documents, the FFA parties have agreed to group the BGOU SWMUs into more manageable remedial action subprojects as follows:

- SWMUs 5 and 6
- SWMUs 2 and 3
- SWMUs 7 and 30

This, along with adjustment of milestone dates, will allow a D1 ROD for SWMUs 5 and 6 to be submitted by September 30, 2012.

V. Primary/Secondary Document Tracking System:

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

- The D1 SWMU 13 SER has been under development and EPA and Kentucky review during this reporting period.

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

- The D1 SWMU 4 work plan addendum is due to EPA and Kentucky by October 31, 2011.
- The D1 SWMU 13 SER was issued to EPA and Kentucky on July 18, 2011, for review and comment. Comments were received from EPA and Kentucky on September 6, 2011, and August 17, 2011, respectively.

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

- The parties have been unable to resolve the dispute through the informal dispute process, and the dispute has been elevated to formal dispute. The project team has been successful in resolving 109 of the 116 comments and continues to work toward the issuance of a D2/R1 FS. Continued delays associated with dispute could impact current milestone dates for providing of a D1 proposed plan for SWMUs 5 and 6 by May 31, 2012, and a D1 ROD by September 30, 2012.
- Per agreement among the FFA parties, SWMU 13 will be removed from the BGOU scope, and SWMU 13 will be addressed in its entirety (both surface and subsurface) as part of the SOU. As a result, a D2 SWMU 13 SER will not be issued. Regulatory comments received on the D1 SWMU 13 SER will be addressed during finalization of the D2 Soils RI Report. A revised SWMU Assessment Report for SWMU 13 will be issued to remove reference to the BGOU and to clarify the placement of SWMU 13 in the SOU.

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:

None.

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

None.

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Reporting Period: 4/1/2011–9/30/2011**

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 for the October 31, 2010, through April 30, 2011, have been included as part of this report. The results of the groundwater monitoring trends through April 2011 are presented in Appendix F. Data from May through September 2011 are unavailable at this time and will be included in the April 2012 report.

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 Administrative Record and the Environmental Information Center, and maintains existing burial ground cover.

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

The requirements and time schedules are being met.

V. Primary/Secondary Document Tracking System:

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

None.

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

None.

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

None.

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

None.

VIII. Changes in relevant personnel:

None.

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

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

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Reporting Period: 4/1/2011–9/30/2011**

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 done in accordance with the *Operations and Maintenance Plan for the Northwest Storm Water Collection Basin 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 \$84,000.

Per the *Operations and Maintenance Plan for the Northwest Storm Water Collection Basin 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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Reporting Period: 4/1/2011–9/30/2011**

SURFACE WATER OPERABLE UNIT PROJECT: Removal Action

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

- Submitted the D2 SWOU Removal Action Report (RAR) to EPA and Kentucky on April 4, 2011.

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

None.

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 Removal Action 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 Administrative Record and the Environmental Information Center.

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

This project is now completed. As a result, this section of the report will be removed during the next reporting period.

V. Primary/Secondary Document Tracking System:

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

The D2 SWOU RAR has been under development and EPA and Kentucky review during this reporting period.

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

The D2 SWOU RAR was submitted to EPA and Kentucky on April 4, 2011. Approval was received from Kentucky on April 11, 2011, and EPA on April 25, 2011.

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

None.

VII. Summary of all contacts with local community, public interest groups, or state government:
DOE provided routine updates on the subproject to the Paducah Site CAB, FFA managers, FFA senior managers, local elected officials, and congressional staff.

VIII. Changes in relevant personnel:

None.

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

Total maintenance action costs are not yet available.

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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):

The D1 SWOU RI Work Plan was submitted to EPA and Kentucky on July 11, 2011.

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

Develop the D2 SWOU RI Work Plan based on comments received from EPA and Kentucky.

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

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

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 D1 SWOU RI Work Plan has been under EPA and Kentucky review during this reporting period.

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

Regulatory comments on the D1 SWOU RI Work Plan are due to DOE on October 9, 2011.

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

None.

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

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

VIII. Changes in relevant personnel:

None.

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

None.

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Reporting Period: 4/1/2011–9/30/2011**

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 Decontamination D&D will be addressed as part of a subsequent action (e.g., post-GDP shutdown for the Soils and Slabs OU).

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 Removal Action Work Plan (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):

- Submitted the D2 Sitewide Evaluation Work Plan (SEWP) to EPA and Kentucky on May 23, 2011.
- Submitted the D1 SOU RI Report to EPA and Kentucky on July 20, 2011.

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

- Develop the D2 SOU RI Report for submittal to EPA and Kentucky.
- Develop the D1 Soils FS Report for submittal to EPA and Kentucky.
- Revise the D2 SEWP for submittal to EPA and Kentucky.
- Conduct additional fieldwork as documented in the revised D2 SEWP.

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 the PGDP. In addition, LATA Kentucky provides programmatic and technical support, analytical services, and business management. SST manages the Administrative Record and the Environmental Information Center.

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

The FFA parties agreed that due to the size and complexity of the Soils RI Report a 150-day review period would be necessary. As a result, milestone dates for subsequent documents will be adjusted in the FY 2012 SMP to reflect the 150-day review period for the Soils RI Report.

V. Primary/Secondary Document Tracking System:

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

- DOE submitted the D2 SEWP to EPA and Kentucky on May 23, 2011, for review and approval.
- DOE submitted the D1 SOU RI Report to EPA and Kentucky on July 20, 2011.

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

- DOE issued the D1 SOU RI Report to EPA and Kentucky as a primary document with a requested 90-day review and comment period per the FFA. Comments are due on October 18, 2011; however, EPA and Kentucky have requested an additional 60-day review period.

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

- The milestone dates for the SOU Remedial Action have been adjusted by 60 days to allow for a 150-day review period for the Soils RI Report. These revised dates will be noted in the FY 2012 SMP.
- The D2 SEWP will be revised in accordance with discussions among the FFA parties on September 8, 2011, and September 9, 2011. Characterization activities required based upon these discussions will be conducted, and results of the characterization will be incorporated into the D1 SER. The milestone date for submittal of the D1 SER has been adjusted to May 23, 2012.

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:

None.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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
- C-746-A East End Smelter

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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:

- Completed demolition of C-411 and Sector 4 of the C-410 Complex. This demolition consisted of approximately 31,000 ft² of the facility. Structural demolition was completed on June 30, 2011. Final fixative application was completed September 30, 2011. Completed activities funded by the American Recovery and Reinvestment Act (ARRA) in the C-410 Complex.
- Completed deactivation of five UF₆ lines and two fluorine lines (over 200-ft long each) contained in the overhead tie line that exited the south side of the C-410 Complex.
- Completed structural demolition of a 200-ft section of the overhead tie line.
- Completed isolation of six UF₆ traps located in Zone 39 of C-410. There are nine additional traps requiring isolation and preparation for removal in the C-410 Complex, located in Zones 23/24 and 27.
- Completed stabilization, removal, and packaging for disposal approximately 32,000 ft³ of the installed piping and equipment from the C-410 Complex during the reporting period.
- Completed stabilization of uranium powder systems in C-410 Complex.
- Continued stabilization and removal of fluorine, hydrogen, and hydrogen fluoride systems.
- Completed removal of glycol systems in C-410 Building.
- Drained oil and removed Freon condensers in C-410 Building.
- Removed equipment and installed large ramps in Zones 23, 44, and 28 to allow movement of heavy equipment (e.g., mobile cranes, forklifts, excavators with shears or grapples) to the varying levels of the C-410 Complex to support equipment removal. Shipped additional 15,000 lb of copper bus work from the C-410 Complex to a private company licensed to handle radiological material for reuse per agreement with Paducah Area Community Reuse Organization. This copper was segregated from Sector 4 demolition debris.

- Shipped approximately 40,000 ft³ of debris from the C-411 and Sector 4 demolition to the C-746-U Landfill for disposal.

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

- Complete stabilization and removal of fluorine systems.
- Complete stabilization of UF₆ systems.
- Complete stabilization of hydrogen fluoride and hydrogen systems.
- Complete removal of items that potentially could be characterized as Resource Conservation and Recovery Act or Toxic Substances Control Act waste from the building.
- Complete removal of the heating, ventilation, and air-conditioning system; UF₆; and vacuum systems.
- Complete final building surveys and fixative application in order to declare building demolition ready.
- Develop an Action Memorandum Addendum for C-410 Complex. The addendum will present a request for applicable or relevant and appropriate requirements (ARARs) waiver to allow an alternative approach for transite removal.
- Develop a RAWP Addendum for C-410 Complex. The addendum will describe the building demolition approach incorporating the alternative approach for transite removal.
- Initiate procurement activities to procure a subcontractor to perform C-410 structural demolition.

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 Administrative Record and the Environmental Information Center.

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. Use of ARRA funding will allow acceleration of DOE baseline schedules and SMP projected completion dates.

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):

Several systems are being identified with substantial chemical or radiologic holdup, which is requiring additional time and effort to stabilize.

For example, the glycol system, assumed to have been drained and empty, was found to contain over 1,000 gal of glycol solution that subsequently was removed, containerized, and characterized for disposal. Large Freon condensers, planned to be left in place and demolished with the building, were found to contain significant volumes of oils, which necessitated removing the condensers to ensure all oil could be removed. The vacuum system piping in several zones was found to be full or nearly full of uranium powder, complicating the removal due to weight and ensuring control of contamination.

Substantial resources were utilized in Sector 4 to remove nonfriable asbestos-insulated wire contained in conduit. This wire had been planned to be left in the conduit and removed using shears during demolition. The shearing of the conduit pinches the ends sealing the asbestos inside, and dust suppression activities would minimize asbestos becoming friable at the cut points. Recent waste acceptance criteria (WAC) changes will not allow bulk container (gondola) shipment of debris containing asbestos, so this method will not be allowed. Similar wire removal is being implemented in the balance of the C-410 Complex, requiring the continued use of additional manpower.

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.
- Developed and issued media press releases for the ARRA-related work.

VIII. Changes in relevant personnel:

None.

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

None.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

**D&D OPERABLE UNIT: C-746-A East End Smelter and
C-340 Metals Reduction Plant Complex**

The scope of this project includes demolition of the C-746-A East End Smelter and 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 and C-746-A East End Smelter:

- Submitted the D1 RAR for the C-746-A East End Smelter to EPA and Kentucky August 5, 2011.
- Completed the deactivation process for the C-340 Complex on August 5, 2011, and initiated subcontracting for demolition of the structure.
- Conducted a strategy discussion with representatives of the EPA and Kentucky to plan polychlorinated biphenyl characterization waste characterization of the C-340 Complex.
- Provided a tour of the C-340 Complex to representatives of EPA and Kentucky.

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

- Develop an Action Memorandum Addendum for C-340 Complex. The addendum will present a request for ARARs waiver to allow an alternative approach for transite removal. The Action Memorandum Addendum is planned for submittal in November 2011.
- Develop a RAWP Addendum for C-340 Complex. The addendum will describe the building demolition incorporating the alternative approach for transite removal. The RAWP Addendum is planned for submittal in November 2011.
- Award subcontract for structural demolition of the C-340 Complex.
- Mobilize subcontractor and initiate structural demolition.

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 Administrative Record and the Environmental Information Center.

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. Use of ARRA funding will allow acceleration of DOE baseline schedules and SMP projected completion dates.

V. Primary/Secondary Document Tracking System:

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

- EPA and Kentucky are reviewing the D1 RAR for the C-746-A East End Smelter.
- DOE is developing the C-340 Action Memorandum Addendum and RAWP Addendum.

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

DOE submitted the D1 RAR for East End Smelter on August 5, 2011, and comments are due within 90 days.

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

C-746-A—None.

C-340—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.
- Developed and issued media press releases for the ARRA-related work.

VIII. Changes in relevant personnel:

None.

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

None.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

COMPREHENSIVE SITE OPERABLE UNIT

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

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

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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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

**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 1995 through April 2011 are presented graphically in Appendix C. Data collected in May through September 2011 will be included in the April 2012 report.

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 Administrative Record and the Environmental Information Center.

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:

None.

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

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

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

PROJECT: Community Relations Plan

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

- During this reporting period, Revision 7 of the CRP was under development.
- Issued Revision 7 of the CRP to EPA and Kentucky July 13, 2011, for comment and/or approval.
- Received approval of Revision 7 of the CRP from Kentucky August 2, 2011. Revision 7 of the CRP is pending comment and/or approval from EPA. Comment and/or approval is due by October 11, 2011.
- Revision 6 of the CRP was pending an official approval letter from EPA during this reporting period. EPA previously indicated that they did not have any comments on the document via e-mail correspondence dated April 19, 2010. EPA officially approved Revision 6 of the CRP September 21, 2011.

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

Obtain final EPA approval of Revision 7 of the CRP.

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 Administrative Record and the Environmental Information Center.

The FFA parties have agreed to revise and submit the CRP for review and approval on a bi-annual basis (i.e., status of major projects in Chapter 2, Appendix A—Key Contacts for the PGDP, Appendix B—Public Involvement History). The next revision to the CRP (Revision 8) is due in July 2013.

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:

- Revision 6 of the CRP has been under EPA review and approval during this reporting period.
- Revision 7 of the CRP has been under development and EPA and Kentucky review and approval during this reporting period.

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

- Revision 7 of the CRP was submitted to EPA and Kentucky for review and comment July 13, 2011. Regulatory comment and/or approval is due October 11, 2011.
- DOE received approval of Revision 7 of the CRP from Kentucky August 2, 2011. DOE currently is awaiting approval from EPA.
- EPA approved Revision 6 of the CRP September 21, 2011.

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:

None.

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

Not applicable.

**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

PROJECT: Site Management Plan

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

- Received conditional concurrence on the D2 FY 2011 SMP from Kentucky and EPA on April 25, 2011, and April 26, 2011, respectively.
- Issued D2/R1 FY 2011 SMP to EPA and Kentucky on May 25, 2011, for final approval.
- Received formal approval of the D2/R1 FY 2011 SMP from Kentucky June 8, 2011, and acknowledgement that DOE had met EPA's conditions of approval via e-mail from EPA June 14, 2011.
- During this reporting period, the D1 FY 2012 was under development. The FFA managers, through resolution of other project issues, have provided feedback on key sections of the FY 2012 (e.g., Appendix 5) document.

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

DOE will complete development of the D1 FY 2012 SMP and transmit the document to EPA and Kentucky by November 15, 2011, for review and approval.

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 Administrative Record and the Environmental Information Center.

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 D2 FY 2011 SMP has been under EPA and Kentucky review during this reporting period.
- The D2/R1 FY 2011 SMP has been under development and EPA and Kentucky review during this reporting period.
- The D1 FY 2012 SMP has been under development during this reporting period.

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

- Received conditional approval of the D2 FY 2011 SMP from Kentucky and EPA on April 25, 2011, and April 26, 2011, respectively.
- Issued the D2/R1 FY 2011 SMP to EPA and Kentucky May 25, 2011, for final approval.
- Received formal approval of the D2/R1 FY 2011 SMP from Kentucky June 8, 2011, and acknowledgement that DOE had met EPA's conditions of approval via e-mail from EPA June 14, 2011.
- D1 FY 2012 SMP is due to EPA and Kentucky no later than November 15, 2011.
- Comments on the D1 FY 2012 SMP are due to DOE within 30 days of the document's being issued or December 15, 2011.
- D2 FY 2012 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 BGOU project continued informal dispute regarding the content of the FS during finalization of the D2/R1 FY 2011 SMP. The continued dispute resolution will affect the BGOU scope (e.g., remedial action objectives and planning assumptions) and milestone sections of the SMP. The FFA parties have agreed to align the scope section of the FY 2012 SMP to reflect the current status of the project. This text will be written based upon the current understanding among the FFA parties to group the BGOU SWMUs into more manageable remedial action subprojects. Any delays in reaching consensus on the text in Appendix 3 of the SMP will delay approval of the SMP.

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:

None.

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

Not applicable.

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**FEDERAL FACILITY AGREEMENT
SEMIANNUAL REPORT
SECOND HALF OF FISCAL YEAR 2011**

**Facility: Paducah Gaseous Diffusion Plant
Plant EPA I.D. No.: KY8-890-008-982
Reporting Period: 4/1/2011–9/30/2011**

PROJECT: CERCLA Waste Disposal Alternatives Evaluation

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

- Presented and participated in modeling subgroup conference calls on April 6, April 13, May 11, May 18, May 25, June 1, June 22, and July 27.
- Presented and participated in modeling subgroup meetings held April 21–22 and June 13–14.
- Revised Appendix C of the D2/R1 RI/FS Work Plan, Proposed Groundwater Modeling Methodology per the Memorandum of Agreement and subsequent meetings. The submittal date to the agencies was June 2, 2011.
- Received Kentucky comments to Appendix C of the D2/R1 RI/FS Work Plan, Proposed Groundwater Modeling Methodology, on July 6, 2011.
- Submitted a revised Appendix C of the D2/R1 RI/FS Work Plan, Proposed Groundwater Modeling Methodology, and comment response summary in draft form to Kentucky and EPA on August 31, 2011.
- Held a conference call with DOE, LATA Kentucky, EPA, and Kentucky August 31, 2011, to discuss the revised Appendix C of the D2/R1 RI/FS Work Plan, Proposed Groundwater Modeling Methodology, and comment response summary. Concurrence on the draft and comment response summary was achieved September 9, 2011.
- Submitted a revised Appendix C of the D2/R1 RI/FS Work Plan, Proposed Groundwater Modeling Methodology, and comment response summary in draft form to EPA and Kentucky on September 14, 2011.

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

Preliminary WAC modeling will be conducted concurrently by DOE, Kentucky, and EPA. The model results will be incorporated into the RI/FS Report with a target submittal date to the agencies of October 31, 2011. The exact date of submittal will be influenced by the progress of the joint modeling.

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 Administrative Record and the Environmental Information Center.

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

Following submittal of the RI/FS Work Plan, 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 D1 RI/FS Report currently is being developed.

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

- Approval of the revised Appendix C to the D2/R1 RI/FS Work Plan will be due within 30 days of submittal to EPA and Kentucky.
- Comments and/or approval of the D1 RI/FS Work Plan will be due within 90 days of submittal to EPA and Kentucky.

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:

None.

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

Not applicable.

APPENDIX A

**NORTHEAST AND NORTHWEST PLUME
WATER WITHDRAWAL REPORTS**

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

Day	April 2011	May 2011	June 2011	July 2011	August 2011	September 2011
1	206,125	13,450	153,600	260,250	134,200	258,700
2	206,125	138,400	287,950	260,250	132,600	251,425
3	206,125	76,300	287,950	260,250	134,900	251,425
4	266,000	241,300	287,950	260,250	139,500	251,425
5	249,800	154,350	287,950	260,250	129,300	251,425
6	258,900	154,350	258,900	262,800	129,300	246,600
7	133,775	154,350	279,200	204,525	129,300	247,100
8	133,775	154,350	250,400	204,525	132,500	253,500
9	133,775	246,300	266,625	204,525	252,800	250,600
10	133,775	258,200	266,625	204,525	263,000	250,600
11	256,300	255,100	266,625	117,700	250,200	250,600
12	249,700	265,050	266,625	112,200	252,867	242,600
13	236,400	265,050	252,600	126,600	252,867	254,200
14	252,025	265,050	278,800	135,900	252,867	108,700
15	252,025	265,050	262,900	135,900	253,900	252,975
16	252,025	264,400	267,650	135,900	244,800	252,975
17	252,025	263,800	267,650	135,900	289,300	252,975
18	262,100	280,100	267,650	135,500	219,400	252,975
19	216,000	238,275	267,650	134,800	257,300	247,500
20	210,700	238,275	262,100	126,100	257,300	259,900
21	210,700	238,275	270,200	133,600	257,300	269,500
22	210,700	238,275	258,700	133,600	241,600	257,450
23	210,700	191,100	270,525	133,600	249,200	257,450
24	210,700	261,300	270,525	133,600	252,000	257,450
25	253,500	155,000	270,525	133,800	254,400	257,450
26	265,100	208,300	270,525	130,200	255,100	244,700
27	205,200	208,300	35,900	132,200	255,100	252,600
28	13,450	208,300	248,900	134,500	255,100	270,700
29	13,450	208,300	285,200	132,433	253,000	256,625
30	13,450	208,300	260,250	132,433	250,800	256,625
31	na	269,700	na	132,433	251,400	na
Monthly Total	5,974,425	6,586,650	7,728,650	5,141,049	6,883,200	7,468,750
*Daily Average	199,148	212,473	257,622	165,840	222,039	248,958
Days Water Pumped	30	31	30	31	31	30

*Value based on number of days water was pumped.

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

Day	April 2011	May 2011	June 2011	July 2011	August 2011	September 2011
1	313,860	189,418	320,450	320,317	91,100	320,920
2	313,860	315,620	319,785	320,317	310,240	308,570
3	313,860	311,120	319,785	320,317	310,360	308,570
4	325,070	320,730	319,785	320,317	102,270	308,570
5	308,480	288,940	319,785	320,317	296,523	308,570
6	316,320	288,940	316,130	320,890	296,523	311,900
7	314,723	288,940	320,340	318,810	296,523	301,450
8	314,723	288,940	314,420	318,810	306,790	321,690
9	314,723	313,800	322,333	318,810	313,580	315,367
10	314,723	317,460	322,333	318,810	314,940	315,367
11	317,960	318,250	322,333	324,760	313,060	315,367
12	316,460	318,860	322,333	264,050	311,453	311,710
13	319,940	318,860	309,000	319,730	311,453	316,600
14	204,013	318,860	322,840	323,210	311,453	314,230
15	204,013	318,860	321,640	323,210	316,030	316,945
16	204,013	319,300	320,150	323,210	308,490	316,945
17	204,013	300,790	320,150	323,210	352,450	316,945
18	311,040	321,360	320,150	311,300	277,690	316,945
19	317,060	315,353	320,150	324,060	315,550	310,630
20	307,632	315,353	320,270	300,070	315,550	311,540
21	307,632	315,353	314,810	292,248	315,550	255,400
22	307,632	315,353	321,600	292,248	304,960	265,995
23	307,632	312,830	319,138	292,248	313,350	265,995
24	307,632	317,620	319,138	292,248	312,520	265,995
25	313,680	322,370	319,138	316,120	312,860	265,995
26	311,650	319,838	319,138	301,630	313,993	311,140
27	308,810	319,838	325,410	325,900	313,993	284,810
28	189,418	319,838	314,150	315,270	313,993	277,610
29	189,418	319,838	317,260	314,730	312,180	307,023
30	189,418	319,838	320,317	314,730	310,890	307,023
31	na	321,460	na	314,730	309,880	na
Monthly Total	8,589,403	9,593,928	9,984,257	9,706,623	9,206,200	9,075,815
*Daily Average	286,313	309,482	332,809	313,117	296,974	302,527
Days Water Pumped	30	31	30	31	31	30

*Value based on number of days water was pumped.

APPENDIX B

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

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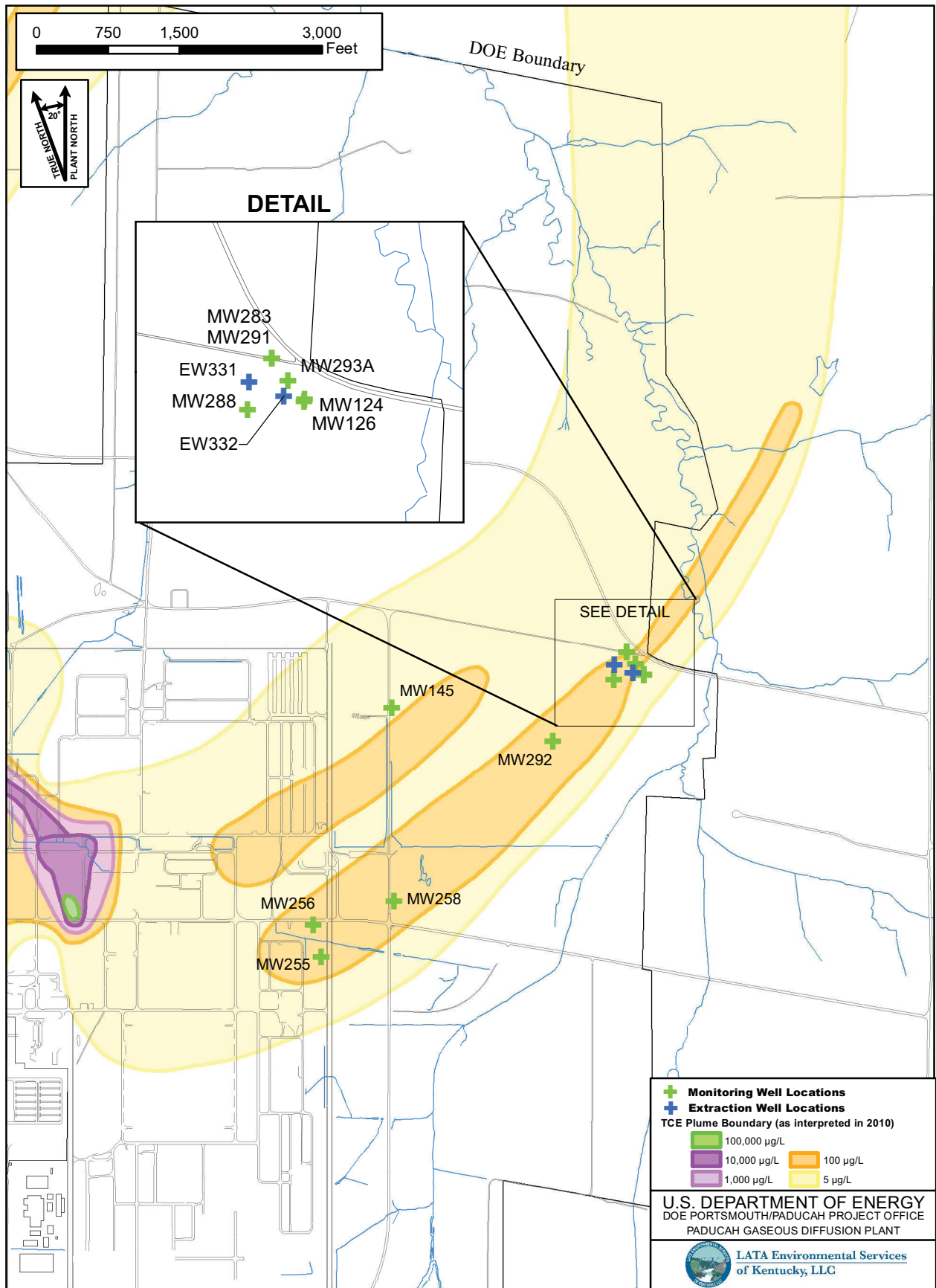


FIGURE No. FFA SemiAnnual20110906_NEP_R0.mxd
DATE 09-06-2011

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

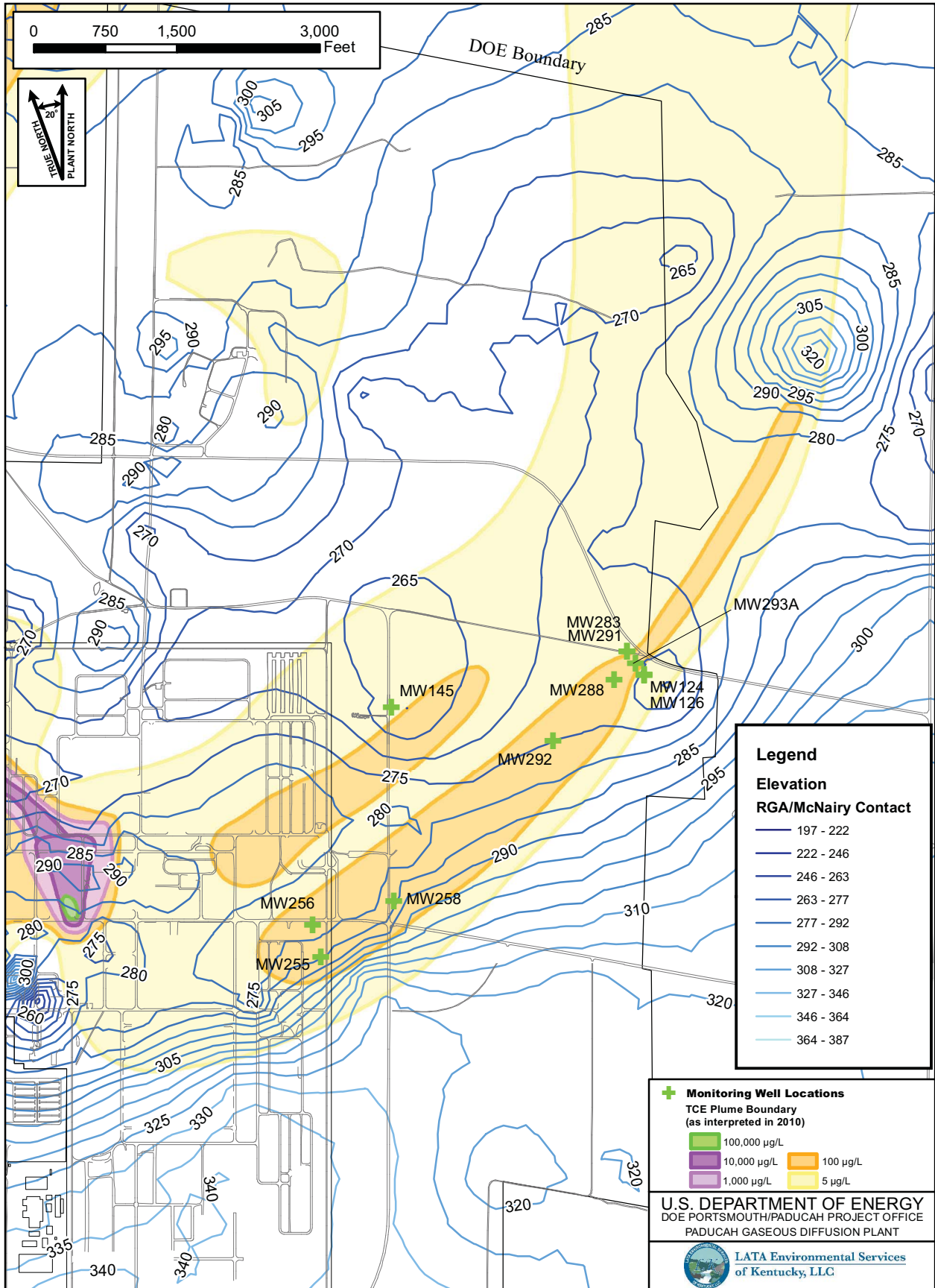
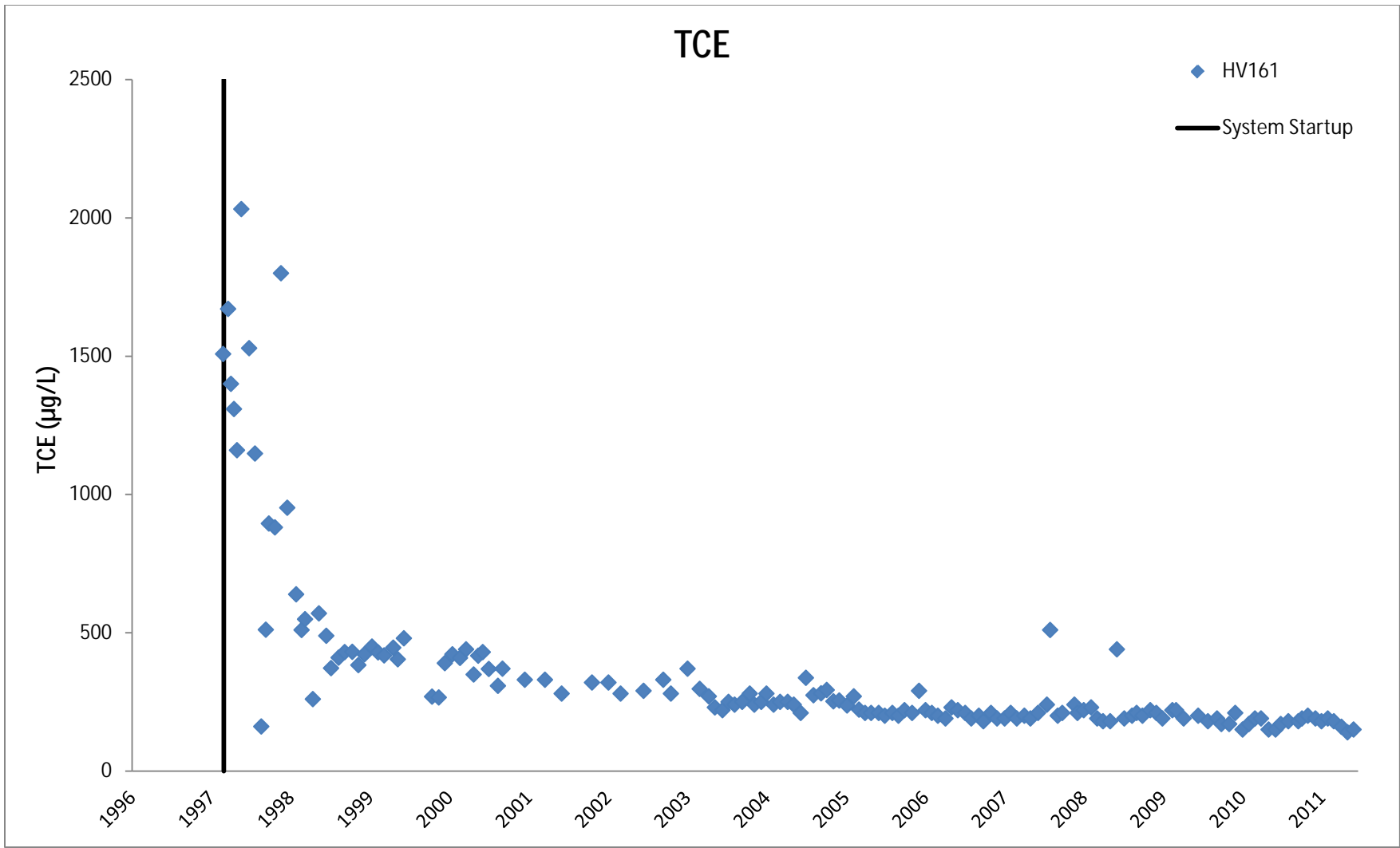


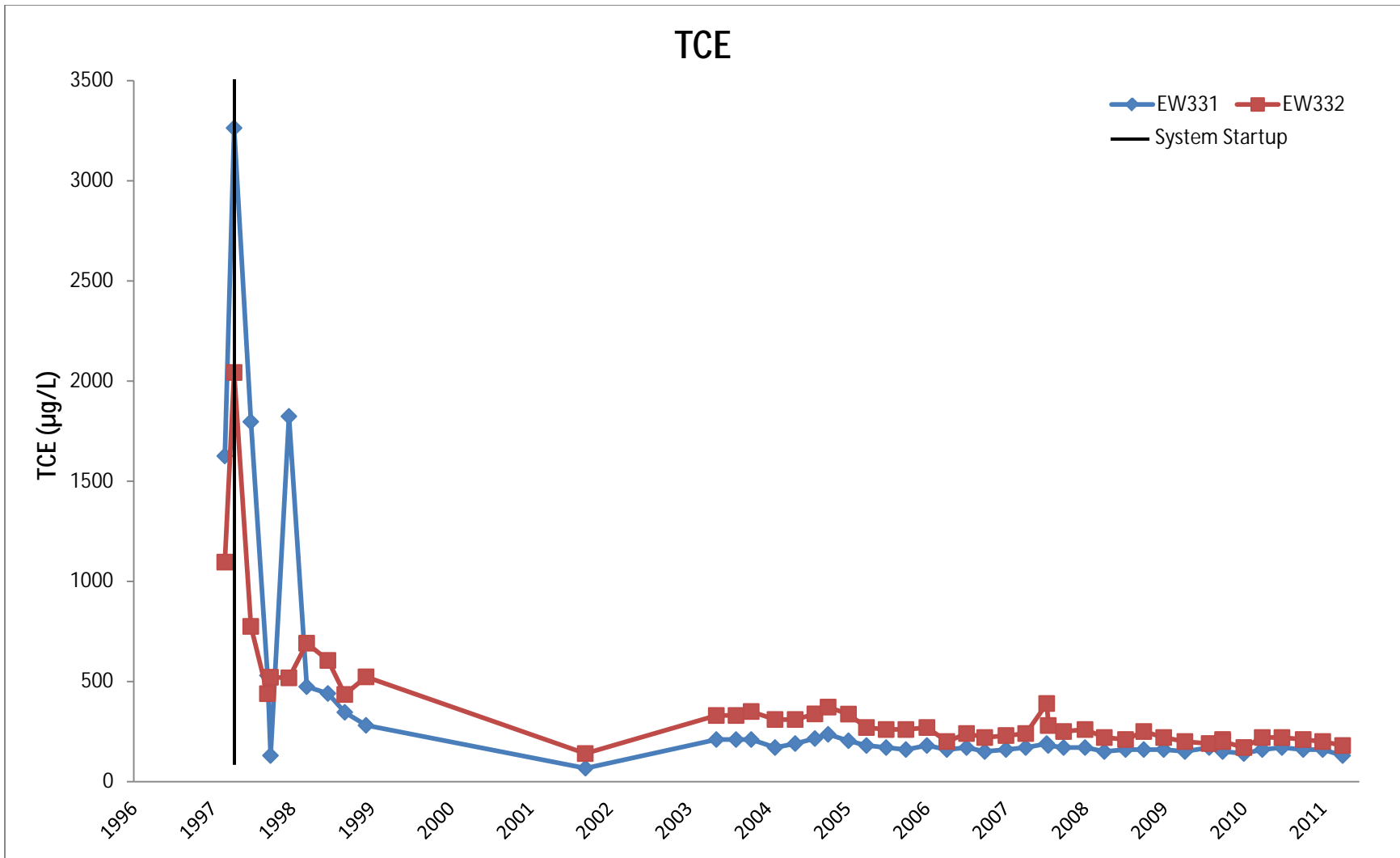
FIGURE No. FFA SemiAnnual/20110906_NEP RGA_R0.mxd
 DATE 09-06-2011

Figure B.2. Northeast Plume with McNairy Topography



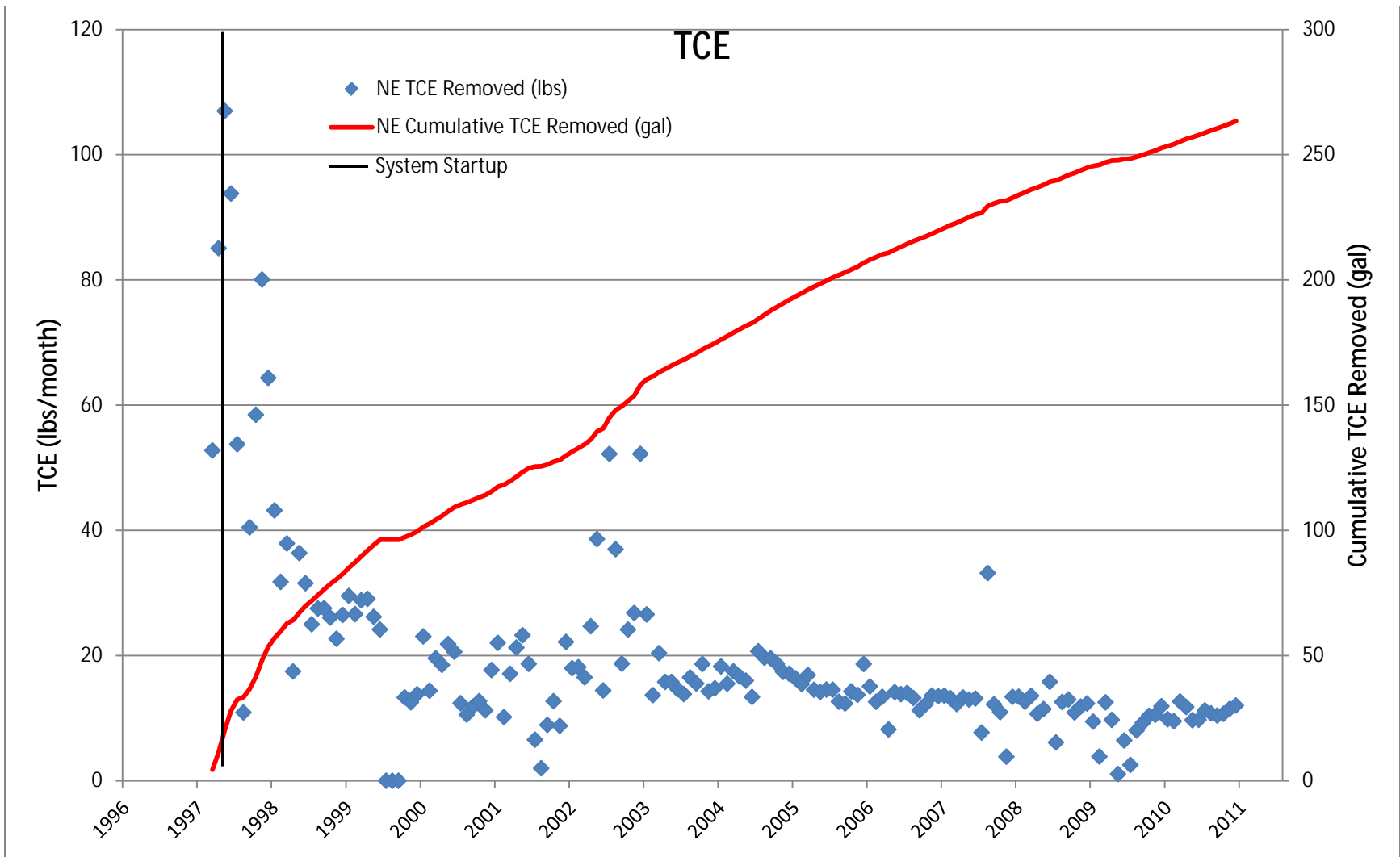
NOTE: Data rejected by validation or assessment have not been graphed.

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



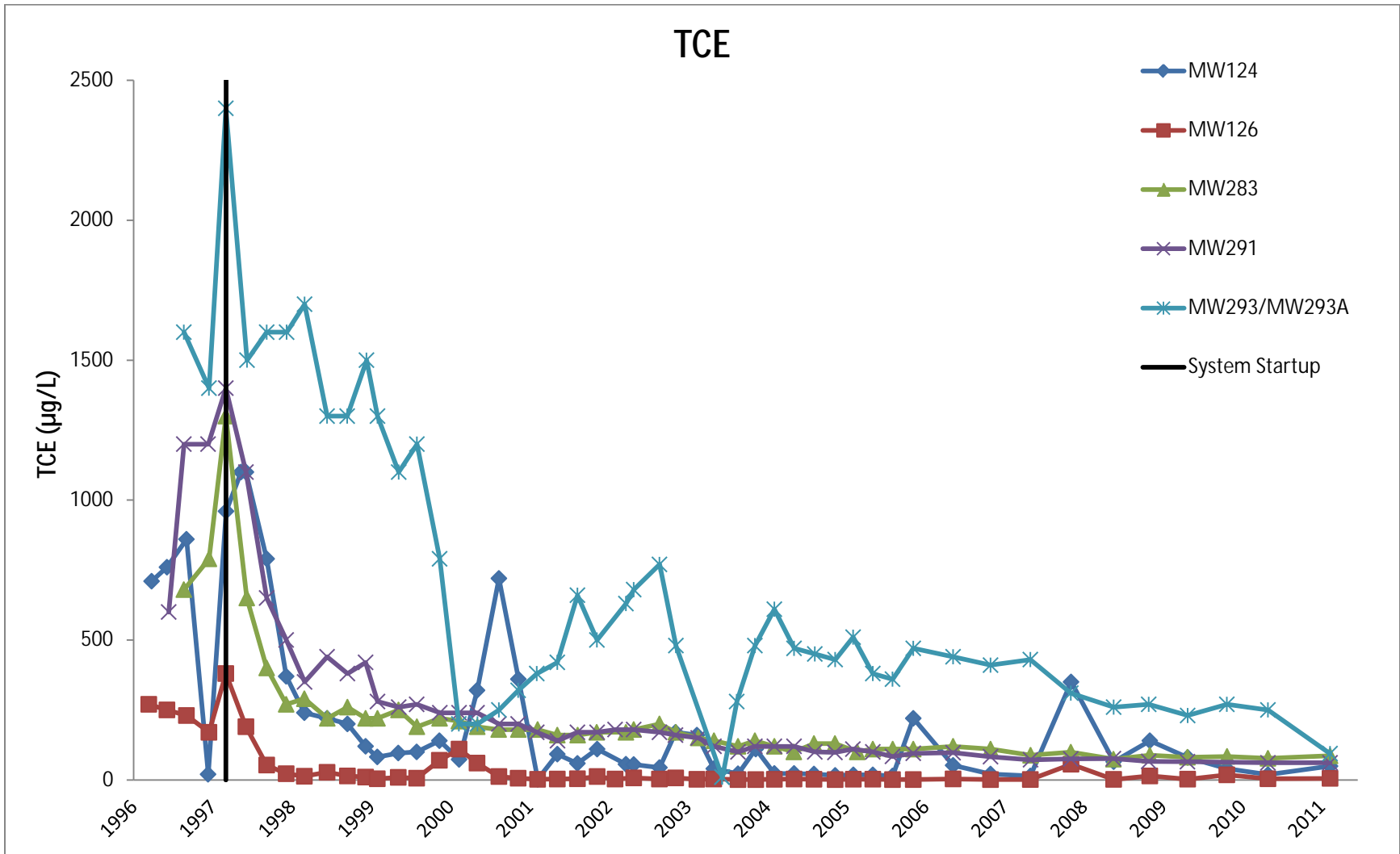
NOTE: Data rejected by validation or assessment have not been graphed.

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



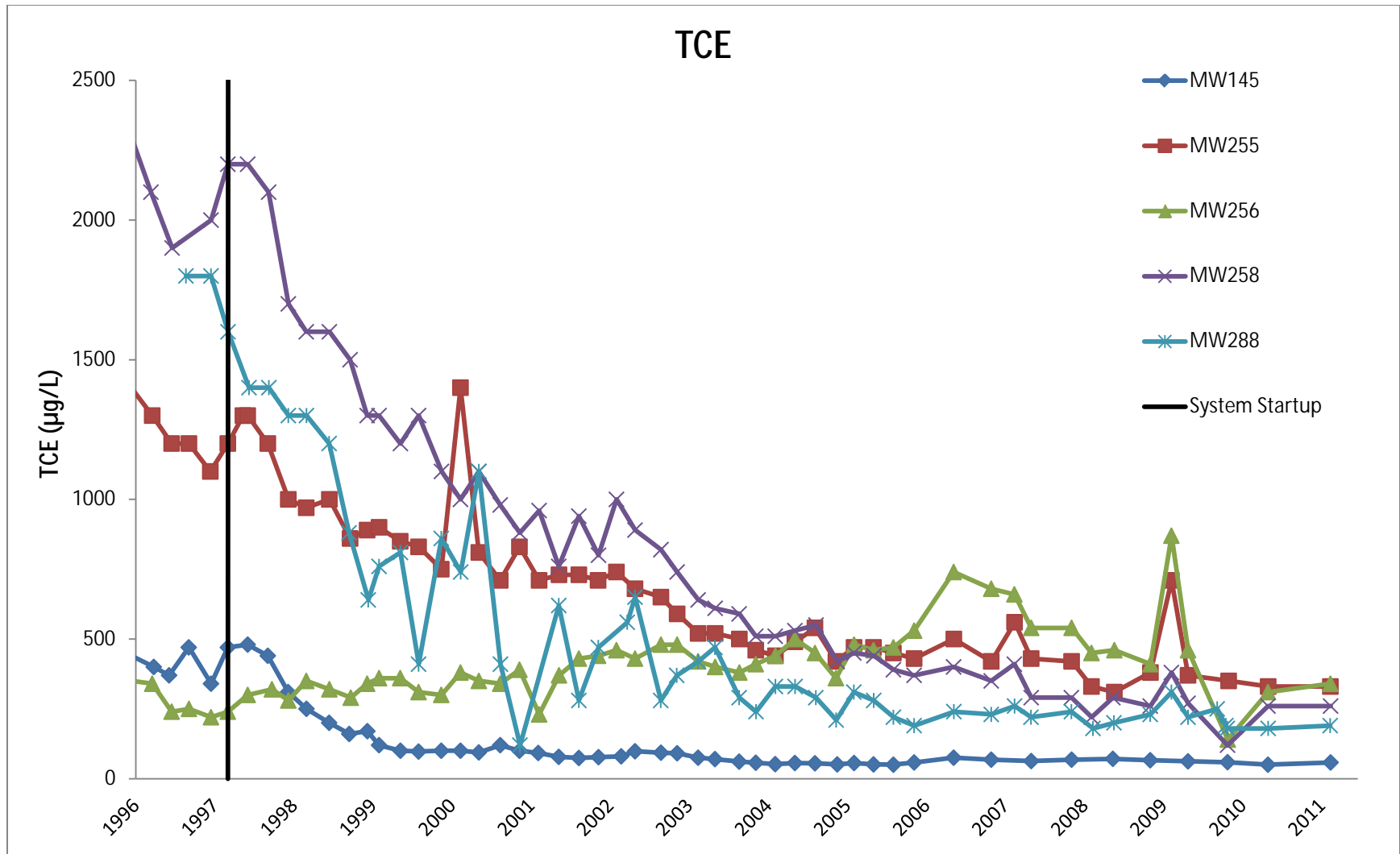
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.4. Northeast Plume Containment System TCE Removed



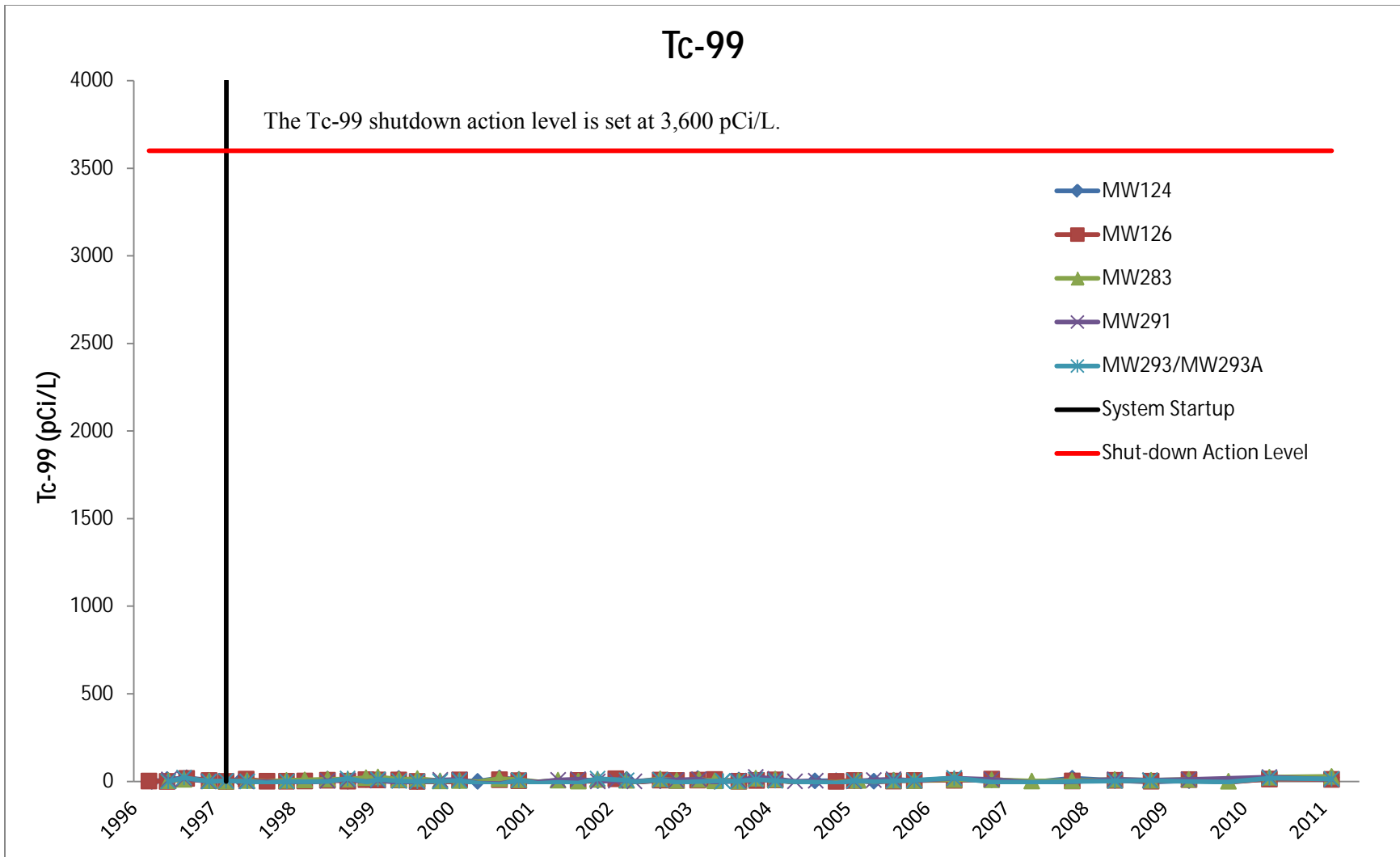
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.5. Northeast Plume—TCE Concentrations in Downgradient Wells



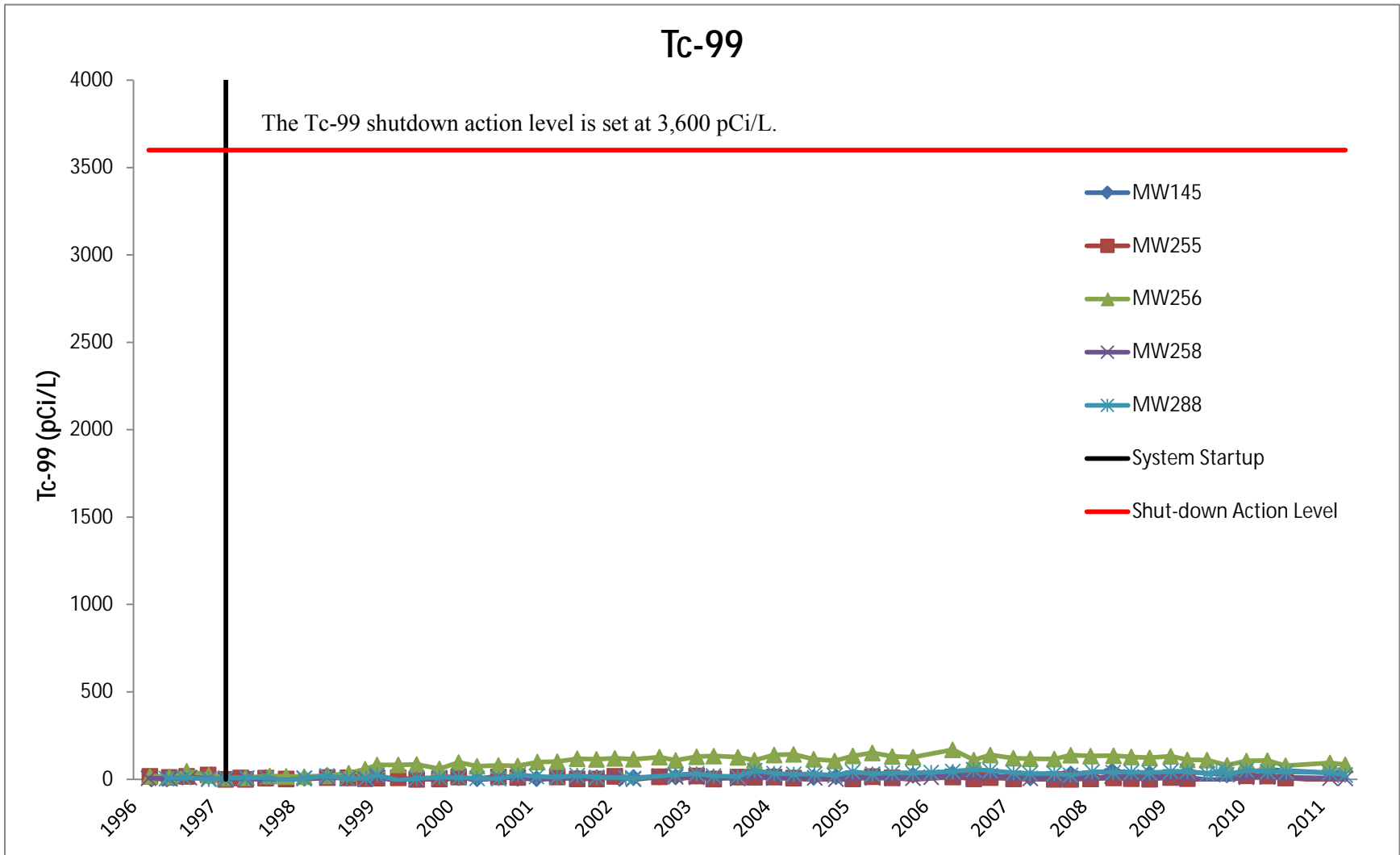
NOTE: Data rejected by validation or assessment have not been graphed.

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



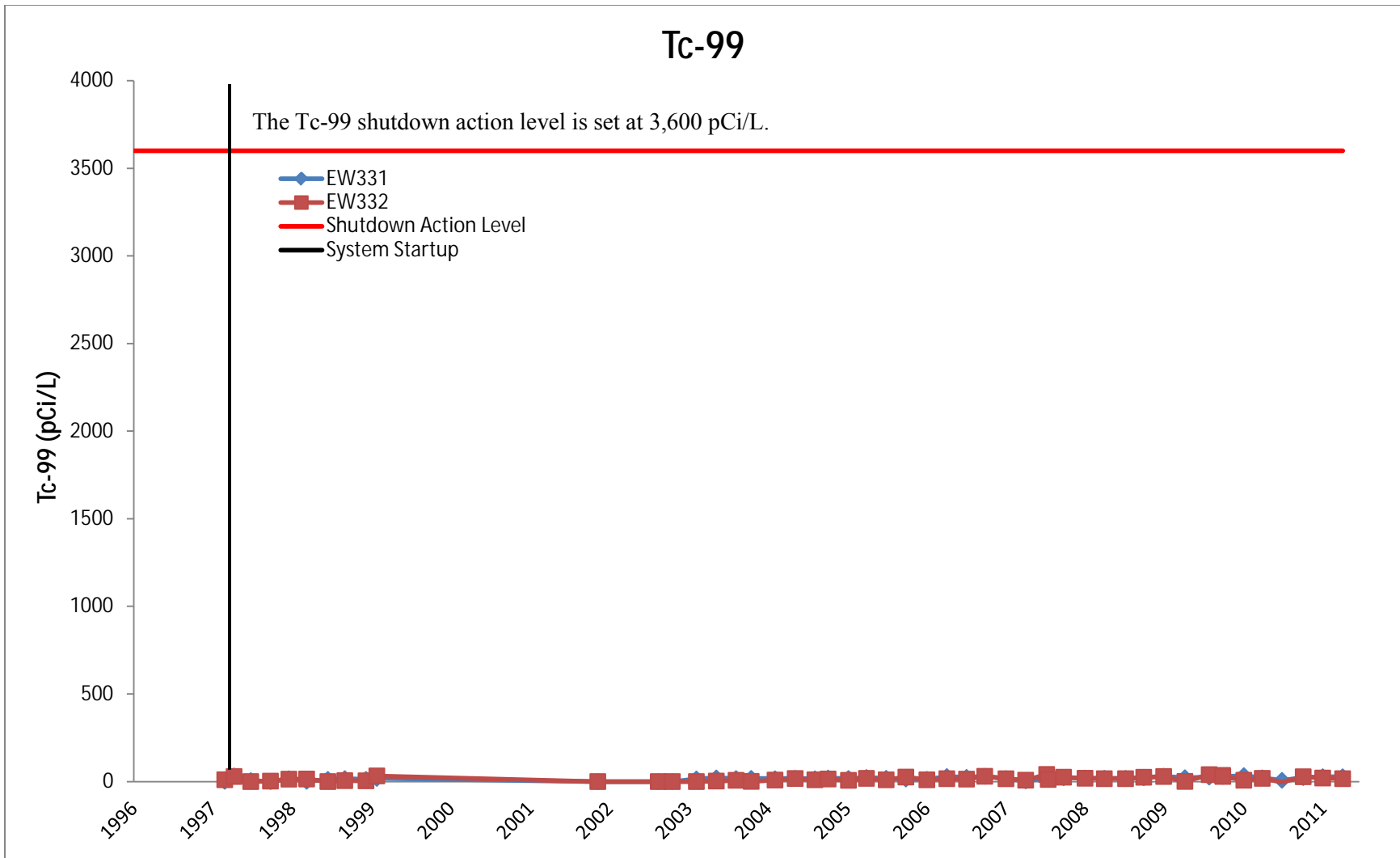
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.7. Northeast Plume—Tc-99 Activities in Downgradient Wells



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

Figure B.8. 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

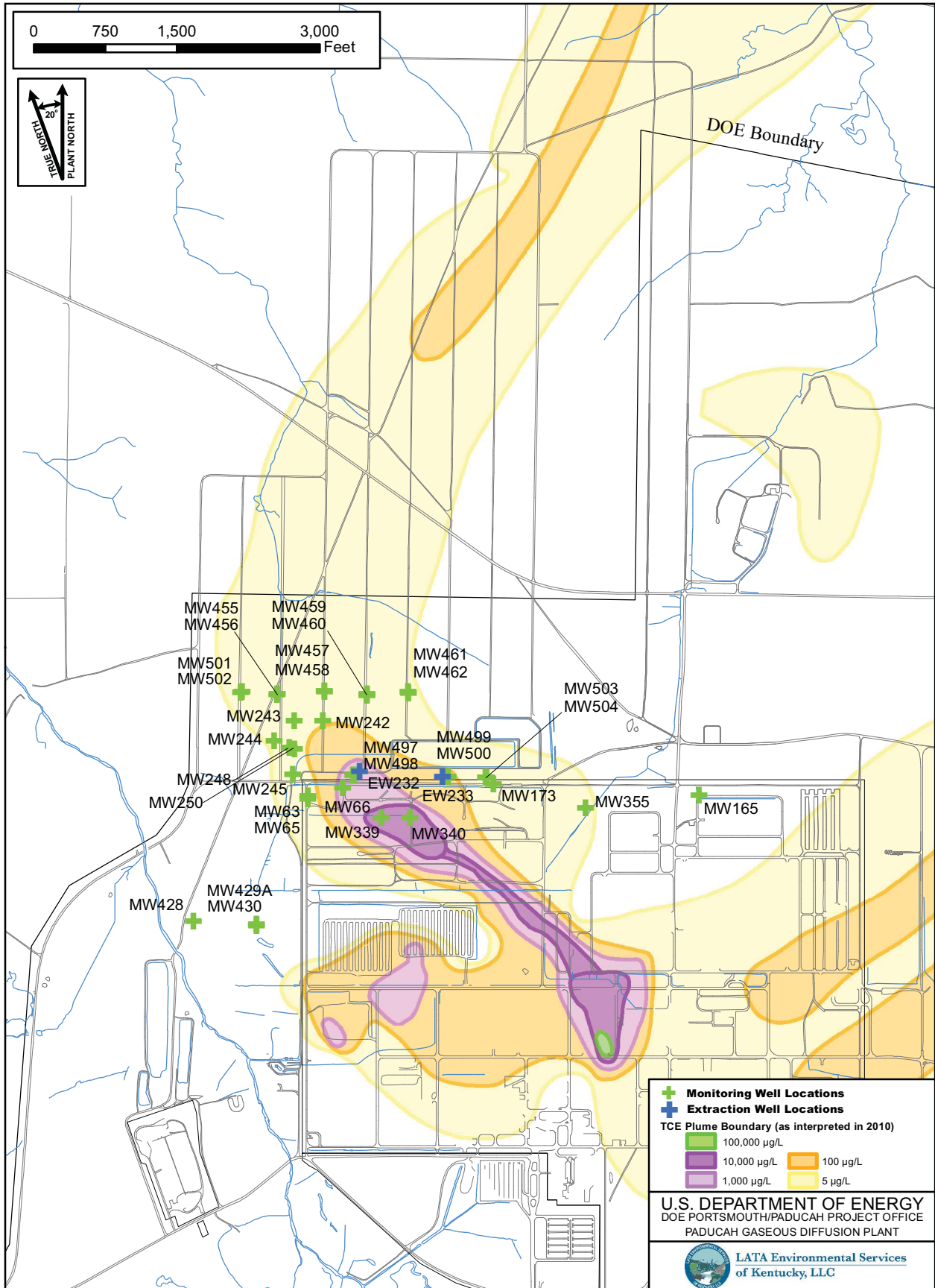


Figure B.11. Northwest Plume Groundwater Wells

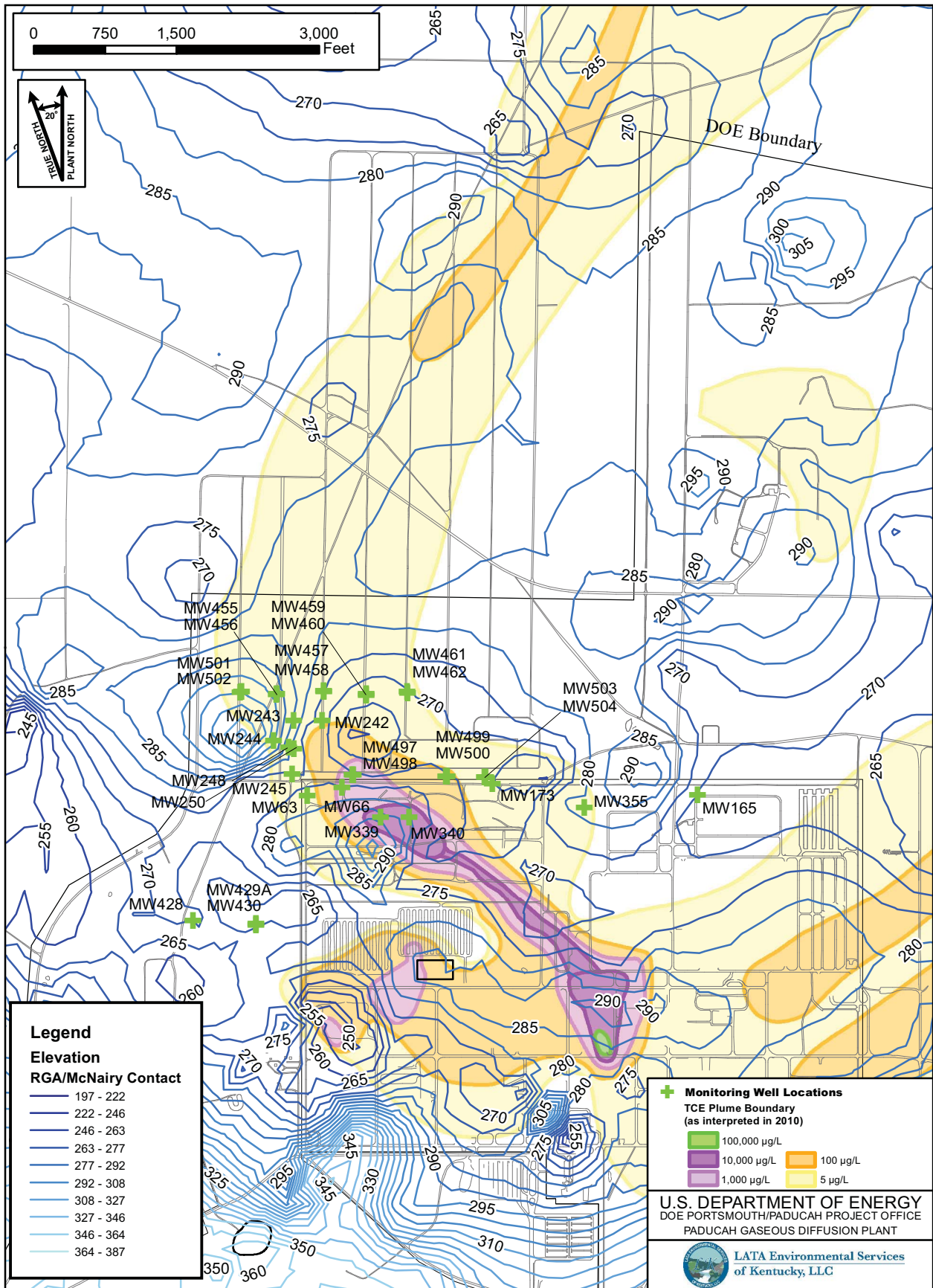
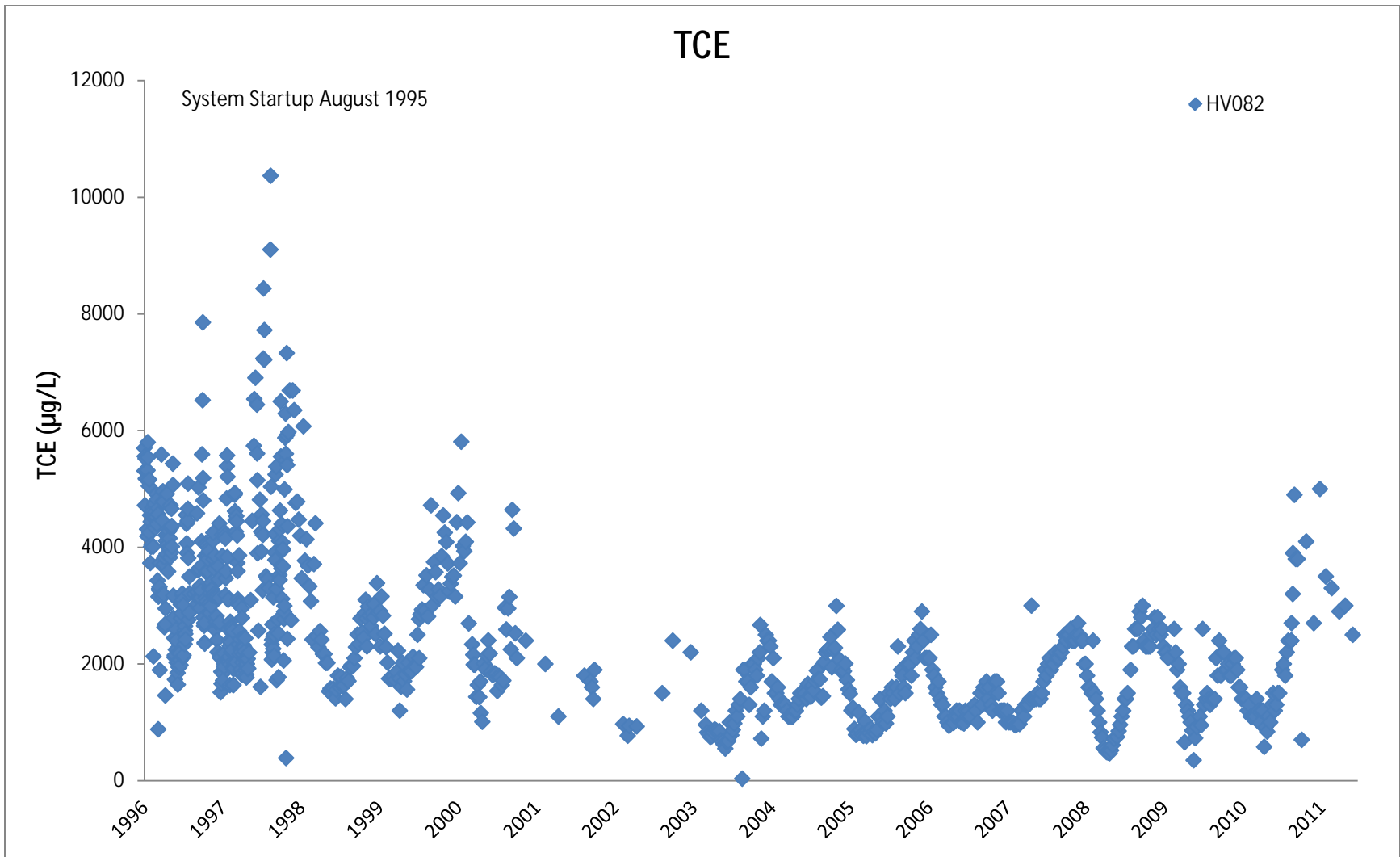
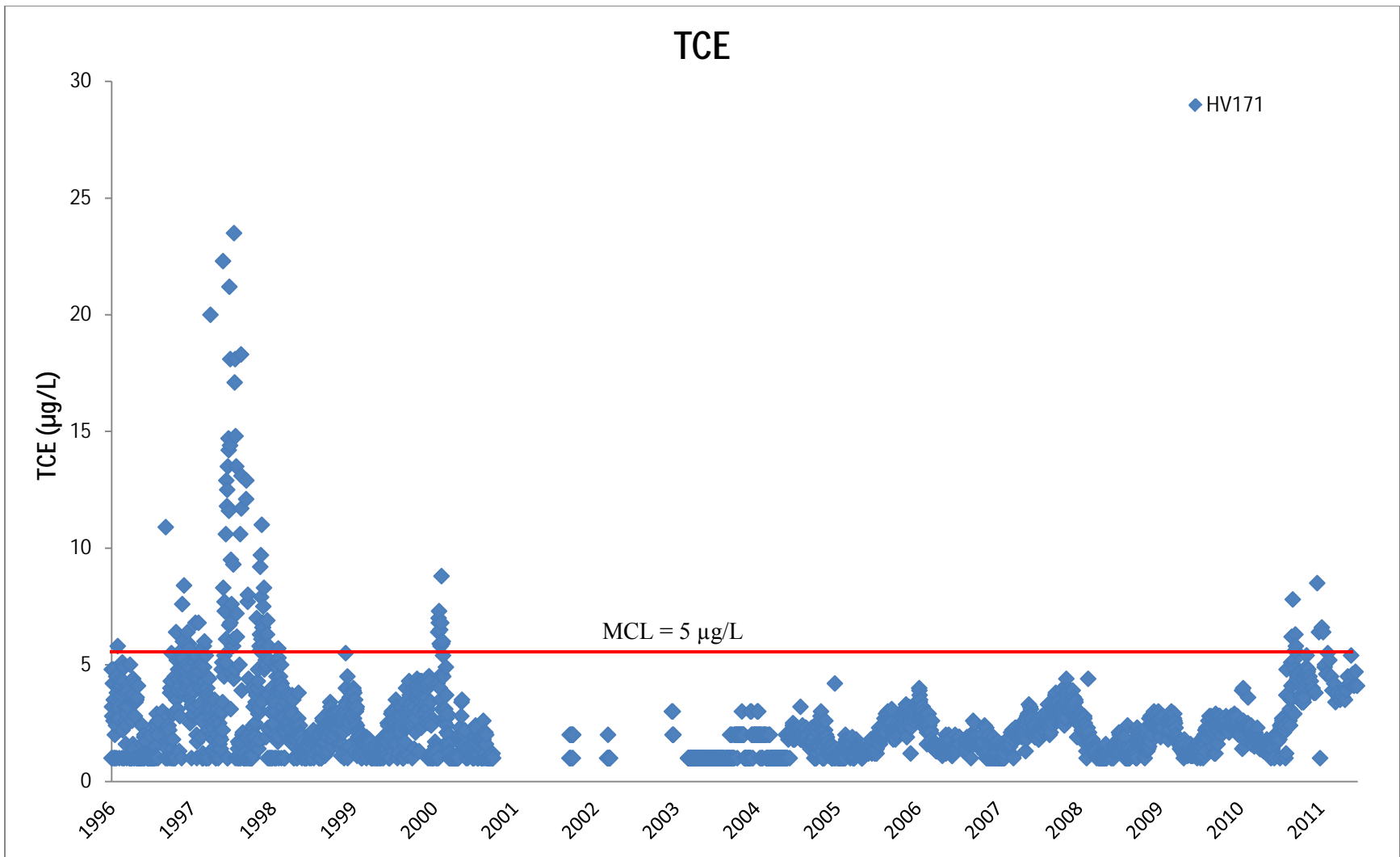


Figure B.12. Northwest Plume with Top of McNairy Topography



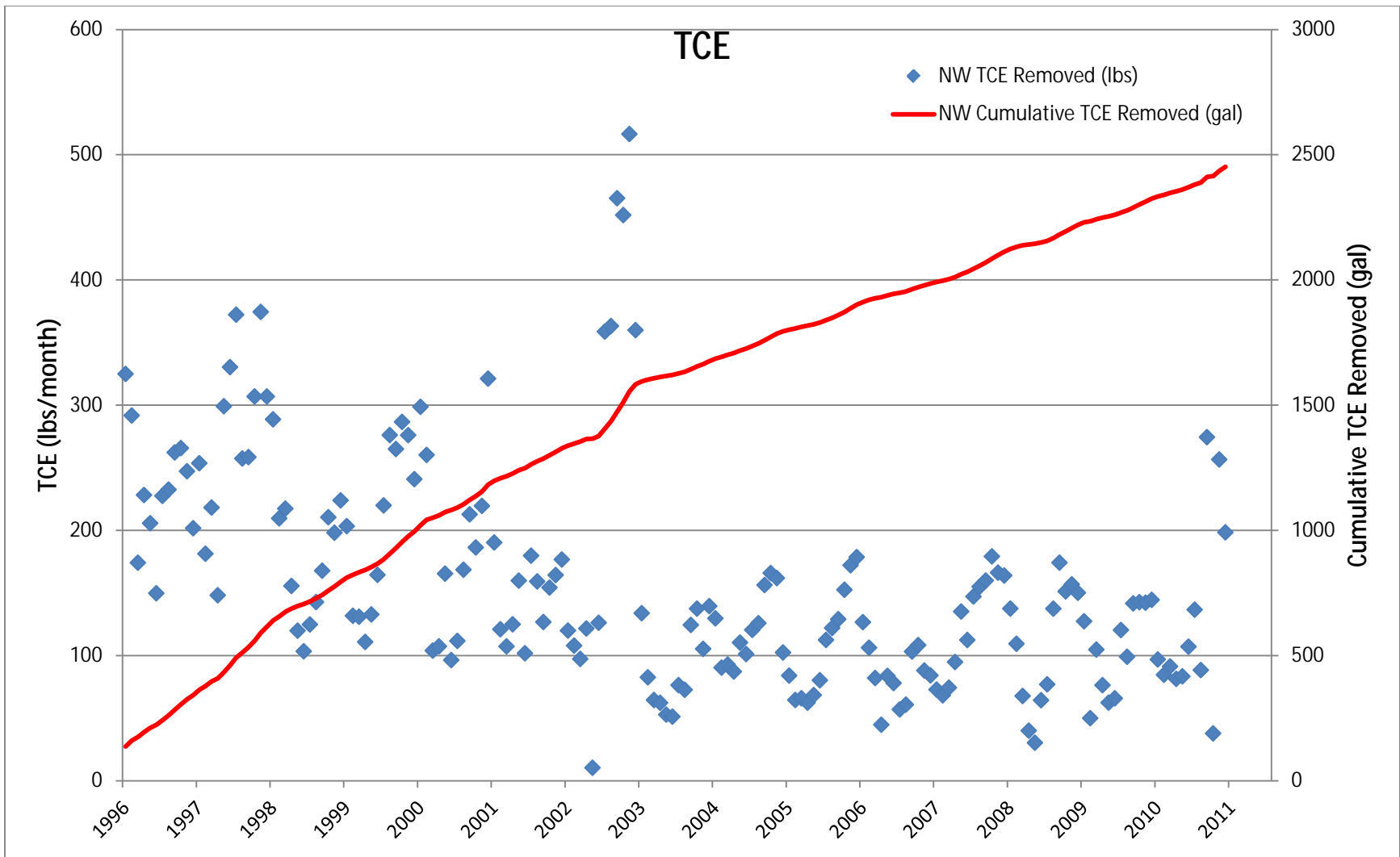
NOTE: Data rejected by validation or assessment have not been graphed.

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



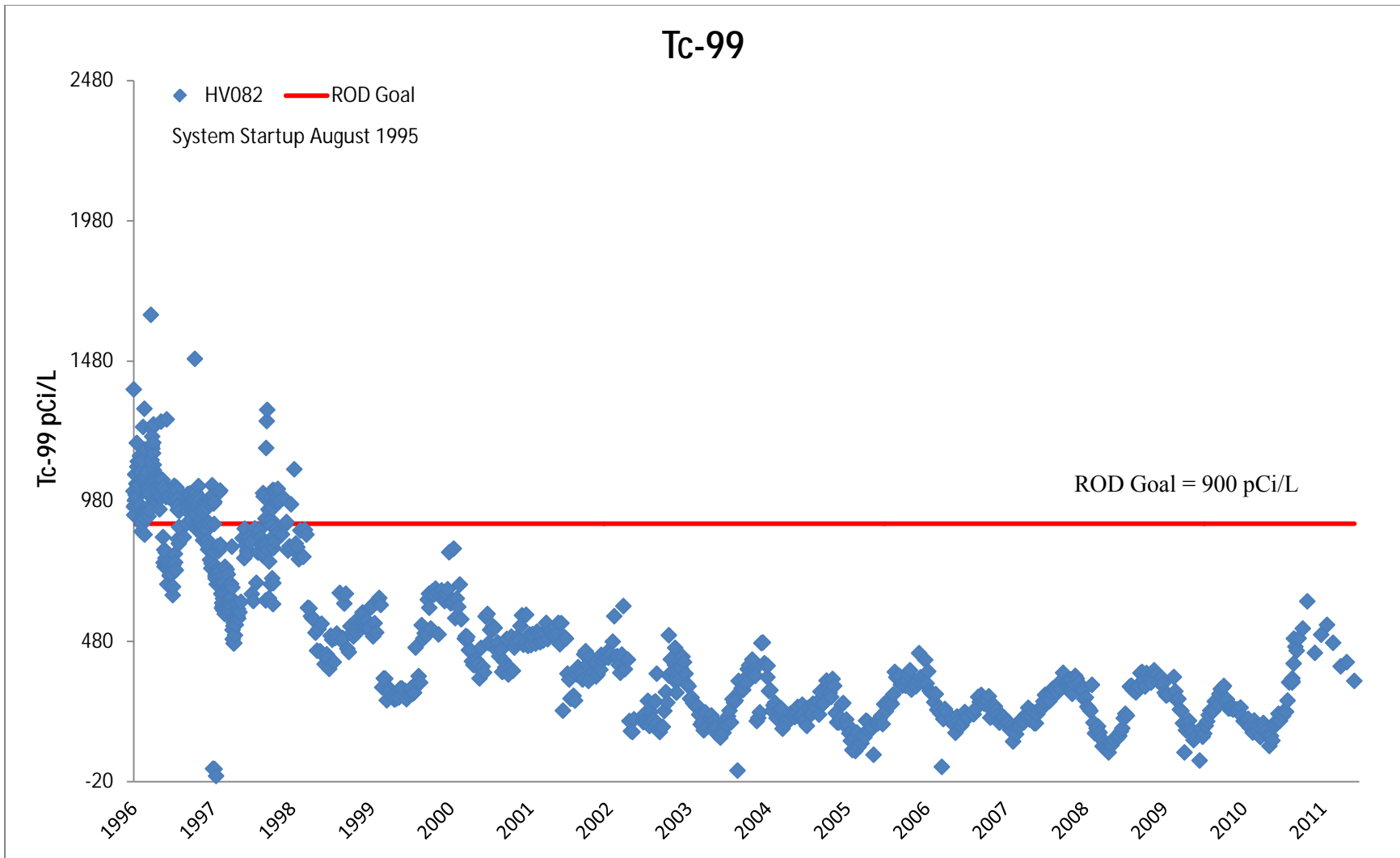
NOTE: Data rejected by validation or assessment have not been graphed.

Figure B.14. Northwest Plume Groundwater System Effluent TCE Concentrations



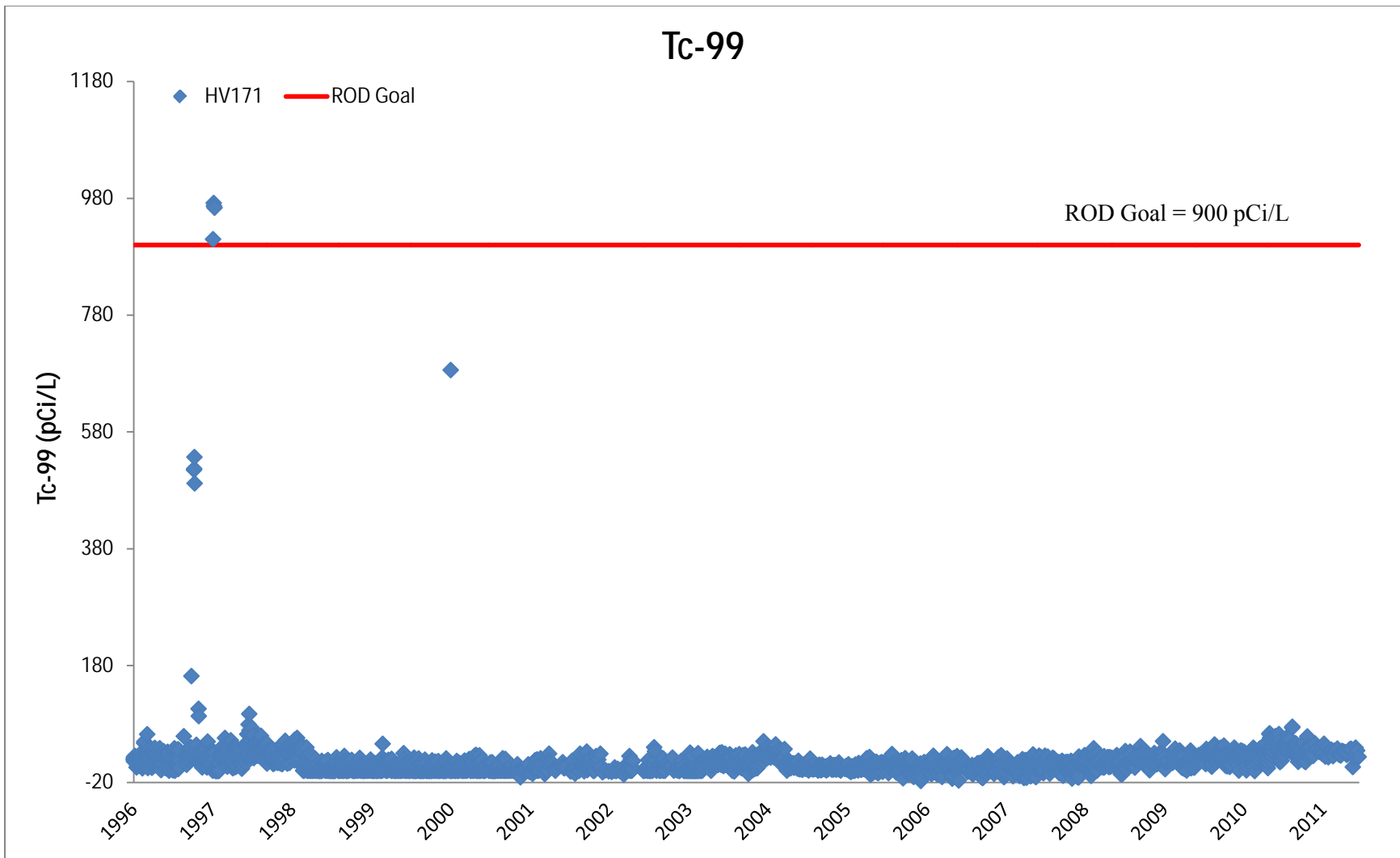
NOTE: Data rejected by validation or assessment are included on the graph.

Figure B.15. Northwest Plume Groundwater System TCE Removed



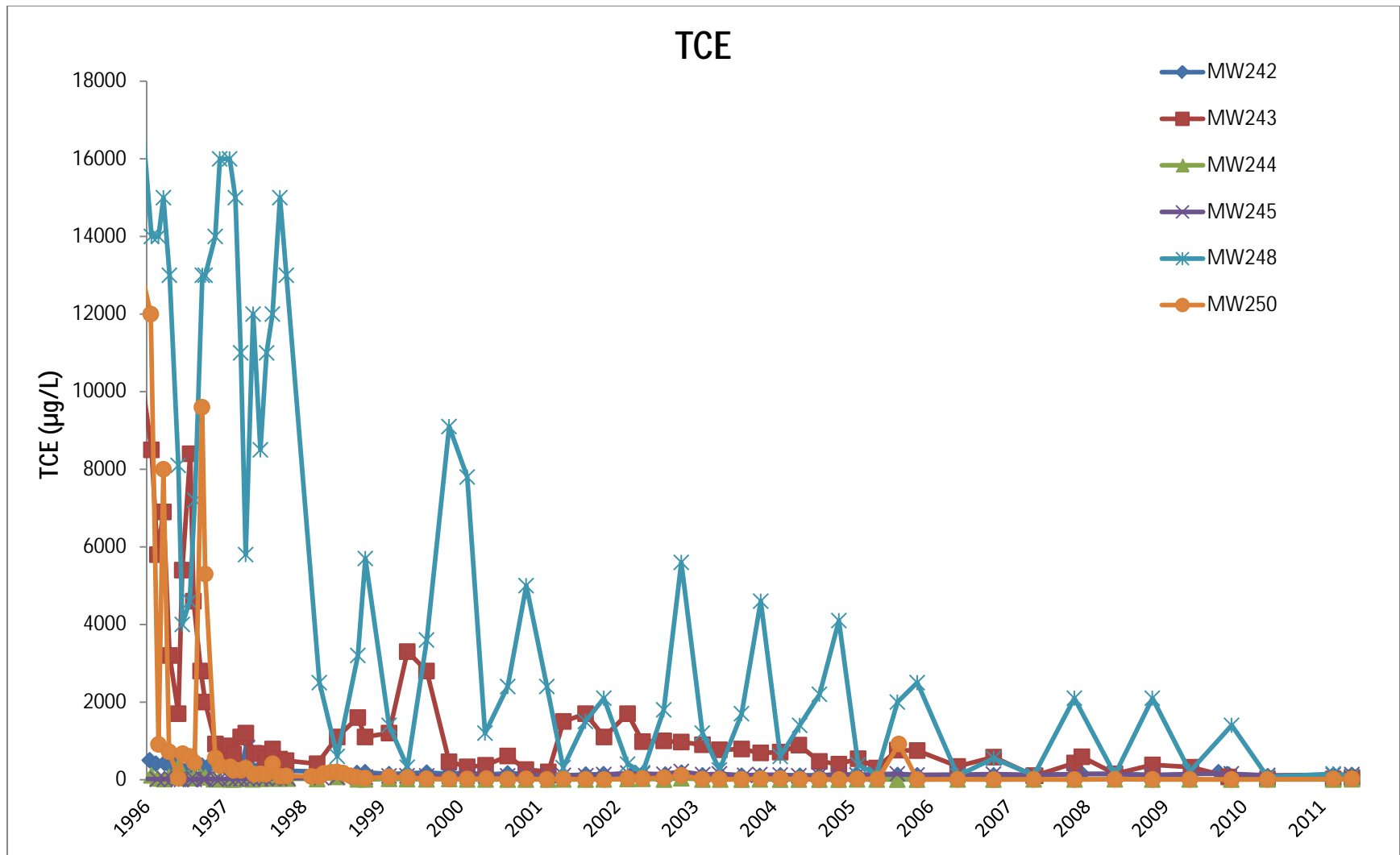
NOTE: Data rejected by validation or assessment have not been graphed.

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



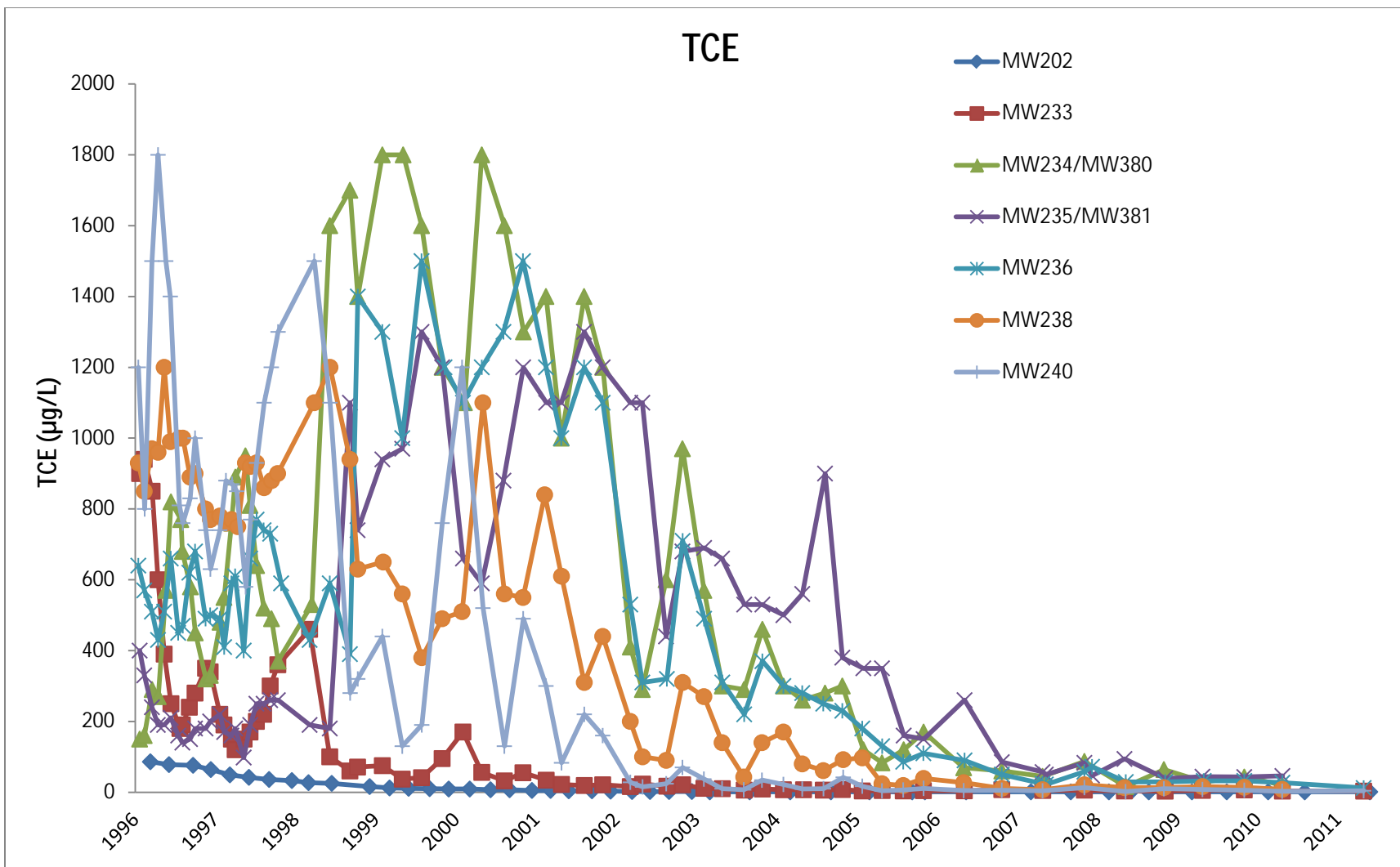
NOTE: Data rejected by validation or assessment have not been graphed.

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



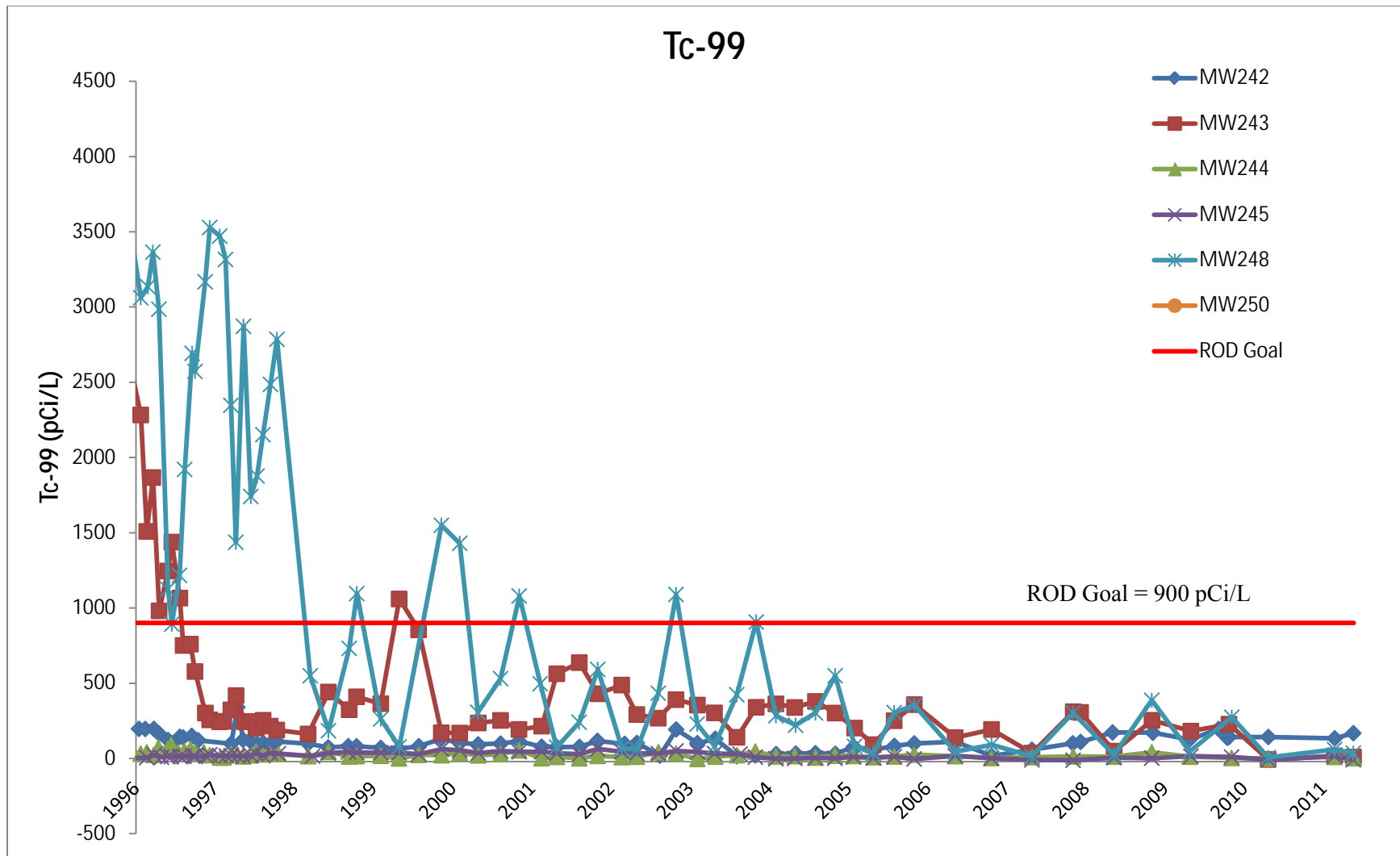
NOTE: Data rejected by validation or assessment have not been graphed.

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



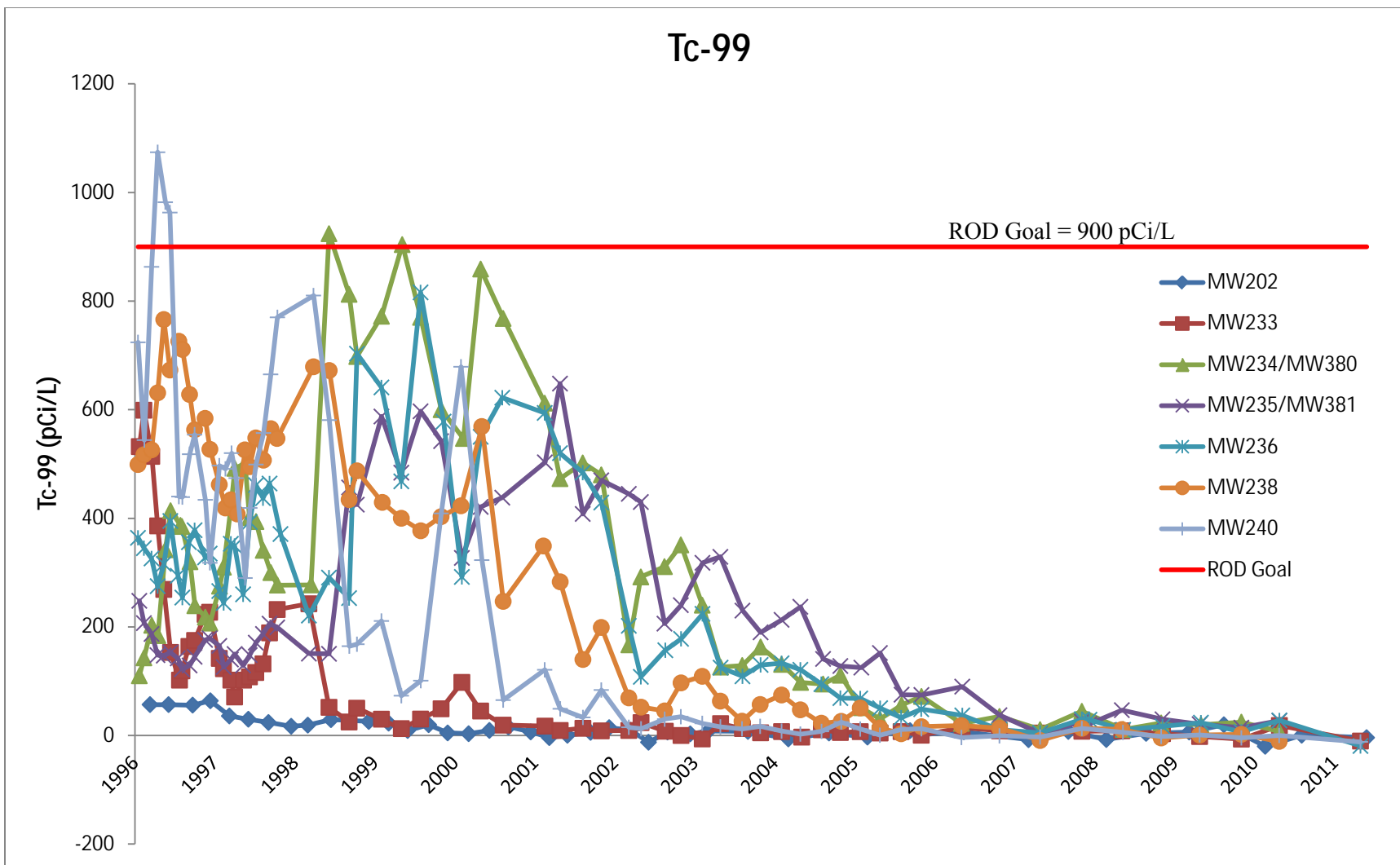
NOTE: Data rejected by validation or assessment have not been graphed.

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



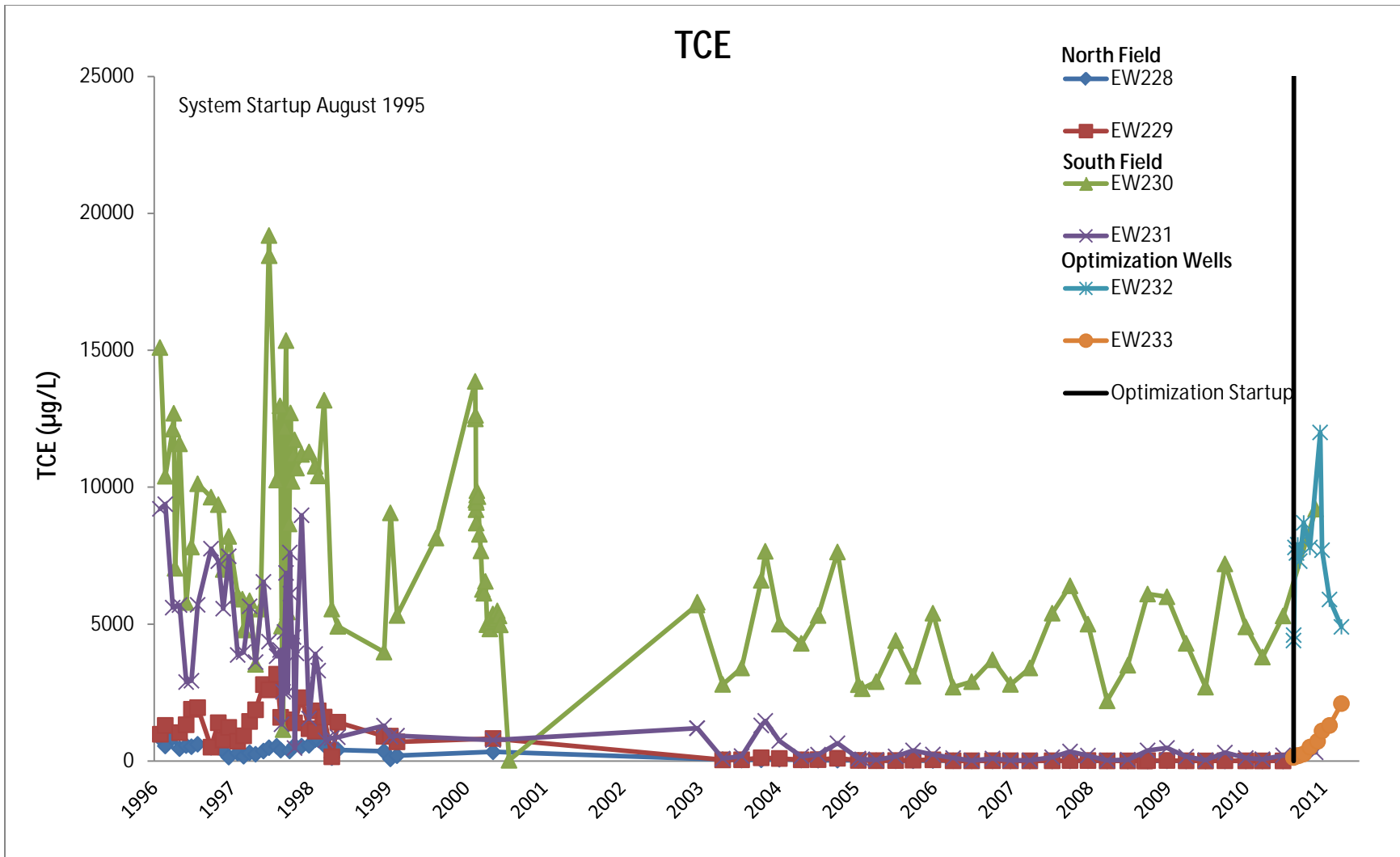
NOTE: Data rejected by validation or assessment have not been graphed.

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



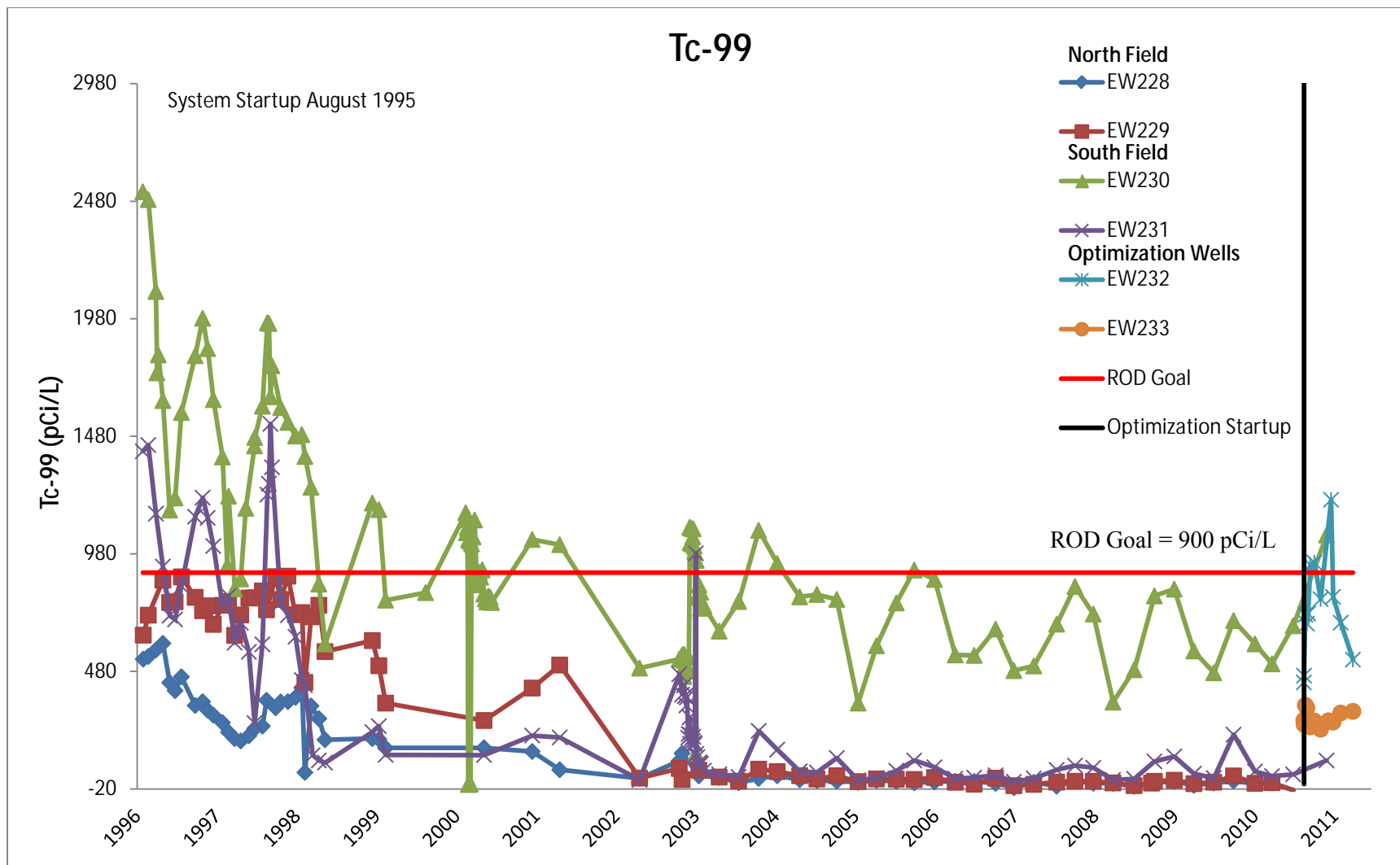
NOTE: Data rejected by validation or assessment have not been graphed.

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

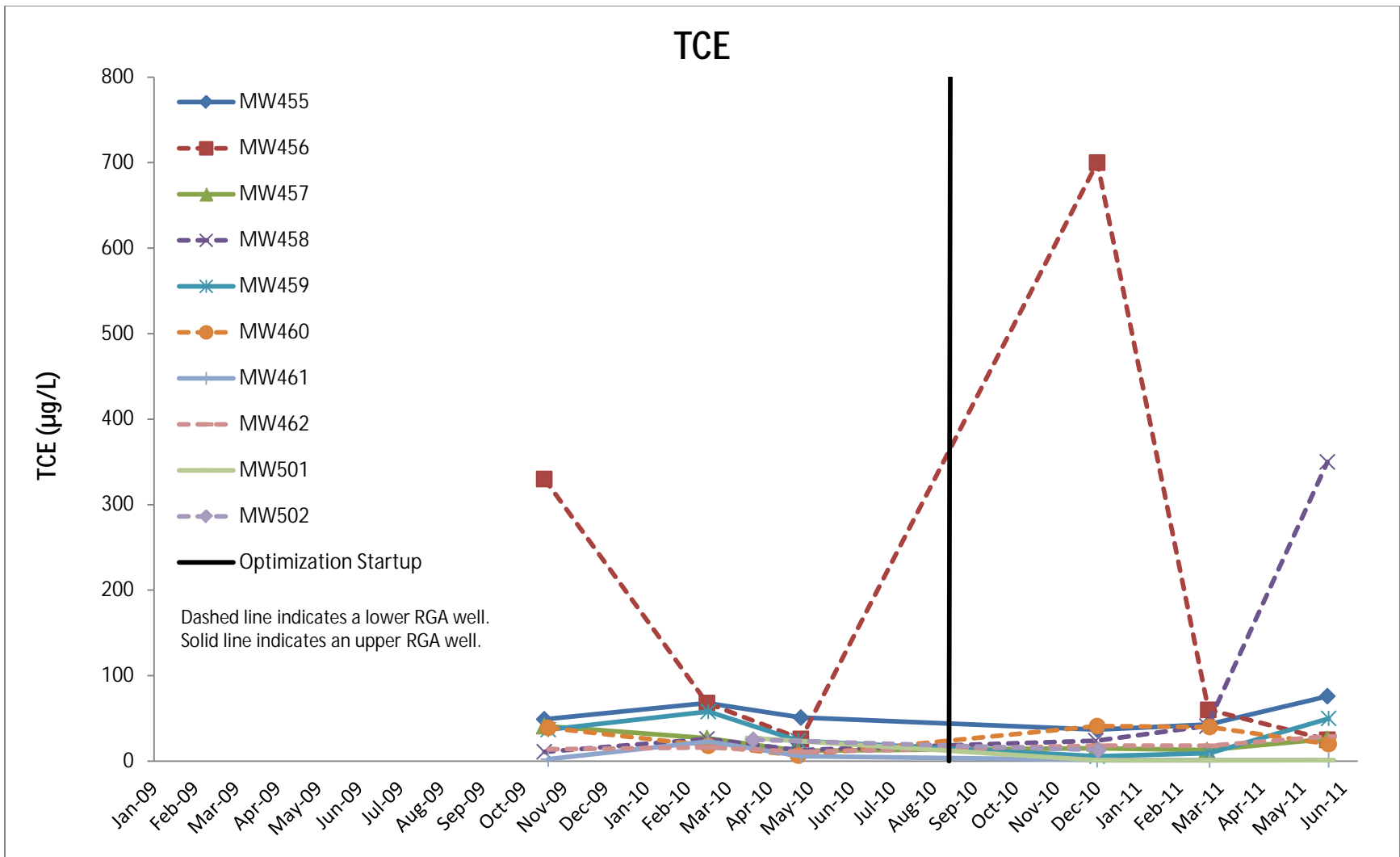


Figure B.24. Northwest Plume—New Well Field TCE Concentrations

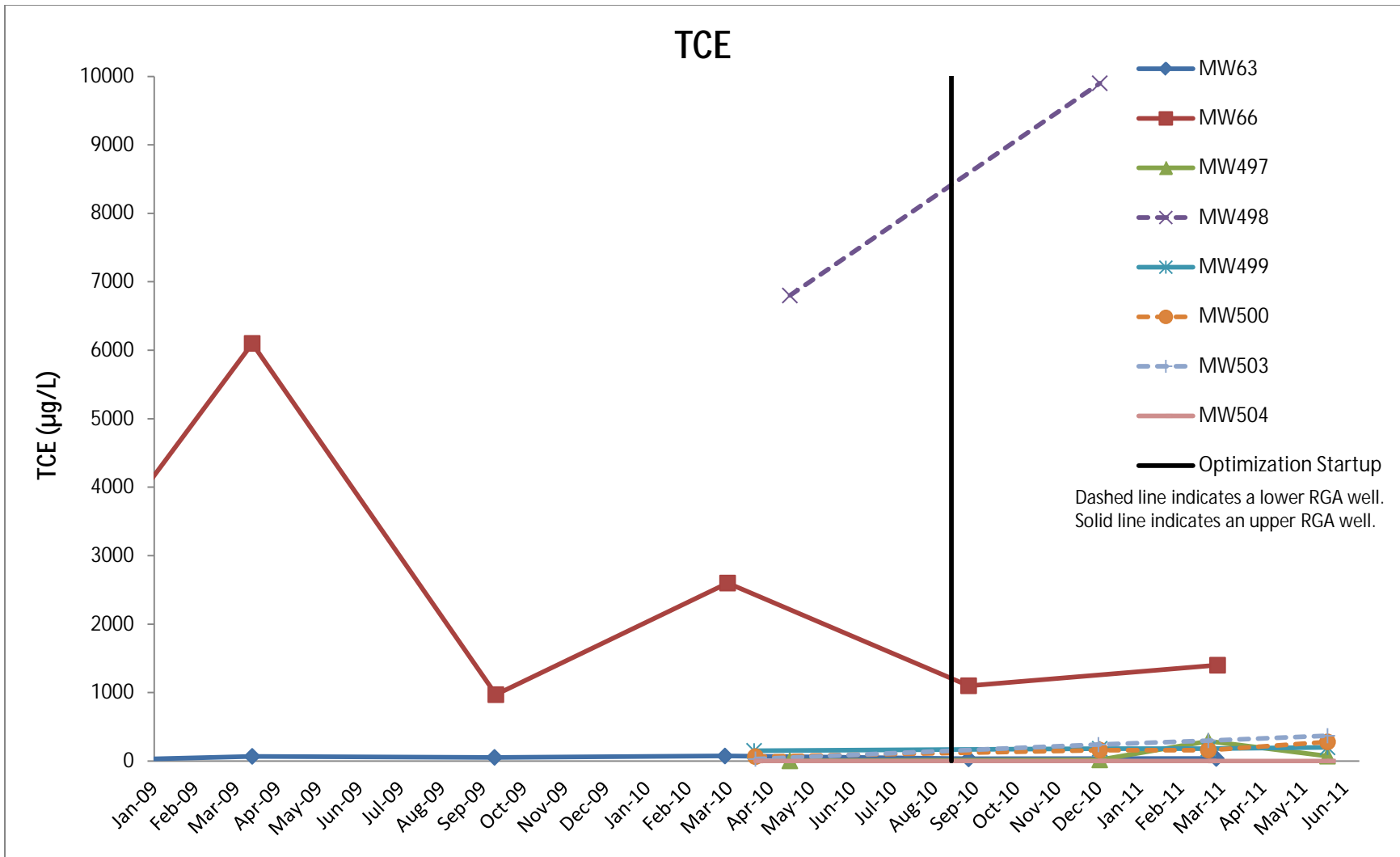


Figure B.25. Northwest Plume—Additional Well Field TCE Concentrations

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APPENDIX C

C-746-K LANDFILL DATA

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C-746-K Landfill groundwater data for reporting period 4/1/2011–9/30/2011 are not available at the time of preparation of this report. The data will be included in the next report.

C-746-K Landfill groundwater data for reporting period 10/1/2010–3/31/2011 has been included.

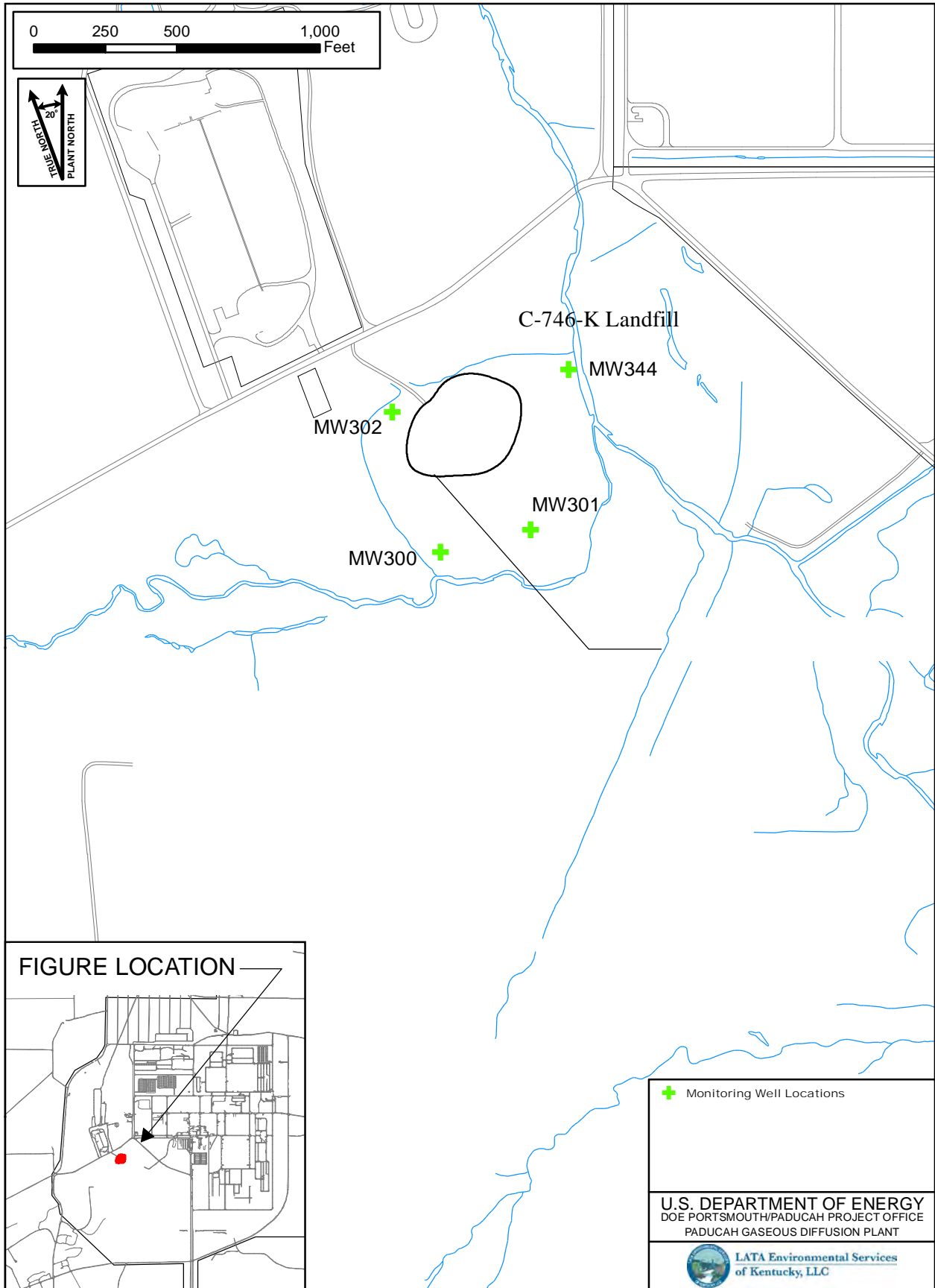
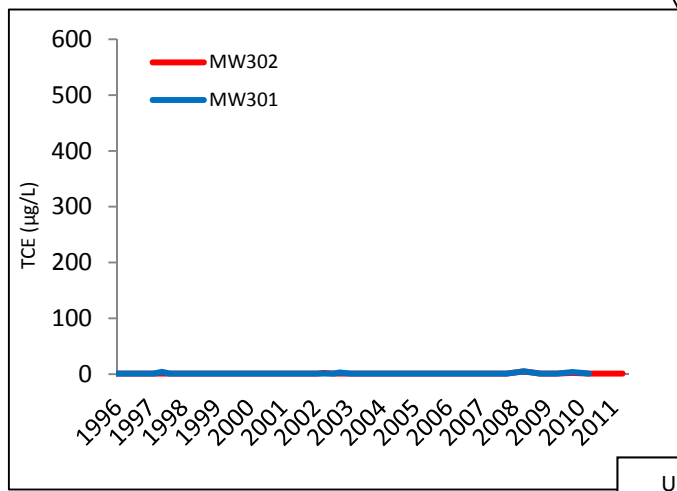
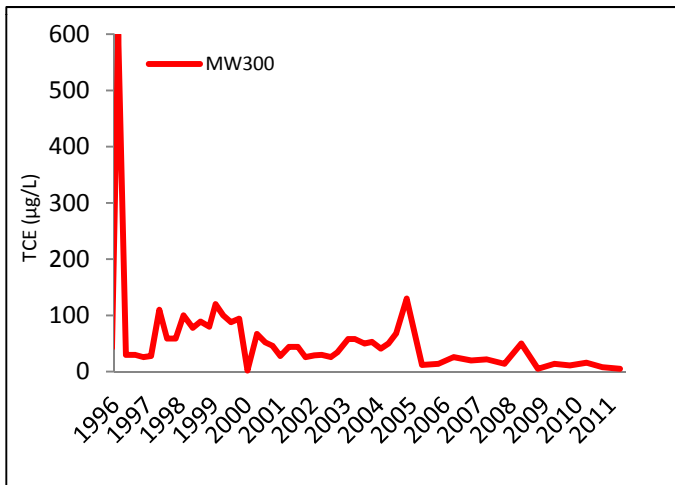
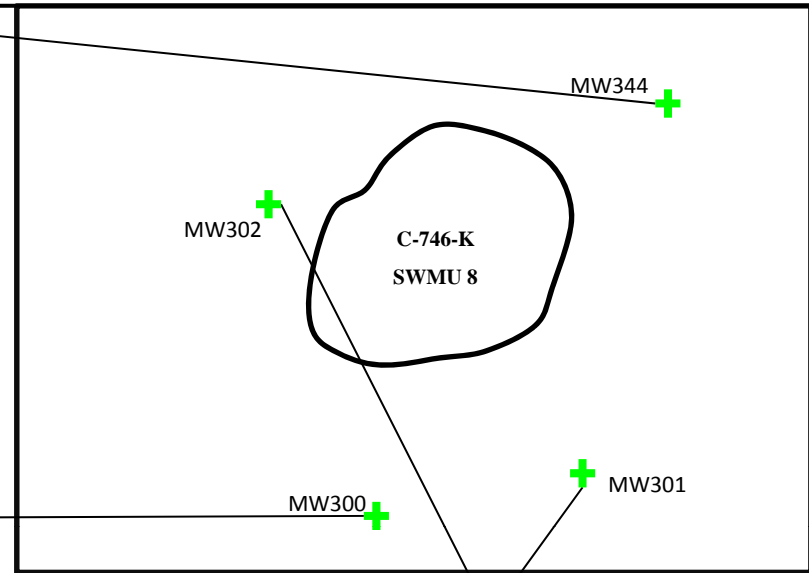
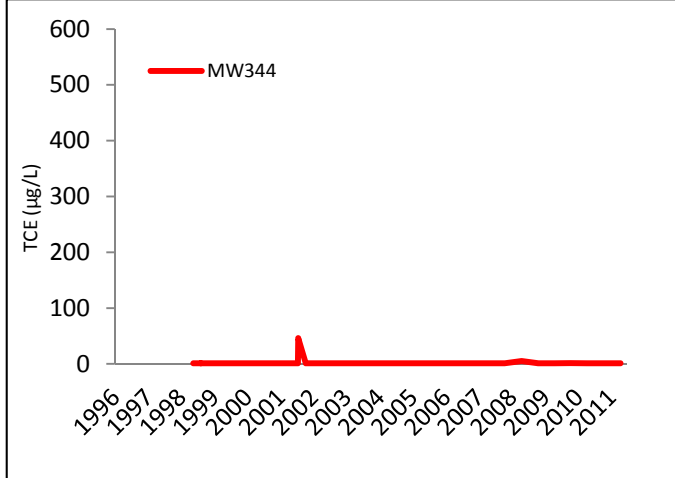


Figure C.1. Monitoring Well Locations

FIGURE No. FFA SemiAnnual[20110401_746K_R0.mxd
DATE 04-01-2011



LEGEND

- + Monitoring Well
- Landfill Boundary

NOT TO SCALE

PLANT NORTH
↑ 20°
TRUE NORTH

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

Figure C.2. TCE Trends in SWMU 8 Wells



C-746-K Landfill Monitoring

Water Quality Records for

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	12.6	363	24.8	< 23.2	< 43.3	21.5	C022060003
7/24/2002	26	< 100	< 100	< 100	< 100	12.9	339	26.8	< 47.4	62.2	< 8.97	C022060004
10/3/2002	34	66	< 50	< 50	< 50	.0101	.33	36.9	< 26.9	< 24.9	17.5	C022760027
1/30/2003	58	160	100	< 50	< 50	10.8	395	23.5	< 3.65	< 3.52	< 1.19	C030310020
4/15/2003	58	180	< 100	< 100	< 100	6.86	437	22.9	< 2.47	< 20.3	< 4.19	C031050068
7/30/2003	42	< 100	< 100	< 100	< 100	21.9	409	27	< 9.4	< 48.7	< 1.31	C032110044
7/30/2003	50	< 100	< 100	< 100	< 100	14.3	382	25.4	< 51.5	53.5	< 4.26	C032110045
10/21/2003	53	92	63	< 50	< 50	.55	497	24.9	< 39.1	< 38	< -4.59	C032950017
1/26/2004	41	120	< 100	< 100	< 100	.471	414	1.91	< 50.1	< 1.36	< 6.71	C040260079
4/21/2004	50	140	< 100	< 100	< 100	.591	327	17.2	< -5.55	< 8.26	< -1.58	C041130033
7/15/2004	55	140	< 100	< 100	< 100	.882	396	22.9	< 15	< 17.4	< -6.91	C041970167
7/15/2004	68	160	< 100	< 100	< 100	.69	424	24.2	< 21.8	< -11.1	< -7.47	C041970166
11/9/2004	130	110	< 100	< 100	< 100	.99	369	22.9	< 12	< 29.7	< -2.6	C043150018
4/27/2005	12	51	< 50	< 50	< 50	.289	126	11.8	< 19.1	39.8	< -2.41	C051170049
10/25/2005	14	65	< 50	< 50	< 50	.344	178	15.2	< 2.14	29.6	< 6.49	C052990006
10/25/2005	13	55	< 50	< 50	< 50	.259	199	16.1	< 18.1	38.4	< 8.37	C052990007
4/11/2006	26	120	77	< 50	< 50	< .2	161	16.5	< .896	< 28.2	< -2.86	C061020009
10/23/2006	< 20	< 100	< 100	< 100	< 100	.334	124	16.2	< -.251	< 16.2	< 8.62	C062960050
4/12/2007	22	120	60	< 50	< 50	< .2	203	18.1	< -3.16	< 33.1	< -1.66	C071030007
10/25/2007	14	120	77	< 5	< 5	< .2	162	19.7	< -.658	< 25.1	< 1.82	C072980183
10/25/2007	13	120	75	< 5	< 5	< .2	166	20.2	< 4.54	27.8	< 1.13	C072980184
4/28/2008	< 5	42	34	< 25	< 5	< .2	117	16.8	< -.155	64.4	< .8	C081200001
10/29/2008	< 5	48	32	< 25	< 5	< .2	63.9	15	< 6.06	43.7	< 11.7	C08304013001
10/29/2008	< 5	46	29	< 25	< 5	< .2	110	16.9	< 5.22	34.8	< 6.45	C08304013002
4/30/2009	14	93	52	< 5	< 5	< .2	104	27.4	< -.39	37	< 5.55	C09120015001
10/19/2009	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

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

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C-746-K Landfill Monitoring

Water Quality Records for

MW301

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

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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	
6/1/1994	< 5	< 5	< 5	< 5		.415	.238	.189	< 3.09	< 3.11	< .94	3220301
3/21/1995	< 1	< 5	< 5	< 5	< 5		2.6	.26	2.2	5	8	950322-048
7/12/1995	< 1	< 5	< 5	< 5	< 5		.702	.175	4	13	6	950713-149
9/11/1995	< 1	< 5	< 5	< 5	< 5	1.3	1.06	.139	7.2	2	13	950912-007
12/7/1995	< 1	< 5	< 5	< 5	< 5		2.39	.087	6.2	3	2	951211-018
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.14	1.68	.08	-6	-2	1	960214-054
2/13/1996	< 1	< 5	< 5	< 5	< 5	2.61	2.14	.099	-5.4	-4	0	960214-058
5/9/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.041	.9	17	6	960513-009
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	< .05	12.3	5	11	960821-020
8/20/1996	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.058	4.4	6	6	960821-022
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	.31	.157	-2	1	0	970211-011
2/10/1997	< 1	< 5	< 5	< 5	< 5	< .75	1.64	.19	2.9	3	0	970211-010
5/13/1997	< 1	< 5	< 5	< 5	< 5	< .75	< .3	.099	5.9	3	10	970514-044
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	< .1	2.8	1	0	970807-144
8/7/1997	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.12	1.6	1	2	970807-145
11/10/1997	< 1	< 5	< 5	< 5	< 5	1.02	1.09	.11	9.8	14	0	971110-118
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	.114	< 1.8	< 0	< 5	C980370102
2/5/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .5	< .1	< 1.2	< 4	< -2	C980370103
5/20/1998	< 1	< 5	< 5	< 5	< 5	< 1	< .25	.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	.101	< -4.7	< 3.52	< 2.65	C010100095
1/10/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.112	< .329	< 5.56	< 8.77	C010100096
4/16/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.068	< -4.37	< 1	< 12.2	C011060086
7/24/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.053	< 1.09	< 1.72	< 12.4	C012060011
10/15/2001	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.207	< 2.32	< .344	< 4.48	C012880076
1/22/2002	< 1	< 5	< 5	< 5	< 5	< .2	< .2	.047	< 5.75	< 1.7	< 11.5	C020220047
4/10/2002	< 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	.611	1.63	< 6.89	< -1.62	< -.819	C041130035
4/21/2004	< 1	< 5	< 5	< 5	< 5	< .2	.302	1.71	< -1.61	< -.897	< 5.4	C041130036
7/15/2004	< 1	< 5	< 5	< 5	< 5	< .2	1.18	1.63	< 5.85	< -.825	< -12.4	C041970169
10/19/2004	< 1	< 5	< 5	< 5	< 5	< .2	.244	1.06	< -4.94	< 3.65	< 4.4	C042940032
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	.675	< 1.48	< 3.76	< 15.3	C051170052
4/27/2005	< 1	< 5	< 5	< 5	< 5	< .2	.154	.708	< .394	< .723	< 15.5	C051170051
10/25/2005	< 1	< 5	< 5	< 5	< 5	< .2	< .1	1.35	< -1.17	< .46	< 9.83	C052990009
4/11/2006	< 1	< 5	< 5	< 5	< 5	.418	1.02	.572	< -1.64	< 3.54	< .914	C061020008
10/26/2006	< 1	< 5	< 5	< 5	< 5	.347	.479	.99	< -.702	< 3.23	< 8.62	C062990102
10/26/2006	< 1	< 5	< 5	< 5	< 5	< .2	.128	.986	< -3.44	< 2.09	< 8.97	C062990103
4/12/2007	< 1	< 5	< 5	< 5	< 5	< .2	.131	.345	< 4.96	< 3.59	< 13.1	C071030006
10/25/2007	< 1	< 1	< 1	< 1	< 1	< .2	.317	.622	< 3.48	< 4.7	< -3.38	C072980110
4/28/2008	< 1	< 1	< 1	< 5	< 1	< .1	.263	.263	< 3.99	< -.184	< -5.34	C081190049
10/29/2008	< 1	< 1	< 1	< 5	< 1	.23	.281	.319	< 1.16	< .994	< 10.6	C08304013004
4/30/2009	< 1	< 1	< 1	< 1	< 1	< .2	< .1	.215	< 1.78	< 1.17	< 1.39	C09120016001
10/19/2009	2.1	< 1	< 1	< 1	< 1	.493	.425	.433	< .942	< 1.51	< -6.33	C09292035004

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Water Quality Records for

MW302

Sample Date	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

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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	.797	3.79	.329	< .901	9.99	< -8.48	C012880067
10/15/2001	< 1	< 5	< 5	< 5	< 5	.655	3.55	.399	< 4.6	< 2.4	< -2	C012880066
1/22/2002	< 1	< 5	< 5	< 5	< 5	1.37	5.33	.366	< 5.38	6.15	< 6.69	C020220045
4/10/2002	< 1	< 5	< 5	< 5	< 5	1.63	7.58	.378	< -.899	< 2.73	< 4.04	C021010052
7/24/2002	< 1	< 5	< 5	< 5	< 5	2.07	5.44	.49	10.2	< 6.95	< 4.82	C022060007
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00423	.00456	.323	< 5.83	< 5.09	18.5	C022760030
10/3/2002	< 1	< 5	< 5	< 5	< 5	.00323	.00478	.366	< 2.54	< 2.37	< 13.8	C022760031
1/30/2003	< 1	< 5	< 5	< 5	< 5	1.68	4.16	.378	< -2.18	< .631	< 2	C030310019
4/14/2003	< 1	< 5	< 5	< 5	< 5	3.92	3.28	.268	< .0183	< 8.74	20.4	C031040078
7/30/2003	< 1	< 5	< 5	< 5	< 5	21.9	35.4	6.18	< 12.1	< 6.22	< 12.3	C032110048
10/21/2003	< 1	< 5	< 5	< 5	< 5	4.19	32.6	.388	< 5.8	< 4.3	< 3.31	C032950014
10/21/2003	< 1	< 5	< 5	< 5	< 5	3.63	34.8	3.99	< 3.45	< 3.49	< -1.39	C032950015
1/26/2004	< 1	< 5	< 5	< 5	< 5	4.22	18.2	2.32	10.1	7.74	< 5.32	C040260082
4/21/2004	< 1	< 5	< 5	< 5	< 5	2.91	13.3	1.23	< 2.26	< 1.95	< -4.04	C041130037

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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

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APPENDIX D

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

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Paducah Documents Added to the Administrative Record Files Second Quarter CY2011

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFBGOU	10/25/10	DOE/LX/07-0130&D2	REPLY TO NOTICE BY DOE OF 30-DAY AUTOMATIC EXTENSION FOR SUBMITTAL OF THE D2 BURIAL GROUNDS OU FEASIBILITY STUDY AT PGDP (DOE/LX/07-0130&D2) AND PROPOSED MODIFICATION OF SUBSEQUENT FFA MILESTONES	USEPA-4	DOE-PPPO	No	I-05211-0042
ARFBGOU	11/09/10	PPPO-02-1057481-11	PADUCAH FEDERAL FACILITY AGREEMENT NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE RESOLUTION OF THE PROPOSED MILESTONE MODIFICATION REQUEST FOR SUBMITTAL OF THE D1 PROPOSED PLAN AND SUBSEQUENT DOCUMENTS FOR THE BURIAL GROUNDS OPERABLE UNIT AT PGDP	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0039
ARFBGOU	12/01/10	PPPO-02-973934-11	SUBMITTAL OF THE D2 FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH KENTUCKY (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0046
ARFBGOU	01/31/11	DOE/LX/07-0130&D2	NON-CONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130&D2)	KDEP	DOE-PPPO	No	I-05211-0040
ARFBGOU	02/03/11	PPPO-02-1119834-11	PADUCAH FEDERAL FACILITY AGREEMENT-EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCES WITH THE FEASIBILITY STUDY FOR THE BGOU AT PGDP (DOE/LX/07-0130&D2) AND THE SUBMITTAL OF BGOU D1 PROPOSED PLAN	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0041
ARFBGOU	05/13/11	PPPO-02-1198516-11	PADUCAH FEDERAL FACILITY AGREEMENT NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0047
ARFC-340	10/29/10	PPPO-02-998296-11	TRANSMITTAL OF D2 REMOVAL ACTION WORK PLAN FOR THE C-340 COMPLEX DECOMMISSIONING AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0344&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05616-0027
ARFCC	09/27/10	PPPO-02-1016725-10	TRANSMITTAL OF WORK PLAN FOR COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT WASTE DISPOSAL ALTERNATIVES EVALUATION REMEDIAL INVESTIGATION FEASIBILITY STUDY AT THE PGDP, PADUCAH, KENTUCKY (DOE/LX/07-0099&D2/R1)	DOE-PPPO	USEPA-4, KDEP	No	I-05309-0039
ARFREF	12/15/10	PPPO-02-1085494-11	TRANSMITTAL OF THE D1 FISCAL YEAR 2011 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, AND PROPOSED FEDERAL FACILITY AGREEMENT MODIFICATION	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0809
ARFREF	02/22/11	PPPO-02-1136228-11A	NOTIFICATION OF SCHEDULE EXTENSION FOR SUBMITTAL OF THE D2 FISCAL YEAR 2011 SITE MANAGEMENT PLAN, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0348&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0816
ARFREF	03/14/11		COMMENTS TO THE SITEWIDE EVALUATION WORK PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0228&D1)	KDEP	DOE-PPPO	No	I-02001-0817
ARFREF	03/31/11	KY-11-0088	KENTUCKY COMMENTS ON DOE FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES DATED FEBRUARY 11, 2011	KDEP	DOE-PPPO	No	I-02001-0807

Paducah Documents Added to the Administrative Record Files Second Quarter CY2011

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFREF	03/31/11	KY-11-0087	EPA COMMENTS ON DOE LETTER FEDERAL FACILITY AGREEMENT INTEGRATED PRIORITY LIST AND ASSESSMENT OF BUDGET TARGETS ON SITE PRIORITIES DATES FEBRUARY 11, 2011, FOR THE PADUCAH GASEOUS DIFFUSION PLANT, KENTUCKY (PGDP)	USEPA-4	DOE-PPPO	No	I-02001-0813
ARFREF	04/06/11	PPPO-02-1181618-11	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETINGS CONDUCTED SEPTEMBER 21-23, 2010 AND JANUARY 20, 2011	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0810
ARFREF	04/06/11		COMMENTS OF THE SITEWIDE EVALUATION WORK PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2228&D1)	USEPA-4	DOE-PPPO	No	I-02001-0818
ARFREF	04/25/11	DOE/LX/07-0348&D2	CONDITIONAL APPROVAL OF THE 2011 SITE MANAGEMENT PLAN ANNUAL REVISION (DOE/LX/07-0348&D2)	KDEP	DOE-PPPO	No	I-02001-0811
ARFREF	04/26/11	DOE/LX/07-0348&D2	CONDITIONAL CONCURRENCE, FY2011 SITE MANAGEMENT PLAN FOR THE PADUCAH GASEOUS DIFFUSION PLANT, DOE/LX/07-0348&D2	USEPA-4	DOE-PPPO	No	I-02001-0812
ARFSOU	08/10/10	PPPO-02-529-10	REMOVAL ACTION REPORT FOR SOILS OPERABLE UNIT INACTIVE FACILITIES SOLID WASTE MANAGEMENT UNITS 19 AND 181 AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0356&D1)	DOE-PPPO	USEPA-4, KDEP	No	I-04916-0055
ARFSOU	09/03/10	PPPO-02-972207-10	SUBMITTAL OF THE SITE EVALUATION REPORT FOR ADDENDUM 1-B SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0225&D2/R2)	DOE-PPPO	USEPA-4, KDEP	No	I-04907-0109
ARFSOU	09/23/10	DOE/LX/07-0120&D2/R2	TRANSMITTAL OF THE REPLACEMENT PAGES FOR THE QUALITY ASSURANCE PROJECT PLAN, WORKSHEET #15, FROM THE WORK PLAN FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, (DOE/LX/07-0120&D2/R2)	DOE-PPPO	USEPA-4, KDEP	No	I-04909-0159
ARFSOU	10/22/10	PPPO-02-1015929-11, DOE/LX/07-0356&D2	REMOVAL ACTION REPORT FOR SOILS OPERABLE UNIT INACTIVE FACILITIES (SWMU 19 AND 181) AT PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0356&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-04916-0050
ARFSOU	12/15/10	PPPO-02-971713-11, DOE/LX/07-0228&D1	TRANSMITTAL OF THE SITEWIDE EVALUATION WORK PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0228&D1)	DOE-PPPO	USEPA-4, KDEP	No	I-04907-0106
ARFSWOUOSD	10/22/10	PPPO-02-967898-11C	REMOVAL ACTION REPORT FOR CONTAMINATED SEDIMENT ASSOCIATED WITH THE SURFACE WATER OPERABLE UNIT (ON-SITE) AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0357&D1)	DOE-PPPO	USEPA-4, KDEP	No	I-04816-0208
ARFSWOUOSD	11/23/10	DOE/LX/07-0357&D1	COMMENTS ON THE D1 REMOVAL ACTION REPORT FOR CONTAMINATED SEDIMENT ASSOCIATED WITH SURFACE WATER OPERABLE UNIT (ON-SITE) AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0357&D1)	USEPA-4	DOE-PPPO	No	I-04816-0205

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Paducah Documents Added to the Administrative Record Files Second Quarter CY2011

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFSWOUOSD	01/24/11	DOE/LX/07-0357&D1	EXTENSION REQUEST FOR SUBMITTAL OF COMMENTS TO THE REMOVAL ACTION REPORT FOR CONTAMINATED SEDIMENT ASSOCIATED WITH THE SURFACE WATER OPERABLE UNIT (ON-SITE) (DOE/LX/07-0357&D1)	KDEP	DOE-PPPO	No	I-04816-0206
ARFSWOUOSD	02/17/11	DOE/LX/07-0357&D1	COMMENTS TO THE REMOVAL ACTION REPORT FOR CONTAMINATED SEDIMENT ASSOCIATED WITH THE SURFACE WATER OPERABLE UNIT (ON-SITE) (DOE/LX/07-0357&D1)	KDEP	DOE-PPPO	No	I-04816-0207
ARFSWOUOSD	04/11/11	DOE/LX/07-0357&D2	[KDEP] APPROVAL OF THE REMOVAL ACTION REPORT FOR CONTAMINATED SEDIMENT ASSOCIATED WITH THE SURFACE WATER OPERABLE UNIT (ON-SITE) (DOE/LX/07-0357&D2)	KDEP	DOE-PPPO	No	I-04816-0209
ARFSWOUOSD	04/25/11		[EPA] APPROVAL OF THE REMOVAL ACTION REPORT FOR CONTAMINATED SEDIMENT ASSOCIATED WITH SURFACE WATER OPERABLE UNIT (ON-SITE) AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-0357&D2)	USEPA-4	DOE-PPPO	No	I-04816-0210
ARFSWP	01/31/11	PPPO-02-1118463-11	REVISED FOCUSED FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, AND 211B VOLATILE ORGANIC COMPOUND SOURCES TO THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0362&D1)	DOE-PPPO	USEPA-4, KDEP	No	I-04611-0330
ARFSWP	03/16/11		EPA COMMENTS ON THE REVISED PROPOSED PLAN FOR SWMU 1, 211A, AND 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0363&D1)	USEPA-4	DOE-PPPO	No	I-04612-0096
ARFSWP	03/17/11	DOE/LX/07-0363&D1	REVISED PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, 211B AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-0363&D1)	KDEP	DOE-PPPO	No	I-04612-0095
ARFSWP	04/13/11	PPPO-02-1189430-11	EXTENSION REQUEST FOR THE D2 REVISED PROPOSED PLAN FOR SWMU 1, 211A, AND 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP (DOE/LX/07-0363&D2), AND MILESTONE MODIFICATION REQUEST FOR SUBSEQUENT SWGP DOCS	DOE-PPPO	USEPA-4, KDEP	No	I-04611-0328

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Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Notes	Object Name
ARFBGOU	03/10/11		RECORD OF CONVERSATION-E-MAIL-RECALL RE: MISSED MILESTONE NOTIFICATION, BURIAL GROUND OPERABLE UNIT PROPOSED PLAN (DOE/LX/07-0130&D2)	USEPA-4	DOE-PPPO	No	I-05212-0026
ARFBGOU	03/24/11		APPROVAL OF THE NOTIFICATION OF EXTENSION OF THE INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NON-CONCURRENCES WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-0130&D2)	KDEP	DOE-PPPO	No	I-05211-0052
ARFBGOU	05/25/11	PPPO-02-1215639-11	NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4	No	I-05211-0053
ARFBGOU	06/10/11	PPPO-02-1222722-11	NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130&D2) (NOTE: DEADLINE IS JUNE 29, 2011)	DOE-PPPO	USEPA-4	No	I-05211-0049
ARFBGOU	06/27/11	PPPO-02-1238474-11	NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130&D2) (NOTE: DEADLINE IS JULY 14, 2011)	DOE-PPPO	USEPA-4	No	I-05211-0050
ARFBGOU	07/13/11	PPPO-02-1251446-11	NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130&D2) (NOTE: DEADLINE IS JULY 29, 2011)	DOE-PPPO	USEPA-4	No	I-05211-0051
ARFBGOU	07/18/11	PPPO-02-1216760-11	TRANSMITTAL OF SITE EVALUATION REPORT FOR SOLID WASTE MANAGEMENT UNIT 13 BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-1259&D1)	DOE-PPPO	USEPA-4, KDEP	No	I-05207-0008
ARFBGOU	07/28/11	PPPO-02-1259889-11	PADUCAH FEDERAL FACILITY AGREEMENT-NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0054
ARFBGOU	08/10/11	PPPO-02-1272061-11	PADUCAH FEDERAL FACILITY AGREEMENT-NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0055
ARFBGOU	08/17/11	KY-11-0151	COMMENTS ON THE SITE EVALUATION REPORT FOR SOLID WASTE MANAGEMENT UNIT 13 BURIAL GROUNDS OPERABLE UNIT (DOE/LX/07-1259&D1)	KDEP	DOE-PPPO	No	I-05207-0009

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Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Notes	Object Name
ARFBGOU	08/26/11	PPPO-02-1279887-11	PADUCAH FEDERAL FACILITY AGREEMENT-NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT PGDP (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0056
ARFBGOU	09/07/11	PPPO-02-12850559-11	NOTIFICATION OF EXTENSION OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE NONCONCURRENCE WITH THE FEASIBILITY STUDY FOR THE BURIAL GROUNDS OPERABLE UNIT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0130&D2)	DOE-PPPO	USEPA-4, KDEP	No	I-05211-0057
ARFCC	07/06/11		COMMENTS ON APPENDIX C TO THE WORK PLAN FOR CERCLA WASTE DISPOSAL ALTERNATIVE EVALUATION REMEDIAL INVESTIGATION FEASIBILITY STUDY (DOE/LX/07-0099&D2/R1)	KDEP	DOE-PPPO	No	I-05309-0041
ARFREF	06/06/11	PPPO-02-1222023-11	SUSPENSION OF COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT DECONTAMINATION AND DECOMMISSIONING FIELD ACTIVITIES AT THE C-340 AND C-410 COMPLEX	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0848
ARFREF	06/08/11		[KDEP] APPROVAL OF THE 2011 SITE MANAGEMENT PLAN ANNUAL REVISION (DOE/LX/07-0348&D2/R1)	KDEP	DOE-PPPO	No	I-02001-0834
ARFREF	06/10/11	PPPO-02-1220602-11	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETINGS CONDUCTED NOVEMBER 17, 2010	DOE-PPPO	USEPA-4	No	I-02001-0835
ARFREF	06/10/11	PPPO-02-1221399-11	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETINGS CONDUCTED MARCH 16-17, 2011	DOE-PPPO	USEPA-4	No	I-02001-0836
ARFREF	06/10/11	PPPO-02-1220747-11	FEDERAL FACILITY AGREEMENT PROJECT MANAGERS MEETINGS CONDUCTED FEBRUARY 22-23, 2011	DOE-PPPO	USEPA-4	No	I-02001-0837
ARFREF	06/28/11	PPPO-02-1184244-11	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-NOTIFICATION OF ISSUANCE OF FISCAL YEAR 2013 BUDGET TARGET FUNDING GUIDANCE AND PRELIMINARY ASSESSMENT OF IMPACTS	DOE-PPPO	USEPA-4	No	I-02001-0838
ARFREF	07/13/11	PPPO-02-1216206-11	FISCAL YEAR 2011 FUNDING ALLOCATION EVALUATION	DOE-PPPO	USEPA-4	No	I-02001-0839
ARFREF	07/13/11	PPPO-02-1250991-11	FEDERAL FACILITY AGREEMENT BUDGET REPORTING-CLARIFICATION OF NOTIFICATION OF ISSUANCE OF FISCAL YEAR 2013 BUDGET TARGET FUNDING GUIDANCE AND PRELIMINARY ASSESSMENT OF IMPACTS	DOE-PPPO	USEPA-4	No	I-02001-0840
ARFREF	07/13/11	PPPO-02-1229041-11B	TRANSMITTAL 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/R7	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0841
ARFREF	07/22/11	PPPO-02-1256483-11	MILESTONE EXTENSION REQUEST TO SUPPORT THE ABILITY TO CONTINUE FIELDWORK FOR DECONTAMINATION AND DECOMMISSIONING CLEANUP PROJECTS	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0842

Paducah Documents Added to the Administrative Record Files Third Quarter CY2011

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Notes	Object Name
ARFREF	07/25/11	MEM-11-0024	RECORD OF CONVERSATION-RE: PPPO-02-1256483-11MILESTONE EXTENSION REQUEST TO SUPPORT THE ABILITY TO CONTINUE FIELDWORK FOR ACCELERATED DECONTAMINATION AND DECOMMISSIONING CLEANUP PROJECTS	USEPA-4	DOE-PPPO	No	I-02001-0843
ARFREF	08/01/11	KY-11-0143	DEPARTMENT OF ENERGY'S COMPLETION OF SITE TREATMENT PLAN MILESTONES	KDEP	DOE-PPPO	No	I-02001-0844
ARFREF	08/02/11	KY-11-0144	APPROVAL OF THE COMMUNITY RELATIONS PLAN (DOE/OR/07-2099&D2/R7)	KDEP	DOE-PPPO	No	I-02001-0845
ARFREF	08/12/11	PPPO-02-1273200-11	MILESTONE EXTENSION REQUEST TO THE FISCAL YEAR 2011 SITE MANAGEMENT PLAN	DOE-PPPO	USEPA-4, KDEP	No	I-02001-0846
ARFREF	08/22/11	KY-11-0153	APPROVAL OF THE FEDERAL FACILITY AGREEMENT (FFA) MILESTONE MODIFICATION REQUEST TO EXTEND SPECIFIC ENFORCEABLE MILESTONES FOR FISCAL YEARS 2011, 2012, 2013, OUT-YEAR PLANNING DATES AND ENFORCEABLE COMPLETION DATES	KDEP	DOE-PPPO	No	I-02001-0847
ARFSOU	05/04/11	PPPO-02-1166929-11A	PADUCAH FEDERAL FACILITY AGREEMENT-REQUEST FOR CLARIFICATION OF COMMENTS RECEIVED FOR THE SITEWIDE EVALUATION WORK PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0228&D1) FROM THE KENTUCKY DIVISION OF WASTE MANAGEMENT	DOE-PPPO	USEPA-4	No	I-04907-0111
ARFSOU	05/10/11	DOE/LX/07-0228&D1	PADUCAH FEDERAL FACILITY AGREEMENT-REQUEST FOR CLARIFICATION OF COMMENTS RECEIVED FOR THE SITEWIDE EVALUATION WORK PLAN AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/LX/07-0228&D1) FROM THE KENTUCKY DIVISION OF WASTE MANAGEMENT	KDEP	DOE-PPPO	No	I-04907-0112
ARFSWP	02/22/11	PPPO-02-1112662-11	REVISED PROPOSED PLAN FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0363&D1)	DOE-PPPO	USEPA-4	No	I-04612-0100
ARFSWP	02/24/11	PPPO-02-1141274-11	RESPONSE TO CITIZENS ADVISORY BOARD CONSENSUS RECOMMENDATION 11-01: SOUTHWEST PLUME SOURCES PROJECT	DOE-PPPO	CAB	No	I-04612-0114
ARFSWP	03/14/11		COMMENTS TO THE REVISED FOCUSED FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 1, 211A AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-0362&D1)	KDEP	DOE-PPPO	No	I-04611-0332
ARFSWP	03/16/11	DOE/LX/07-0362&D1	EPA COMMENTS ON THE REVISED FOCUSED FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0362&D1)	USEPA-4	DOE-PPPO	No	I-04611-0333

Paducah Documents Added to the Administrative Record Files Third Quarter CY2011

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Notes	Object Name
ARFSWP	04/08/11	PPPO-02-1181630-11	NOTIFICATION OF SCHEDULE EXTENSION FOR D2 REVISED PROPOSED PLAN FOR SWMU 1, 211A, AND 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY (DOE/LX/07-0363&D2)	DOE-PPPO	USEPA-4	No	I-04612-0106
ARFSWP	05/02/11	PPPO-02-1167406-11A	NOTIFICATION OF SCHEDULE EXTENSION FOR D2 REVISED FOCUSED FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 1, 211A, AND 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP, PADUCAH, KY (DOE/LX/07-0362&D2)	DOE-PPPO	USEPA-4	No	I-04611-0334
ARFSWP	05/10/11		DENIAL OF DOE'S EXTENSION REQUEST FOR THE D2 REVISED PROPOSED PLAN FOR SWMU'S 1, 211A AND 211 B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SW PLUME (DOE/LX/07-0363&D2), AND MILESTONE MODIFICATION REQUEST OF SUBSEQUENT SWP DOCUMENTS	KDEP	DOE-PPPO	No	I-04612-0101
ARFSWP	05/18/11		[EPA] CONCURRENCE WITH THE D2 REVISED FOCUSED FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 2, 211A AND 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PGDP (DOE/LX/07-0363&D2)	USEPA-4	DOE-PPPO	No	I-04611-0335
ARFSWP	05/18/11		[KDEP] APPROVAL OF THE REVISED FOCUSED FEASIBILITY STUDY FOR SOLID WASTE MANAGEMENT UNITS 1, 211A AND 211B VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-0362&D2)	KDEP	DOE-PPPO	No	I-04611-0336
ARFSWP	05/31/11	PPPO-02-1215212-11	EXTENSION OF THE D2 REVISED PROPOSED PLAN FOR SWMU 1, 211A, AND 211B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AND MILESTONE MODIFICATION REQUEST FOR SUBSEQUENT SOUTHWEST GROUNDWATER PLUME DOCUMENTS	DOE-PPPO	USEPA-4	No	I-04612-0107
ARFSWP	06/07/11	DOE/LX/07-0363&D2	APPROVAL OF THE EXTENSION REQUEST FOR SUBMITTAL OF REVISED PROPOSED PLAN FOR SWMU 1, 211A, AND 211B, AND PART OF 103 VOLATILE ORGANIC COMPOUND SOURCES FOR SOUTHWEST GROUNDWATER PLUME (SWP) AND MILESTONE MODIFICATION REQUEST FOR SUBSEQUENT SWP DOCUMENTS	KDEP	DOE-PPPO	No	I-04612-0108
ARFSWP	06/14/11		[USEPA] APPROVAL OF MILESTONE MODIFICATIONS FOR THE SOUTHWEST PLUME SOURCES PROJECT AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE LETTER DATED MAY 31, 2011)	USEPA-4	DOE-PPPO	No	I-04612-0109

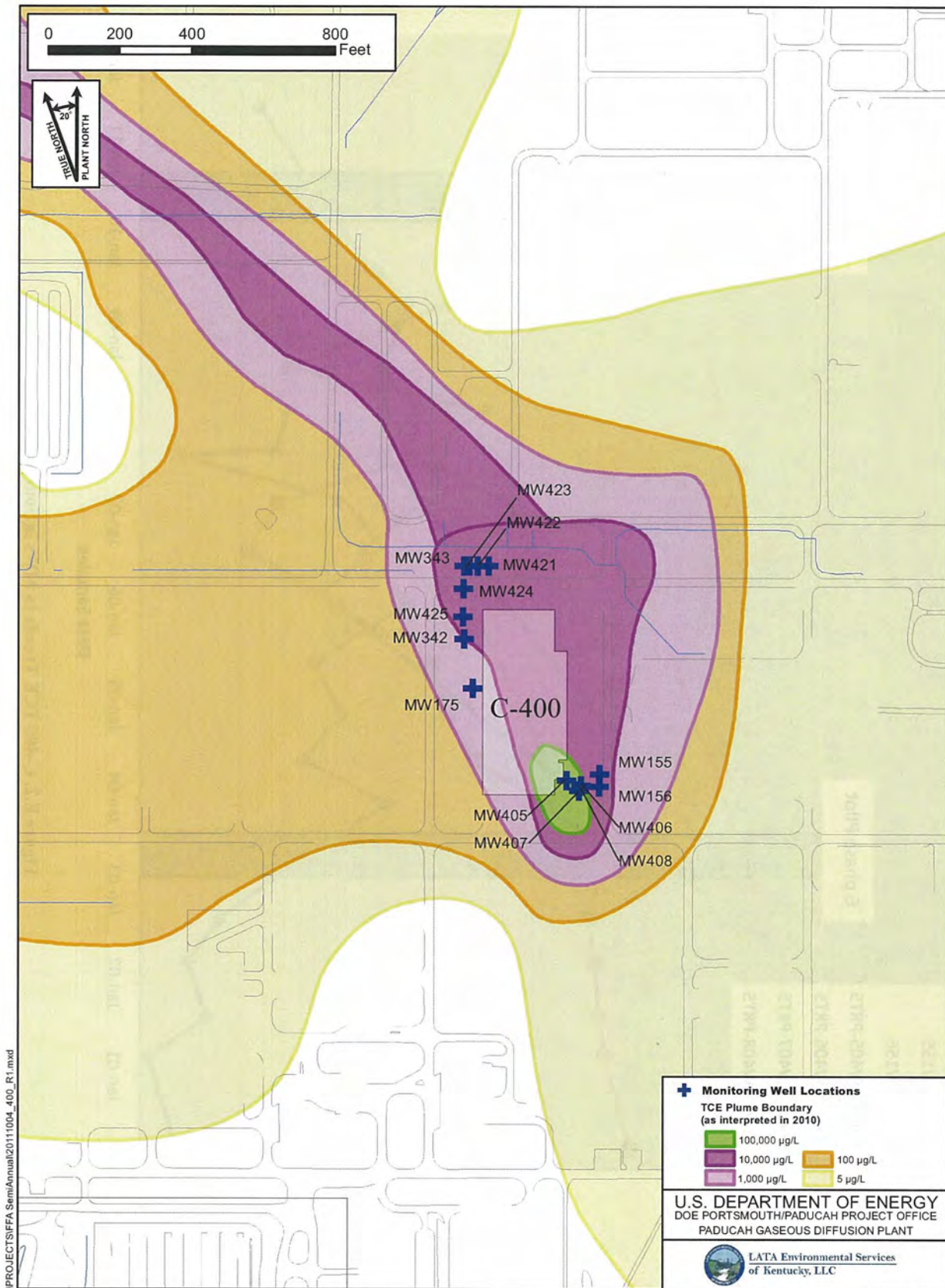
Paducah Documents Added to the Administrative Record Files Third Quarter CY2011

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Notes	Object Name
ARFSWP	06/22/11	PPPO-02-1168806-11	TRANSMITTAL OF THE REVISED PROPOSED PLAN FOR SWMUs 1, 211-A, 211-B AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0363&D2)	DOE-PPPO	USEPA-4	No	I-04612-0112
ARFSWP	07/08/11		CONDITIONAL CONCURRENCE TO THE REVISED PROPOSED PLAN FOR SWMU 1, 211A, 211B AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-0363&D2)	KDEP	DOE-PPPO	No	I-04612-0110
ARFSWP	07/13/11		[EPA] CONDITIONAL APPROVAL OF THE REVISED PROPOSED PLAN FOR SWMUs1, 211-A, 211-B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KY, DOE/LX/07-0363&D2	USEPA-4	DOE-PPPO	No	I-04612-0113
ARFSWP	07/22/11	PPPO-02-1172300-11B	TRANSMITTAL OF THE D1 RECORD OF DECISION FOR SWMUs 1, 211-A, 211-B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0365&D1)	DOE-PPPO	USEPA-4, KDEP	No	I-04613-0109
ARFSWP	09/07/11	KY-11-0160	EXTENSION REQUEST FOR SUBMITTAL OF COMMENTS TO THE REVISED PROPOSED PLAN FOR SWMUs 1, 211A, 211B AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME (DOE/LX/07-0363&D2/R1)	KDEP	DOE-PPPO	No	I-04612-0117
ARFSWP	09/08/11	KY-11-0161	REVISED PROPOSED PLAN FOR SWMUs 1, 211-A, 211-B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0363&D2/R1)	USEPA-4	DOE-PPPO	No	I-04612-0116
ARFSWP	09/28/11	DOE/LX/07-036&D2/R2	REVISED PROPOSED PLAN FOR SWMUs 1, 211-A, 211-B, AND PART OF 102 VOLATILE ORGANIC COMPOUND SOURCES FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0363&D2/R2)	LATA	GENERAL PUBLIC	No	ENV 1.A-00001

APPENDIX E

C-400 PROJECT GROUNDWATER MONITORING WELLS DATA

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PROJECTS\FFA SemiAnnual\2011\1004_400_R1.mxd

FIGURE No. FFA SemiAnnual\2011\1004_400_R1.mxd
DATE 10-04-2011

Figure E.1. C-400 Monitoring Wells

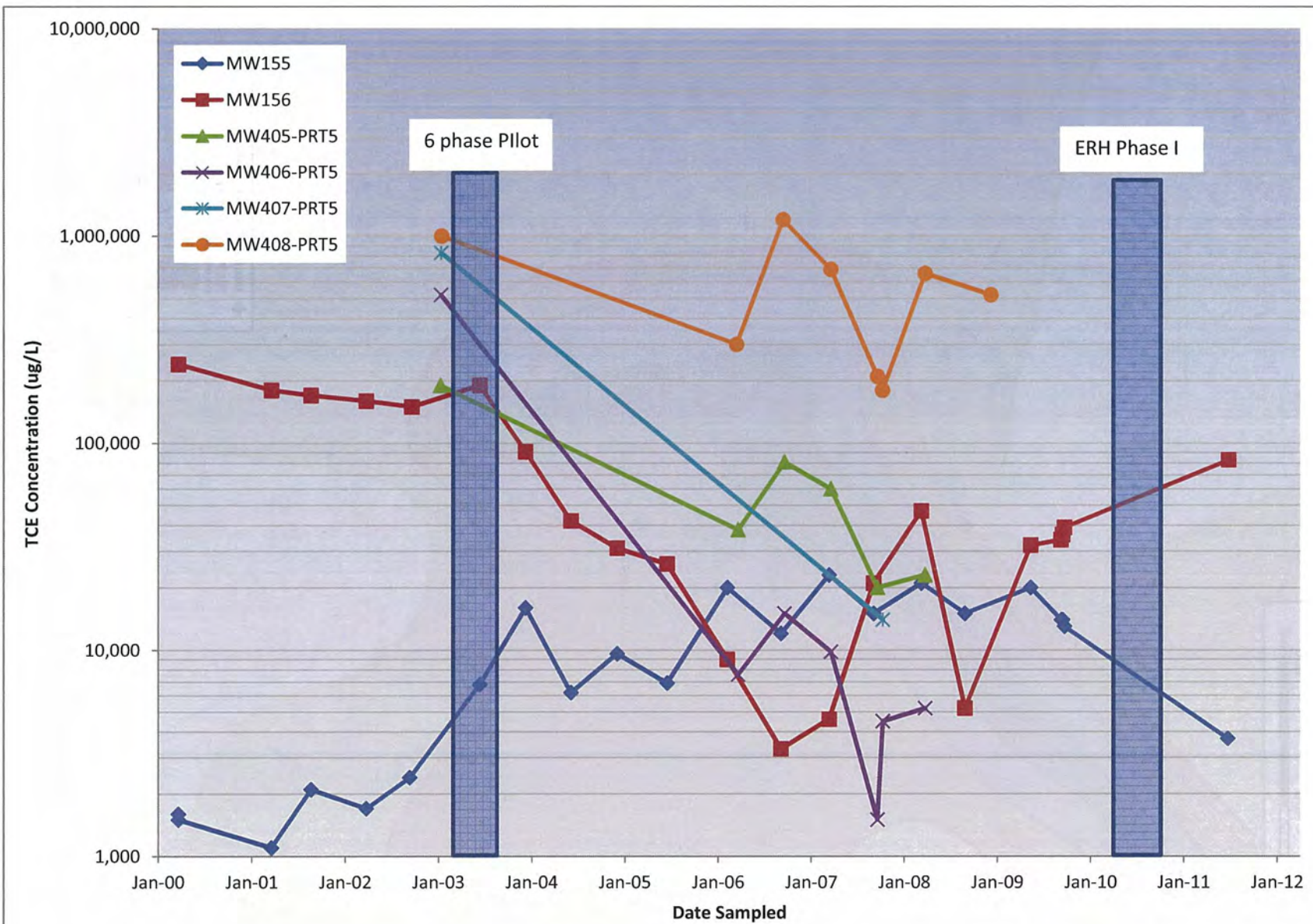


Figure E.2. C-400 TCE Trends in MWs in Source Area

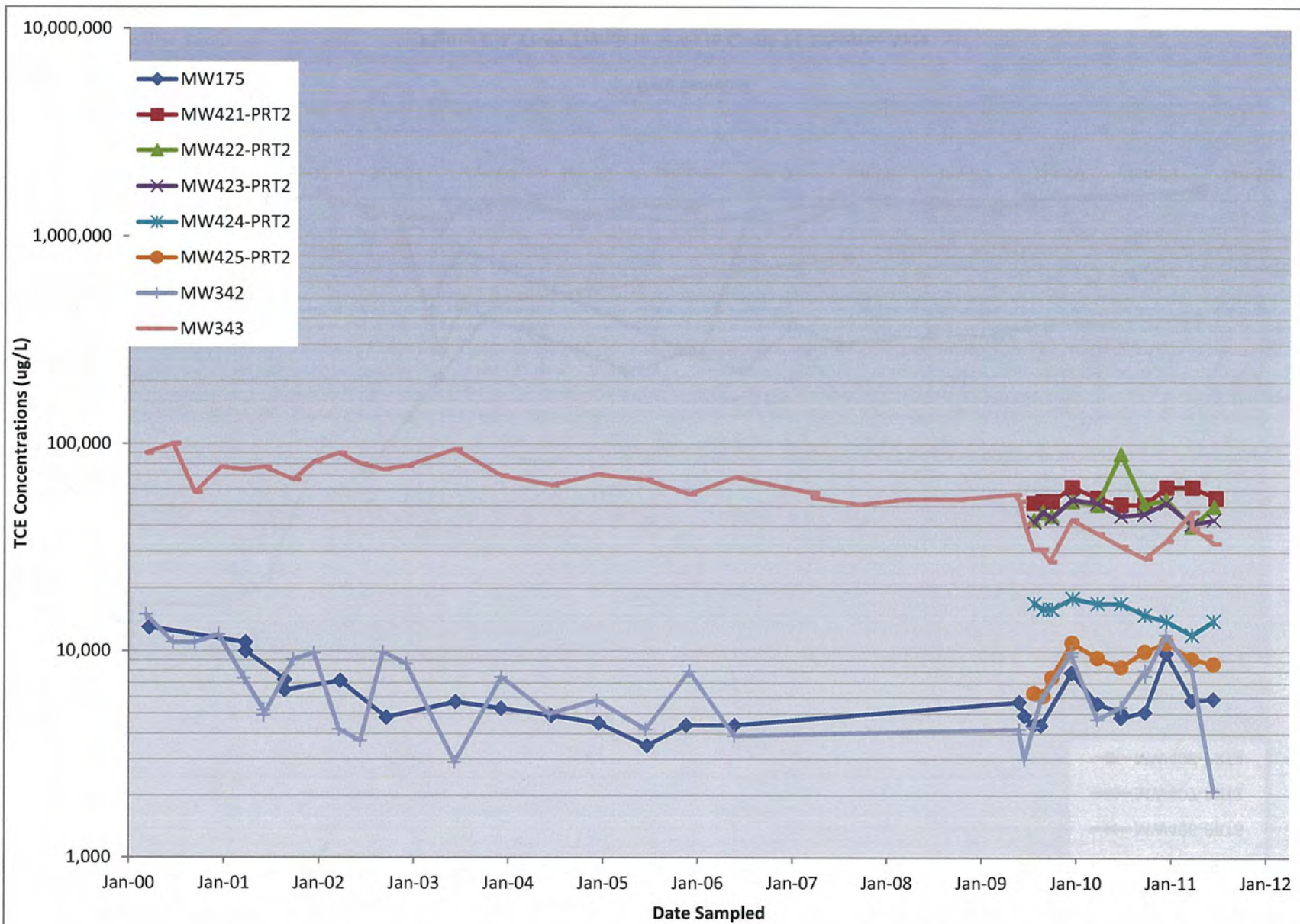


Figure E.3. C-400 TCE Trends in MWs Downgradient of Source Area

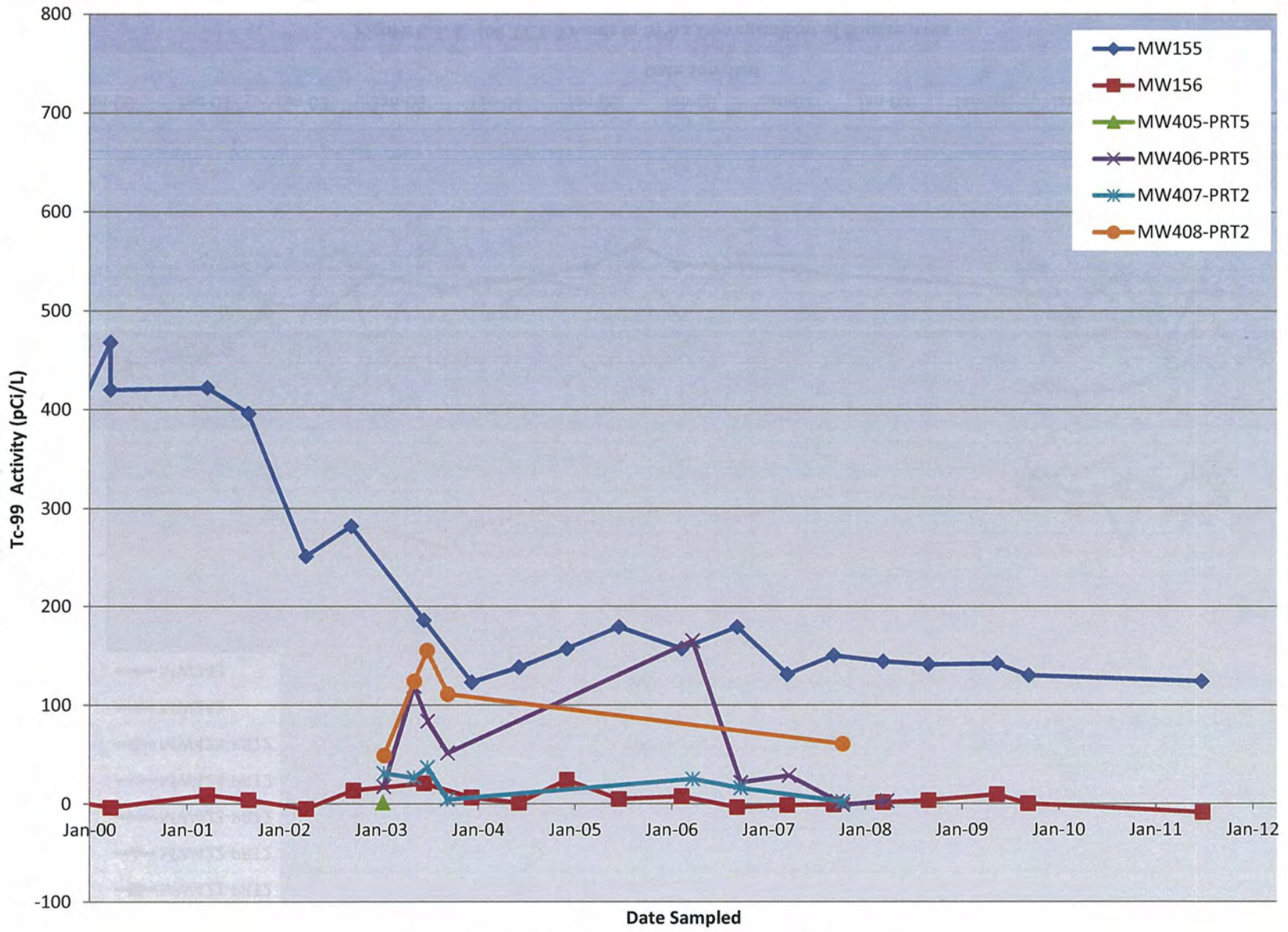


Figure E.4. Tc-99 Trends in MWs in C-400 TCE Source Area

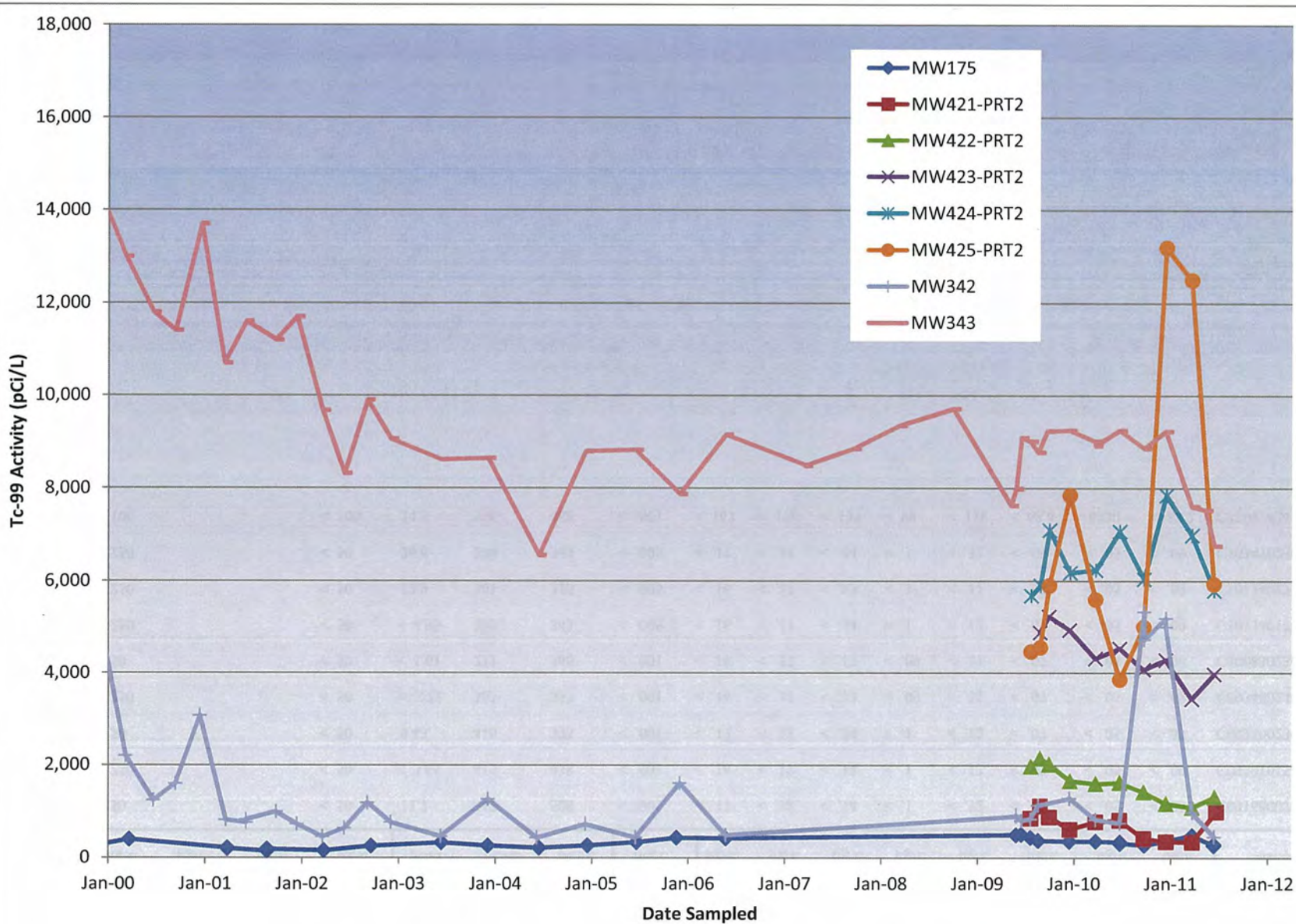


Figure E.5. Tc-99 Trends in MWs Downgradient of C-400 TCE Source Area

C-400 Monitoring
Water Quality Records for
MW175

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE µg/L	1,1-DCE µg/L	1,1-DCA µg/L	1,2-DCA µg/L	trans-1,2-DCE µg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 µg/L	PCB 1221 µg/L	PCB 1232 µg/L	PCB 1242 µg/L	PCB 1248 µg/L	PCB 1254 µg/L	PCB 1260 µg/L	PCB 1268 µg/L	
6/16/2009	4900	< 50			< 50	11.7	447	508	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09168007001
7/20/2009	4400	< 250			< 50	< 3.65	415	438	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09201015001
8/18/2009	4400	< 50			< 50	9.43	416	375	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230023001
12/14/2009	7900	< 250			< 50	< -.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

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C-400 Monitoring
Water Quality Records for
MW342

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/16/2009	3000	< 50			< 50	16.7	616	805	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168006001
7/20/2009	4300	< 250			< 50	< -.785	510	837	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09201016001
8/18/2009	5800	< 50			< 50	16	985	1130	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230024001
12/14/2009	9500	< 250			< 50	< -6.46	978	1290	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09348024002
12/14/2009	9900	< 250			< 50	< .633	926	1280	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09348024003
3/23/2010	4700	< 50			< 50	10.3	386	827	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10082025007
6/22/2010	5400	< 250			< 50	11.4	642	750	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173039001
9/23/2010	7600	< 250			< 50	< -52	3690	5330	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013002
9/23/2010	8100	< 250			< 50	< -57.1	3720	4720	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10266013003
12/13/2010	12000	< 200			< 200	56	3960	5190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023003
12/13/2010	12000	< 200			< 200	41	4120	5000	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023002
3/23/2011	8100	< 100			< 100	26.8	835	980	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.32	< .09	C11082024001

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C-400 Monitoring
Water Quality Records for
MW343

Sample Date	Organic Laboratory Analysis Results					Radiological Laboratory Analysis Results			Metal	Polychlorinated biphenyl Analysis Results								Lab Sample ID
	TCE μg/L	1,1-DCE μg/L	1,1-DCA μg/L	1,2-DCA μg/L	trans-1,2-DCE μg/L	Alpha Activity pCi/L	Beta Activity pCi/L	Tc-99 pCi/L	Uranium mg/L	PCB 1016 μg/L	PCB 1221 μg/L	PCB 1232 μg/L	PCB 1242 μg/L	PCB 1248 μg/L	PCB 1254 μg/L	PCB 1260 μg/L	PCB 1268 μg/L	
6/16/2009	41000	< 500			< 500	82.1	6710	9090	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09168007002
7/20/2009	31000	< 2500			< 500	< 4.65	6730	9010	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09201066001
8/18/2009	31000	< 400			< 400	19.7	7420	8770	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C09230023002
9/21/2009	27000	< 1000	< 200	< 1000	< 200	< -119	6980	9230	< .005									C09265006005
12/14/2009	43000	< 2000			< 400	< -176	6970	9250	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09348027001
3/22/2010	37000	< 400	< 250	< 250	< 250	< -90.6	5370	8960	< .005									C10082002001
3/22/2010	37000	< 250			< 250	37.4	6850	8920	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082005001
3/22/2010	37000	< 250			< 250	92.1	5660	9010	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C10082005002
6/22/2010	32000	< 2500			< 500	22	6440	9250	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10173027001
9/22/2010	28000	< 2500			< 500	< -114	6340	8860	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10265020004
12/13/2010	34000	< 2500			< 500	< -77.3	6970	9230	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347023006
3/22/2011	39000	< 400			< 400	134	5310	7600	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.53	< .09	C11081023003
3/22/2011	47000	< 400			< 400	46.5	6570	7610	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.13	< .09	C11081023004

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C-400 Monitoring
Water Quality Records for
MW421-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	20000	< 1000			< 200	38	1780	1650	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09202027001
8/25/2009	21000	< 200			< 200	< -.377	1300	1670	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09237029001
9/29/2009	22000	< 200			< 200	33	878	1240	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09273002001
12/16/2009	27000	< 1000			< 200	27.7	906	1160	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C09350025004
3/23/2010	24000	< 200			< 200	15.5	1180	1780	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025004
6/23/2010	58000	< 500			< 500	18.4	1710	2340	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10172026001
9/21/2010	34000	< 500			< 500	15.1	826	1190	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10264016001
12/14/2010	28000	< 2500			< 500	9.44	789	916	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10348026001
3/23/2011	28000	< 250			< 250	< 4.35	623	859	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.06	< .09	C11082024003

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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
3/23/2011	62000	< 500			< 500	8.6	220	340	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.15	< .09	C11082024004

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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
3/23/2011	61000	< 500			< 500	19	186	278	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.34	< .09	C11082024005

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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
3/22/2011	20000	< 200			< 200	87.5	4860	6410	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C11081023005

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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

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C-400 Monitoring
Water Quality Records for
MW422-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	45000	< 2500			< 500	< -.394	1650	2310	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C09202019002
8/24/2009	46000	< 500			< 500	15.4	1380	1960	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09237008002
9/28/2009	45000	< 500			< 500	15.5	1560	1940	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09271021006
12/16/2009	58000	< 2500			< 500	20.7	1230	1630	< .005	< .16	< .17	< .14	< .1	< .12	< .07	< .05	< .09	C09350025003
3/23/2010	53000	< 500			< 500	19.6	866	1490	< .005	< .16	< .17	< .13	< .1	< .11	< .07	< .05	< .09	C10082025003
6/21/2010	72000	< 1000			< 1000	15.1	883	1520	< .005	< .16	< .17	< .13	< .09	< .11	< .07	< .05	< .08	C10173001004
9/20/2010	61000	< 1000			< 1000	16.3	777	1320	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10263039006
12/13/2010	54000	< 2500			< 500	22.6	782	1070	< .005	< .17	< .18	< .14	< .1	< .12	< .07	< .05	< .09	C10347024006
3/22/2011	54000	< 500			< 500	23.3	677	1010	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.36	< .09	C11081023007

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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

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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

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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

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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

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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
3/22/2011	12000	< 100			< 100	170	4620	6990	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.26	< .09	C11081023001

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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
3/22/2011	16000	< 200			< 200	93.3	2580	3430	< .005	< .17	< .18	< .14	< .1	< .12	< .07	.28	< .09	C11081023002

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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

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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

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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

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APPENDIX F

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

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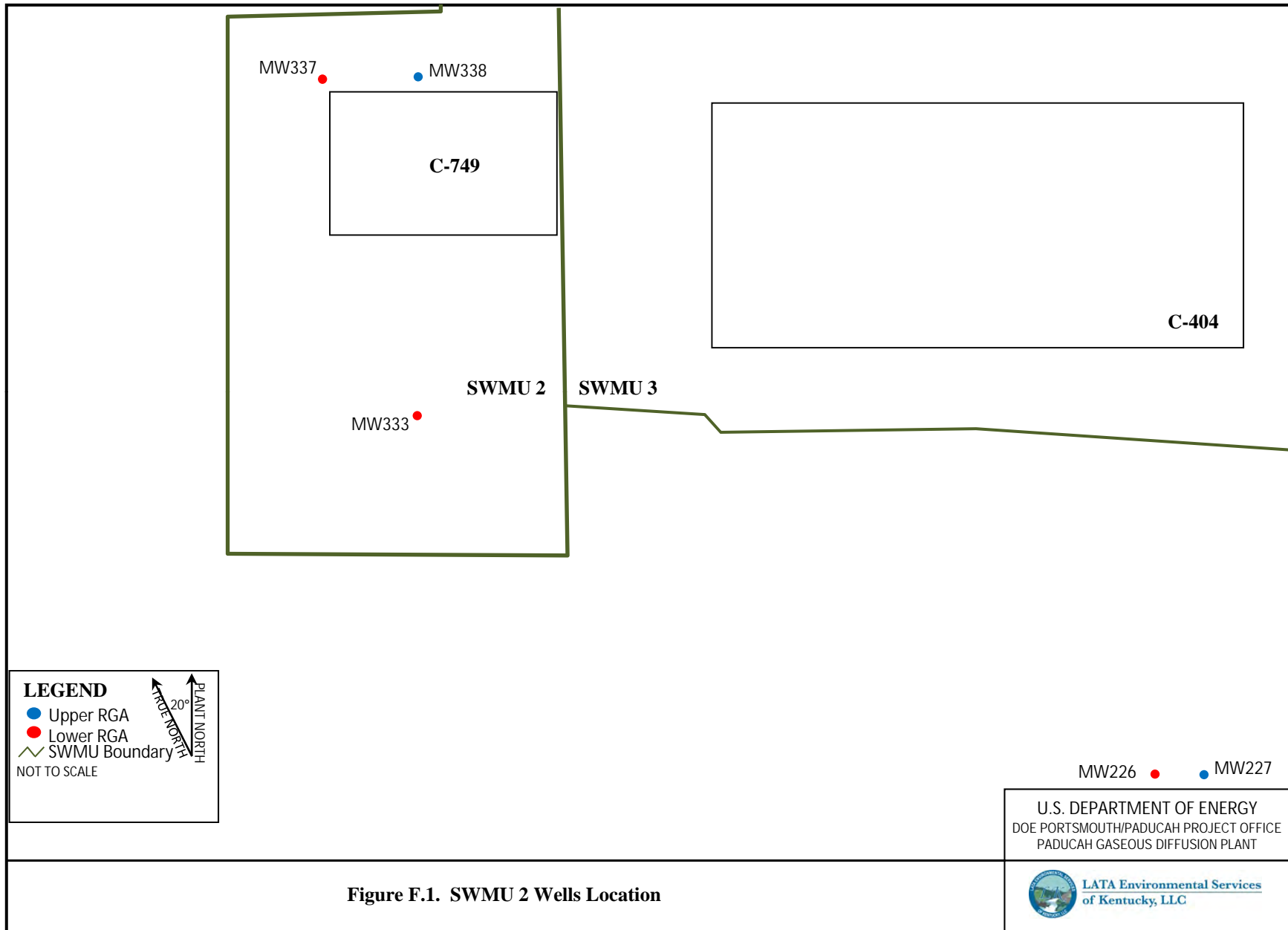


Figure F.1. SWMU 2 Wells Location

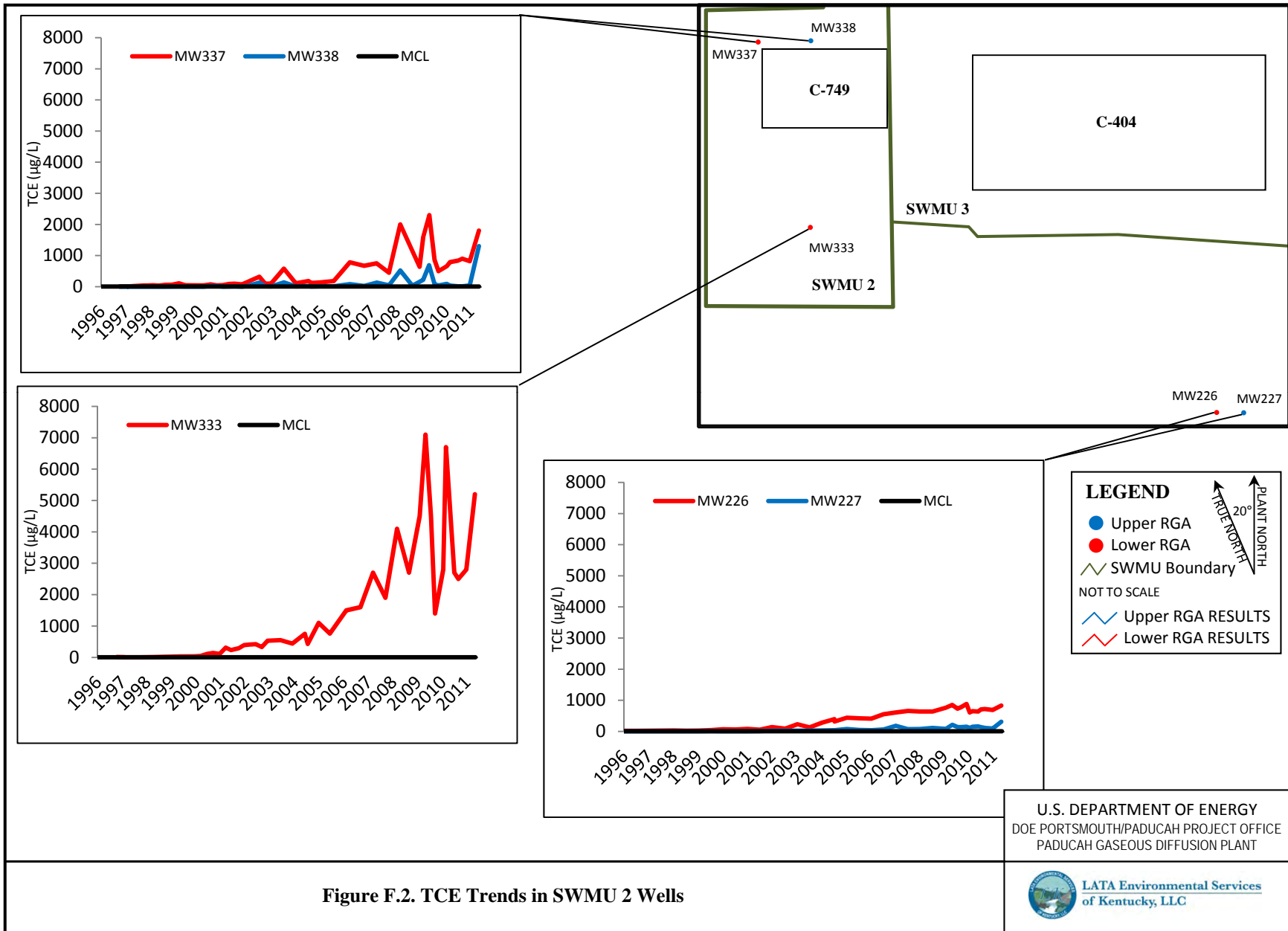


Figure F.2. TCE Trends in SWMU 2 Wells

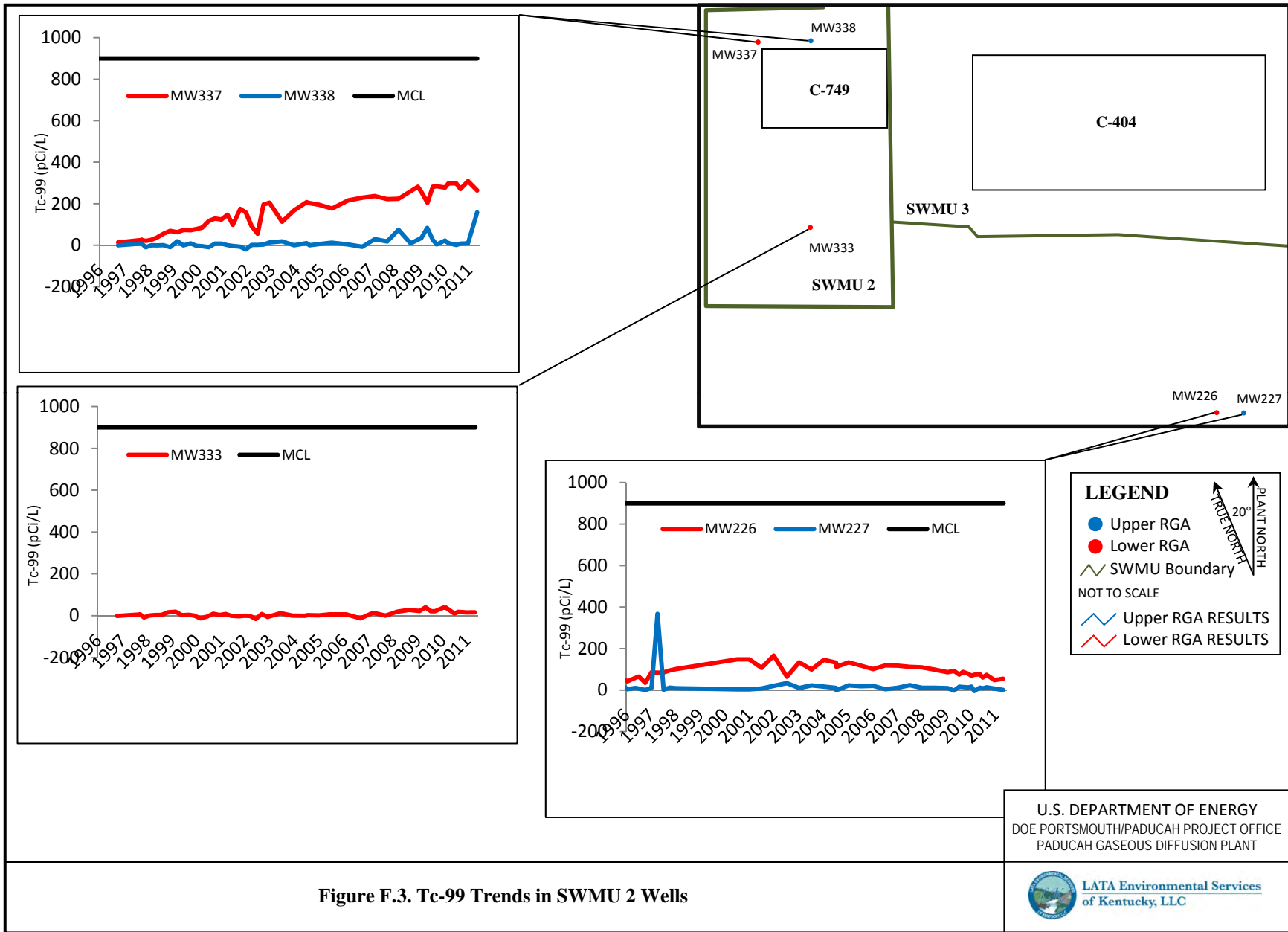


Figure F.3. Tc-99 Trends in SWMU 2 Wells

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



LATA Environmental Services
of Kentucky, LLC

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

FIG

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								36				951031-060
10/30/1995								40				951031-056
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	27							85				970714-134
7/14/1997	26							84				970714-133

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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	394											C042050002
7/22/2004	340	12	< 5	< 5	< 5	< .668	57.7	132	< .0902	< .0122	< .348	C042050009
7/27/2004	320							112				C042090056
1/24/2005	440							134	< .0357	< .0147	< -.0135	C050240045
7/27/2005	420							118	< .0346	< .00589	< .00252	C052080180
1/24/2006	410							101	< .0973	< -.0183	< .0768	C060240039
7/24/2006	550							119	< 1.07	< .187	< .282	C062050057
1/24/2007	610							118	< 1.03	< -.00311	< .21	C070240038
7/24/2007	660							112	< .0971	< -.0355	< .0361	C072060043

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

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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				951024-032
10/23/1995								0				951024-040
10/30/1995								6				951031-064
11/8/1995								7				951110-063
11/15/1995								22				951116-024
1/22/1996	4							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

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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	10				< .48							96M04623-3717
10/14/1996									9.66		.14	96M04623-3731
10/14/1996								-1.1				96M04623-3761
1/29/1997	5	< 5	< 5	< 5	< 5							970130-051
9/23/1997	5	< 5	< 5	< 5	< 5	-2	2	6				970923-064
11/19/1997	6	< 5	< 5	< 5	< 5	-7	2	-8				971119-080
2/9/1998	8	< 5	< 5	< 5	< 5	< 2.3	< 1	< 1				C980420046
5/4/1998	14	< 5	< 5	< 5	< 5	< 5.1	15	< 3				C981250036
8/10/1998	16	< 5	< 5	< 5	< 5	< 4.3	6	< 3.9				C982220109
11/12/1998	16	< 5	< 5	< 5	< 5	< -1.37	5.36	< 16				C983160089
3/3/1999	30	< 5	< 5	< 5	< 5	< .68	< 2.83	19.27				C990620037
6/4/1999	33	< 5	< 5	< 5	< 5	< 1.23	< .07	< 2.81				C991580024
9/15/1999						< -.79		< 4.13				C992580210
12/7/1999	33	< 5	< 5	< 5	< 5	< .45	< .49	< -6.17				C993410101
12/7/1999	29	< 5	< 5	< 5	< 5	2.48	< 1.48	< .475				C993410100
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	1300	< 50	< 50	< 50	< 50	< 2.43	< 3.19	< 5.18				C060450088
2/14/2006	1500	< 50	< 50	< 50	< 50	< -.267	< 3.66	< 6.25				C060450089
9/12/2006	1600	< 120	< 120	< 120	< 120	< 1.58	4.31	< -12.7				C062550163
3/19/2007	2700	< 100	< 100	< 100	< 100	4.34	8.66	< 13.8				C070780102
9/19/2007	1900	< 20	< 20	< 100	< 20	< 2.81	6.15	< .212				C072630092
3/11/2008	4100	< 25	< 25	< 120	< 25	< 1.75	16.9	19				C080710145
9/3/2008	2700	< 25	< 25	< 120	< 25	< .456	6.72	27.3				C082470086
2/9/2009	4500							22.7				C09040013001
5/7/2009	7100	< 250	< 50	< 250	< 50	< 2.35	22	39.9				C09127062003
7/28/2009	4500							21.1				C09209012001
9/25/2009	1400	< 50	< 50	< 50	< 50	< .535	17.7	21.3				C09268017001
1/26/2010	2800							38.1				C10026023004
3/8/2010	6700	< 50	< 50	< 50	< 50	< .795	24.7	38.6				C10067037002
7/9/2010	2700							< 10.3				C10190027002
9/8/2010	2500	< 50	< 50	< 50	< 50	< 1.48	10.6	18.7				C10251037004
1/4/2011	2800							< 15.6				C11005004006

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

MW337

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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

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

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C-749 Uranium Burial Ground (SWMU2) Monitoring

Water Quality Records for

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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