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**APR 29 2008**

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PPPO-02-409-08

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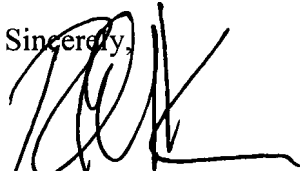
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Dear Mr. Ballard and Mr. Hatton:

**U.S. DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT  
FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR  
THE FIRST HALF OF FISCAL YEAR 2008, PADUCAH, KENTUCKY**

Enclosed is the U.S. Department of Energy's Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2008. The enclosed report is required by Sections XXIII and XXXII of the Federal Facility Agreement and Part IV of the Resource Conservation and Recovery Act Permit.

If you have any questions or need any additional information, please contact David Dollins at (270) 441-6819.

Sincerely,  
  
Reinhard Knerr  
Paducah Site Lead  
Portsmouth/Paducah Project Office

Enclosures:

1. Certification
2. FFA Semiannual Progress Report for 1<sup>st</sup> Half of FY 2008

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## CERTIFICATION

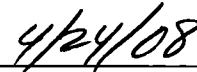
**Document Identification:** *U.S. Department of Energy Paducah Gaseous Diffusion Plant,  
Federal Facility Agreement Semiannual Progress Report for  
the First Half of Fiscal Year 2008, Paducah, Kentucky  
(DOE/LX/07-0118/V1)*

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

Paducah Remediation Services LLC



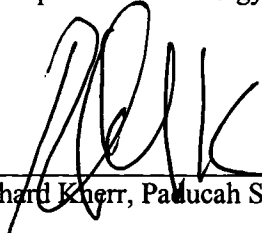
Peter W. Coutts, Deputy Site Manager/Manager of Projects




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)



Reinhard Kherr, Paducah Site Lead



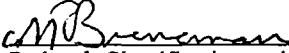
Date Signed

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Secondary Document

**U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
First Half of Fiscal Year 2008  
Paducah, Kentucky**



This document is approved for public release per review by:

  
Paducah Classification and Control Office      Date  
Swift and Staley Team

**DOE/LX/07-0118/V1  
Secondary Document**

**U.S. Department Of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
First Half of Fiscal Year 2008  
Paducah, Kentucky**

Date Issued—April 2008

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

Prepared by  
PADUCAH REMEDIATION SERVICES, LLC  
managing the  
Environmental Management Activities at the  
Paducah Gaseous Diffusion Plant  
under contract DE-AC30-06EW05001

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## ACRONYMS

BGOU	Burial Grounds Operable Unit
CAB	Citizens Advisory Board
CQCP	Construction Quality Control Plan
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
DQO	data quality objective
EE/CA	Engineering Evaluation/Cost Analysis
EPA	U.S. Environmental Protection Agency
EQ	equalization
FFA	Federal Facility Agreement
FS	feasibility study
FY	fiscal year
GWOU	Groundwater Operable Unit
IRA	Interim Remedial Action
KRCEE	Kentucky Research Consortium for Energy and the Environment
LUCIP	Land Use Control Implementation Plan
MOU	Memorandum of Understanding
NEPCS	Northeast Plume Containment System
NSDD	North-South Diversion Ditch
NWPGS	Northwest Plume Groundwater System
O&M	operation and maintenance
PGDP	Paducah Gaseous Diffusion Plant
ppb	parts per billion
PRAP	Proposed Remedial Action Plan
PRS	Paducah Remediation Services, LLC
RAR	Removal Action Report
RAWP	Remedial Action Work Plan
RDR	Remedial Design Report
RGA	Regional Gravel Aquifer
RI	remedial investigation
ROD	Record of Decision
SAP	sampling and analysis plan
SI	Site Investigation
SI/BRA	Site Investigation/Baseline Risk Assessment
SMP	Site Management Plan
SOU	Soils Operable Unit
SWMU	Solid Waste Management Unit
SWOU	Surface Water Operable Unit
<sup>99</sup> Tc	technetium-99
TCE	trichloroethene
WAG	waste area group

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# INTRODUCTION

## FEDERAL FACILITY AGREEMENT SEMIANNUAL REPORT FIRST HALF FISCAL YEAR 2008

**Facility: Paducah Gaseous Diffusion Plant**  
**Plant EPA I.D. No.: KY8-890-008-982**  
**Reporting Period: 10/01/07–03/31/08**

As specified by the Paducah Federal Facility Agreement (FFA) Section XXIII, the U.S. Department of Energy (DOE) has prepared this regulatory progress report that describes the actions that DOE has taken during the previous six months to implement the FFA requirements. This report also describes the schedules<sup>1</sup> for the upcoming six months. Activities that have taken place after the reporting period closed are not included in this report.

Projects reported within this update are grouped similarly to the organization presented in the *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/OR/07-2280&D2* (SMP). Those projects are listed below.

**Table 1. Operable Units and Corresponding Report Topics**

Operable Unit	Project
Groundwater Operable Unit	C-400 Southwest Plume and Its Sources Dissolved-Phase Plumes Northeast Plume Interim Remedial Action Northwest Plume Interim Remedial Action
Burial Grounds Operable Unit	Burial Grounds Operable Unit
Surface Water Operable Unit	Scrap Metal Surface Water (On-Site)
Soils Operable Unit	Sitewide Soils Inactive Facilities Soil and Rubble Areas <sup>2</sup>
Decontamination and Decommissioning Operable Unit	Decontamination and Decommissioning Operable Unit
Comprehensive Sitewide Operable Unit/Permitted/ No Further Action/Miscellaneous	Waste Area Groups 1 and 7 Community Relations Plan Site Management Plan

Within this report, Appendix A contains Water Withdrawal Reports and Appendix B contains Figures 1 through 7, as referenced in the Northeast and Northwest Plume updates.

<sup>1</sup> Schedules are included for information and planning purposes only; enforceable schedules are established in the FFA.  
Soil and rubble areas are not included within the Site Management Plan, but are reported under the Soils Operable Unit for clarity.

Appendix C reports the C-746-K Landfill groundwater monitoring data. Sampling of these monitoring wells is outlined in the Record of Decision (ROD) for Waste Area Groups (WAGs) 1 and 7.

As required by the Paducah FFA (Section XXXII.F), updates to the Administrative Record index since the last progress report are included as Appendix D.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07–03/31/08**

**GROUNDWATER OPERABLE UNIT**

The scope of the Groundwater Operable Unit (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 unacceptable risk.

Within the GWOU are these projects: C-400, Southwest Plume sources, Dissolved-Phase Plumes, Northeast Plume IRA, and Northwest Plume IRA. Supporting projects in the GWOU include the update and revision of the Risk Methods Document and the Sitewide Numerical Groundwater Model, which are included in the Dissolved-Phase Plumes update.

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07–03/31/08**

**GROUNDWATER OPERABLE UNIT PROJECT: C-400**

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

- Developed and submitted the Certified for Construction Remedial Design Report (RDR) (D2) to the Commonwealth of Kentucky (Kentucky) and U.S. Environmental Protection Agency (EPA).
- Responded to EPA comments on the D2/R1 Land Use Control Implementation Plan (LUCIP) and submitted the D2/R2 LUCIP to Kentucky and EPA.
- Developed and submitted the Construction Quality Control Plan (CQCP) for the C-400 Interim Remedial Action (IRA) to Kentucky and EPA.
- Completed installation of overhead/underground electrical feeder to supply future electrical needs of the C-400 IRA.

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

- Resolve and incorporate Kentucky and EPA comments from the D1 Remedial Action Work Plan (RAWP) and the D2 RDR and issue the final versions of these documents.
- Remove interfering infrastructure at the C-400 Cleaning Building area in preparation for installation of Phase I of the C-400 IRA systems.
- Begin installing electrical resistance heating and aboveground treatment system components for Phase I deployment of the C-400 IRA.

**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 Paducah Remediation Services, LLC, (PRS) as the DOE prime remediation contractor at the Paducah Gaseous Diffusion Plant (PGDP). In addition, PRS also provides programmatic and technical support, analytical services, and business management.

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

The requirements are being met for the Groundwater C-400 Action subproject; however, project field implementation is significantly behind the original planned schedule, as described on

Section VI below, resulted in the need to modify April 2011 milestone date for submittal of the Remedial Action Completion Report.

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

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

- D1 RAWP for the C-400 IRA,
- D2 RDR for the C-400 IRA,
- D2/R2 LUCIP for the C-400 IRA, and
- D1 CQCP for the C-400 IRA.

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

- Approval by Kentucky and EPA of the D2 C-400 IRA RAWP is expected by July 2008,
- Approval by Kentucky and EPA of the D2 C-400 IRA RDR is expected by July 2008,
- Approval by Kentucky and EPA of the D2/R2 C-400 IRA LUCIP as an appendix to the RDR is expected by July 2008, and
- Approval by Kentucky and EPA of the D1 CQCP is expected by June 2008.

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

The final Independent Technical Review Report was released to Kentucky and EPA on August 24, 2007. Kentucky comments on the D1 RDR were received on September 7, 2007, and EPA comments were received on October 17, 2007. The D2 RDR was developed and transmitted to Kentucky and EPA on February 14, 2008, to reflect the design for a phased approach requested by EPA. Both Kentucky and EPA have requested extensions to complete the review of the D2 RDR. Once comments on the document have been received, it will be revised and resubmitted. EPA comments on the D1 RAWP, which was submitted on May 9, 2007, were received on March 28, 2008, and the D2 RAWP is currently under revision in response to RDR and RAWP comments. Final approval of these documents is anticipated, as indicated above.

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

Routine updates on the subproject were provided to the Citizens Advisory Board (CAB) and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

**IX. Actual cost for Operation and Maintenance (O&M), if appropriate:**

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2008**

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Reporting Period: 10/01/07–03/31/08**

**GROUNDWATER OPERABLE UNIT PROJECT: Southwest Plume Sources**

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

- The project continued to operate under an FFA Informal Dispute with EPA. Kentucky issued minor comments on the D2/R1 on September 5, 2007, and indicated they were terminating their informal dispute issue that was initiated in September 2006.
- EPA invoked additional informal dispute on the Southwest Plume Site Investigation (SI) Report on December 6, 2007, with the issuance of additional comments on D2/R1 SI that was issued in redline in June 2007.
- Activities were suspended on the Proposed Remedial Action Plan (PRAP) for the Oil Landfarm [Solid Waste Management Unit (SWMU) 1] and C-270 Building—area sources to the Southwest Plume—which was nearing the D1 phase, as a result of the dispute resolution.
- DOE issued on January 18, 2008, a proposed resolution to the FFA Informal Disputes on the Southwest Plume SI Report.
- EPA provided a draft Memorandum of Understanding (MOU) on February 6, 2008, with an outline of requirements necessary to terminate the informal disputes. DOE revised the MOU into a Resolution and reissued it on March 4, 2008, for consideration. The resolution was signed by all FFA parties on March 24, 2008, ending the Informal Dispute on the Southwest Plume SI.

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

- Continue support of Kentucky Research Consortium for Energy and the Environment (KRCEE) facilitated trichloroethene (TCE) degradation analysis.
- Initiate development of a focused feasibility study (FS) for three areas associated with the Southwest Plume.

**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 PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

The KRCEE has been assigned the task of facilitating the TCE degradation evaluation with support from the TCE Technical Degradation Working Group that includes technical experts from DOE, EPA, Kentucky, PRS, and Performance Results Corporation.

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

All FFA parties are in agreement with the existing project extensions. Southwest Plume milestones will be realigned consistent with the informal dispute resolution and Site Management Plan negotiations.

**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:**

- Submission and approval of the Resolution of Dispute/Memorandum of Agreement is based on the acceptance of terms and the allowance of extensions under the FFA under this project.

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

Invoking informal dispute concerning the D2 Southwest SI Report has impacted the progress of the Southwest Plume subproject. Modifications to the development schedules have been coordinated through dispute resolution and Site Management Plan negotiations.

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

Routine updates for the subproject were provided to the FFA Managers. Dispute resolution meetings were attended by DOE, Kentucky, and EPA.

**VIII. Changes in relevant personnel:**

None.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07-03/31/08**

**GROUNDWATER OPERABLE UNIT PROJECT: Dissolved-Phase Plumes**

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

- Sampled 12 monitoring wells for stable carbon isotope and volatile organic contaminant analyses to assist in determining if TCE degradation is occurring in the Regional Gravel Aquifer (RGA) at the Northwest Plume. Sample analysis was performed by the University of Oklahoma. TCE degradation results are being incorporated into a report concerning aerobic degradation of TCE in the RGA that is being developed by multidisciplined project team, which will be released during the next reporting period.
- Resampled two monitoring wells for enzyme analysis in support of the TCE Degradation Project Team.
- Continued update of existing PGDP Sitewide Numerical Groundwater Model in support of the Dissolved-Phase Plumes, BGOU, and other applicable projects. Monthly meetings or conference calls were held during this reporting period. The design of the updated model was completed during this reporting period, and the calibration of the revised model was completed to approximately 90% during this reporting period.
- Continued update of the 2001 Risk Methods Documents in support of all PGDP environmental restoration projects. The Human Health Risk Methods was developed up to the D1 document level during this reporting period. The Environmental Risk Methods document update was initiated during this reporting period.
- As a result of negotiations completed on informal dispute associated with the Southwest Plume Site Investigation, a remedial investigation (RI) and feasibility study (FS) is being incorporated into the baseline of the Dissolved Phase Plumes Project as part of project baseline schedule.

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

- Complete development, review, and project team comment incorporation into the TCE Degradation Report concerning aerobic degradation of TCE contaminants in the RGA lead by the KRCEE-facilitated multidisciplined TCE Project Team.
- Make decision concerning initiation of scoping of work needed for abiotic TCE degradation based on recommendations developed by the KRCEE-facilitated multidisciplined TCE Degradation Project Team.

- Complete the updating of the Risk Methods Documents, including the Human Health and Environmental Risk volumes.
- Complete update and development of PGDP Sitewide Numerical Flow Model and complete the contaminant transport component of the model.

**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 PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management. PRS also is managing the upgrade of the Risk Methods Document and the Sitewide Groundwater Numerical Model.

The KRCEE has been assigned the task of facilitating the TCE degradation evaluation with support from the TCE Technical Degradation Working Group, which is comprised of representatives from DOE, EPA, Kentucky, PRS, and Performance Results Corporation.

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

The Dissolved-Phase Plume project is proceeding with planned scope by utilizing an interagency TCE Technical Degradation Working Group.

**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:**

Routine updates on the subproject are provided to the Citizens Advisory Board (CAB) and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
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Reporting Period: 10/01/07–03/31/08**

**GROUNDWATER OPERABLE UNIT PROJECT: Northeast Plume IRA**

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

The Northeast Plume Containment System (NEPCS) achieved an operational efficiency of 79.2% during the reporting period of October 2007 through March 2008. During this reporting period, the NEPCS treated 38,255,400 gallons of contaminated groundwater. The average system treatment rate for the reporting period was 145.2 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: October, 76%; November, 23%; December 2007, 90%; January 2008, 89%; February, 95%; and March, 100%.

**A) Process Operations**

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

**B) Process Testing**

Operation of the NEPCS began February 28, 1997. As of March 31, 2008, the NEPCS has processed a total of 927,860,000 gallons of water. The monthly extraction volumes for October, November, December 2007, January, February and March 2008 are presented in Appendix A, Table 1, of this report. This table includes a summary of the extracted water volumes and average daily rates.

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

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from July through December 2007.

Influent sample results, compared to the effluent (cooling tower shower) sample results, indicated that TCE was effectively removed below the operational goal of 5 parts per billion (ppb). The influent flow is a composite from two extraction wells. Influent TCE analytical data from the beginning of calendar year 2000 through the end of December 2007 are presented in Appendix B, Figure 1. Environmental samples were collected monthly from the treatment system influent and effluent for the period of July through December 2007. High, low, and average influent and effluent TCE concentrations for these months are presented in Table 2. Values reported as less than the reporting limit of 1 ppb are considered to be 1 ppb for averaging and graphing purposes.

**Table 2. TCE Concentrations for Northeast Plume**

	TCE (ppb)		
	High	Low	Average
Influent (EQ Tank)	510	200	284
Effluent (Cooling Tower effluent)	< 1	< 1	< 1

As presented Table 2, the NEPCS continued to effectively remove TCE. The system operated with an average removal efficiency of 100% for TCE. All effluent TCE samples showed less than the reporting limit.

The extraction wells 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 EW-331 had an average TCE concentration of 175 ppb, while EW-332 had an average concentration of 260 ppb.

Concentrations of technetium-99 (<sup>99</sup>Tc) in water samples collected from the EQ tank did not exceed the DQO of 50 pCi/L. The highest reading from the EQ tank was 20.8 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*, PRS-ENM-001, January 2008.

In accordance with the above-mentioned plan, leak tests were conducted on the transfer lines from the extraction wells to the EQ tank and from the EQ tank to the cooling towers. These tests were conducted from November 5 to November 28, 2007, and were successful in verifying the integrity of the transfer lines. This test is conducted every five years of operation and last was conducted in 2002. The NEPCS was out of service during this period.

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

##### **Nonroutine Maintenance Activities**

From October 10 through October 16, 2007, the Northeast Pump-and-Treat System was removed from service due to faulty level probe readings from the EQ tank. A new grounding system to the level probe was installed on October 16, 2007, and the system was returned to operation.



**E) Effectiveness Monitoring - Monitoring Well Results**

Figures 2a, 2b, 2c, 2d, and 2e included in Appendix B, show TCE concentrations and <sup>99</sup>Tc activities in monitoring wells downgradient and upgradient and the extraction wells. Figure 3, included in Appendix B, shows locations of the monitoring wells and extraction wells.

MW292 is located approximately 1,200 ft upgradient of the pumping wells to provide an early detection point for <sup>99</sup>Tc migration. During the third and fourth quarters of calendar year 2007, <sup>99</sup>Tc activity at MW292 was 29.0 and 48.1 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*.

**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 PRS as the DOE prime remediation contractor at PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

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

The effluent concentration goal of 5 ppb for TCE was met during the reporting period. The NEPCS remained operational 79.2 % of the time during this reporting period.

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

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

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*, has been revised to reflect how PRS now operates the NEPCS.

**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:**

None.

**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 period between October 2007 and March 2008 was \$270K.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07-03/31/08**

**GROUNDWATER OPERABLE UNIT PROJECT: Northwest Plume IRA**

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

During this reporting period, the Northwest Plume Groundwater System (NWPGS) treated 50,069,000 gallons of contaminated groundwater with an average monthly operational efficiency of 96.3%. The average system treatment rate for the reporting period was 190.0 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for the reporting period were as follows: October, 100%; November, 100%; December 2007, 97%; January 2008, 100%; February, 92%; and March, 89%.

**A) Process Operations**

The NWPGS consists of two extraction well fields (each field has two extraction wells) for a total of four wells, underground pipeline, treatment facility, and monitoring well network.

**B) Process Testing**

Operation of the NWPGS began on August 28, 1995. As of March 31, 2008, the NWPGS has processed a total of 1,276,030,000 gallons of water. The monthly extraction volumes for October, November, December 2007, January, February and March 2008 are presented in Appendix A, Table 2, of this report. This table includes a summary of the extracted water volumes and average daily rates.

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

Due to sample analysis time and the data assessment process, the analytical data included in this report lags operational data by three months. This report presents analytical data from July through December 2007.

The influent sample results, compared to the NWPGS effluent results, indicated that the NWPGS continues to effectively remove TCE and <sup>99</sup>Tc. Influent and effluent TCE and <sup>99</sup>Tc analytical data from January 2000 through December 2007 are presented in Appendix B on Figures 4a, 4b, 5a, and 5b, respectively.

TCE values reported as less than the reporting limit of 1 ppb are considered to be 1 ppb for averaging and graphing purposes. High, low, and average influent and effluent TCE and <sup>99</sup>Tc concentrations from July through December 2007 are presented in Table 3.

**Table 3. TCE and <sup>99</sup>Tc Concentrations for Northwest Plume**

	TCE (ppb)			<sup>99</sup> Tc (pCi/L)		
	High	Low	Average	High	Low	Average
Influent	2700	1800	2261	368	257	315
Effluent	4.4	1.8	2.86	25.7	-13.4	7.3

The treatment system influent, a composite from four extraction wells, was sampled weekly, and the effluent was sampled daily during this reporting period. As presented in Table 3, the NWPGS continued to effectively remove TCE and <sup>99</sup>Tc. The system operated with an average removal efficiency of 99.87% for TCE and 97.7% for <sup>99</sup>Tc.

The average TCE effluent concentration for this reporting period was 2.86 ppb, which is less than the treatment goal of 5 ppb and the existing Kentucky Pollutant Discharge Elimination System Outfall 001 TCE permit limit of 80.7 ppb. The average <sup>99</sup>Tc effluent value was 7.3 pCi/L, which is less than the operational goal of 900 pCi/L, during the reporting period.

NWPGS extraction wells were sampled quarterly during the period July through December 2007. High, low, and average sample results for this reporting period at the extraction wells are shown in Table 4.

**Table 4. TCE and <sup>99</sup>Tc Concentrations for Northwest Plume Extraction Wells**

	TCE (ppb)			<sup>99</sup> Tc (pCi/L)		
	High	Low	Average	High	Low	Average
EW-228	7.3	3.6	5.9	12.3	-8.6	-0.8
EW-229	21	11	16	12.5	9.0	10.8
EW-230	6400	5400	5900	841	681	761
EW-231	350	140	210	79.2	56.3	65.5

#### D) Treatment Media

##### Ion Exchange Resins

The NWPGS is equipped with four ion exchange columns used for the removal of <sup>99</sup>Tc. 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 the 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

February 13, 2008, with recycled carbon. The current stock of recycled carbon and future utilization of recycling technology will provide an adequate supply of carbon throughout 2009.

#### **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*, PRS-ENM-0001, January 28, 2008. Instances of minor downtime occurred during the reporting period relating to power outages, maintenance, and calibration of the system.

##### **Nonroutine Maintenance Activities**

On March 28 through March 31, the NWPGS was not operational due to a blown fuse in the air stripper pump resulting from lightning activity in the area. Repairs were completed on March 31, 2008, and the system was restarted.

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

Figures 6a, 6b, 6c, 6d, and 6e included in Appendix B, show TCE and <sup>99</sup>Tc concentrations in monitoring wells at the South and North Fields of the Northwest Plume and the extraction wells, respectively. These graphs show all data since monitoring began in 1995 and indicate the position of the monitoring wells relative to the extraction. Figure 7, included in Appendix B, shows locations of the monitoring wells and extraction wells.

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

There were no modifications of the NWPGS operations or configuration during the reporting period.

#### **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 operations, 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.

#### **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 PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

**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 ppb for TCE and 900 pCi/L for <sup>99</sup>Tc during the reporting period. The NWPGS has remained operational 96.3% of the time during this reporting period.

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

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

*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*, has been revised to reflect comments received from KDEP. The document has been forwarded to DOE/KDWM for final approval. Proposed changes include reduced sampling frequencies at the Northwest Plume.

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

The approved O&M Plan revision was completed which incorporated comments received from KDWM. Final approval of the document is pending.

**VI. Anticipated problems/delays (provide summary of problems, schedule, and 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:**

The Water Withdrawal Reports for October, November, December, 2007 and January, February, and March, 2008 were submitted in their respective months to the Kentucky Division of Water.

**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 period between October 2007 and March 2008 was \$270K.

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**BURIAL GROUND OPERABLE UNIT**

The scope of this project includes an RI, baseline 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 (SWMU 4); C-746-F (SWMU 5); C-747-B (SWMU 6); C-747-A (SWMUs 7 and 30, which includes the area beneath SWMU 12); the residential/inert borrow area (SWMU 145); C-746-P Clean Scrap Yard (SWMU 13) and any additional disposal areas that might exist beneath the scrap yards; and the S&T Landfills.

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

A new monitoring well (MW420) was installed in December 2007. Well rehabilitation was performed successfully on MW67 and MW76. The D0 RI Report was submitted to DOE on December 18, 2007 for technical review. Comments were incorporated, and the RI Report was resubmitted for DOE legal review on February 8, 2008.

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

- The RI Report is in process with a D1 milestone date of July 25, 2008.
- Sampling for further investigation of metal detected in C-746-P/P1 Scrap Yards (SWMU 13).
- Begin work on BGOU FS.

**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 PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

**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:**

RI Report.

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

D1 RI Report due July 25, 2008.

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

This project is critical path for a 2019 completion of site cleanup activities. Additional delays to the project may jeopardize the ability to finish cleanup activities.

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

Routine meetings with the CAB were held. Regulators were briefed, as needed, on progress or issues.

**VIII. Changes in relevant personnel:**

None.

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

None.



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**SURFACE WATER OPERABLE UNIT**

The scope of this project includes investigation, baseline risk assessment, evaluation of removal/remedial alternatives, remedy selection, and implementation of cleanup actions for hot spots associated with the following areas: internal plant ditches; outfall ditches; and Sections 3, 4, and 5 of the North-South Diversion Ditch (NSDD). The scope also includes evaluation of whether additional sediment control measures are needed, as well as actions for potential legacy releases associated with the storm sewer system and Bayou and Little Bayou Creeks.

The Surface Water Operable Unit (SWOU) includes Sections 1 and 2 of the NSDD, Scrap Metal, Surface Water (On-Site), and Surface Water (Off-site) projects. Additionally, O&M is performed on NSDD Sections 1 and 2 and Institutional Controls for Surface Water, 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, respectively. Inspection reports are filed in the Document Management Center, managed by the Swift & Staley Team. The estimated annual cost of this O&M is \$94K.

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**SURFACE WATER OPERABLE UNIT PROJECT: Scrap Metal Removal**

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

- Prepared and submitted a minor modification of the Scrap Metal Action Memorandum to Kentucky and EPA on May 24, 2007. This addresses leaving the nickel ingots in place rather than moving them under a temporary shelter. Kentucky approved the minor modification on June 21, 2007. EPA approved the minor modification on December 14, 2007.
- Prepared and submitted the D1 Removal Action Report (RAR) for Scrap Metal to EPA and Kentucky for review and comment on December 27, 2007.
- Received Kentucky comments on the D1 RAR for Scrap Metal on March 20, 2008.
- Received EPA comments on the D1 RAR for Scrap Metal on April 1, 2008.

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

- Respond to comments on the D1 RAR for Scrap Metal from regulatory agencies, revise, and resubmit D2 by May 16, 2008.

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

PRS is responsible for preparation of the RAR and minor modification to the Scrap Metal Action Memorandum. In addition, PRS also provides programmatic and technical support and business management.

**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:**

D1 Removal Action Completion Report (Secondary Document) for Scrap Metal.

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

March 27, 2008, was the end of the 90-day review period for regulators on the secondary document.

**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:**

Routine updates on the subproject were provided to the CAB and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

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

O&M costs include craft labor to inspect, in-line monitor, and discharge the C-613 Basin, as well as any discrete maintenance repairs that may be required, such as potential repairs of the high-density polyethylene basin liner or a pump. Cost is estimated at approximately \$20K.

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**SURFACE WATER OPERABLE UNIT PROJECT: SWOU On-Site Investigation**

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

Additional comments were received from EPA on the D2/R1 version of the SWOU Site Investigation/Baseline Risk Assessment (SI/BRA) Report. Comments were addressed and a revision to the D2/R1 SWOU SI/BRA Report was submitted to EPA and Kentucky for further comment and/or approval. Approval of the D2/R1 SWOU SI/BRA Report was received from EPA and Kentucky on January 29, 2008, and February 8, 2008, respectively.

The D1 SWOU Engineering Evaluation Cost Analysis (EE/CA) was issued to EPA and Kentucky on February 8, 2008, for comment and/or approval. EPA and Kentucky have requested a 30-day extension, requesting additional time for review of the D1 SWOU EE/CA.

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

The D2 SWOU EE/CA will be submitted (if required) to the regulators for final approval.

The D1 SWOU Action Memorandum will be prepared for submittal to the regulators by the latest FFA milestone date, July 26, 2008.

The D1 SWOU RAWP will be prepared for submittal to the regulators by the latest FFA milestone date, November 23, 2008.

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

Refer to Section VIII for the identity and assigned tasks to be performed for this project.

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

Regulator formal extension requests have impacted due dates for subsequent documents and impacted project milestones.

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

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

D2/R1 SWOU SI/BRA Report

D1 SWOU EE/CA

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

D2/R2 SWOU SI/BRA Report—EPA and Kentucky approval on January 29, 2008, and February 8, 2008, respectively.

D1 SWOU EE/CA—Issued for regulatory review, February 8, 2008.

D1 SWOU Action Memorandum—Issue for regulatory review, July 26, 2008.\*

D1 SWOU RAWP—Issue for regulatory review, November 23, 2008.\*

\* EPA and Kentucky have requested extensions that may impact current FFA milestone dates.

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

Extension requests to review documents have delayed document approvals and resulted in impacts to project milestones. The project has experienced a nine-month delay associated with the approval of the SWOU SI/BRA and a 45-day delay for the SWOU EE/CA prior to this progress report time frame. These schedule impacts have a compounding effect, resulting in schedule impacts to subsequent documents which are routinely performed in sequence. These schedule impacts will result in delays in the implementation of fieldwork and will jeopardize DOE's ability to meet the September 30, 2017, project completion milestone.

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

Routine updates on the subproject are provided to the CAB and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

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

None.

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**SOILS OPERABLE UNIT**

This project includes a removal action coordinated with an RI, BRA, evaluation of cleanup alternatives, remedy selection, and implementation of necessary response actions. The scope of the Soils Operable Unit (SOU) is intended to address primarily those units where contamination is believed to be confined to shallow soil horizons, units not currently being addressed by the accelerated actions, and units that require additional characterization. The scope of the SOU RI will include a multimedia evaluation (e.g., groundwater, surface water) to ensure that all exposure pathways for the subject units are assessed adequately to support cleanup decisions.

The SOU also includes (1) the Soils Inactive Facilities that include the removal of portions of the C-218 Firing Range, the C-410-B Sludge Lagoon, and the C-403 Neutralization Pit; and (2) the Soil/Rubble Areas that include conducting a site evaluation of the of the identified areas, developing site evaluation reports, and implementing a removal action, if necessary, to address areas of contamination with unacceptable risk.

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

Routine updates on the subproject are provided to the CAB and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

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

None.



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**SOILS OPERABLE UNIT PROJECT: Inactive Facilities Soils**

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

Issued the D1 Soils Inactive Facilities EE/CA to the regulators on March 24, 2008, meeting the enforceable milestone proposed in the fiscal year (FY) 2008 D1 Site Management Plan.

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

Obtain comments from Kentucky and EPA on the Soils Inactive Facilities EE/CA, incorporate comments, resubmit, and obtain approvals. Prepare the Action Memorandum and the RAWP for the Soils Inactive Facilities.

**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 Soils Inactive Facilities belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition PRS also provides programmatic and technical support, analytical services, and business management.

**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:**

Issuance of D1 EE/CA

- Preparation of the D1 Action Memorandum

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

Proposed SMP milestone for the D1 Soils Inactive Facilities EE/CA was March 22, 2008. Due dates for subsequent documents follow the standard FFA timeline. Primary documents require a 30-day review (e.g., EE/CA) and secondary documents require a 90-day review (e.g., SAP).

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

Extension requests to review documents will delay implementation of fieldwork.

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

Routine updates on the subproject are provided to the CAB and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

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

None.

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**SOILS OPERABLE UNIT PROJECT: Soil and Rubble Areas<sup>3</sup>**

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

Obtained approval on the Soil Piles SAP and Addendum 1-A from Kentucky on November 1, 2007 (pending approval from EPA).

Issued Soil Piles Addenda 1-B and 2 to the regulators on December 14, 2007. Comments are due March 14, 2008; however, two 15-day extensions have been requested by Kentucky.

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

Submit the D1 Soil Pile I Site Evaluation and SWMU Assessment Report to Kentucky and EPA for review.

Obtain EPA approval on the D2/R1 SAP and Addenda 1-A.

Revise and resubmit the Addenda 1-B and 2 for the Soil Piles for approval.

Submit the Rubble Piles SAP to Kentucky and EPA for review.

Complete sampling of the Addenda 1-B and 2 areas pending regulatory approval of the Addenda.

**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 Soil and Rubble Areas belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

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

Soil and Rubble Areas currently are not included in the approved FY 2007 D2 SMP schedule. Pursuant to the February 16, 2007, "Notification of Soil and Rubble Areas" letter, project implementation dates were based on regulatory approval of the first SAP. The project is currently over 13 months behind this original schedule due to multiple comments and extension requests by EPA.

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<sup>3</sup> Soil and Rubble Areas are not included within the SMP, but are reported under the SOU for clarity.

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

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

- Soil Pile I Site Evaluation and SWMU Assessment Report
- Soil Piles Addenda 1-B and 2
- Rubble Piles SAP

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

Will adhere to the February 16, 2007, letter.

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

Delay of regulatory approval of the SAP and Addenda 1-A has affected the implementation of the Addenda 1-B and 2 fieldwork. FFA parties are discussing Addenda 1-B and 2 in an effort to expedite the schedule. Addenda 2 work package development has been completed and Addenda 1-B work package development has been initiated to expedite fieldwork. EPA has not yet provided final comments or approval of the Addenda (Kentucky provided final comments in March).

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

Routine updates on the subproject are provided to the CAB and FFA Managers. DOE has updated the local media on background information and the planned activities for the soil piles identified in November 2006

**VIII. Changes in relevant personnel:**

None.

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

None.

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**DECONTAMINATION AND DECOMMISSIONING OPERABLE UNIT**

The scope of this project includes decontamination and decommissioning (D&D) of the C-410 and C-340 facilities, as well as the other 15 inactive DOE facilities, assuming the use of the Comprehensive Environmental Response, Compensation and Liability Act removal actions implemented in accordance with the FFA.

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

- Continued asbestos abatement as a part of D&D activities in the C-410 Complex in multiple areas using glovebag techniques and enclosures. Accessible asbestos has been removed in Sectors 2, 3, and 4, with work ongoing in Sectors 5 through 8.
- Abated approximately 32,000 linear ft of asbestos thermal surfacing insulation to date, with approximately 9,000 linear ft abated during this reporting period. Additionally, over 5,000 ft<sup>2</sup> of asbestos containing transite or asbestos insulation on tanks or other large equipment has been removed, packaged and disposed at *EnergySolutions*.
- Shipped approximately 9,900 ft<sup>3</sup> of low-level waste asbestos debris and low-level waste PCB bulk product debris from the C-410 Complex to *EnergySolutions* for disposal.
- Received approval on C-402 Limehouse Removal Action Completion Report from EPA. Kentucky approval of the Removal Action Completion Report received in last reporting period.
- Completed asbestos abatement and equipment removal at the C-405 Contaminated Items Incinerator, and began development of Removal Action Completion Report.
- Disposed of 4,400 ft<sup>3</sup> of low-level waste from the C-405 Incinerator at *EnergySolutions* in Utah. Treated and disposed of ash and pit water generated during the C-405 Contaminated Items Incinerator at *EnergySolutions*.
- Completed equipment removal at the C-746-A West End Smelter. Resolved issue with the sprinkler system located in the smelter area that feeds remaining portions of the C-746-A Waste Storage Building.
- Disposed of 5,300 ft<sup>3</sup> of sanitary debris from the C-746-A West End Smelter at the C-746-U Landfill.

Initiated demolition of C-746-A West End Smelter structure.

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

- Complete asbestos abatement in C-410 Complex, Sectors 5, 6, and 7, and continue abatement in Sector 8.
- Initiate stabilization and removal of fluorine, hydrogen fluoride, and hydrogen systems in Sector 4 of the C-410 Complex.
- Continue collection, sorting, and packaging of stored material inside C-410 Complex for disposition.
- Complete C-746-A West End Smelter Demolition and sealing of slab.
- Submit C-405 Contaminated Items Incinerator Removal Action Completion Report; begin development of C-746-A West End Smelter Removal Action Completion Report.

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

Responsibility for the day-to-day operations of D&D belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

**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:**

C-405 Removal Action Completion Report under preparation

**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 to report at this time.

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

Routine updates on the subproject were provided to the CAB and FFA Managers.

**VIII. Changes in relevant personnel:**

None.

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

None.

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Reporting Period: 10/01/07-03/31/08**

**COMPREHENSIVE SITEWIDE OPERABLE UNIT/PERMITTED/  
NO FURTHER ACTION/MISCELLANEOUS**

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, and the Site Management Plan (SMP).

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**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07–03/31/08**

**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 (include 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 WAGs 1 and 7 Record of Decision (ROD). The results of the groundwater monitoring are reported in Appendix C.

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

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

Maintenance activities related to repair of the rip rap that has been eroded from the stream bank at the C-746-K Landfill. A work request for this repair has been initiated.

**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 PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

**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 Watershed Monitoring Program. O&M cost is not broken out separately.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07-03/31/08**

**PROJECT: Community Relations Plan**

- I. Work performed during the reporting period (include summaries of findings and any deviations from the work plan):**
- None.
- II. Schedules of activities to be performed during the next reporting period (including projected work/crucial phases of construction):**
- No activities are planned. The Community Relations Plan has been approved by the FFA parties.
- III. Identity and assigned tasks of DOE contractors for work to be performed for this project:**
- Responsibility for the maintenance of the Community Relations Plan belongs to PRS as the DOE prime remediation contractor at the PGDP. No activities are anticipated for this period.
- IV. Statement of the manner and extent to which the requirements and time schedules are being met:**
- The Community Relations Plan FFA informal dispute has been resolved, and the document now is approved.
- 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:**

Not applicable.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2008**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/07-03/31/08**

**PROJECT: Site Management Plan**

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

EPA provided conditional approval with comments of the FY 2007 D1 SMP on September 14, 2007, requesting that comments be addressed in the FY 2008 D1 SMP. Revised the FY 2007 D1 SMP to address comments previously received from Kentucky. DOE Submitted the FY 2007 D2 SMP to EPA and Kentucky on October 29, 2007, for review and approval. Kentucky approved FY 2007 D2 SMP on November 8, 2007. A meeting was held on October 4, 2008, in Nashville, Tennessee, to discuss and scope the FY 2008 D1 SMP. EPA took action to provide a redline/strikeout version of the document that would address the comments they provided in the September 14, 2007, letter. EPA transmitted their proposed redline/strikeout version of the SMP to Kentucky and DOE on November 2, 2007. DOE requested a 60-day extension (from November 15, 2007, to January 15, 2008) for the submittal of the FY 2008 D1 SMP to allow time for the three FFA parties to evaluate and discuss EPA's proposed changes. The FY 2008 D1 SMP was transmitted to EPA and Kentucky on January 15, 2008, for review and/or approval.

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

Address comments received from Kentucky and EPA, then issue D2 version of the FY 2008 SMP.

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

Responsibility for the maintenance of the SMP belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition, PRS also provides programmatic and technical support, analytical services, and business management.

**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 FY. DOE requested a 60-day extension to allow for the three FFA parties to evaluate and discuss EPA's proposed redline/strikeout version of the SMP. The D1 FY 2008 SMP was issued January 15, 2008. Regulator comments were due within 30 days of issuance. A 30-day extension request was requested by EPA and Kentucky. Kentucky provided comments on March 14, 2008. EPA requested an additional 30-day extension for the submittal of comments on March 14, 2008. EPA comments are due by April 13, 2008.

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

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

FY 2008 D2 SMP (awaiting EPA comments before document can be finalized).

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

FY 2008 D2 SMP is due within 15 days of receipt of EPA and Kentucky comments. Since EPA's comments have not been received to date, a due date has not yet been established.

**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:**

The CAB was briefed on the status of the FY 2007 SMP and FY 2008 SMP on October 18, 2007.

**VIII. Changes in relevant personnel:**

David Williams, EPA's Federal Facility Agreement Manager assigned to Paducah, has accepted a new position within EPA Region 4. W. Turpin Ballard was assigned as his replacement.

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

Not applicable.



**APPENDIX A**

**NORTHEAST AND NORTHWEST PLUME  
WATER WITHDRAWAL REPORTS**

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**Table 1. Northeast Plume Containment System  
Water Withdrawal Reporting Form (gallons of water pumped)**

Day	October 2007	November 2007	December 2007	January 2008	February 2008	March 2008
1	161,300	286,200	278,367	281,650	265,267	273,900
2	102,100	272,233	278,367	261,700	265,267	273,900
3	258,700	272,233	265,500	283,100	265,267	276,600
4	270,500	272,233	275,600	278,433	260,000	272,200
5	264,367	267,200	259,500	278,433	270,900	277,800
6	264,367	0	276,000	278,433	272,400	279,300
7	264,367	0	273,667	274,800	276,300	274,267
8	208,500	0	273,667	274,600	277,233	274,267
9	185,800	0	273,667	269,100	277,233	274,267
10	12,600	0	276,600	265,200	277,233	282,800
11	0	0	270,600	280,767	147,800	266,800
12	0	0	256,900	280,767	269,500	282,500
13	0	0	270,000	280,767	0	286,300
14	0	0	9,400	280,300	270,300	283,833
15	0	0	0	271,500	87,900	283,833
16	210,700	0	0	277,400	0	283,833
17	273,300	0	256,800	284,600	0	294,900
18	270,000	0	298,400	202,300	273,800	274,000
19	267,000	0	247,900	202,300	267,300	282,100
20	267,000	0	270,800	202,300	280,800	286,325
21	267,000	0	275,820	202,300	275,400	286,325
22	277,200	0	275,820	272,900	208,033	286,325
23	270,700	0	275,820	270,700	208,033	286,325
24	309,300	0	275,820	265,300	208,033	283,800
25	275,200	0	275,820	1,900	276,600	264,100
26	257,433	0	273,400	0	276,000	283,700
27	257,433	0	274,700	0	273,700	282,400
28	257,433	0	276,567	264,600	267,500	282,900
29	263,600	270,900	276,567	190,500	273,900	282,900
30	262,600	278,367	276,567	261,800	na	282,900
31	272,700	na	281,650	272,800	na	146,200
Monthly Total	6,251,200	1,919,367	7,650,283	7,311,250	6,571,700	8,551,600
*Daily Average	201,652	63,979	246,783	235,847	226,610	275,858
Days water pumped	31	30	31	31	29	31

\*Value based on number of days water was pumped

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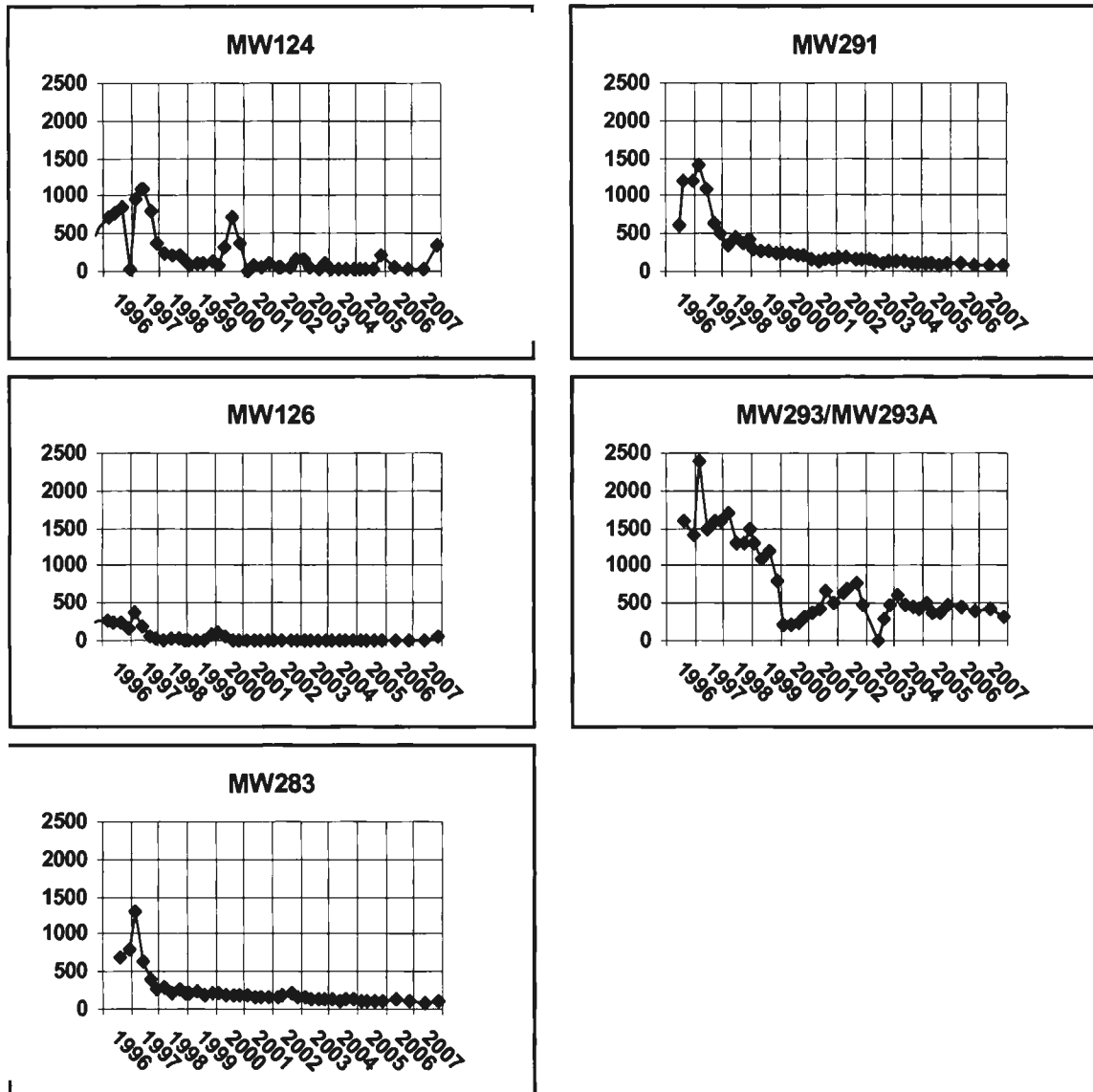
**APPENDIX B**

**FIGURES 1 THROUGH 7**

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TCE (ppb)

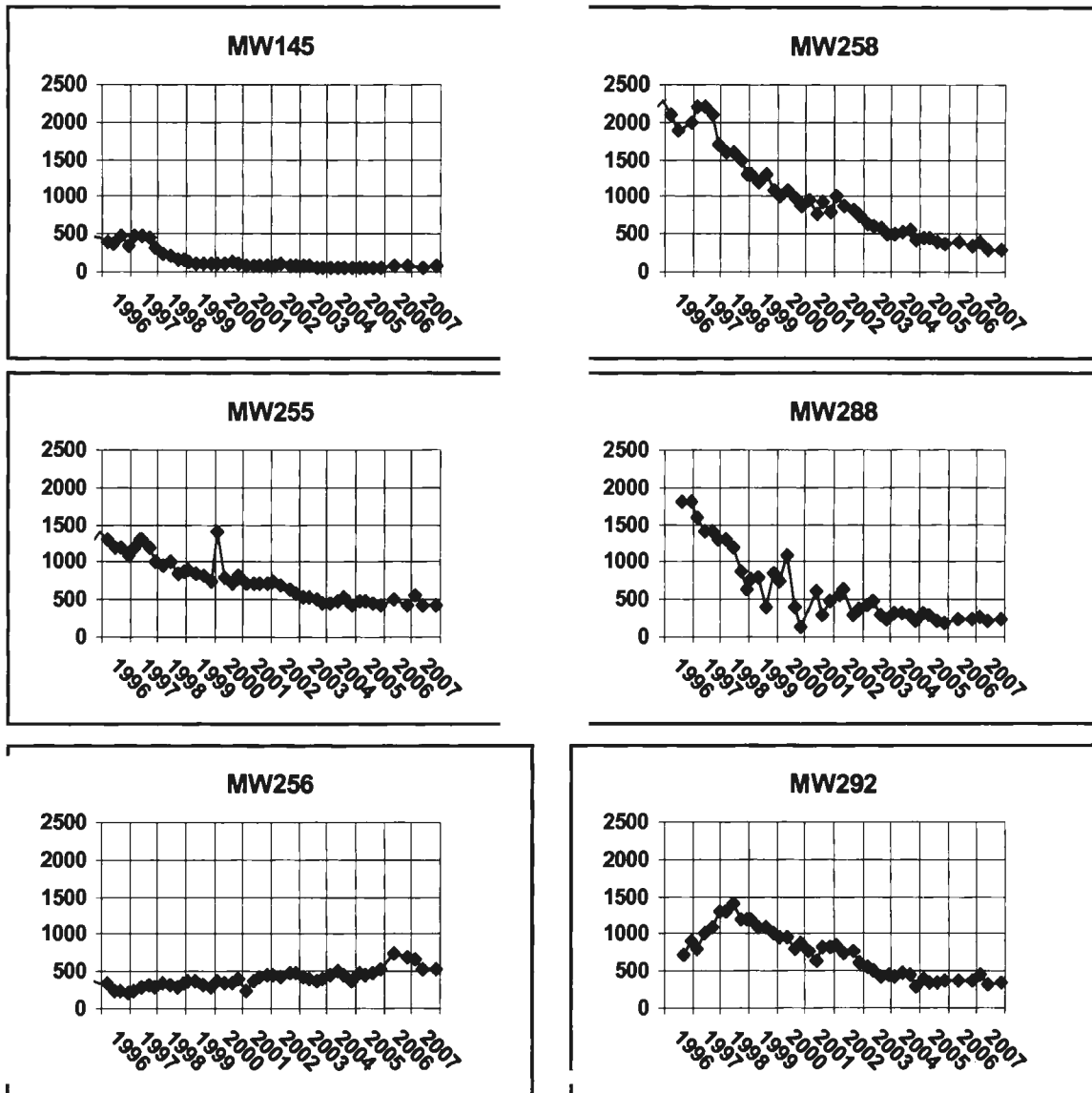


NOTE: Data rejected by validation or assessment have not been graphed.

Figure 2a. Northeast Plume—TCE Concentrations in Downgradient Wells



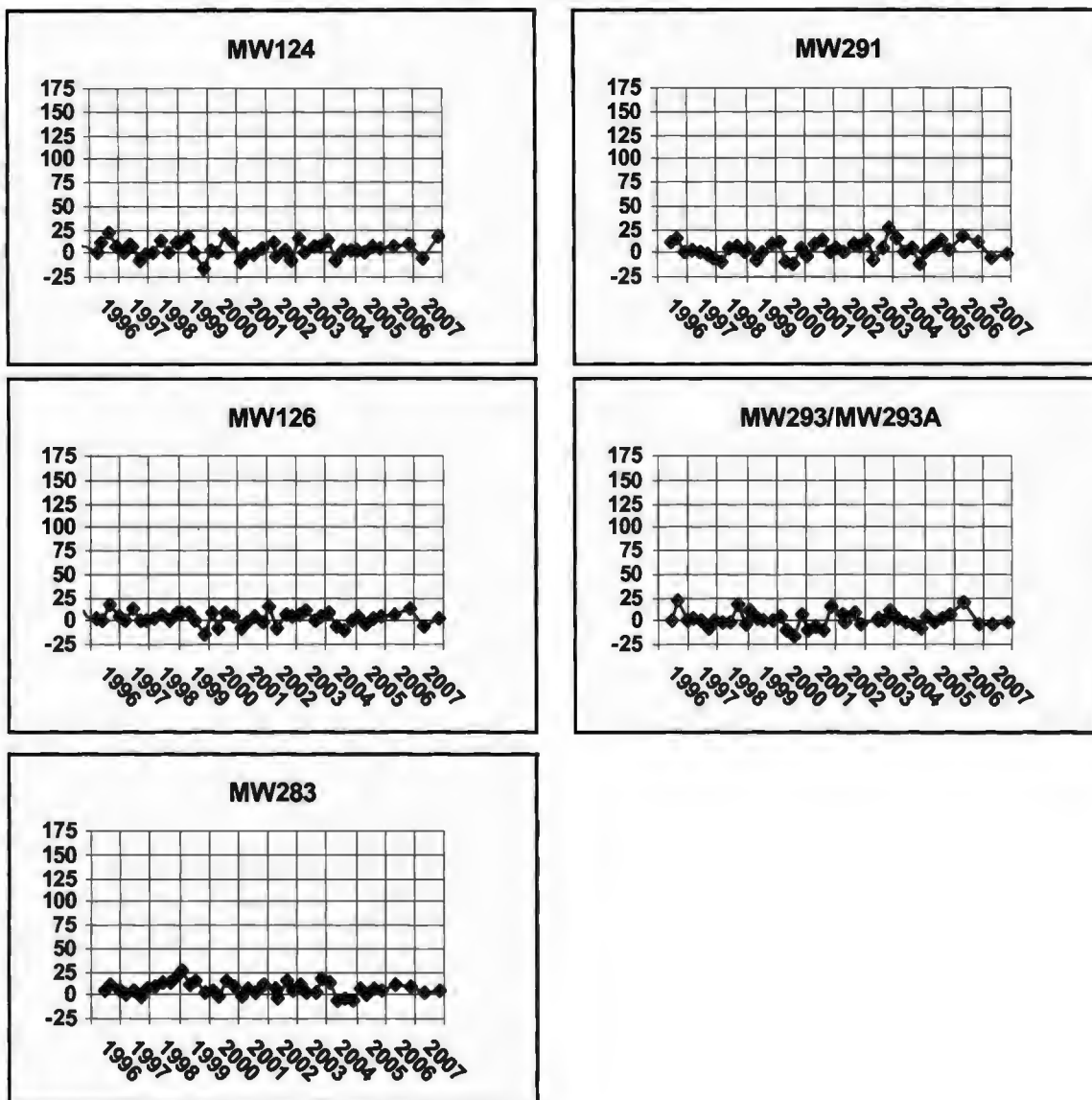
TCE (ppb)



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

Figure 2b. Northeast Plume—TCE Concentrations in Upgradient Wells

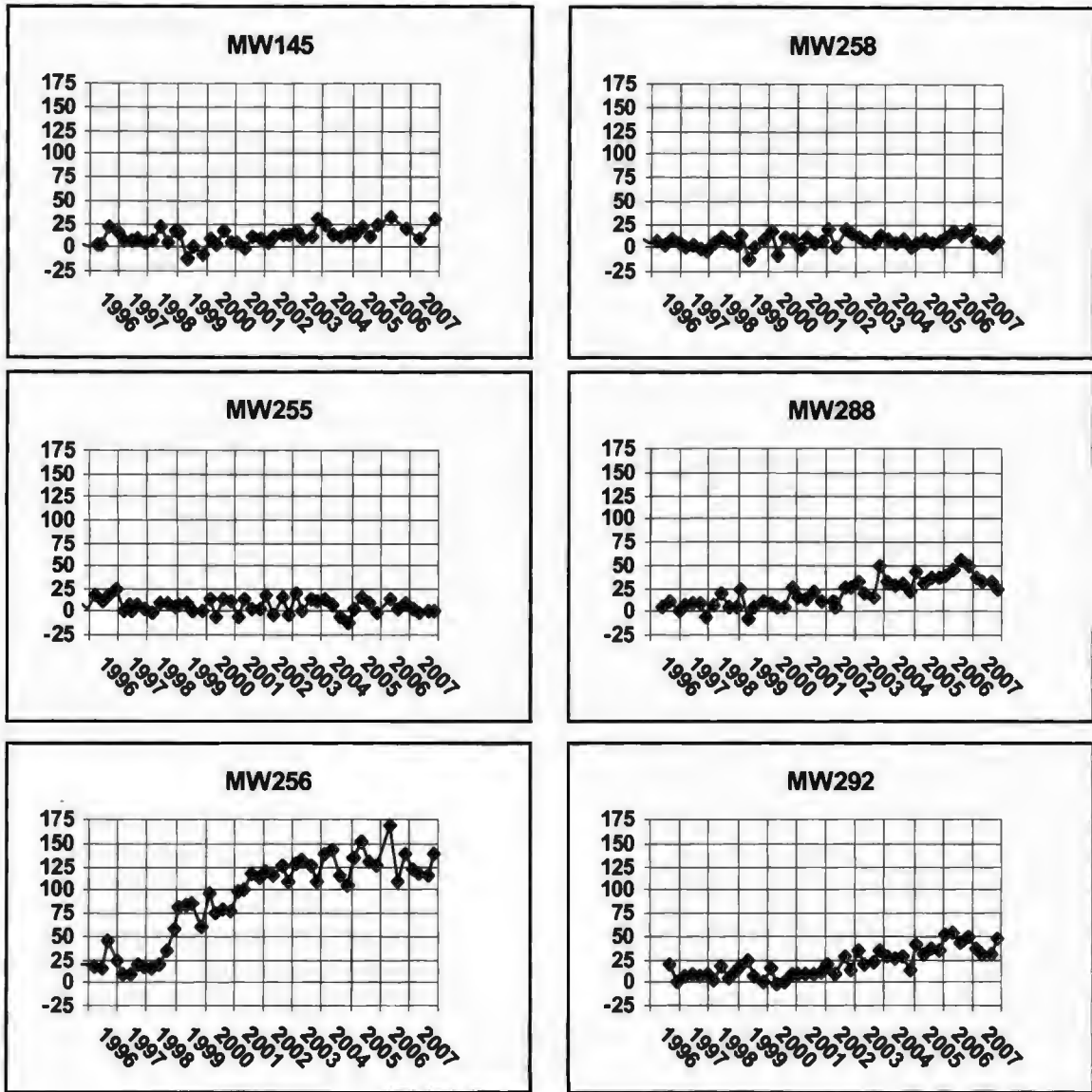
Tc-99 (pCi/L)



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

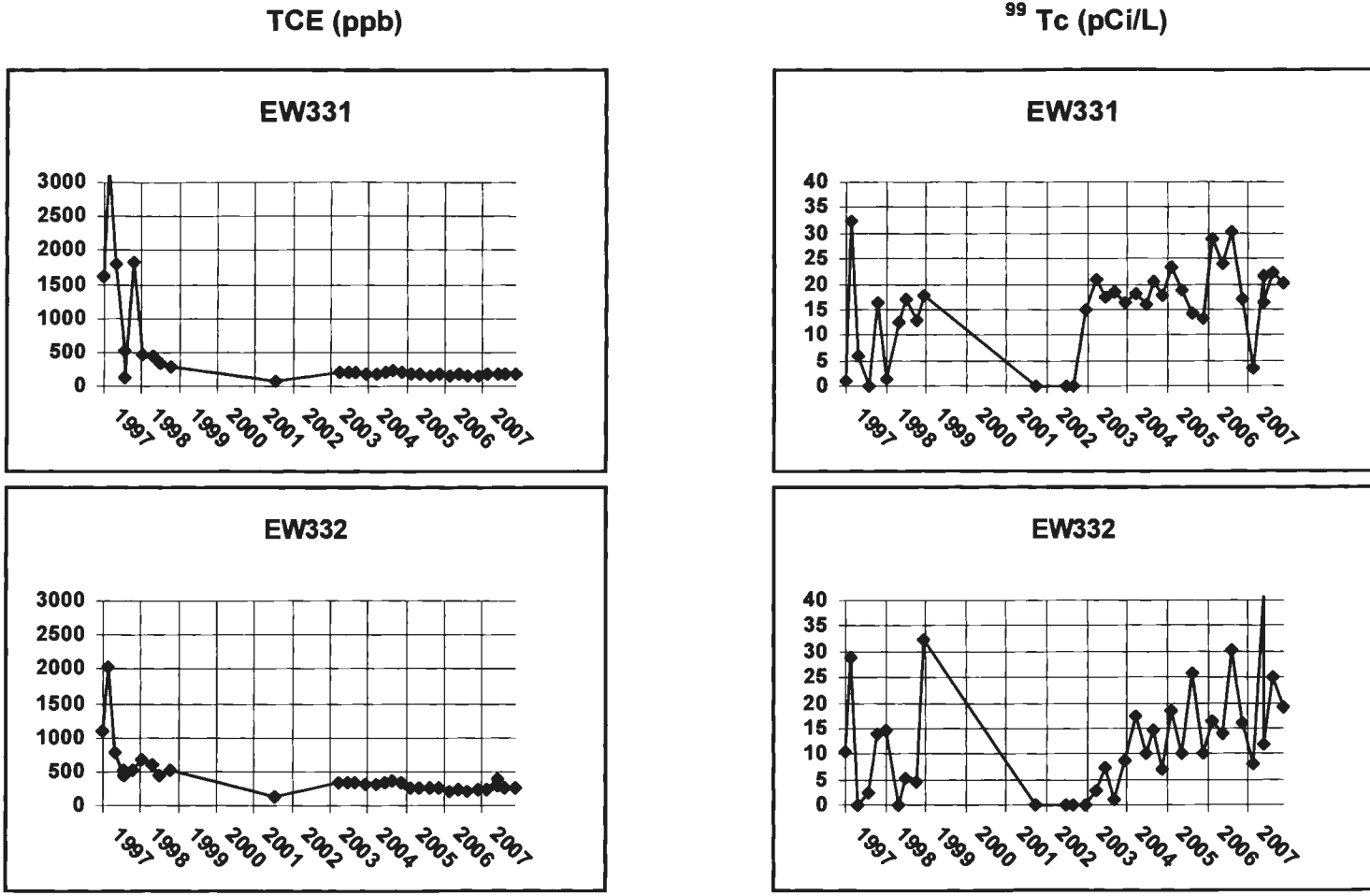
Figure 2c. Northeast Plume—Tc-99 Activities in Downgradient Wells

Tc-99 (pCi/L)



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

Figure 2d. Northeast Plume—Tc-99 Activities in Upgradient Wells



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

Figure 2e. Northeast Plume—TCE Concentrations and Tc-99 Activities in Extraction Wells

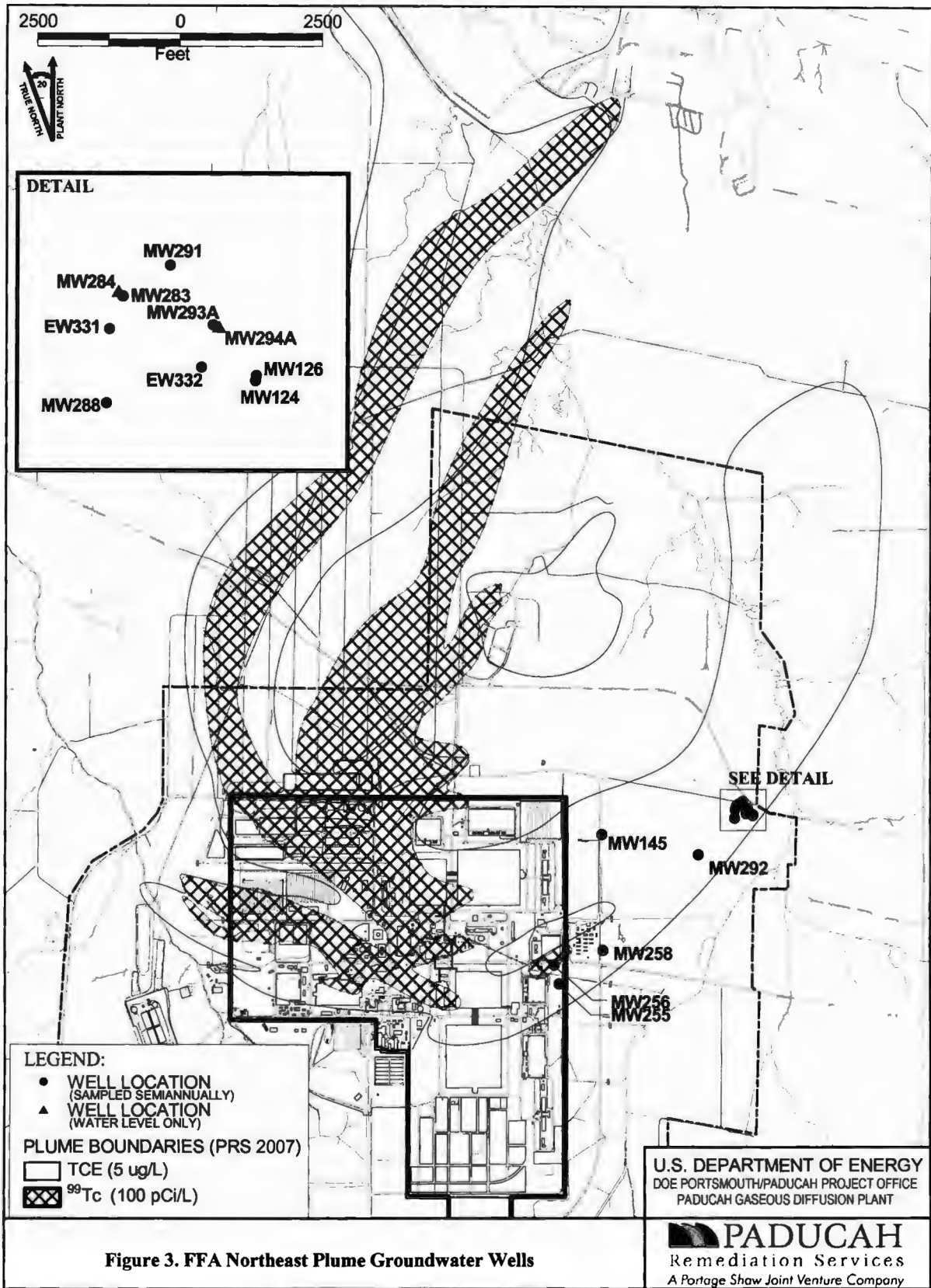
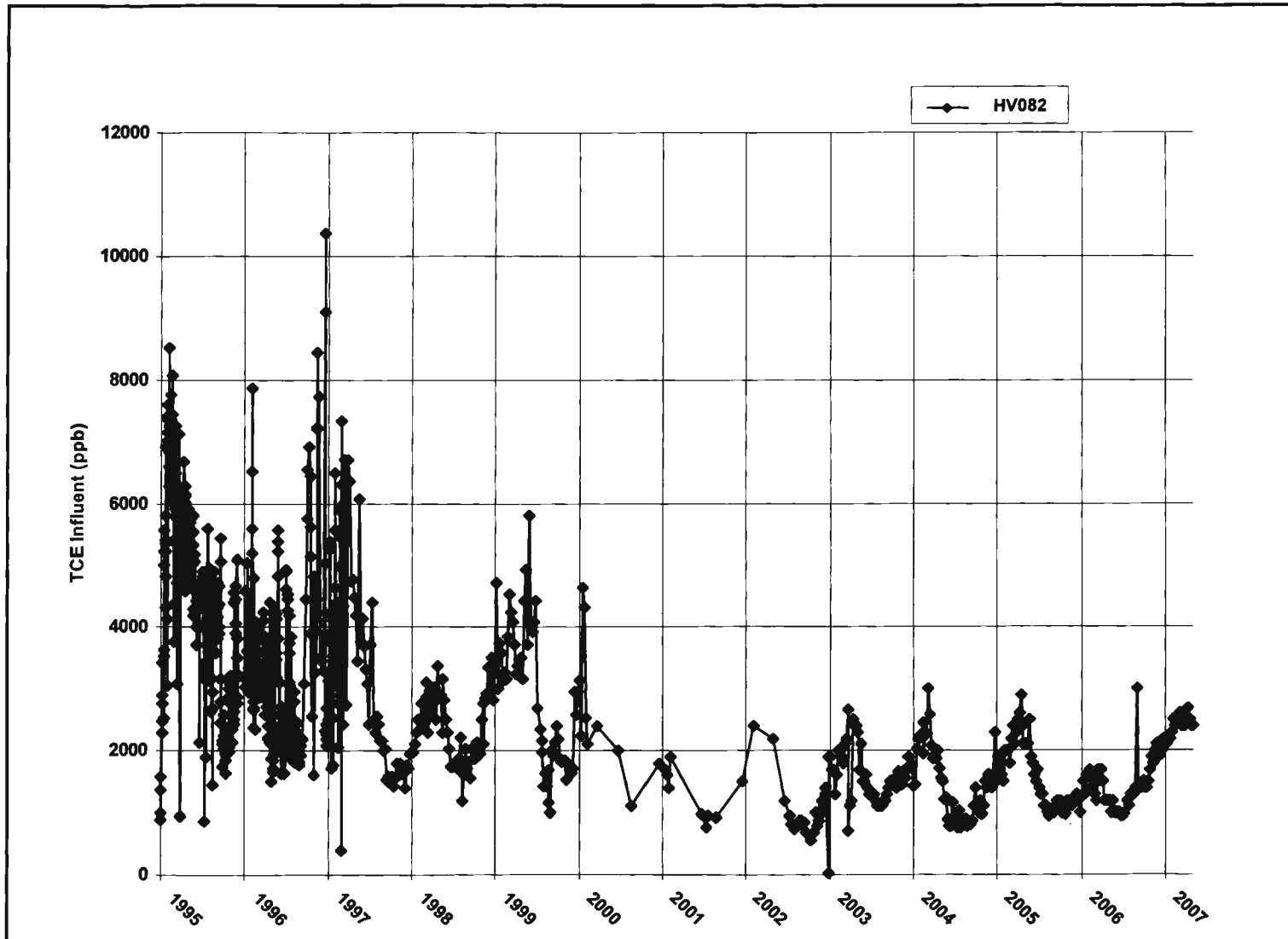


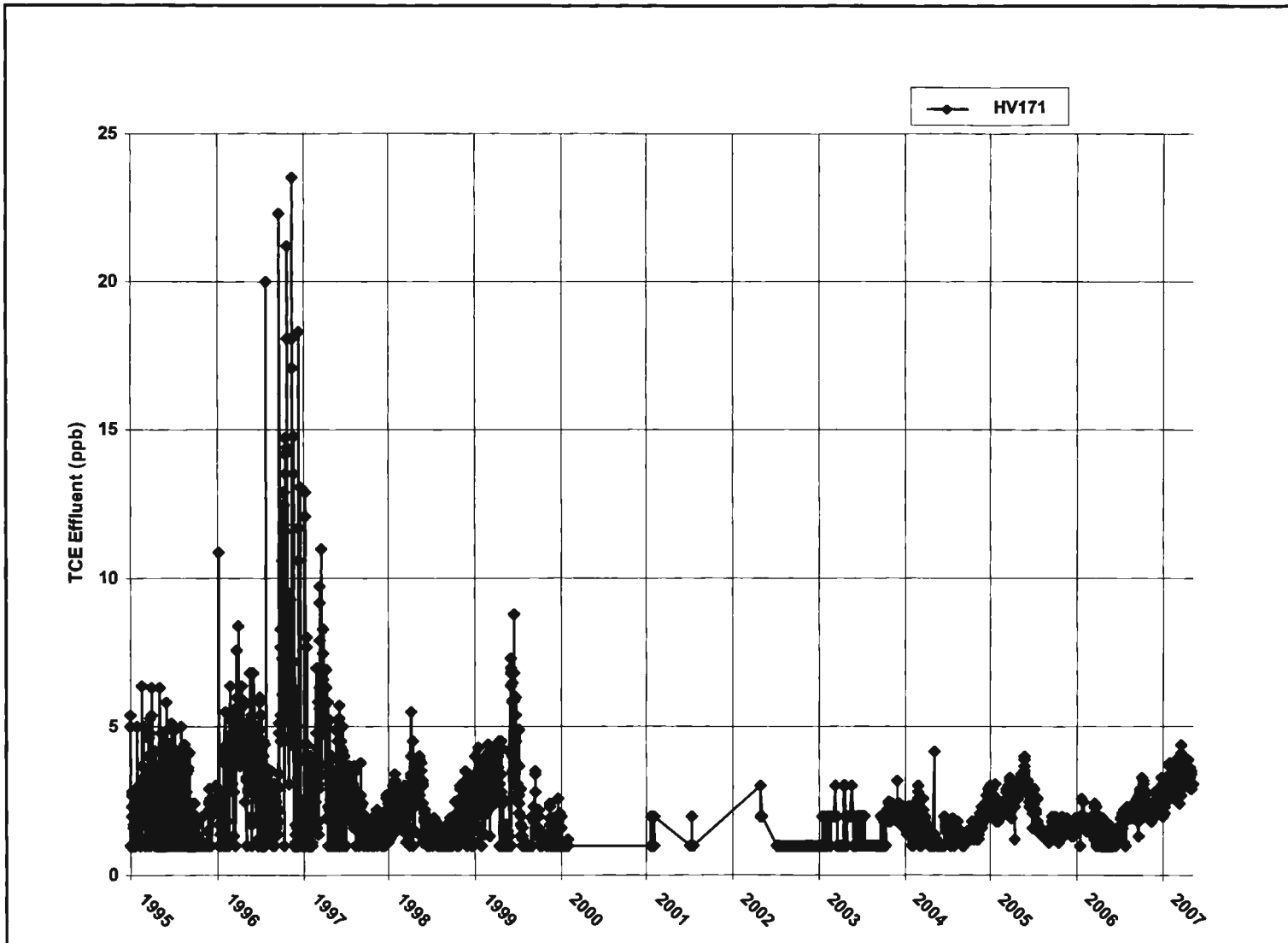
Figure 3. FFA Northeast Plume Groundwater Wells

Figure No. c5ac90005sk016r2.apr  
 DATE 10-25-07



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

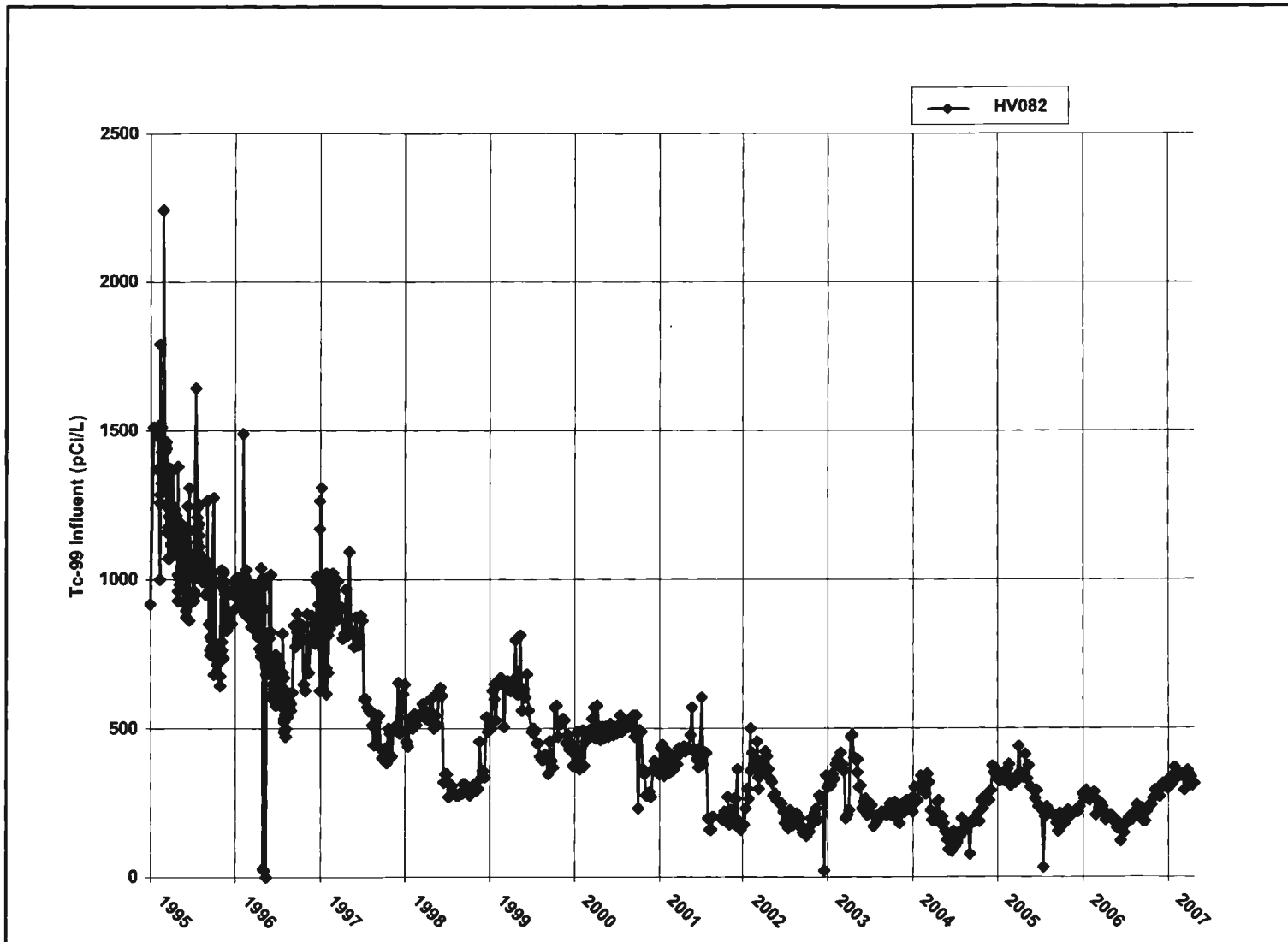
Figure 4a. Northwest Plume Groundwater System Influent TCE Concentrations



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

Sample result of 280 ug/L collected 9/6/1995 not plotted.

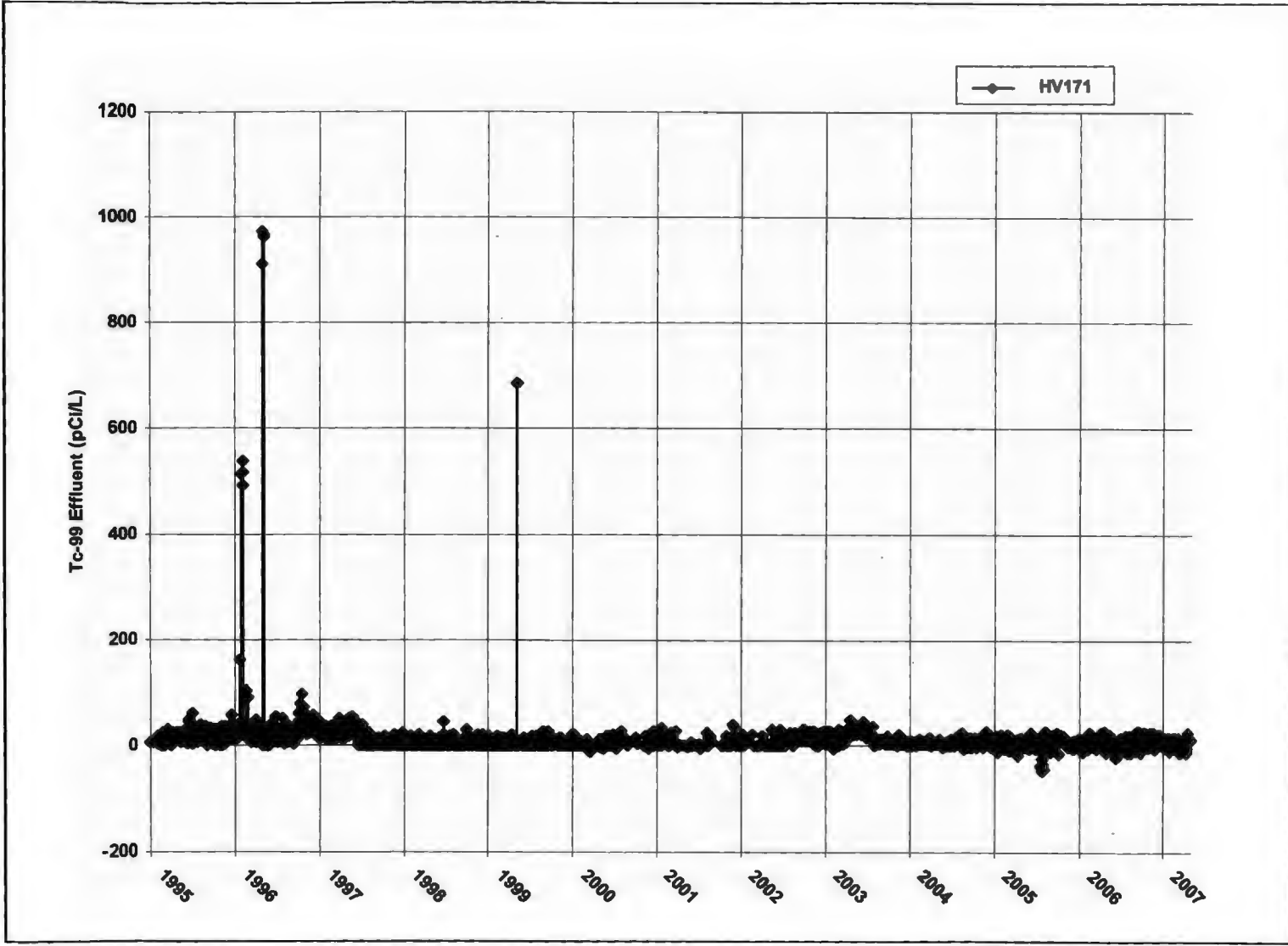
Figure 4b. Northwest Plume Groundwater System Effluent TCE Concentrations



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

Figure 5a. Northwest Plume Groundwater System Influent Tc-99 Activity

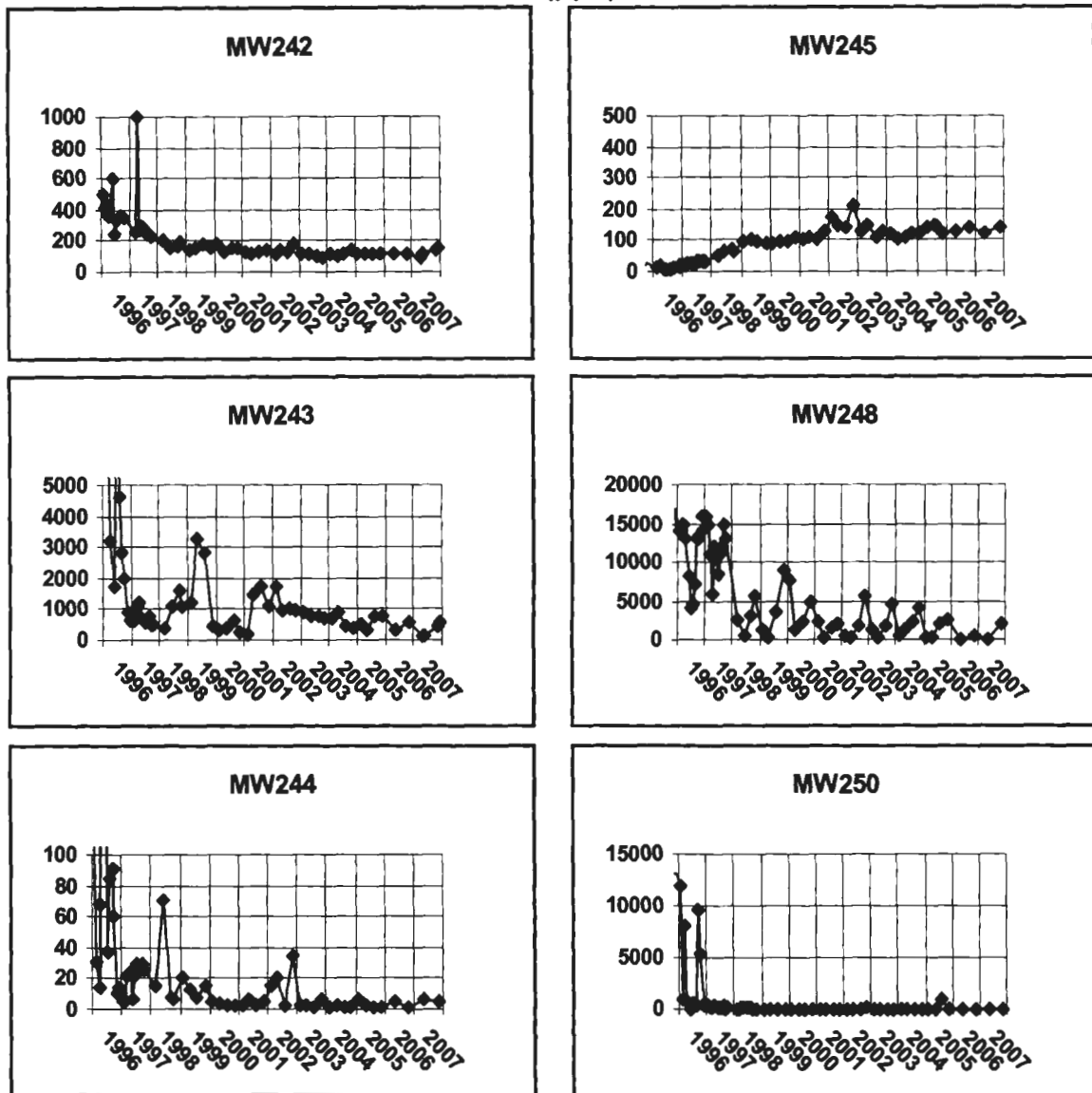




NOTE: Data rejected by validation or assessment have not been graphed.

Figure 5b. Northwest Plume Groundwater System Effluent Tc-99 Activity

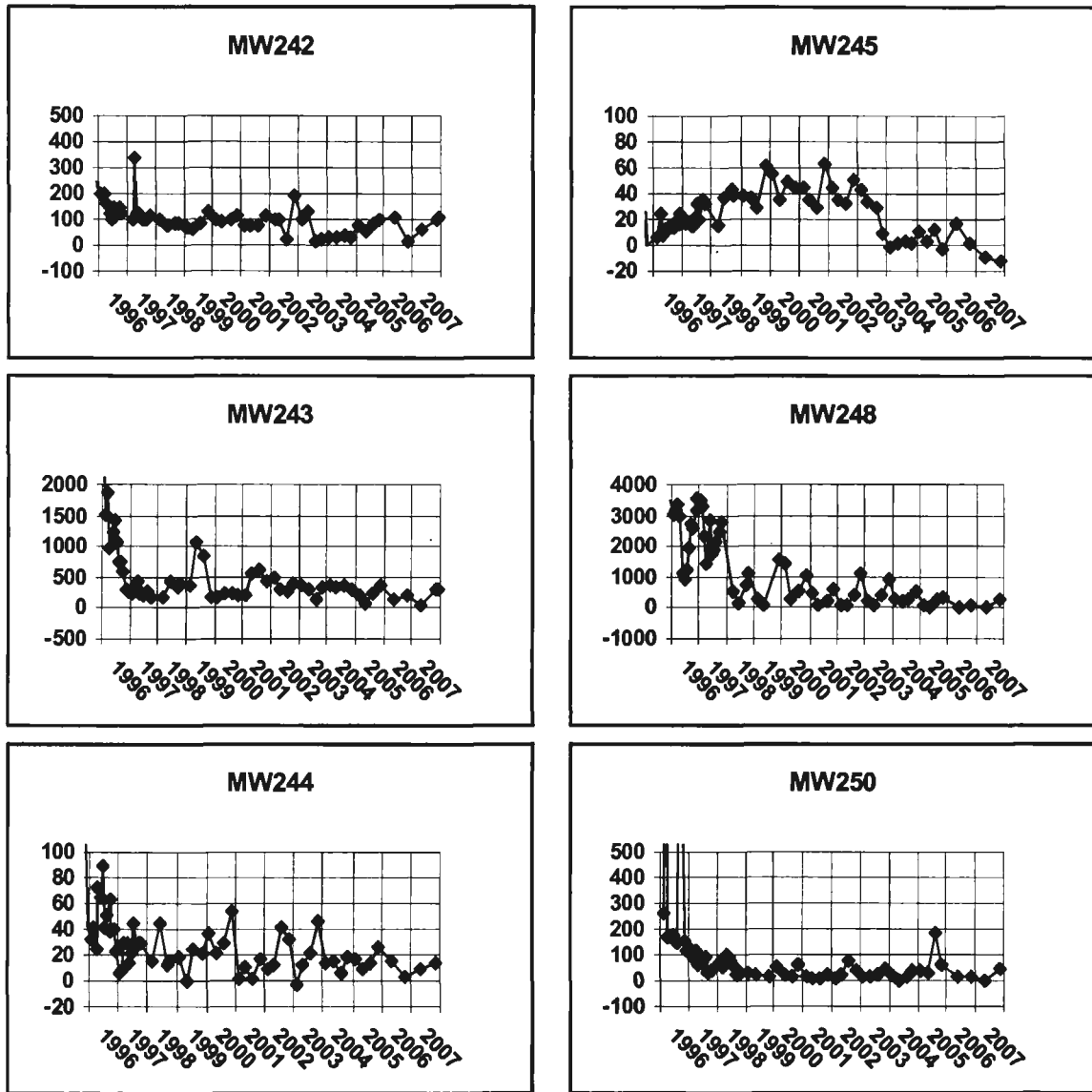
TCE (ppb)



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

Figure 6a. Northwest Plume—South Well Field TCE Concentrations

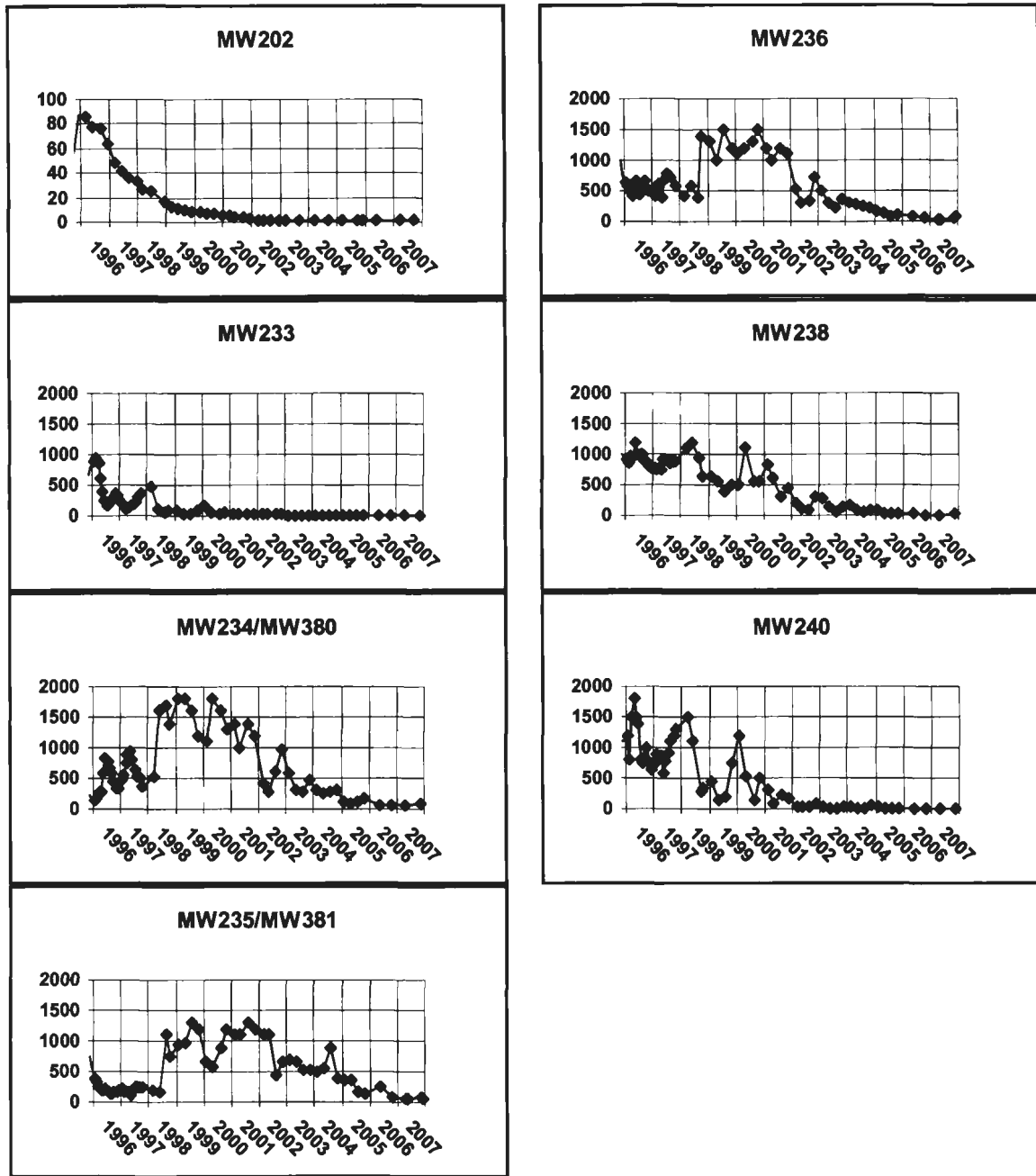
Tc-99 (pCi/L)



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

Figure 6b. Northwest Plume—South Well Field Tc-99 Activities

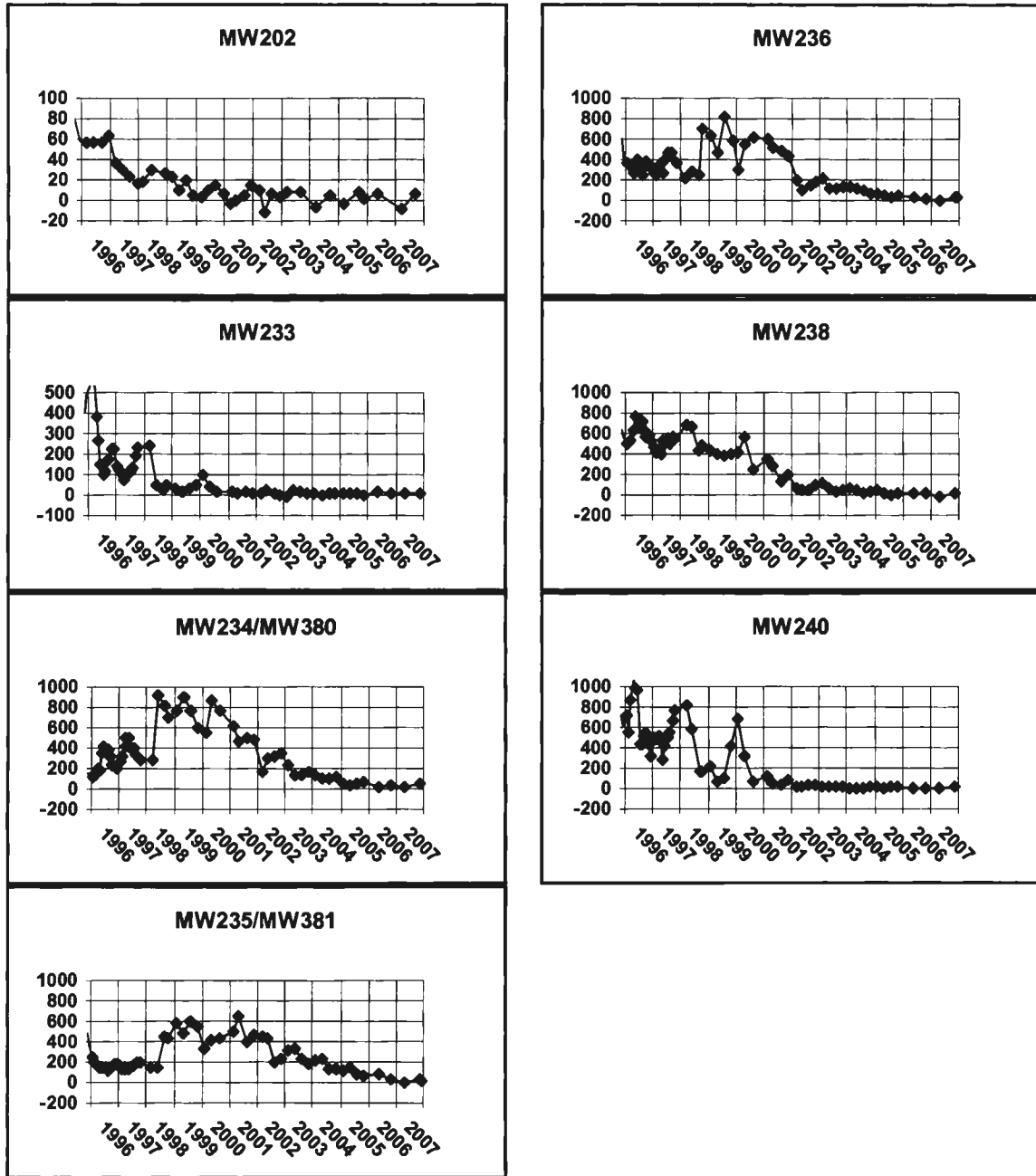
TCE (ppb)



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

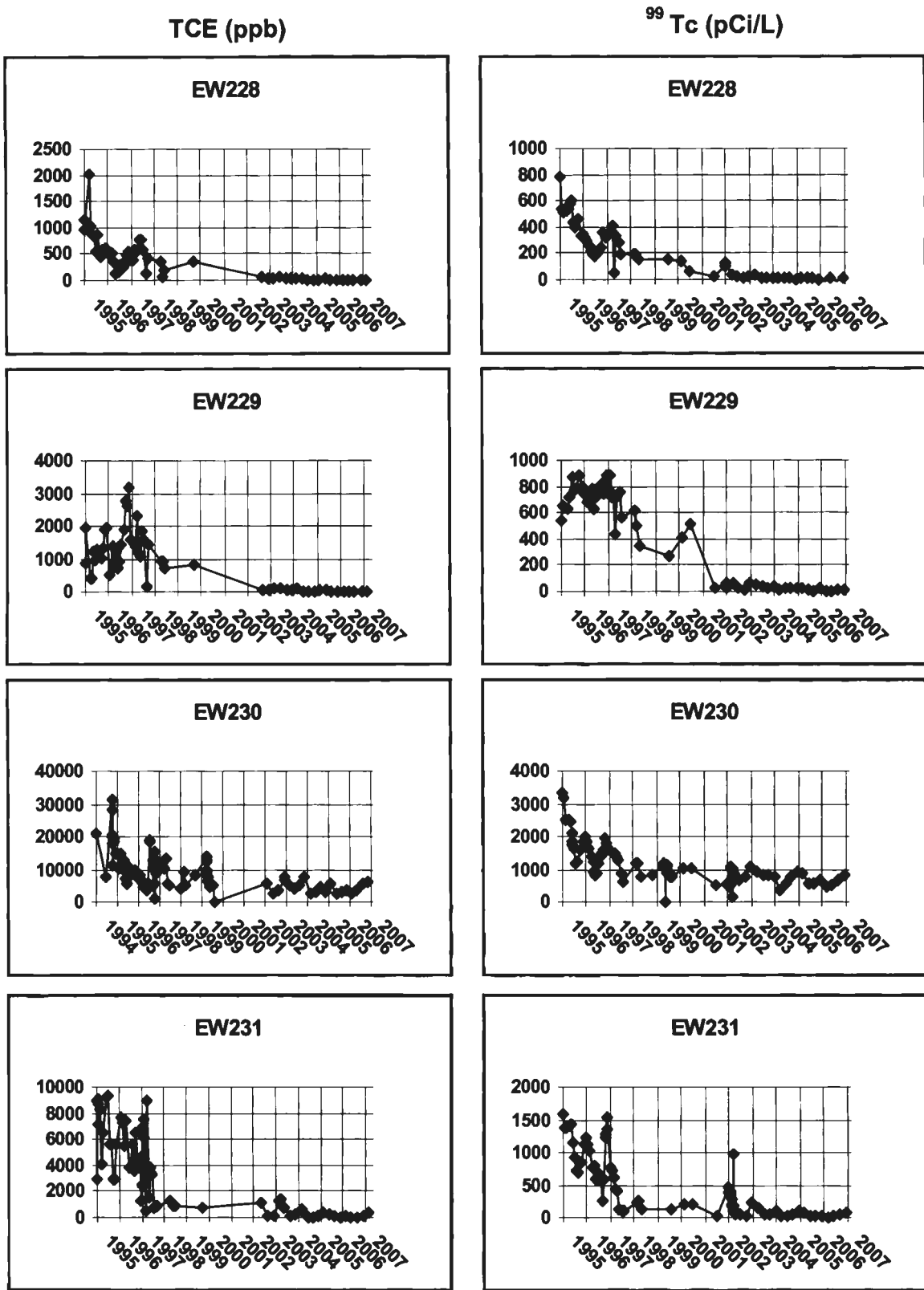
Figure 6c. Northwest Plume—North Well Field TCE Concentrations

Tc-99 (pCi/L)



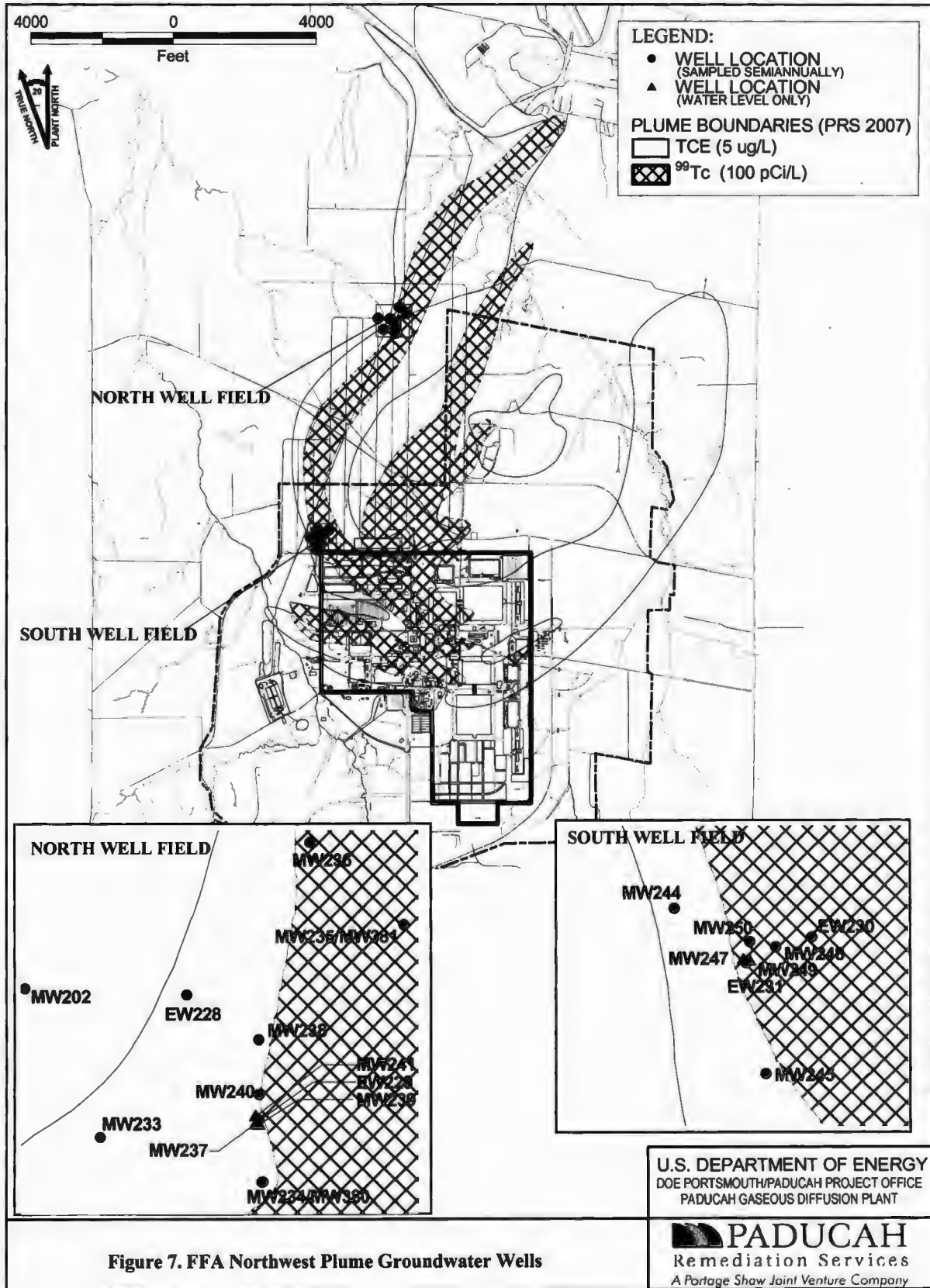
NOTE: Data rejected by validation or assessment have not been graphed.

Figure 6d. Northwest Plume—North Well Field Tc-99 Activities



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

Figure 6e. Northwest Plume—TCE Concentrations and Tc-99 Activities in Extraction Wells



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**APPENDIX C**

**C-746-K LANDFILL DATA**

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## Paducah OREIS Report for KG08-01

**MW300DKG1-08**

from: MW300

on 10/25/2007

Media: WG

SmpMethod: GR

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	VN/A*
<b>ANION</b>									
Chloride	21		mg/L			2		SW846-9056	/=/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	T/X/
Sulfate	1910		mg/L			100		SW846-9056	I/=/
<b>FS</b>									
Barometric Pressure Reading	30		Inches/Hg					FS	/ /
Conductivity	2870		umho/cm					FS	/ /
Depth to Water	5.85		ft					FS	/ /
Dissolved Oxygen	1.04		mg/L					FS	/ /
pH	4.71		Std Unit					FS	/ /
Redox	125		mV					FS	/ /
Temperature	67		deg F					FS	/ /
Turbidity	37.8		NTU					FS	/ /
<b>METAL</b>									
Aluminum	0.2		mg/L	U		0.2		SW846-6010B	/U/
Arsenic	0.00367		mg/L			0.001		SW846-6020	/=/
Barium	0.0198		mg/L			0.005		SW846-6020	/=/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/U/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/U/
Calcium	361		mg/L			1		SW846-6010B	/=/
Iron	166		mg/L			0.1		SW846-6010B	I/=/
Iron (2+)	180		mg/L			60		SM-3500-Fe B 17	/=/
Lead	0.0013		mg/L	U		0.0013		SW846-6020	/U/
Magnesium	99.6		mg/L			0.025		SW846-6010B	/=/
Manganese	20.2		mg/L			0.5		SW846-6020	I/=/
Nickel	0.0872		mg/L	NX		0.005		SW846-6020	/J/
Potassium	19		mg/L			0.2		SW846-6010B	/=/
Sodium	29		mg/L			0.5		SW846-6010B	/=/
Uranium	0.001		mg/L	U		0.001		SW846-6020	/U/
<b>METAL-D</b>									
Arsenic, Dissolved	0.00453		mg/L			0.001		SW846-6020	S/=/
Barium, Dissolved	0.0197		mg/L	NX		0.005		SW846-6020	/=/
Beryllium, Dissolved	0.001		mg/L	NUX		0.001		SW846-6020	/U/
Cadmium, Dissolved	0.0006		mg/L	NUX		0.0006		SW846-6020	/U/
Lead, Dissolved	0.0013		mg/L	NUX		0.0013		SW846-6020	/U/
Uranium, Dissolved	0.001		mg/L	BNU		0.001		SW846-6020	/U/
<b>RADS</b>									
Alpha activity	4.54	1.69	pCi/L	UX		18.6	1.94	SW846-9310	/U/
Beta activity	27.8	3.04	pCi/L	DX	I	25.7	4.43	SW846-9310	/=/
Technetium-99	1.13	12.3	pCi/L	U		17.8	12.3	RL-7100	/U/
<b>VOA</b>									
1,1,1-Trichloroethane	5		ug/L	U		5		SW846-8260	/U/
1,1,2-Trichloroethane	5		ug/L	U		5		SW846-8260	/U/
1,1-Dichloroethane	75		ug/L	D		5		SW846-8260	/=/
1,1-Dichloroethene	120		ug/L	D		5		SW846-8260	I/=/
1,2-Dichloroethane	5		ug/L	U		5		SW846-8260	/U/
Benzene	25		ug/L	U		25		SW846-8260	/U/
Bromodichloromethane	25		ug/L	JU		25		SW846-8260	/=/
Carbon tetrachloride	25		ug/L	U		25		SW846-8260	/U/
Chloroform	25		ug/L	U		25		SW846-8260	/U/

**Paducah OREIS Report for KG08-01**

cis-1,2-Dichloroethene	960	ug/L	D	10	SW846-8260	I / = /
Ethylbenzene	25	ug/L	U	25	SW846-8260	/ U /
Tetrachloroethene	25	ug/L	U	25	SW846-8260	/ U /
Toluene	25	ug/L	U	25	SW846-8260	/ U /
Total Xylene	75	ug/L	U	75	SW846-8260	/ U /
trans-1,2-Dichloroethene	5	ug/L	U	5	SW846-8260	/ U /
Trichloroethene	13	ug/L	D	5	SW846-8260	I / = /
Vinyl chloride	110	ug/L	D	10	SW846-8260	I / = /
<b>WETCHEM</b>						
Alkalinity	67	mg/L		10	EPA-310.1	/ = /

## Paducah OREIS Report for KG08-01

**MW300KG1-08**

from: MW300

on 10/25/2007

Media: WG

SmpMethod: GR

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	V/V/A*
<b>ANION</b>									
Chloride	21		mg/L			2		SW846-9056	/=/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	T/X/
Sulfate	1790		mg/L			100		SW846-9056	I/=
<b>FS</b>									
Barometric Pressure Reading	30		Inches/Hg					FS	//
Conductivity	2870		umho/cm					FS	//
Depth to Water	5.85		ft					FS	//
Dissolved Oxygen	1.04		mg/L					FS	//
pH	4.71		Std Unit					FS	//
Redox	125		mV					FS	//
Temperature	67		deg F					FS	//
Turbidity	37.8		NTU					FS	//
<b>METAL</b>									
Aluminum	0.2		mg/L	U		0.2		SW846-6010B	/U/
Arsenic	0.00351		mg/L			0.001		SW846-6020	/=/
Barium	0.0194		mg/L			0.005		SW846-6020	/=/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/U/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/U/
Calcium	368		mg/L			1		SW846-6010B	/=/
Iron	162		mg/L			0.1		SW846-6010B	I/=
Iron (2+)	180		mg/L			60		SM-3500-Fe B 17	/=/
Lead	0.0013		mg/L	U		0.0013		SW846-6020	/U/
Magnesium	101		mg/L			0.025		SW846-6010B	/=/
Manganese	19.7		mg/L			0.5		SW846-6020	I/=
Nickel	0.0864		mg/L		NX	0.005		SW846-6020	/J/
Potassium	19.3		mg/L			0.2		SW846-6010B	/=/
Sodium	29.1		mg/L			0.5		SW846-6010B	/=/
Uranium	0.001		mg/L	U		0.001		SW846-6020	/U/
<b>METAL-D</b>									
Arsenic, Dissolved	0.00454		mg/L			0.001		SW846-6020	S/=
Barium, Dissolved	0.0199		mg/L		NX	0.005		SW846-6020	/=/
Beryllium, Dissolved	0.001		mg/L		NUX	0.001		SW846-6020	/U/
Cadmium, Dissolved	0.0006		mg/L		NUX	0.0006		SW846-6020	/U/
Lead, Dissolved	0.0013		mg/L		NUX	0.0013		SW846-6020	/U/
Uranium, Dissolved	0.001		mg/L		BNU	0.001		SW846-6020	/U/
<b>RADS</b>									
Alpha activity	-0.658	0.281	pCi/L	UX		19.3	0.313	SW846-9310	/UJ/
Beta activity	25.1	2.79	pCi/L	DUX I		26.3	4.03	SW846-9310	/U/
Technetium-99	1.82	12.4	pCi/L	U		17.8	12.4	RL-7100	/U/
<b>VOA</b>									
1,1,1-Trichloroethane	5		ug/L	U		5		SW846-8260	/U/
1,1,2-Trichloroethane	5		ug/L	U		5		SW846-8260	/U/
1,1-Dichloroethane	77		ug/L	D		5		SW846-8260	/=/
1,1-Dichloroethene	120		ug/L	D		5		SW846-8260	I/=
1,2-Dichloroethane	5		ug/L	U		5		SW846-8260	/U/
Benzene	25		ug/L	U		25		SW846-8260	/U/
Bromodichloromethane	25		ug/L	JU		25		SW846-8260	/=/
Carbon tetrachloride	25		ug/L	U		25		SW846-8260	/U/
Chloroform	25		ug/L	U		25		SW846-8260	/U/

**Paducah OREIS Report for KG08-01**

cis-1,2-Dichloroethene	950	ug/L	D	10	SW846-8260	I / = /
Ethylbenzene	25	ug/L	U	25	SW846-8260	/ U /
Tetrachloroethene	25	ug/L	U	25	SW846-8260	/ U /
Toluene	25	ug/L	U	25	SW846-8260	/ U /
Total Xylene	75	ug/L	U	75	SW846-8260	/ U /
trans-1,2-Dichloroethene	5	ug/L	U	5	SW846-8260	/ U /
Trichloroethene	14	ug/L	D	5	SW846-8260	I / = /
Vinyl chloride	110	ug/L	D	10	SW846-8260	I / = /
<b>WETCHEM</b>						
Alkalinity	64	mg/L		10	EPA-310.1	/ = /

**Paducah OREIS Report for KG08-01**

**MW301KG1-08**

from: MW301

on 10/25/2007

Media: WG

SmpMethod: GR

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	VN/A*
<b>ANION</b>									
Chloride	32		mg/L			2		SW846-9056	/=/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	T/X/
Sulfate	900		mg/L			50		SW846-9056	IS/=/
<b>FS</b>									
Barometric Pressure Reading	30		Inches/Hg					FS	/ /
Conductivity	3390		umho/cm					FS	/ /
Depth to Water	8.99		ft					FS	/ /
Dissolved Oxygen	1.32		mg/L					FS	/ /
pH	5.93		Std Unit					FS	/ /
Redox	-46		mV					FS	/ /
Temperature	61.5		deg F					FS	/ /
Turbidity	227		NTU					FS	/ /
<b>METAL</b>									
Aluminum	1.06		mg/L			0.2		SW846-6010B	/=/
Arsenic	0.00117		mg/L			0.001		SW846-6020	/=/
Barium	0.0511		mg/L			0.005		SW846-6020	/=/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/U/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/U/
Calcium	353		mg/L			1		SW846-6010B	/=/
Iron	117		mg/L			0.1		SW846-6010B	/=/
Iron (2+)	160		mg/L			60		SM-3500-Fe B 17	/=/
Lead	0.0013		mg/L	U		0.0013		SW846-6020	/U/
Magnesium	74.4		mg/L			0.025		SW846-6010B	/=/
Manganese	8.42		mg/L			0.05		SW846-6020	/=/
Nickel	0.00771		mg/L	NX		0.005		SW846-6020	/J/
Potassium	29.4		mg/L			0.2		SW846-6010B	/=/
Sodium	44.1		mg/L			0.5		SW846-6010B	/=/
Uranium	0.00769		mg/L			0.001		SW846-6020	/=/
<b>METAL-D</b>									
Arsenic, Dissolved	0.00101		mg/L			0.001		SW846-6020	/=/
Barium, Dissolved	0.0265		mg/L	NX		0.005		SW846-6020	/=/
Beryllium, Dissolved	0.001		mg/L	NUX		0.001		SW846-6020	/U/
Cadmium, Dissolved	0.0006		mg/L	NUX		0.0006		SW846-6020	/U/
Lead, Dissolved	0.0013		mg/L	NUX		0.0013		SW846-6020	/U/
Uranium, Dissolved	0.00313		mg/L	BNX		0.001		SW846-6020	/=/
<b>RADS</b>									
Alpha activity	1.59	0.625	pCi/L	UX		18.7	0.711	SW846-9310	/U/
Beta activity	39.3	4.09	pCi/L	DX	I	25.7	6.12	SW846-9310	/=/
Technetium-99	-9.49	11.9	pCi/L	U		17.8	11.9	RL-7100	/UJ/
<b>VOA</b>									
1,1,1-Trichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1,2-Trichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1-Dichloroethane	3.1		ug/L			1		SW846-8260	/=/
1,1-Dichloroethene	3.6		ug/L			1		SW846-8260	S/=/
1,2-Dichloroethane	1		ug/L	U		1		SW846-8260	/U/
Benzene	5		ug/L	U		5		SW846-8260	/U/
Bromodichloromethane	5		ug/L	JU		5		SW846-8260	/=/
Carbon tetrachloride	5		ug/L	U		5		SW846-8260	/U/
Chloroform	5		ug/L	U		5		SW846-8260	/U/

**Paducah OREIS Report for KG08-01**

cis-1,2-Dichloroethene	48	ug/L		1	SW846-8260	/ = /
Ethylbenzene	5	ug/L	U	5	SW846-8260	/ U /
Tetrachloroethene	5	ug/L	U	5	SW846-8260	/ U /
Toluene	5	ug/L	U	5	SW846-8260	/ U /
Total Xylene	15	ug/L	U	15	SW846-8260	/ U /
trans-1,2-Dichloroethene	1	ug/L	U	1	SW846-8260	/ U /
Trichloroethene	1	ug/L	U	1	SW846-8260	/ U /
Vinyl chloride	4.2	ug/L		2	SW846-8260	! / = /
<b>WETCHEM</b>						
Alkalinity	342	mg/L		10	EPA-310.1	/ = /



**Paducah OREIS Report for KG08-01**

**MW302KG1-08**

from: MW302

on 10/25/2007

Media: WG

SmpMethod: GR

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	V/V/A*
<b>ANION</b>									
Chloride	11		mg/L			2		SW846-9056	/=/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	T/X/
Sulfate	140		mg/L			20		SW846-9056	/=/
<b>FS</b>									
Barometric Pressure Reading	30		Inches/Hg					FS	//
Conductivity	833		umho/cm					FS	//
Depth to Water	11.36		ft					FS	//
Dissolved Oxygen	1.46		mg/L					FS	//
pH	6.05		Std Unit					FS	//
Redox	164		mV					FS	//
Temperature	61.6		deg F					FS	//
Turbidity	7.8		NTU					FS	//
<b>METAL</b>									
Aluminum	0.2		mg/L	U		0.2		SW846-6010B	/U/
Arsenic	0.00111		mg/L			0.001		SW846-6020	/=/
Barium	0.0681		mg/L			0.005		SW846-6020	/=/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/U/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/U/
Calcium	44.4		mg/L			1		SW846-6010B	/=/
Iron	0.317		mg/L			0.1		SW846-6010B	/=/
Iron (2+)	0.6		mg/L	U		0.6		SM-3500-Fe B 17	/U/
Lead	0.0013		mg/L	U		0.0013		SW846-6020	/U/
Magnesium	24.9		mg/L			0.025		SW846-6010B	/=/
Manganese	0.622		mg/L			0.005		SW846-6020	/=/
Nickel	0.00961		mg/L	NX		0.005		SW846-6020	/J/
Potassium	0.431		mg/L			0.2		SW846-6010B	/=/
Sodium	84.5		mg/L			0.5		SW846-6010B	/=/
Uranium	0.001		mg/L	U		0.001		SW846-6020	/U/
<b>METAL-D</b>									
Arsenic, Dissolved	0.001		mg/L	U		0.001		SW846-6020	/U/
Barium, Dissolved	0.0659		mg/L	NX		0.005		SW846-6020	/=/
Beryllium, Dissolved	0.001		mg/L	NUX		0.001		SW846-6020	/U/
Cadmium, Dissolved	0.0006		mg/L	NUX		0.0006		SW846-6020	/U/
Lead, Dissolved	0.0013		mg/L	NUX		0.0013		SW846-6020	/U/
Uranium, Dissolved	0.001		mg/L	BNU		0.001		SW846-6020	/U/
<b>RADS</b>									
Alpha activity	3.48	1.09	pCi/L	U		4.56	1.32	SW846-9310	/U/
Beta activity	4.7	0.535	pCi/L	DUX I		6.31	0.764	SW846-9310	/U/
Technetium-99	-3.38	12.2	pCi/L	U		17.8	12.2	RL-7100	/UJ/
<b>VOA</b>									
1,1,1-Trichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1,2-Trichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1-Dichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1-Dichloroethene	1		ug/L	U		1		SW846-8260	/U/
1,2-Dichloroethane	1		ug/L	U		1		SW846-8260	/U/
Benzene	5		ug/L	U		5		SW846-8260	/U/
Bromodichloromethane	5		ug/L	JU		5		SW846-8260	/=/
Carbon tetrachloride	5		ug/L	U		5		SW846-8260	/U/
Chloroform	5		ug/L	U		5		SW846-8260	/U/

**Paducah OREIS Report for KG08-01**

cis-1,2-Dichloroethene	1	ug/L	U	1	SW846-8260	/ U /
Ethylbenzene	5	ug/L	U	5	SW846-8260	/ U /
Tetrachloroethene	5	ug/L	U	5	SW846-8260	/ U /
Toluene	5	ug/L	U	5	SW846-8260	/ U /
Total Xylene	15	ug/L	U	15	SW846-8260	/ U /
trans-1,2-Dichloroethene	1	ug/L	U	1	SW846-8260	/ U /
Trichloroethene	1	ug/L	U	1	SW846-8260	/ U /
Vinyl chloride	2	ug/L	U	2	SW846-8260	/ U /
<b>WETCHEM</b>						
Alkalinity	246	mg/L		10	EPA-310.1	/ = /

## Paducah OREIS Report for KG08-01

**MW344KG1-08**

from: MW344

on 10/25/2007

Media: WG

SmpMethod: GR

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	V/V/A*
<b>ANION</b>									
Chloride	21		mg/L			2		SW846-9056	/=/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	T/X/
Sulfate	160		mg/L			20		SW846-9056	S/=/
<b>FS</b>									
Barometric Pressure Reading	30		Inches/Hg					FS	//
Conductivity	659		umho/cm					FS	//
Depth to Water	25.05		ft					FS	//
Dissolved Oxygen	0.99		mg/L					FS	//
pH	6.29		Std Unit					FS	//
Redox	64		mV					FS	//
Temperature	60.7		deg F					FS	//
Turbidity	89.5		NTU					FS	//
<b>METAL</b>									
Aluminum	5.46		mg/L			0.2		SW846-6010B	/=/
Arsenic	0.00368		mg/L			0.001		SW846-6020	S/=/
Barium	0.0732		mg/L			0.005		SW846-6020	/=/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/U/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/U/
Calcium	61.7		mg/L			1		SW846-6010B	/=/
Iron	4.1		mg/L			0.1		SW846-6010B	/=/
Iron (2+)	0.78		mg/L			0.6		SM-3500-Fe B 17	/=/
Lead	0.00168		mg/L			0.0013		SW846-6020	S/=/
Magnesium	20.4		mg/L			0.025		SW846-6010B	/=/
Manganese	0.217		mg/L			0.005		SW846-6020	IS/=/
Nickel	0.006		mg/L		NX	0.005		SW846-6020	/J/
Potassium	1.93		mg/L			0.2		SW846-6010B	/=/
Sodium	29.7		mg/L			0.5		SW846-6010B	/=/
Uranium	0.001		mg/L	U		0.001		SW846-6020	/U/
<b>METAL-D</b>									
Arsenic, Dissolved	0.00401		mg/L			0.001		SW846-6020	/=/
Barium, Dissolved	0.0524		mg/L		NX	0.005		SW846-6020	/=/
Beryllium, Dissolved	0.001		mg/L		NUX	0.001		SW846-6020	/U/
Cadmium, Dissolved	0.0006		mg/L		NUX	0.0006		SW846-6020	/U/
Lead, Dissolved	0.0013		mg/L		NUX	0.0013		SW846-6020	/U/
Uranium, Dissolved	0.001		mg/L		BNU	0.001		SW846-6020	/U/
<b>RADS</b>									
Alpha activity	2.24	0.757	pCi/L	U		4.13	0.894	SW846-9310	/U/
Beta activity	2.43	0.289	pCi/L	DUX I		5.82	0.404	SW846-9310	/U/
Technetium-99	1.88	12.3	pCi/L	U		17.8	12.3	RL-7100	/U/
<b>VOA</b>									
1,1,1-Trichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1,2-Trichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1-Dichloroethane	1		ug/L	U		1		SW846-8260	/U/
1,1-Dichloroethene	1		ug/L	U		1		SW846-8260	/U/
1,2-Dichloroethane	1		ug/L	U		1		SW846-8260	/U/
Benzene	5		ug/L	U		5		SW846-8260	/U/
Bromodichloromethane	5		ug/L	JU		5		SW846-8260	/U/
Carbon tetrachloride	5		ug/L	U		5		SW846-8260	/U/
Chloroform	5		ug/L	U		5		SW846-8260	/U/

**Paducah OREIS Report for KG08-01**

cis-1,2-Dichloroethene	1	ug/L	U	1	SW846-8260	/U/
Ethylbenzene	5	ug/L	U	5	SW846-8260	/U/
Tetrachloroethene	5	ug/L	U	5	SW846-8260	/U/
Toluene	5	ug/L	U	5	SW846-8260	/U/
Total Xylene	15	ug/L	U	15	SW846-8260	/U/
trans-1,2-Dichloroethene	1	ug/L	U	1	SW846-8260	/U/
Trichloroethene	1	ug/L	U	1	SW846-8260	/U/
Vinyl chloride	2	ug/L	U	2	SW846-8260	/U/
<b>WETCHEM</b>						
Alkalinity	112	mg/L		10	EPA-310.1	/=/

## Paducah OREIS Report for KG08-01

**FBMW300KG1-08**

from: QC

on 10/25/2007

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	VN/A*
<b>ANION</b>									
Chloride	2		mg/L	U		2		SW846-9056	/X/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	/X/
Sulfate	2		mg/L	U		2		SW846-9056	/X/
<b>METAL</b>									
Aluminum	0.2		mg/L	U		0.2		SW846-6010B	/X/
Arsenic	0.001		mg/L	U		0.001		SW846-6020	/X/
Barium	0.005		mg/L	U		0.005		SW846-6020	/X/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/X/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/X/
Calcium	1		mg/L	U		1		SW846-6010B	/X/
Iron	0.1		mg/L	U		0.1		SW846-6010B	/X/
Lead	0.0013		mg/L	U		0.0013		SW846-6020	/X/
Magnesium	0.025		mg/L	U		0.025		SW846-6010B	/X/
Manganese	0.005		mg/L	U		0.005		SW846-6020	/X/
Nickel	0.005		mg/L	NUX		0.005		SW846-6020	/X/
Potassium	0.2		mg/L	U		0.2		SW846-6010B	/X/
Sodium	0.5		mg/L	U		0.5		SW846-6010B	/X/
Uranium	0.001		mg/L	U		0.001		SW846-6020	/X/
<b>RADS</b>									
Alpha activity	0.828	0.308	pCi/L	U		2.85	0.354	SW846-9310	/X/
Beta activity	2.2	0.259	pCi/L	DUX		4.54	0.363	SW846-9310	/X/
Technetium-99	-4.5	12	pCi/L	U		17.8	12	RL-7100	/X/
<b>VOA</b>									
1,1,1-Trichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1,2-Trichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1-Dichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
1,2-Dichloroethane	1		ug/L	U		1		SW846-8260	/X/
Benzene	5		ug/L	U		5		SW846-8260	/X/
Bromodichloromethane	5		ug/L	JU		5		SW846-8260	/X/
Carbon tetrachloride	5		ug/L	U		5		SW846-8260	/X/
Chloroform	5		ug/L	U		5		SW846-8260	/X/
cis-1,2-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
Ethylbenzene	5		ug/L	U		5		SW846-8260	/X/
Tetrachloroethene	5		ug/L	U		5		SW846-8260	/X/
Toluene	5		ug/L	U		5		SW846-8260	/X/
Total Xylene	15		ug/L	U		15		SW846-8260	/X/
trans-1,2-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
Trichloroethene	1		ug/L	U		1		SW846-8260	/X/
Vinyl chloride	2		ug/L	U		2		SW846-8260	/X/

## Paducah OREIS Report for KG08-01

**RIMW300KG1-08**

from: QC

on 10/25/2007

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	V/V/A*
<b>ANION</b>									
Chloride	2		mg/L	U		2		SW846-9056	/X/
Nitrate as Nitrogen	1		mg/L	U		1		SW846-9056	/X/
Sulfate	2		mg/L	U		2		SW846-9056	/X/
<b>METAL</b>									
Aluminum	0.2		mg/L	U		0.2		SW846-6010B	/X/
Arsenic	0.001		mg/L	U		0.001		SW846-6020	/X/
Barium	0.005		mg/L	U		0.005		SW846-6020	/X/
Beryllium	0.001		mg/L	U		0.001		SW846-6020	/X/
Cadmium	0.0006		mg/L	U		0.0006		SW846-6020	/X/
Calcium	1		mg/L	U		1		SW846-6010B	/X/
Iron	0.1		mg/L	U		0.1		SW846-6010B	/X/
Lead	0.0013		mg/L	U		0.0013		SW846-6020	/X/
Magnesium	0.025		mg/L	U		0.025		SW846-6010B	/X/
Manganese	0.005		mg/L	U		0.005		SW846-6020	/X/
Nickel	0.005		mg/L	NUX		0.005		SW846-6020	/X/
Potassium	0.2		mg/L	U		0.2		SW846-6010B	/X/
Sodium	0.5		mg/L	U		0.5		SW846-6010B	/X/
Uranium	0.001		mg/L	U		0.001		SW846-6020	/X/
<b>RADS</b>									
Alpha activity	0.0113	0.00494	pCi/L	U		2.8	0.0055	SW846-9310	/X/
Beta activity	-0.232	0.0295	pCi/L	DUX		4.52	0.0399	SW846-9310	/X/
Technetium-99	-6.6	12.1	pCi/L	U		17.8	12.1	RL-7100	/X/
<b>VOA</b>									
1,1,1-Trichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1,2-Trichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1-Dichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
1,2-Dichloroethane	1		ug/L	U		1		SW846-8260	/X/
Benzene	5		ug/L	U		5		SW846-8260	/X/
Bromodichloromethane	5		ug/L	JU		5		SW846-8260	/X/
Carbon tetrachloride	5		ug/L	U		5		SW846-8260	/X/
Chloroform	5		ug/L	U		5		SW846-8260	/X/
cis-1,2-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
Ethylbenzene	5		ug/L	U		5		SW846-8260	/X/
Tetrachloroethene	5		ug/L	U		5		SW846-8260	/X/
Toluene	5		ug/L	U		5		SW846-8260	/X/
Total Xylene	15		ug/L	U		15		SW846-8260	/X/
trans-1,2-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
Trichloroethene	1		ug/L	U		1		SW846-8260	/X/
Vinyl chloride	2		ug/L	U		2		SW846-8260	/X/

## Paducah OREIS Report for KG08-01

**TBMW300KG1-08**

from: QC

on 10/25/2007

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Counting Error	Units	Result Qual	Foot Note	Reporting Limit	TPU	Method	V/VIA*
<b>VOA</b>									
1,1,1-Trichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1,2-Trichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1-Dichloroethane	1		ug/L	U		1		SW846-8260	/X/
1,1-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
1,2-Dichloroethane	1		ug/L	U		1		SW846-8260	/X/
Benzene	5		ug/L	U		5		SW846-8260	/X/
Bromodichloromethane	5		ug/L	JU		5		SW846-8260	/X/
Carbon tetrachloride	5		ug/L	U		5		SW846-8260	/X/
Chloroform	5		ug/L	U		5		SW846-8260	/X/
cis-1,2-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
Ethylbenzene	5		ug/L	U		5		SW846-8260	/X/
Tetrachloroethene	5		ug/L	U		5		SW846-8260	/X/
Toluene	5		ug/L	U		5		SW846-8260	/X/
Total Xylene	15		ug/L	U		15		SW846-8260	/X/
trans-1,2-Dichloroethene	1		ug/L	U		1		SW846-8260	/X/
Trichloroethene	1		ug/L	U		1		SW846-8260	/X/
Vinyl chloride	2		ug/L	U		2		SW846-8260	/X/

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**APPENDIX D**  
**ADMINISTRATIVE RECORD INDEX**

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## Documents Added to the Administrative Record and Post-Decision Files Fourth Quarter CY2007

Ar Project File	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Accession Num
Scrap Metal-PD	10/16/07	PPPO-02-117-08	[DOE GIVES DIRECTION NOT TO RECYCLE] PADUCAH REMEDIATION SERVICES, LLC (PRS) RECYCLING OF ALUMINUM INGOTS	DOE-PPPO	PRS	I-01716-0195
C-400 Cleaning Bldg.- Post Decision	09/24/07	PRS/I-0658	[KDEP COMMENTS] REMEDIAL ACTION WORK PLAN FOR THE INTERIM REMEDIAL ACTION FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0004&D1)	KDEP	DOE-PPPO	I-04616-0044
C-400 Cleaning Bldg.- Post Decision	10/17/07	PRS/I-0706	[EPA COMMENTS] REVIEW OF THE REMEDIAL DESIGN REPORT, 90% DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE GWOU INTERIM REMEDIAL ACTION FOR THE VOCC AT THE C-400 CLEANING BLDG. AT THE PGDP, PADUCAH, KY. (DOE/LX/07-0005&D1)	USEPA-IV	DOE-PPPO	I-04616-0045
C-400 Cleaning Bldg.- Post Decision	11/15/07	PPPO-02-183-08	EXTENSION FOR SUBMITTAL OF THE REMEDIAL DESIGN REPORT, DESIGN DRAWINGS AND TECHNICAL SPECIFICATIONS PACKAGE FOR THE GROUNDWATER OPERABLE UNIT FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING AT THE PGDP, PADUCAH, KENTUCKY	DOE-PPPO	KDEP	I-04615-0024
C-400 Cleaning Bldg.- Post Decision	12/14/07	PPPO-02-227-08	COMMENTS ON THE DRAFT REMEDIAL DESIGN REPORT, CERTIFIED FOR CONSTRUCTION DESIGN DRAWINGS AND SPECIFICATIONS FOR THE GWOU FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BLDG. AT THE PGDP, PADUCAH, KY. (DOE/LX/07-0005&D2)	DOE-PPPO	PRS	I-04615-0027
Burial Grounds Operable Unit	11/06/07		FEDERAL FACILITY AGREEMENT PROJECT MANAGERS AND MID MANAGERS MEETING CONDUCTED OCTOBER 4, 2007			I-02001-0590*
Burial Grounds Operable Unit	11/15/07	PPO-02-144-08	RESPONSE TO KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION LETTER FOR CONDITIONAL APPROVAL OF WELL PLAN FOR ADDITION OF WELLS FOR C-404 MONITORING WELL	DOE-PPPO	KDEP	I-05202-0091
Reference Document	11/08/07	PRS/I-0700	[KDEP APPROVES] SITE MANAGEMENT PLAN ANNUAL REVISION FY 2007 (DOE/LX/07-0009&D2) PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, MCCrackEN COUNTY, KENTUCKY KY8-890-008-982	KDEP	DOE-PPPO	I-02001-0592
Soils Operable Unit	09/28/07	PPPO-02-558-07	TRANSMITTAL OF THE SAMPLING AND ANALYSIS PLAN (SAP) FOR SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0015&D2/R1) AND ADDENDUM 1A (DOE/LX/07-0015/A1&D2/R1) INCLUDING (4) COMMENT RESPONSE SUMMARIES	DOE-PPPO	KDEP	I-04909-0017
Soils Operable Unit	10/05/07	PPPO-02-617-07	[DOE CONCERNED WITH CONTINUAL DELAYS] SUBMISSION OF REPORTS ASSOCIATED WITH INVESTIGATION AND EVALUATION OF SOIL AND RUBBLE PILES	DOE-PPPO	PRS	I-04909-0025
Soils Operable Unit	10/23/07	PPPO-02-123-08	RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUEST FOR SOIL AND RUBBLE AREA INFORMATION PURSUANT TO SECTION 3007 OF THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)	DOE-PPPO	USEPA-IV	I-04907-0005
Soils Operable Unit	11/06/07		FEDERAL FACILITY AGREEMENT PROJECT MANAGERS AND MID MANAGERS MEETING CONDUCTED OCTOBER 4, 2007			I-02001-0590*

**Documents Added to the Administrative Record and Post-Decision Files Fourth Quarter CY2007**

Ar Project File	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Accession Num
Soils Operable Unit	11/21/07	PPPO-02-207-08	COMMENTS ON RESPONSE TO COMMENTS PROVIDED WITH APPROVAL OF SAMPLING AND ANALYSIS PLAN FOR SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0015&D2/R1)	DOE-PPPO	PRS	I-04909-0028
Surface Water Operable Unit (On-Site)	10/16/07	PRS/I-0675	[EXTENSION REQUESTED] REVIEW OF THE SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0001&D2/R1)	USEPA-IV	DOE-PPPO	I-04810-0040
Surface Water Operable Unit (On-Site)	11/05/07	PRS/I-0694	[EPA COMMENTS] CONDITIONAL CONCURRENCE ON THE SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0001&D2/R1), PRIMARY DOCUMENT	USEPA-IV	DOE-PPPO	I-04810-0041
Surface Water Operable Unit (On-Site)	11/30/07	PPPO-02-214-08	EXTENSION REQUEST FOR RESPONSE TO CONDITIONAL CONCURRENCE FOR THE SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT FOR THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE-PPPO	KDEP	I-04810-0044
C-410 Complex Infrastructure Removal Post-Decision	10/25/07	PRS/D-0024	[KDEP CONCURS] INCORRECT APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENT CITATION FOR THE C-410 D&D PROJECT ENGINEERING EVALUATION/COST ANALYSIS FOR THE C-410 COMPLEX INFRASTRUCTURE AT THE PGDP, PADUCAH, KY (DOE/OR/07-1952&D2/R1)	KDEP	DOE-PPPO	I-05112-0058
			Same record in (2) Operable Units			

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## Documents Added to the Administrative Record Files First Quarter CY2008

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARF24	11/23/07	PRS/D-0025, PPPO-02-116-08	DEPARTMENT OF ENERGY (DOE) REQUEST FOR MINOR MODIFICATION OF THE ACTION MEMORANDUM FOR THE SCRAP METAL DISPOSITION AT THE PADUCAH GASEOUS DIFFUSION PLANT (PGDP) AND TECHNICAL JUSTIFICATION FOR LEAVING NICKEL INGOTS AT THE C-746-H4 STORAGE PAD	DOE-PPPO	USEPA-IV	NO	I-01713-0045
ARF24	12/14/07	PRS/D-0029	[EPA APPROVES] DOE REQUEST FOR MINOR MOD. OF THE ACTION MEMORANDUM FOR THE SCRAP METAL DISPOSITION AT THE PADUCAH GASEOUS DIFFUSION PLANT AND TECHNICAL JUSTIFICATION FOR LEAVING NICKEL INGOTS AT THE C-746-H4 STORAGE PAD WITHOUT A PROTECTIVE STRUCTURE	USEPA-IV	DOE-PPPO, PRS	NO	I-01713-0039
ARFCC	12/27/07	PPPO-02-610-07	[CERCLA CELL] WASTE DISPOSAL ALTERNATIVES AT THE PADUCAH GASEOUS DIFFUSION PLANT	DOE-PPPO, DOE PPPO	RHB-KY	NO	I-05306-0105
ARFCC	01/30/08	PPPO-02-126-08, PRS/I-0764	COMPARISON OF THE FEDERAL FACILITY AGREEMENT APPENDIX D DOCUMENT OUTLINES TO THE PROPOSED COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) WASTE DISPOSAL ALTERNATIVES EVALUATION DOCUMENT OUTLINES	DOE-PPPO, DOE PPPO	KDEP, USEPA-IV	NO	I-05310-0006
ARFREF, ARFSWOUOSD, ARFBGOU, ARFSWP	12/17/07	PRS/I-0725, PPPO-02-125-08	[TRANSMITTAL] FEDERAL FACILITY AGREEMENT (FFA) PROJECT MANAGERS' MEETING CONDUCTED SEPTEMBER 20, 2007	DOE-PPPO	KDEP, USEPA-IV	NO	I-02001-0603
ARFREF, ARFSWOUOSD, ARFSWP	01/09/08		[MEETING CANCELLED] JANUARY 2008 CITIZENS ADVISORY BOARD (CAB) MEETING MATERIALS	PGDP CAB		NO	I-02001-0604
ARFSOU	12/14/07	PPPO-02-206-08, PRS/I-0737, DOE/LX/07-0015/B	TRANSMITTAL OF ADDENDUM 1-B TO THE SAMPLING AND ANALYSIS PLAN FOR SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0015/B)	DOE-PPPO	KDEP, USEPA-IV	NO	I-04909-0029
ARFSOU	12/14/07	PPPO-02-165-08, DOE/LX/07-0015/A2, PRS/I-0738	TRANSMITTAL OF ADDENDUM 2 TO THE SAMPLING AND ANALYSIS PLAN FOR SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0015/A2)	DOE-PPPO	KDEP, USEPA-IV	NO	I-04909-0030
ARFSOU	12/20/07	PPPO-02-481-07, DOE/LX/07-0027&D1, PRS/I-0726	TRANSMITTAL OF THE SCOPING DOCUMENT FOR THE SOILS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0027&D1)	DOE-PPPO, DOE PPPO	KDEP, USEPA-IV	NO	I-04911-0001
ARFSWOUOSD	01/02/08	PPPO-02-205-08, PRS/I-0738, DOE/LX/07-0001&D2/R1	TRANSMITTAL OF THE [ERRATA TO THE] SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0001&D2/R1)	DOE-PPPO, DOE PPPO	KDEP, USEPA-IV	NO	I-04810-0045
ARFSWOUOSD	01/04/08	PPPO-02-607-07, PRS/I-0741	PROPOSED MILESTONE MODIFICATION FOR THE SURFACE WATER OPERABLE UNIT (ON-SITE) REMOVAL ACTION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	DOE-PPPO	KDEP, USEPA-IV	NO	I-04813-0045

## Documents Added to the Administrative Record Files First Quarter CY2008

Document Status	Date On Document	Document Id	Title	Author Affiliation	To Affiliation	Protected Information	Object Name
ARFSWOUOSD	01/08/08	PRS/I-0756	PROPOSED MILESTONE EXTENSION FOR THE SURFACE WATER OPERABLE UNIT (ON-SITE) REMOVAL ACTION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0001&D2/R1)	USEPA-IV	DOE-PPPO, PRS	NO	I-04813-0046
ARFSWOUOSD	01/29/08	PRS/I-0768	[EPA APPROVES] SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0001&D2/R1), PRIMARY DOCUMENT	USEPA-IV	DOE-PPPO, PRS	NO	I-04810-0046
ARFSWOUOSD	02/08/08	PPPO-02-560-07, DOE/LX/07-0012&D1	TRANSMITTAL OF THE ENGINEERING EVALUATION/COST (EE/CA) ANALYSIS FOR CONTAMINATED SEDIMENT ASSOCIATED WITH THE SURFACE WATER OPERABLE UNIT (ON-SITE) AT PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0012&D1)	DOE-PPPO, DOE PPPO	KDEP, USEPA-IV	NO	I-04812-0115
ARFSWP	12/28/07	PPPO-02-239-08, PRS/I-0734	EXTENSION REQUEST OF INFORMAL DISPUTE RESOLUTION PERIOD FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2180&D2)	DOE-PPPO	KDEP, USEPA-IV	NO	I-04610-0092
ARFSWP, ARFBGOU	01/18/08	PPPO-02--276-08, PRS/I-0757	[DOE PROPOSES ACTIONS TO RESOLVE DISPUTE AND REQUESTS EXTENSION] RESPONSE TO LETTER OF NONCONCURRENCE FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST PLUME AT THE PGDP, PADUCAH, KENTUCKY (DOE/OR/07-2180&D2) AND NOTICE OF INFORMAL DISPUTE	DOE-PPPO	KDEP, USEPA-IV	NO	I-04610-0095

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