



**Department of Energy**

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

**received**  
8-7-07 EB 113

**RECORD COPY**

APR 30 2007

Mr. R. Bruce Scott, Director  
Division of Waste Management  
Kentucky Department for Environmental Protection  
14 Reilly Road  
Frankfort Office Park  
Frankfort, Kentucky 40601

PPPO-02-408-07

Mr. David G. Williams  
United States Environmental Protection Agency  
Region IV  
DOE Remedial Section  
Federal Facilities Branch  
Waste Management Division  
61 Forsyth Street  
Atlanta, Georgia 30303

I-02001-0564

Dear Mr. Scott and Mr. Williams:

**UNITED STATES DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT FEDERAL FACILITY AGREEMENT SEMIANNUAL PROGRESS REPORT FOR THE FIRST HALF OF FISCAL YEAR 2007, PADUCAH, KENTUCKY**

In accordance with Condition XXIII of the Federal Facility Agreement, a copy of the *U.S. Department of Energy Paducah Gaseous Diffusion Plant Federal Facility Agreement Semiannual Progress Report for the First Half of Fiscal Year 2007, Paducah, Kentucky* (DOE/LX/07-0020/V1) is enclosed. This report also serves to satisfy semi-annual reporting requirements set forth in Part IV of the Resource Conservation and Recovery Act Permit.

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

Sincerely,

Reinhard Knerr, Paducah Site Lead  
Portsmouth/Paducah Project Office

Enclosures:

1. FFA Semiannual Progress Report for First Half of FY07
2. Certification

cc w/enclosures:

DCC/Kevil

J. Hornback, KDEP/Frankfort

J. Maybriar, KDEP/Frankfort

J. Wilson, KDEP/Frankfort

cc w/o enclosures:

R. Blumenfeld, PPPO/Lexington

R. Boyd, PRS/Kevil

T. Brindley, PRS/Kevil

D. Dollins, PPPO/Paducah

T. Fitzgerald, Navarro/Paducah

R. Knerr, PPPO/Paducah

D. Massey, Navarro/Paducah

J. Morgan, PRS/Kevil

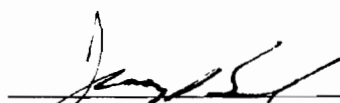
M. Redfield, RSI/Kevil

## CERTIFICATION

**Document Identification:**      **Federal Facility Agreement Semiannual Progress Report  
First Half Fiscal Year 2007 (DOE/LX/07-0020V1)  
Paducah Gaseous Diffusion Plant,  
Paducah, Kentucky**

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  
Co-Operator

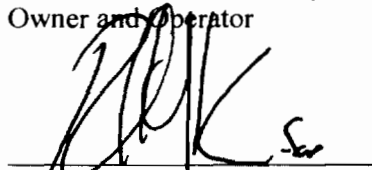
  
\_\_\_\_\_  
Tracey Brindley,  
ER/EM Manager

4/30/2007

\_\_\_\_\_  
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)  
Owner and Operator

  
\_\_\_\_\_  
William E. Murphie, Manager

4/30/07

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

**U.S. Department of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report for the  
First Half of Fiscal Year 2007  
Paducah, Kentucky**



**This Document is approved for public release per review by:**

*A. B. Brennan*  
\_\_\_\_\_  
PRS Classification & Information Officer

4.5.07  
\_\_\_\_\_  
Date

**U.S. Department Of Energy  
Paducah Gaseous Diffusion Plant  
Federal Facility Agreement  
Semiannual Progress Report For The  
First Half of Fiscal Year 2007  
Paducah, Kentucky**

April 2007

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

**THIS PAGE INTENTIONALLY LEFT BLANK**

## CONTENTS

FIGURES.....	v
ACRONYMS.....	vii
INTRODUCTION.....	1
GROUNDWATER OPERABLE UNIT (GWOU).....	3
SURFACE WATER OPERABLE UNIT.....	21
SOILS OPERABLE UNIT (SOU).....	27
D&D OPERABLE UNIT.....	37
CONPREHENSIVE SITE_WIDE/PERMITTED/ NO FURTHER ACTION/MISCELLANEOUS OPERABLE UNITS.....	17
APPENDIX A: NORTHEAST AND NORTHWEST PLUME WATER WITHDRAWAL REPORTS.....	A-1
APPENDIX B: FIGURES 1 THROUGH 7.....	B-1
APPENDIX C: C-746-K LANDFILL DATA.....	C-1
APPENDIX D: ADMINISTRATIVE RECORD INDEX.....	D-1

**THIS PAGE INTENTIONALLY LEFT BLANK**



## FIGURES

1.	Northeast Plume Containment System Influent TCE Concentration.....	B-3
2a.	Northeast Plume – TCE Concentrations in Downgradient Wells.....	B-4
2b.	Northeast Plume – <sup>99</sup> Tc Concentrations in Downgradient Wells.....	B-5
2c.	Northeast Plume – TCE Concentrations in Upgradient Wells.....	B-6
2d.	Northeast Plume – <sup>99</sup> Tc Concentrations in Upgradient Wells.....	B-7
3.	FFA Northeast Plume Groundwater Wells.....	B-8
4a.	Northwest Plume Groundwater System Influent TCE Concentrations.....	B-9
4b.	Northwest Plume Groundwater System Effluent TCE Concentrations.....	B-10
5a.	Northwest Plume Groundwater System Influent <sup>99</sup> Tc Activity.....	B-11
5b.	Northwest Plume Groundwater System Effluent <sup>99</sup> Tc Activity.....	B-12
6a.	Northwest Plume – South Well Field TCE Concentrations.....	B-13
6b.	Northwest Plume – South Well Field <sup>99</sup> Tc Concentrations.....	B-14
6c.	Northwest Plume – North Well Field TCE Concentrations.....	B-15
6d.	Northwest Plume – North Well Field <sup>99</sup> Tc Concentrations.....	B-16
7.	FFA Northwest Plume Groundwater Wells.....	B-17

**THIS PAGE INTENTIONALLY LEFT BLANK**

## ACRONYMS

AOC	area of concern
BRA	Baseline Risk Assessment
CAB	Citizens Advisory Board
D&D	Decontamination and Decommissioning
DMC	Document Management Center
DOE	U.S. Department of Energy
DQO	data quality objectives
EE/CA	engineering evaluation/cost analysis
EPA	U.S. Environmental Protection Agency
EQ	Equalization
FFA	Federal Facility Agreement
FY	fiscal year
GWOU	Groundwater Operable Unit
IC	institutional control
IRA	interim remedial action
KRCEE	Kentucky Research Consortium for Energy and the Environment
LUCIP	Land Use Control Implementation Plan
NEPCS	Northeast Plume Containment System
NSDD	North-South Diversion Ditch
NWPGS	Northwest Plume Groundwater System
O&M	operation and maintenance
pCi/L	picoCuries per liter
PGDP	Paducah Gaseous Diffusion Plant
ppb	parts per billion
PRAP	Proposed Remedial Action Plan
PRS	Paducah Remediation Services, LLC
RAWP	Remedial Action Work Plan
RDR	Remedial Design Report
RI	remedial investigation
RI/FS	remedial investigation/feasibility study
RL	reporting limit
ROD	Record of Decision
SAP	sampling and analysis plan
SI	Site Investigation
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
UST	underground storage tank
WAG	waste area group

**THIS PAGE INTENTIONALLY LEFT BLANK**

## INTRODUCTION

### FEDERAL FACILITY AGREEMENT SEMIANNUAL REPORT FIRST HALF FISCAL YEAR 2007

**Facility: Paducah Gaseous Diffusion Plant (PGDP)**  
**Plant EPA I.D. No.: KY8-890-008-982**  
**Reporting Period: 10/01/06– 03/31/07**

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

Operable Unit (OU)	Project
Groundwater OU (GWOU)	C-400 Southwest Plume and Its Sources Dissolved-Phase Plumes Northeast Plume Interim Remedial Action (IRA) Northwest Plume IRA
Burial Grounds OU (BGOU)	
Surface Water OU (SWOU)	Scrap Metal Surface Water (On-Site)
Soils OU	Site-Wide Soils Inactive Facilities Soil and Rubble Areas <sup>2</sup>
Decontamination and Decommissioning (D&D) OU	
Comprehensive Site-Wide OU/Permitted/ No Further Action/Miscellaneous	WAGs 1 and 7 Community Relations Plan SMP

Previous Semiannual Progress Reports have included updates for the Waste Area Group (WAG) 15 Site Evaluation. During this reporting period for this project, soils removed during closure of C-746-A1

---

<sup>1</sup> Schedules are included for information and planning purposes only; enforceable schedules are established in the FFA.

<sup>2</sup> Soil and rubble areas are not included within the SMP, but are reported under the Soils OU for clarity.

[Underground Storage Tank (UST) #5] that were in interim waste storage were disposed at Nevada Test Site. The reporting of this activity will be discontinued after this Progress Report.

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.

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 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 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**GWOU**

The scope of the GWOU includes investigation, a baseline risk assessment, evaluation of removal/remedial alternatives, and selection and implementation of actions necessary to achieve protection of human health from exposure to groundwater contamination that could result in unacceptable risk.

Within the GWOU are the projects C-400, Southwest Plume and its Sources, and Dissolved-Phase Plumes. The projects for Groundwater Assessments (U.S. Army Corps of Engineers Groundwater Modeling System) and C-746-S&T and Solid Waste Management Unit (SWMU) 145 Landfills Site Investigation (SI) had no activity during this reporting period, are complete, and will not be reported upon again in following updates.

**THIS PAGE INTENTIONALLY LEFT BLANK**



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**GWOU PROJECT: C-400**

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

- Developed and submitted 30% and 60% Remedial Design Reports (RDRs) to Kentucky and U.S. Environmental Protection Agency (EPA).
- Continued development of the 90% (D1) RDR
- Continued development of the D1 Remedial Action Work Plan (RAWP)
- Continued with resolution of Kentucky and EPA comments on the D2 Land Use Control Implementation Plan (LUCIP)

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

- Resolve Kentucky and EPA comments on the D2 LUCIP and issue the D2/R1 LUCIP as an appendix to the D1 RDR.
- Issue the D1 RAWP and the D1 RDR.
- Resolve and incorporate Kentucky and EPA comments from the D1 RAWP and the D1 RDR (90% design) and issue the D2 versions of these documents.
- Complete installation of overhead/underground electrical feeder to supply future electrical needs of the C-400 Interim Remedial Action (IRA).
- Remove interfering infrastructure at the C-400 Cleaning Building area in preparation for installation of the IRA systems.

**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, fixed-base 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 for the Groundwater C-400 Action Subproject.

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

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

- D1 RDR and the D1 RAWP for the C-400 IRA;
- D2 LUCIP for the C-400 IRA;

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

- Kentucky's and EPA's approval of the D2/R1 C-400 IRA LUCIP is expected by 07/11/07;
- Kentucky's and EPA's approval of the D2 C-400 IRA RAWP is expected by 07/11/07; and

Kentucky's and EPA's approval of the D2 C-400 IRA RDR is expected by 07/11/07.

**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:**

Monthly updates on the C-400 IRA subproject are provided to the CAB. Monthly project status meetings with Kentucky and EPA were held.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Project Manager – Tracey Brindley

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**GWOU PROJECT: Southwest Plume and its Sources**

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

- Issued D2 SW Plume SI Report in May 2006 for approval by EPA and Kentucky. Kentucky issued a letter of nonconcurrence in September for the D2 SI and EPA issued a letter of non-concurrence in November 2006 and invoked informal dispute under the FFA.
- Discontinued development of the Proposed Remedial Action Plan (PRAP) for the Southwest Plume sources until informal dispute on SI Report is resolved. FFA milestone modification submitted in October 2006 with the D1 PRAP being submitted 30 days after Kentucky and EPA approval of the SI Report.
- On 10/13/06, DOE issued an FFA Milestone Modification Proposal modifying all existing SW Plume project milestones to be dependent on the resolution of the FFA Informal Dispute. FFA Milestone Modification Proposal is currently pending with EPA. Kentucky approved the modification proposal in a letter dated 11/06/06.
- On 10/16/06, EPA requested a 30-day extension for the review of the D2 SW SI Report.
- On 11/06/06, EPA issued a letter invoking FFA Informal Dispute. Kentucky issued a non-concurrence letter on 9/20/06.
- On 12/06/06, DOE proposed actions to resolve informal dispute and draft Comment Response Summary for the Kentucky and EPA comments received on the D2 SI. EPA requested on 12/20/06 that a draft Comment Response Summary be provided to allow the parties to view the methods used for resolving the comments received on the D2 SI.
- The FFA Informal Dispute period was extended by 15 days to 01/05/07 by Kentucky on 12/21/06.
- The FFA Informal Dispute period was extended by 15 days to 01/20/07 by EPA.
- The FFA Informal Dispute period was extended by 15 days to 02/06/07 by EPA in a letter dated 01/22/07.
- The FFA Informal Dispute period was extended by 15 days to 02/21/07 by DOE in a letter dated 02/05/07.
- The FFA Informal Dispute period was extended by 30 days to 03/23/07 by Kentucky on 03/02/07.

- On 03/15/07, Kentucky proposed additional actions to resolve including the provision of a red-line version of the SW Plume SI Report as necessary requirements to close out the informal dispute for their organization.
- The FFA Informal Dispute period was extended by 15 days to 04/07/07 by DOE.
- DOE procured Kentucky Research Consortium for Energy and the Environment (KRCEE) to facilitate a data quality objectives (DQO) process for the trichloroethene (TCE) degradation and attenuation issues that resulted in the invocation of informal dispute for the SW Plume SI Report. KRCEE has developed a technical working group to perform this DQO process. The technical working group includes DOE National Laboratories, Kentucky, EPA, University of Kentucky, Navarro Engineering Group, and PRS.

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

- Revise SI Report into a D2/R1 version and submit as a redline to the regulating authorities for review and assessment.
- Issue the D2/R1 SI Report for approval to EPA and Kentucky.
- Continue KRCEE facilitated DQO process for the TCE degradation analysis.
- Complete development of the D1 PRAP for the Southwest Plume sources and submit for stakeholder review and comment.
- Initiate development of the ROD for the Southwest Plume sources.

**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, fixed-base 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.

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

Although the Southwest Plume SI currently is in informal dispute, all FFA parties are in agreement with the existing project extensions. Also, all future SW Plume milestones have been revised to be re-aligned once the Informal Dispute process has been completed.

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

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

- D2/R1 SI Report for the Southwest Groundwater Plume at the PGDP; and
- D1 PRAP for the Southwest Groundwater Plume Sources at the PGDP.

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

- Submission, approval or comment on the D2/R1 Southwest Plume Groundwater Sources SI Report is pending the resolution of the informal dispute associated with the D2 SI Report;
- FFA milestone proposal submitted by DOE on 10/13/06 modifies remaining milestones to be dependent on resolution of FFA informal dispute. Modification form approved by Kentucky on 11/6/06; approval is pending with EPA.
- Submittal of the D1 Southwest Groundwater Plume PRAP is expected 30 days after the approval of the SW SI Report.

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

Invoking of Informal Dispute concerning the D2 SW SI Report has impacted the progress of the SW Plume subproject. Modifications to the development schedules have been coordinated through DOE correspondence. An FFA milestone modification form was submitted on 10/13/06 to re-align milestones to be consistent with original FFA durations prior to information dispute being invoked. Kentucky approved modification on 11/06/06. Approval by EPA is pending. Additional schedule mitigation is being performed through the facilitation of the TCE degradation DQO process to accelerate the resolution of the degradation issue to reduce impacts to ongoing GWOU and BGOU projects.

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

Monthly updates on the SW Plume subproject are provided to the CAB. Monthly project status meetings with Kentucky and EPA were held. Dispute resolution meetings were attended by DOE, Kentucky, and EPA.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Project Manager – Tracey Brindley

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

None.

**THIS PAGE INTENTIONALLY LEFT BLANK**

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**GWOU PROJECT: Dissolved-Phase Plumes (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 99.2% during the reporting period of October 2006 through March 2007. During this reporting period, the NEPCS treated 48,422,633 gallons of contaminated groundwater. The average system treatment rate for the reporting period was 184.8 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for October, November, December 2006, January, February, and March 2007 were 100%, 95%, 100%, 100%, 100%, and 100%, respectively.

**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 02/28/97. As of 03/31/07, the NEPCS has processed a total of 846,940,000 gallons of water. The monthly extraction volumes for October, November, December 2006, January, February, and March 2007 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 2006.

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 2006 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 2006. High, low, and average influent and effluent TCE concentrations for these months are presented in the following table. Values reported as less than the reporting limit (RL) of 1 ppb are considered to be 1 ppb for averaging and graphing purposes.

	TCE (ppb)		
	High	Low	Average
Influent	210	180	191
Effluent	<RL*	<RL*	1

\*<RL = less than the reporting limit

As presented in the previous table, 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 RL.

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 160 ppb while EW-332 had an average concentration of 223 ppb.

technetium-99 (<sup>99</sup>Tc) concentrations in water samples collected from the EQ tank did not exceed the data quality objective of 50 picoCuries per liter (pCi/L). The highest reading from the EQ tank was 31.3 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 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, Revision 3, July 2005.

Instances of minor routine maintenance causing downtime occurred during the reporting period relating to power outages, routine maintenance, and calibration of system components. No major periods of downtime occurred during this reporting period.

##### Non-routine Maintenance Activities

On November 27 through November 28 (for approximately 36 hours), the Northeast Pump and Treat System was rendered inoperative when severe weather caused a power outage at the facility. The system was recalibrated and restarted.

#### 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 2006, <sup>99</sup>Tc activity at MW292 was 42.7 and 49.6 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 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, fixed-base 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 99.2 % 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*, is being revised to reflect the 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 2006 and March 2007 was \$242K.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT  
FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**GWOU PROJECT: Dissolved-Phase Plumes (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 48,876,314 gallons of contaminated groundwater with an average monthly operational efficiency of 93.8%. The average system treatment rate for the reporting period was 186.5 gal/min and was calculated assuming 100% operational uptime. Operational efficiencies for October, November, December 2006, January, February, and March 2007 were 99%, 77%, 100%, 100%, 100%, and 87%, respectively.

**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 08/28/95. As of 03/31/07, the NWPGS has processed a total of 1,172,160,000 gallons of water. The monthly extraction volumes for October, November, December 2006, January, February, and March 2007 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 2006.

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 July through December 2006 are presented in Appendix B on Figures 4a, 4b, 5a, and 5b, respectively.

TCE values reported as less than the RL 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 2006 are presented in the following table.

	TCE (ppb)			<sup>99</sup> Tc (pCi/L)		
	High	Low	Average	High	Low	Average
Influent	1700	1000	1317	289	187	235
Effluent	2.6	1.0	1.6	26.4	-14.7	6.1

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 the previous table, the NWPGS continued to effectively remove TCE and <sup>99</sup>Tc. The system operated with an average removal efficiency of 99.9% for TCE and 97.4% for <sup>99</sup>Tc.

The average TCE effluent concentration for this reporting period was 1.6 ppb, which is less than the treatment goal of 5 ppb and the Kentucky Pollutant Discharge Elimination System Outfall 001 TCE permit limit of 81 ppb. The average <sup>99</sup>Tc effluent value was 6.1 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 2006. High, low, and average sample results for this reporting period at the extraction wells are shown below.

	TCE (ppb)			<sup>99</sup> Tc (pCi/L)		
	High	Low	Average	High	Low	Average
EW-228	7.2	4.9	5.8	11.7	2.8	6.0
EW-229	14	9.7	11.9	25.7	.30	13.0
EW-230	3700	2900	3300	660	548	604
EW-231	94	19	45	38	24.3	30.1

#### 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 is replaced in each column twice a year. The carbon in both columns is currently scheduled to be replaced in April 2007, with recycled carbon. The current stock of recycled carbon and future utilization of recycling technology will provide an adequate supply of carbon throughout 2007.

## **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 at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Revision 3, July 2005 (Maintenance and Calibration Plan).

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

### **Non-routine Maintenance Activities**

The following is a list of non-routine maintenance activities conducted at the NWPGS during the reporting period.

On 10/31/06, the NW Plume air stripper pump was identified during a routine inspection as having a small continuous leak. At that time, a decision was made to remove the air stripper pump and the NW Plume operations from service while the system was unattended. A replacement pump seal was procured and installed and the NW Plume operation was returned to continuous service on 11/08/06.

An electronic control was replaced on extraction well 229 on 02/08/07, to correct intermittent episodes when the pump motor would trip and operation of the extraction well would cease.

On 03/10/07, the NW Plume operations were stopped to repair the air stripper motor starter. The facility was returned to operation on 03/14/07.

## **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**

The granular activated carbon in the air stripper, which is typically replaced every six months, was not replaced during the reporting period. Reduced TCE concentrations in the system influent has caused the carbon to become "spent" less often. Extended carbon life reduces the frequency of replacement.

## **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 NEPCS belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition PRS also provides programmatic and technical support, fixed-base 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 93.8% of the time during this reporting period.

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

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

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*, is being revised to reflect that PRS now operates the NWPGS.

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

None.

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

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 2006, January, February, and March 2007 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 this reporting period for the period between October 2006 and March 2007 was \$242K.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**PROJECT: BGOU**

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); and 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):**

Conditional concurrence was granted by Kentucky and EPA for the Remedial Investigation (RI) Work Plan on 10/06/06 and 10/10/06, respectively. New and modified pages for the RI Work Plan and notification of dispute invocation were submitted by DOE on 11/03/06. Kentucky and EPA approved the Work Plan in letters dated 11/09/06 and 11/13/06, respectively. DOE submitted notification of dispute resolution.

RI field work began.

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

Complete RI field work in May 2007.

Begin preparation of the RI Report and the Feasibility Study.

**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, fixed-base 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:**

Remedial Investigation (RI) Work Plan

**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):**

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. Monthly project status meetings with Kentucky and EPA were held. Regulators are briefed, as needed, on RI field progress or issues.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Project Manager – Tracey Brindley

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

None.



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**SWOU**

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.

Within the SWOU are the projects Scrap Metal and Surface Water (On-Site). Additionally, O&M is performed on the 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 PGDP Environmental Management and Enrichment Facilities Document Management Center. The estimated annual cost of this O&M is \$94K.

**THIS PAGE INTENTIONALLY LEFT BLANK**

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**SWOU PROJECT: Scrap Metal Removal**

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

- Segregated, characterized, packaged, and shipped the last 6,046 net tons of northwest corner scrap metal to EnergySolutions.
- The site has been stabilized by grading and seeding.

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

Prepare and submit the D1 Removal Action Completion Report for Scrap Metal to DOE for review by 12/30/07.

Preparation of a modification to the Action Memorandum to address nickel ingots

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

Responsibility for the day-to-day operations of Scrap Metal Removal belongs to PRS as the DOE prime remediation contractor at the PGDP. Performance of the day-to-day operations of Scrap Metal Removal is accomplished by EnergySolutions, a PRS teaming partner. In addition PRS also provides programmatic and technical support, fixed-base 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:**

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

**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 meetings with the Citizens Advisory Board (CAB) were held. Monthly project status meetings with Kentucky and EPA were held.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Project Manager – Chris Marshall

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

O&M should represent only 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 \$4K.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**SWOU PROJECT: SWOU On-Site Investigation**

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

The D1 SWOU (On-site) SI/Baseline Risk Assessment (BRA) Report was submitted to Kentucky and EPA for review and approval. Comments were received from Kentucky and EPA on 02/12/07 and 02/13/07, respectively. A meeting was held with the Kentucky and EPA on 03/15/07, to discuss Kentucky's and EPA's comments. Preparing the D2 SWOU SI/BRA report for issuance to Kentucky and EPA on 04/16/07. The Removal Notification for the SWOU (On-site) was completed and issued to Kentucky and EPA. Approval of the Removal Notification was received from Kentucky and EPA.

The Engineering Evaluation/Cost Analysis (EE/CA) for the SWOU (On-site) is currently undergoing internal review.

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

The D2 SWOU SI/BRA report is scheduled to be submitted to the Kentucky and EPA by the deliverable date of 04/16/07.

The D1 SWOU EE/CA is scheduled to be submitted to the Kentucky and EPA by the deliverable date of 05/17/07.

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

Responsibility for the day-to-day operations of the SWOU (On-site) belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition PRS also provides programmatic and technical support, fixed-base 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:**

- D2 SWOU (On-site) SI/BRA Report.
- D1 SWOU (On-site) EE/CA.

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

Kentucky, and EPA's approval of the following documents:

- D2 SWOU (On-site) SI/BRA Report 05/16/07
- D1 SWOU (On-site) EE/CA 06/17/07

**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 meetings with the CAB were held. Monthly project status meetings with Kentucky and EPA were held.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Project Manager –Tracey Brindley

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**Soils OU**

This project includes a hot spot removal action coordinated with a remedial investigation, baseline risk assessment, evaluation of cleanup alternatives, remedy selection, and implementation of necessary response actions. The scope of the Soils OU 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 Soils OU remedial investigation 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.

**THIS PAGE INTENTIONALLY LEFT BLANK**



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**Soils OU PROJECT: Site-Wide Soils**

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

Preparation began for the Soils RI/FS Scoping Document.

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

Submit D1 RI/FS Scoping Document to Kentucky and EPA for review for the Soils OU SWMUs listed in the SMP.

**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 Site-Wide Soils belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition PRS also provides programmatic and technical support, fixed-base 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:**

D1 Scoping Document for the RI/FS.

**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 meetings with the CAB were held. Monthly project status meetings with Kentucky and EPA were held.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Task Lead – Craig Jones/Aric Cowne

PRS Project Manager – Tracey Brindley

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**Soils OU PROJECT: Inactive Facilities Soils**

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

The D1 Soils Inactive Facilities Removal Notification of the C-218 Outdoor Firing Range (SWMU) 181, C-403 Neutralization Tank (SWMU 40), and C-410-B Hydrogen Fluoride Neutralization Lagoon (SWMU 19) was completed, submitted, and approved by Kentucky and EPA. The Soils Inactive Facilities EE/CA is being prepared.

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

Submit the D1 EE/CA for the inactive facilities, C-218 Outdoor Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), and C-410-B Hydrogen Fluoride Neutralization Lagoon (SWMU 19) for approval to Kentucky and EPA and for public comment.

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

Responsibility for the day-to-day operations of the SOU belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition PRS also provides programmatic and technical support, fixed-base 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:**

D1 EE/CA for 3 inactive facilities, C-218 Outdoor Firing Range (SWMU 181), C-403 Neutralization Tank (SWMU 40), and C-410-B Hydrogen Fluoride Neutralization Lagoon (SWMU 19).

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

Kentucky, and EPA's approval of the following documents:

- D1 SOU RN – 03/29/07
- D1 SOU EE/CA – 06/14/07

**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 meetings with the CAB were held. Monthly project status meetings with Kentucky and EPA were held.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Task Lead – Craig Jones/Aric Cowne

PRS Project Manager – Tracey Brindley

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**Soils OU 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):**

The Time-Critical Removal Notification for Area of Concern (AOC) 492 and AOC 541 and Other Soil and Rubble Areas is being prepared.

The D1 Sampling and Analysis Plan (SAP) and Addendum 1-A for Soil Piles was prepared and submitted to Kentucky and EPA for review.

Field mobilization to sample in accordance with Soil Piles SAP Addendum 1-A began.

Preparation of Soil Piles SAP Addendum 2 began.

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

Issue D2 SAP and Addendum 1-A for Soil Piles to Kentucky and EPA for approval.

Approval of the Work Package for the sampling and characterization field effort for the Soil Piles SAP and Addendum 1-A.

Prepare and submit the D1 Addendum 1-B and Addendum 2 for Soil Piles to Kentucky and EPA for approval.

Prepare and submit the D1 Rubble Piles SAP to Kentucky and EPA for approval.

Submit the D1 Time Critical Removal Notification for AOC 492 and AOC 541 and Other Soil and Rubble Areas to Kentucky and EPA for approval.

Perform time critical removal action for AOC 492 and AOC 541.

Begin time critical removal action for AOC 492 and AOC541; begin time critical removal for other soil and rubble areas, as appropriate.

Develop Confirmation Sampling Addendum for Time Critical Removal Action for AOC492 and AOC541 and Other Soil and Rubble Areas.

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

---

<sup>3</sup> Soil and rubble areas are not included within the SMP, but are reported under the Soils OU for clarity.

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, fixed-base 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 baseline or SMP schedules.

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

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

D1 Time Critical Removal Notification for AOC 492 and AOC 541 and Other Soil and Rubble Areas.

D1 SAP and Addendum 1-A for Soil Piles.

D1 Addendum 2 for Soil Piles.

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

Kentucky and EPA's approval of the following documents:

- D1 Soil Piles SAP and Addendum I-A – 04/13/07
- D2 Soil Piles Time Critical Removal Notification – 05/18/07
- D2 Soil Piles Addendum 2 – 06/15/07
- D2 Rubble Piles SAP – 07/16/07
- D2 Soil Piles Addendum I-B – 10/01/07

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

The due date for submittal of the D1 Soil Piles Addendum 2 is based on a 15-day window after approval by Kentucky and EPA on the D2 Soil Piles SAP and Addendum I-A. The due date for submitting the D1 Rubble Piles SAP is based on a 45-day window after approval by Kentucky and EPA on the D2 Soil Piles SAP and Addendum I-A. Delay by Kentucky and EPA submittal dates of the D1 Soil Piles Addendum 2 and D1 Rubble Piles SAP.

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

Routine meetings with the CAB were held. Monthly project status meetings with Kentucky and EPA were held. 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:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Task Lead – Craig Jones/Aric Cowne

PRS Project Manager – Tracey Brindley

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

None.

**THIS PAGE INTENTIONALLY LEFT BLANK**



**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
FIRST HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**PROJECT: D&D OU**

The scope of this project includes D&D of the C-410 and C-340 facilities as well as the other 15 inactive DOE facilities, assuming the use of CERCLA 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 C-410 Complex in multiple areas using glovebag techniques.
- Completed construction of first asbestos containment structure inside C-410 Complex, and initiated abatement. Construction of 2<sup>nd</sup> containment underway.
- Continued piping and equipment demolition in Sectors 2 and 3. Piping and equipment removal focusing on removal of obstructions for performance of asbestos abatement.
- Completed opening and removing residual fluorine, hydrogen fluoride, or hydrogen from piping systems in Zone 42 and 43 (Fluorine Cell Rooms), and demolition of piping systems in those zones.
- Dispositioned 4,644 cubic feet (4 SeaLands) of low-level waste from the C-402 Limehouse Demolition at EnergySolutions, and 9,720 cubic feet at the C-746-U Landfill.
- Disposed of 56 Intermodals (approximately 34,000 cubic feet) of low-level polychlorinated biphenyl bulk product waste from the C-410 Complex at EnergySolutions. This material was generated during the packaging of loose material in the complex and from removal of equipment and piping from the facility.
- Received approval of the D1 Removal Action Work Plan for the C-405 Incinerator and C-746-A West End Smelter demolition from the Kentucky and EPA.
- Completed loose material removal and initiated equipment demolition of the C-405.
- Initiated development of work instructions for C-746-A West End Smelter.

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

- Continue asbestos abatement in C-410 Complex, Sectors 2 and 3.
- Initiate characterization, hazardous material removal, and piping removal for fluorine, hydrogen, hydrogen fluoride, and uranium hexafluoride containing systems in the C-410.

- Continue collection, sorting, and packaging of stored material inside C-410 Complex for disposition.
- Submit D1 C-402 Removal Action Report.
- Continue active D&D inside the C-410 Complex in Sectors 2 and 3.
- Complete C-405 Contaminated Items Incinerator field work.
- Initiate C-746-A West End Smelter field work.

**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, fixed-base 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-402 Removal Action Report

**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 meetings with the Citizens Advisory Board (CAB) were held. Monthly project status meetings with Kentucky and EPA were held.

**VIII. Changes in relevant personnel:**

Changes in relevant personnel have been made since the last reporting period. Current personnel, if different, are listed below.

PRS Project Manager – Don Ulrich

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

None.

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**Comprehensive Site-Wide OU/Permitted/No Further Action/Miscellaneous**

Presented in this section are updates for WAGs 1 and 7 (C-746-K Landfill, TCE Spill Sites, USTs, and Kentucky Ordnance Works Sites), the Community Relations Plan, and the SMP.

**THIS PAGE INTENTIONALLY LEFT BLANK**

**FEDERAL FACILITY AGREEMENT  
SEMIANNUAL REPORT FOR THE  
First HALF OF FISCAL YEAR 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

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

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

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

Responsibility for the day-to-day operations of WAGs 1 and 7 belongs to PRS as the DOE prime remediation contractor at the PGDP. In addition PRS also provides programmatic and technical support, fixed-base 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 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**PROJECT: Community Relations Plan**

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

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

Achieve resolution of informal dispute; issue D2 Community Relations Plan for Kentucky and EPA review and approval.

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

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

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

The Community Relations Plan currently under FFA informal dispute.

**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 2007**

**Facility: Paducah Gaseous Diffusion Plant  
Plant EPA I.D. No.: KY8-890-008-982  
Reporting Period: 10/01/06 – 03/31/07**

**PROJECT: SMP**

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

Developed and issued D1 FY07 Site Management Plan (SMP) to Kentucky and EPA

**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.

**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, fixed-base 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 fiscal year. D1 FY07 SMP was issued November 17, 2006. Ky provided comments on 2/26/07. EPA requested an extension to the review period.

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

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

None.

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

None.

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

None.

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

A summary of the FY07 SMP was presented to the Citizens Advisory Board on January 18, 2007.

**VIII. Changes in relevant personnel:**

None.

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

Not applicable.

**APPENDIX A**  
**NORTHEAST AND NORTHWEST PLUME**  
**WATER WITHDRAWAL REPORTS**

**THIS PAGE INTENTIONALLY LEFT BLANK**

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

Day	October 2006	November 2006	December 2006	January 2007	February 2007	March 2007
1	210,033	263,600	260,700	290,175	275,000	259,400
2	235,900	261,600	260,700	252,700	280,833	255,267
3	256,600	288,100	260,700	285,700	280,833	255,267
4	247,300	288,100	282,800	255,200	280,833	255,267
5	265,200	288,100	278,300	271,333	281,100	305,900
6	269,333	228,800	254,300	271,333	274,300	198,100
7	269,333	264,000	284,300	271,333	271,400	264,800
8	269,333	283,000	274,400	279,400	287,600	262,700
9	230,400	291,900	274,400	267,300	277,167	268,200
10	261,900	274,800	274,400	271,700	277,167	268,200
11	264,200	274,800	277,400	277,900	277,167	268,200
12	258,900	274,800	259,100	279,150	294,600	234,900
13	262,333	284,300	288,900	279,150	222,600	241,000
14	262,333	301,100	273,600	279,150	290,300	273,700
15	262,333	198,000	274,533	279,150	301,300	257,000
16	278,600	275,100	274,533	294,800	291,067	272,000
17	276,600	276,167	274,533	263,200	291,067	272,000
18	258,200	276,167	281,200	275,200	291,067	272,000
19	256,100	276,167	267,400	283,900	300,400	259,400
20	280,433	276,900	277,100	283,900	290,600	259,000
21	280,433	250,100	274,900	283,900	263,500	255,000
22	280,433	254,900	278,380	261,900	247,000	263,700
23	255,300	254,900	278,380	221,800	257,033	258,567
24	270,500	254,900	278,380	330,200	257,033	258,567
25	266,500	254,900	278,380	283,600	257,033	258,567
26	277,000	254,900	278,380	275,467	266,500	148,400
27	268,900	228,400	270,200	275,467	253,900	120,100
28	268,900	0	260,500	275,467	260,800	280,500
29	268,900	280,300	290,175	297,900	n/a	266,700
30	248,400	279,500	290,175	263,900	n/a	207,200
31	285,600	n/a	290,175	289,500	n/a	207,200
Monthly Total	8,146,233	7,758,300	8,521,325	8,570,775	7,699,200	7,726,800
*Daily Average	262,782	258,610	274,881	276,477	274,971	249,252
Days water pumped	31	30	31	31	28	31

\* Value based on number of days water was pumped

A-3

61

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

Day	October 2006	November 2006	December 2006	January 2007	February 2007	March 2007
1	302,623	16,720	258,380	266,993	303,300	313,040
2	294,110	37,700	258,370	262,570	305,493	301,967
3	289,770	78,420	258,370	285,650	305,493	301,967
4	294,270	0	310,630	294,110	305,493	301,967
5	302,636	0	279,900	282,203	262,740	329,120
6	303,005	0	177,420	282,203	294,530	253,250
7	303,005	0	258,530	282,203	300,050	316,410
8	303,005	229,800	256,010	300,880	258,840	296,570
9	263,390	310,040	251,660	265,250	304,923	402,490
10	292,110	262,830	251,660	264,490	304,923	0
11	296,930	262,830	308,210	258,000	304,923	0
12	298,140	262,830	295,310	267,645	308,070	236,400
13	298,307	328,870	283,110	267,645	296,850	0
14	298,307	344,670	315,110	267,645	303,330	0
15	298,307	272,750	305,007	267,645	312,260	306,590
16	302,060	256,630	305,007	268,670	304,933	292,743
17	323,240	308,777	305,007	278,280	304,933	263,633
18	264,140	308,777	311,750	306,970	304,933	263,633
19	291,860	308,777	272,730	280,440	307,630	299,090
20	301,087	278,260	261,860	280,440	303,250	256,450
21	301,087	264,820	304,880	280,440	301,870	300,800
22	301,087	262,212	269,074	241,560	300,830	306,990
23	286,280	262,212	269,074	297,700	303,360	306,080
24	293,850	262,212	269,074	307,560	303,360	306,080
25	289,840	262,212	269,074	282,860	303,360	306,080
26	305,310	262,212	269,074	264,700	313,230	305,500
27	300,440	305,990	168,390	264,700	299,010	305,010
28	300,440	269,890	259,500	264,700	302,720	309,770
29	300,440	305,530	266,993	289,250	n/a	296,620
30	281,110	267,520	266,993	249,990	n/a	244,395
31	70,280	n/a	266,993	264,140	n/a	244,395
Monthly Total	8,950,463	6,593,490	8,403,148	8,537,533	8,424,640	7,967,040
*Daily Average	288,725	219,783	271,069	275,404	300,880	257,001
Days water pumped	31	30	31	31	28	31

\*Value based on number of days water was pumped

62  
A-4

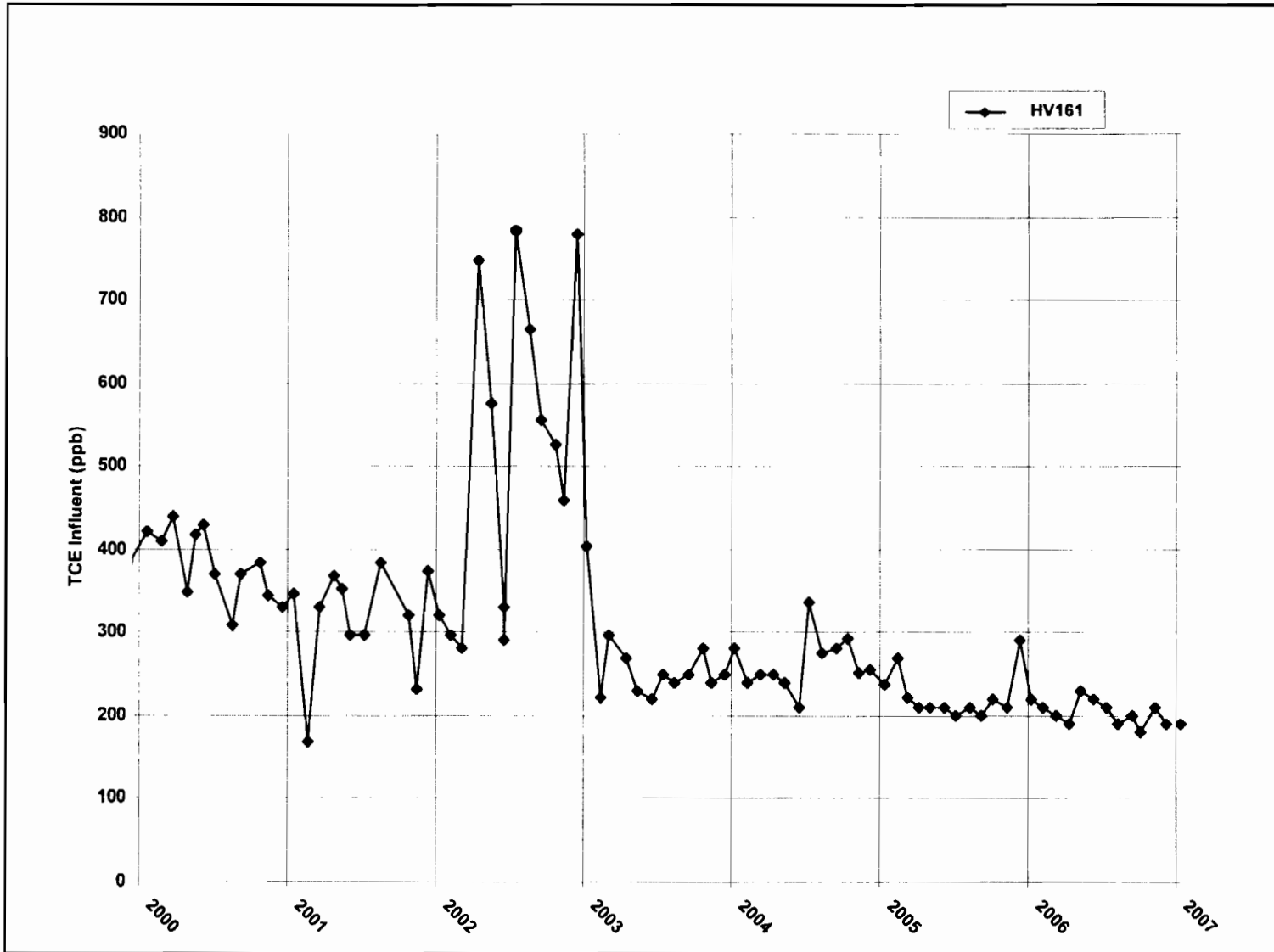
**APPENDIX B**  
**FIGURES 1 THROUGH 7**

**THIS PAGE INTENTIONALLY LEFT BLANK**



65

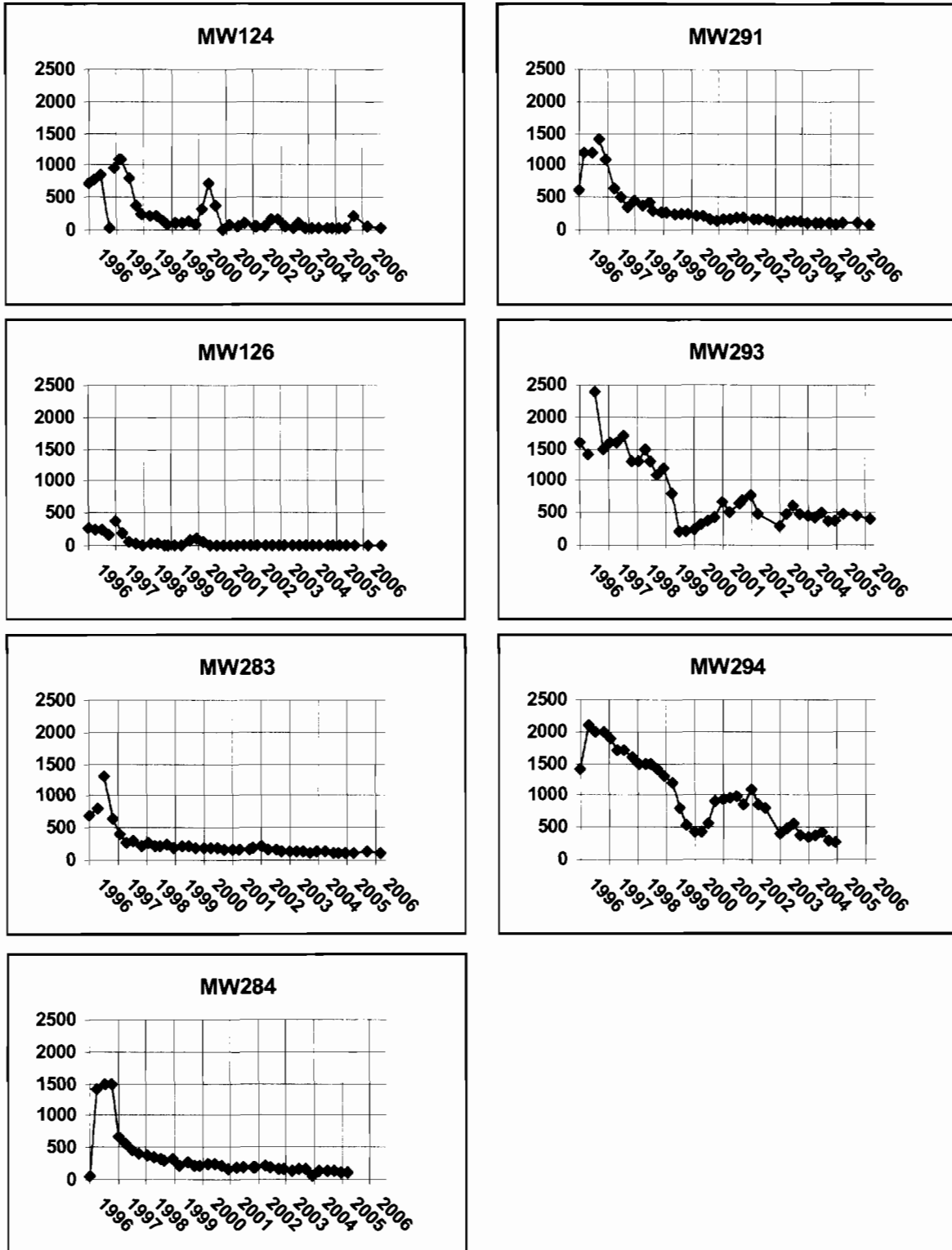
B-3



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

Figure 1. Northeast Plume Containment System Influent TCE Concentration

TCE (ppb)

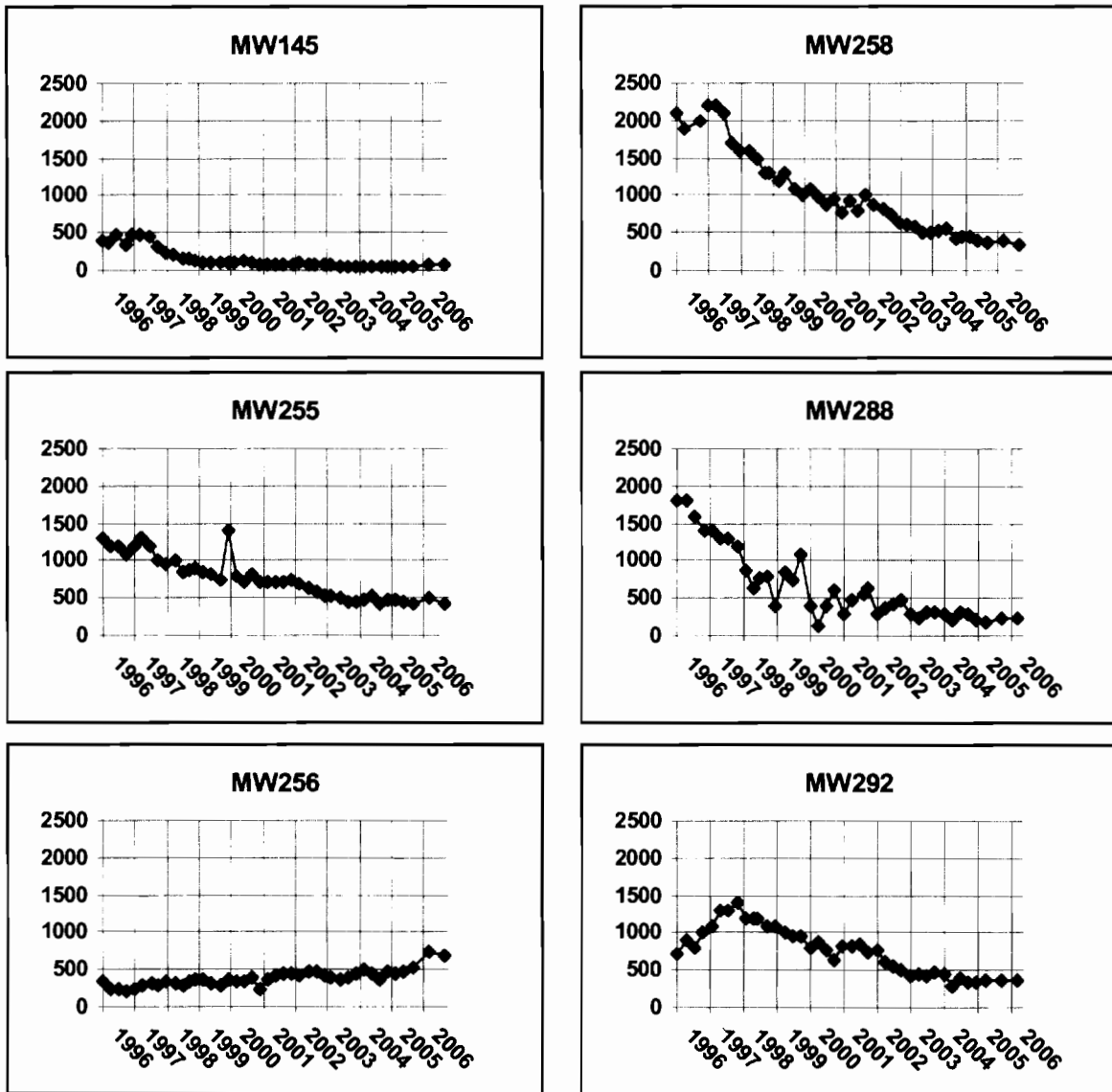


NOTE: Data rejected by validation or assessment have not been graphed.

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

66

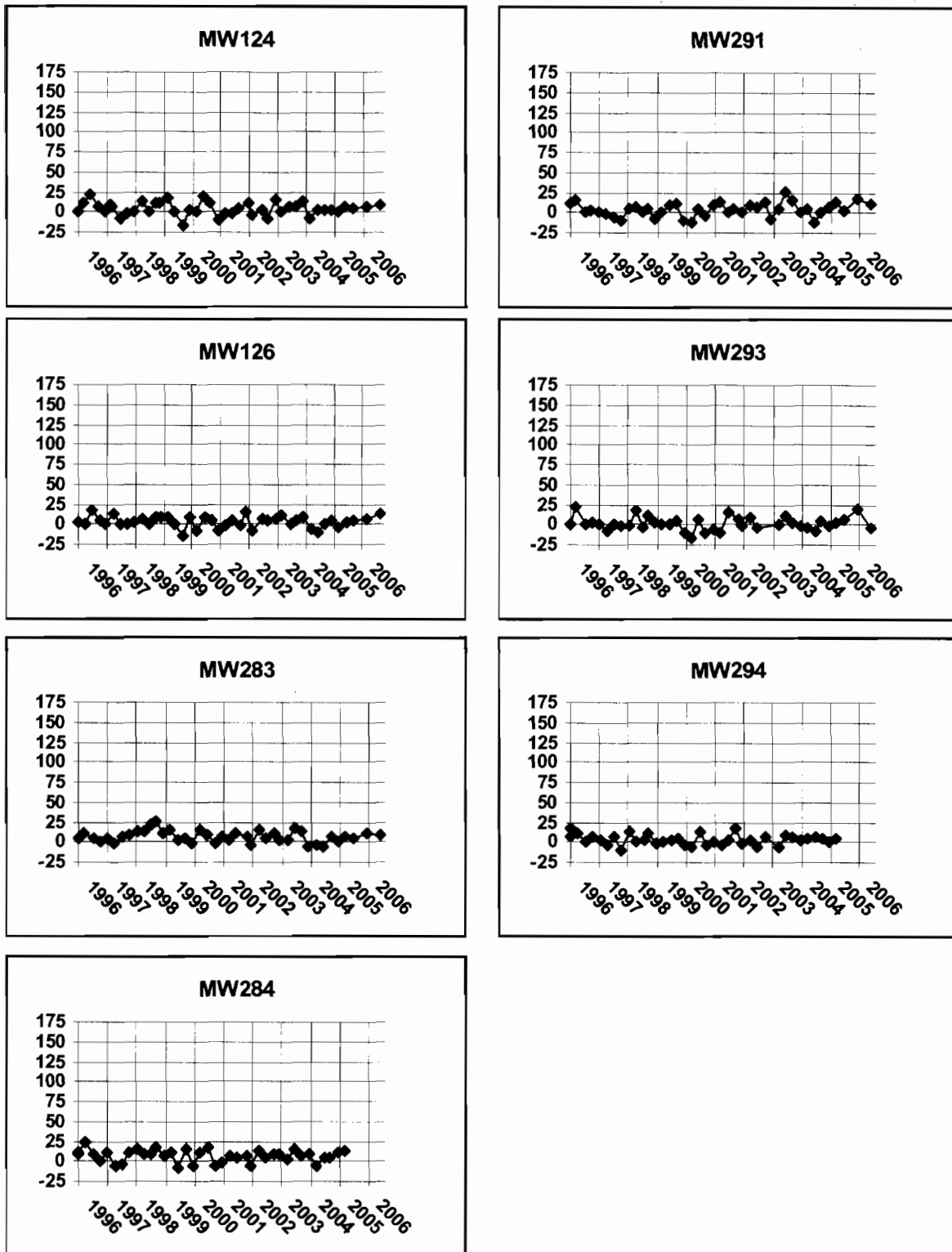
TCE (ppb)



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

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

Tc-99 (pCi/L)

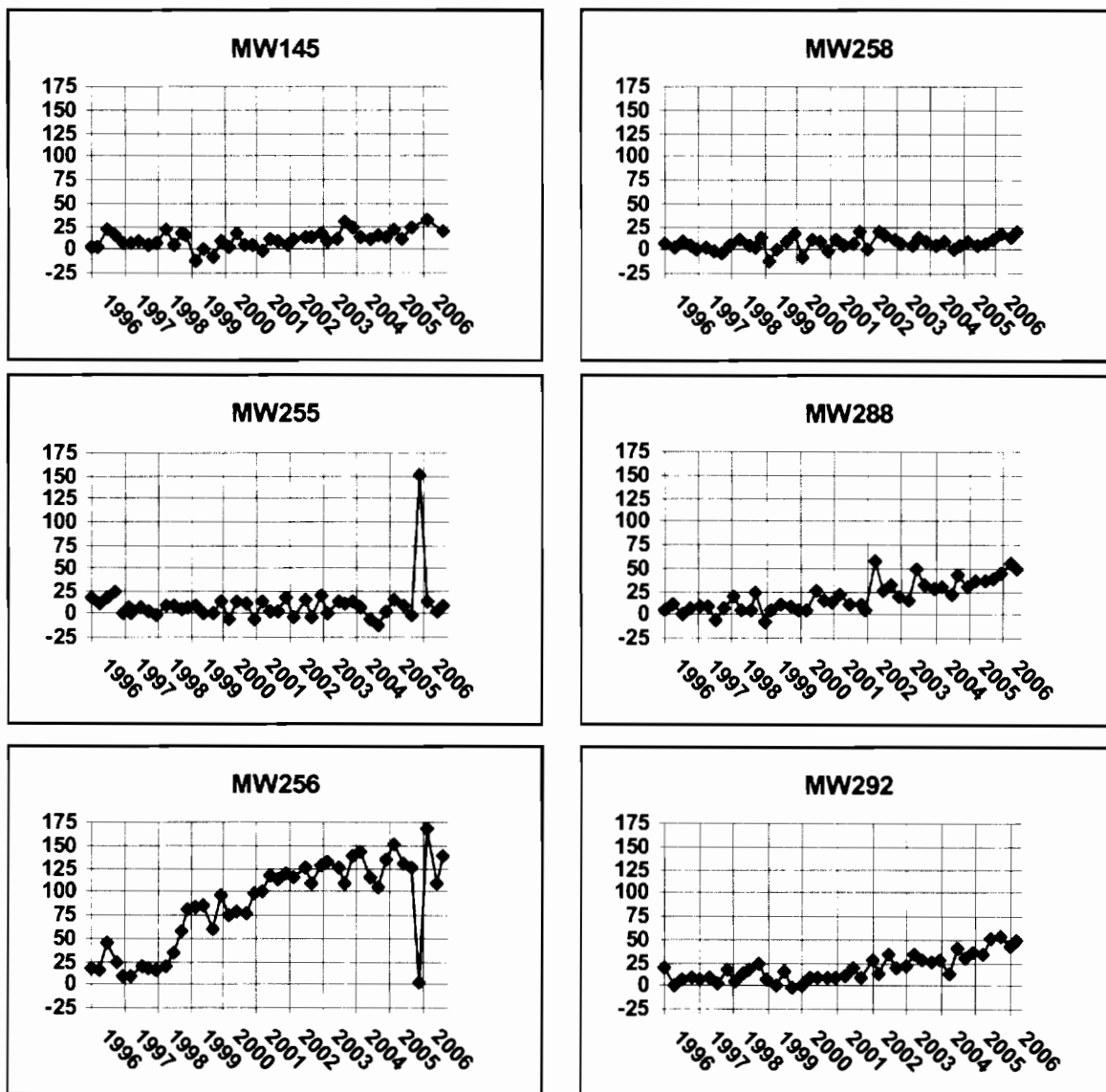


NOTE: Data rejected by validation or assessment have not been graphed.

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

68

### Tc-99 (pCi/L)

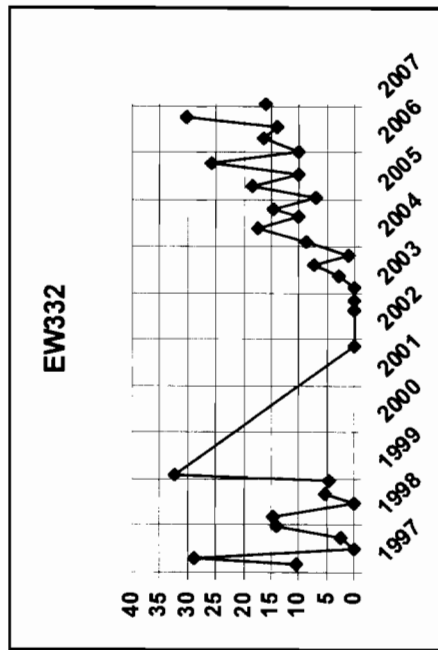
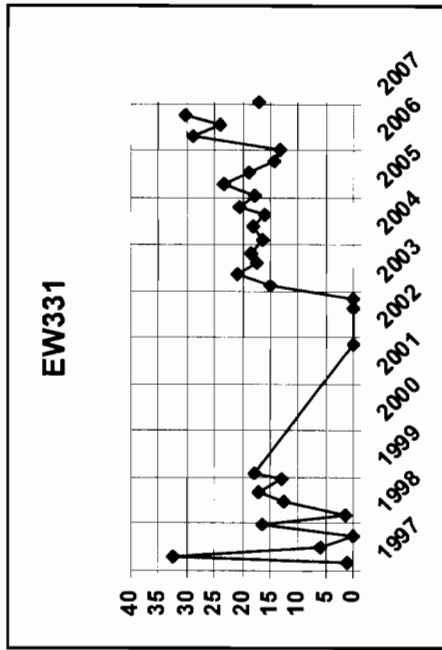


NOTE: Data rejected by validation or assessment have not been graphed.

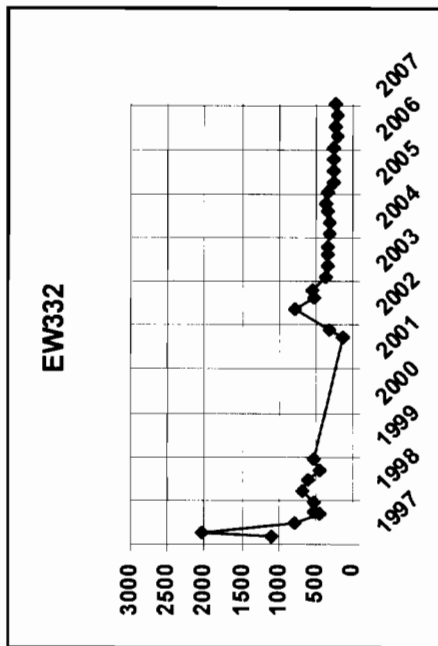
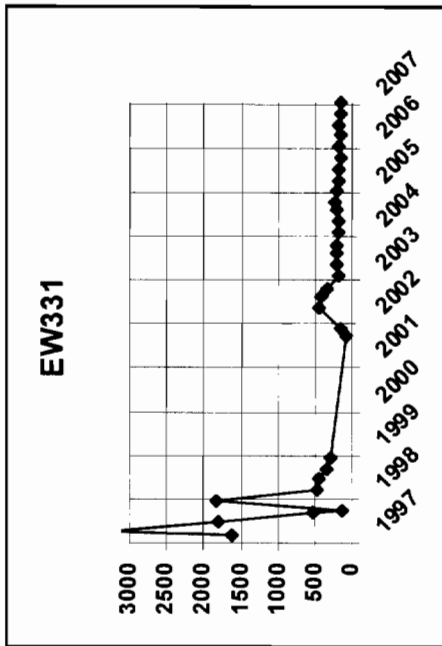
Figure 2d. Northeast Plume—Tc-99 Activities in Upgradient Wells

69

<sup>99</sup>Tc (pCi/L)



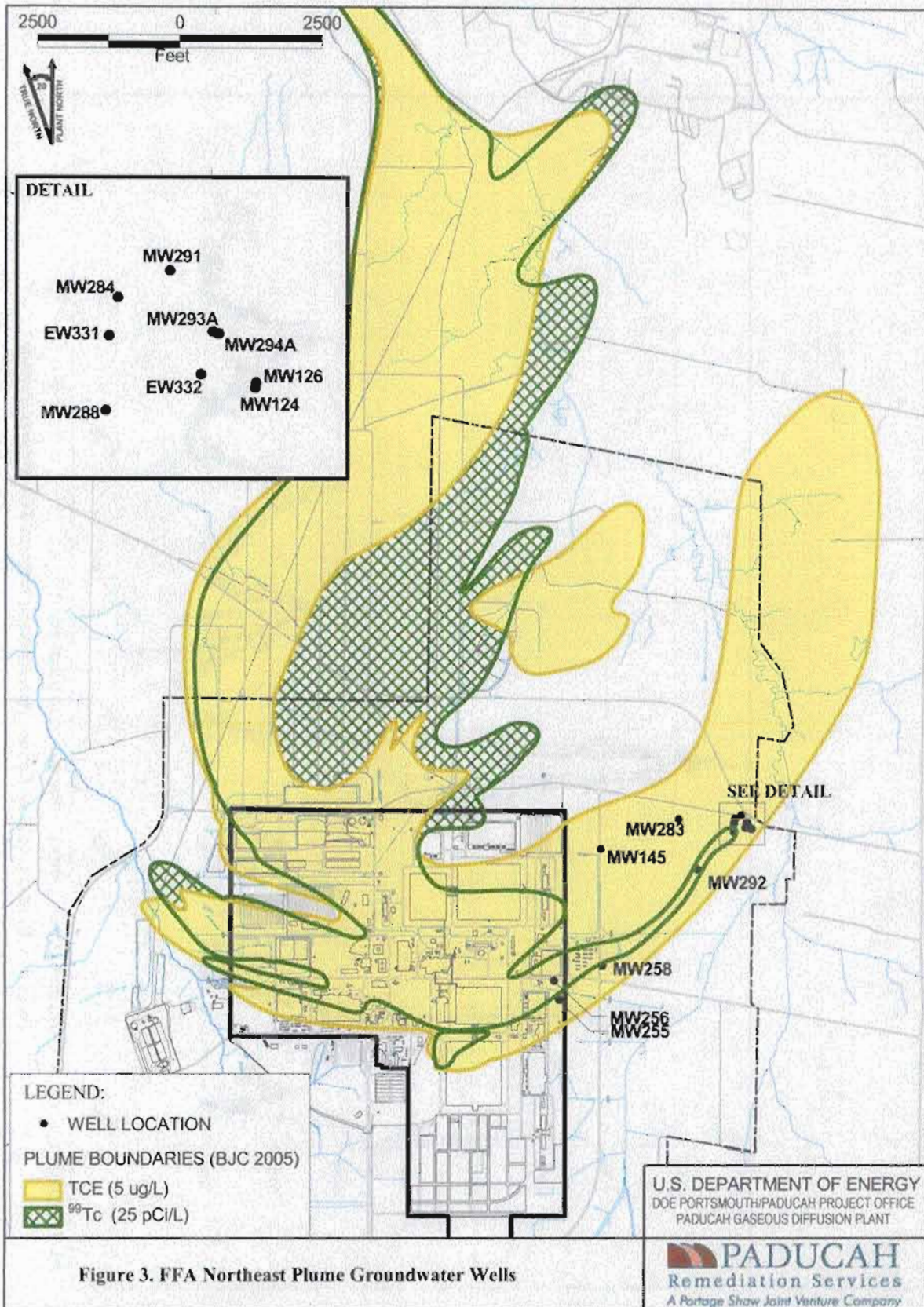
TCE (ppb)



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

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

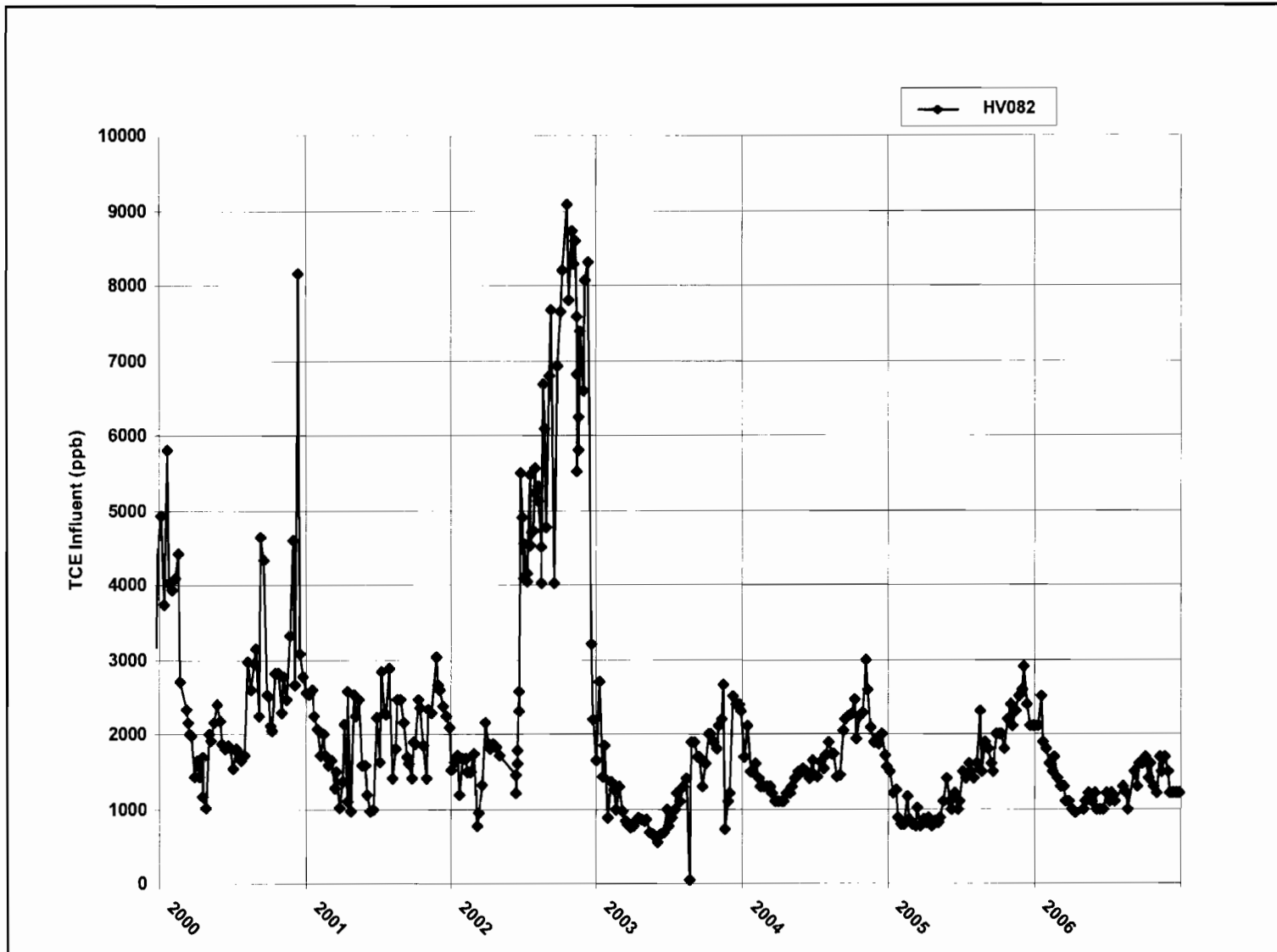
75



71

72

B-10



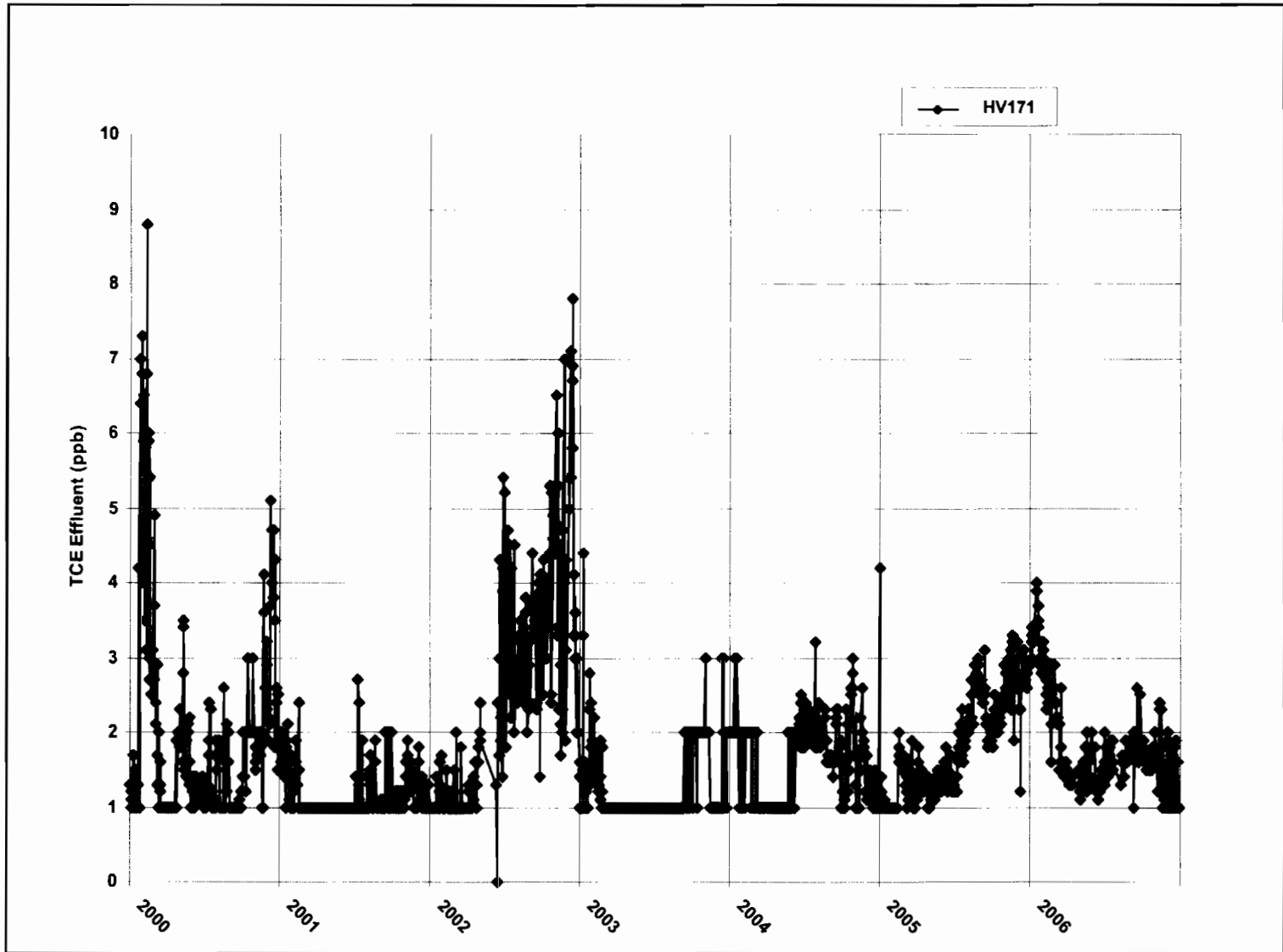
NOTE: Data rejected by validation or assessment have not been graphed.

Figure 4a. Northwest Plume Groundwater System Influent TCE Concentrations



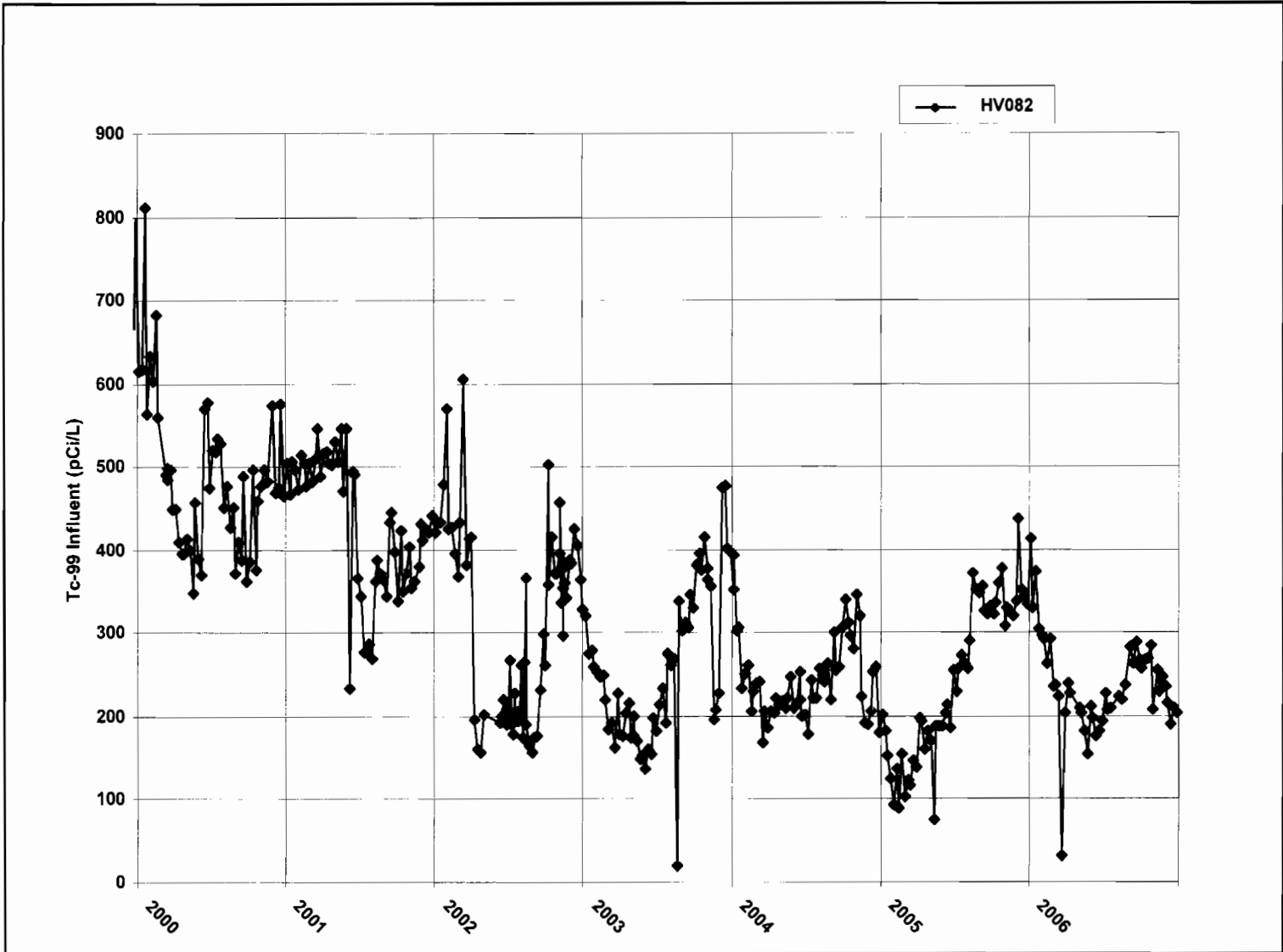
73

B-11



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

Figure 4b. Northwest Plume Groundwater System Effluent TCE Concentrations



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

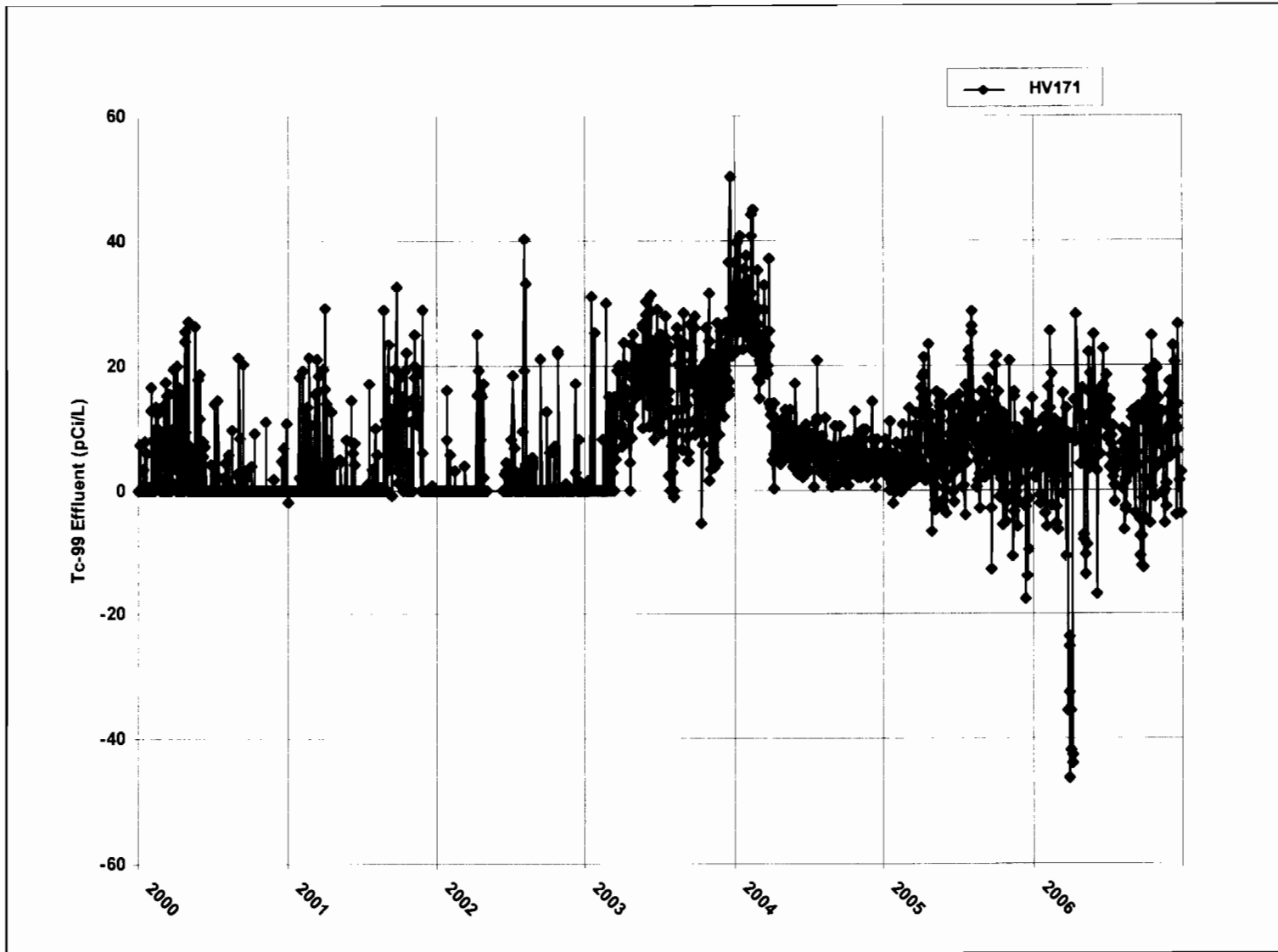
Figure 5a. Northwest Plume Groundwater System Influent Tc-99 Activity

74

B-12

75

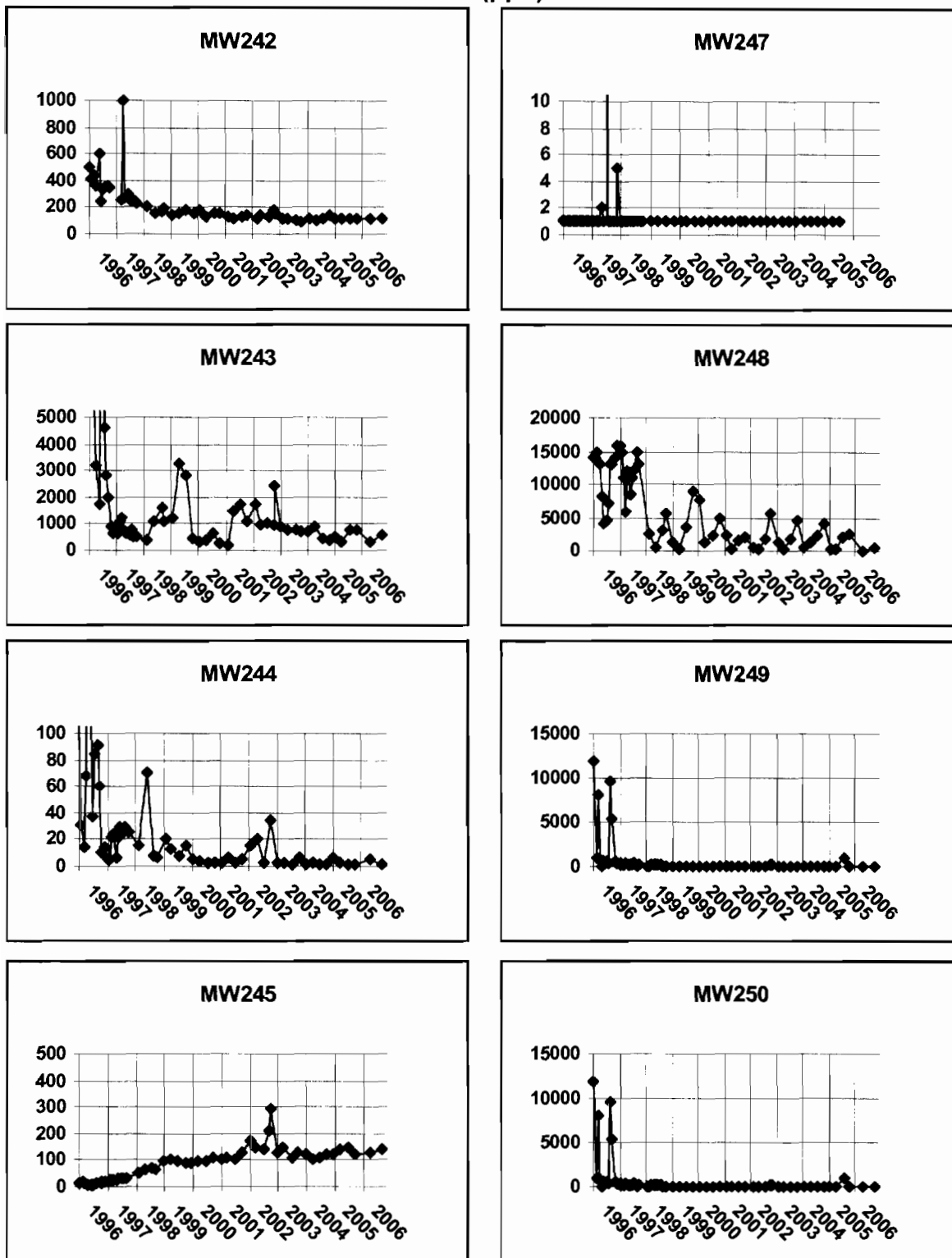
B-13



NOTE: Data rejected by validation or assessment have not been graphed.  
One value, 686 pCi/L, detected 1/5/2000 was omitted for graphing.

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

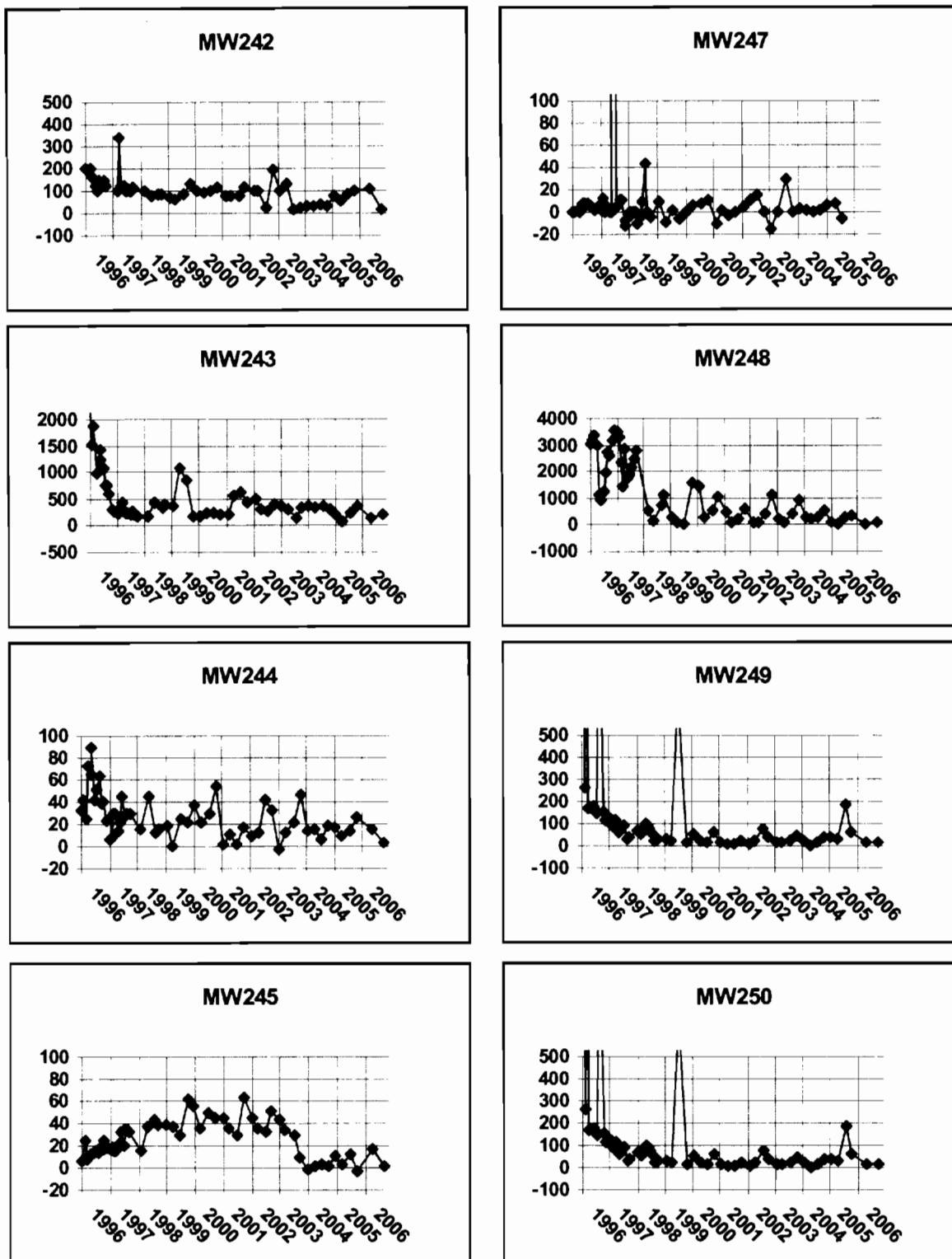
TCE (ppb)



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

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

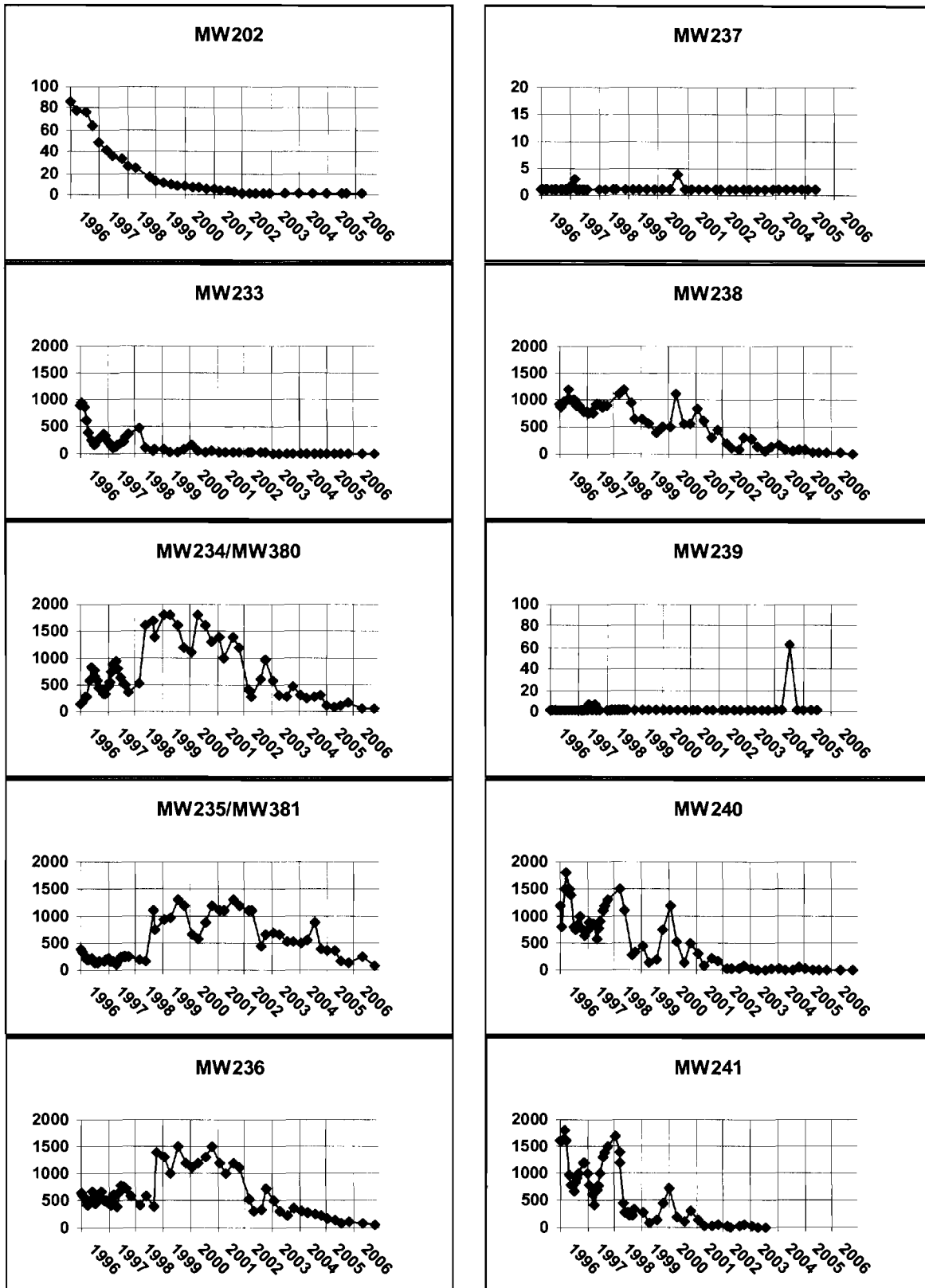
Tc-99 (pCi/L)



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

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

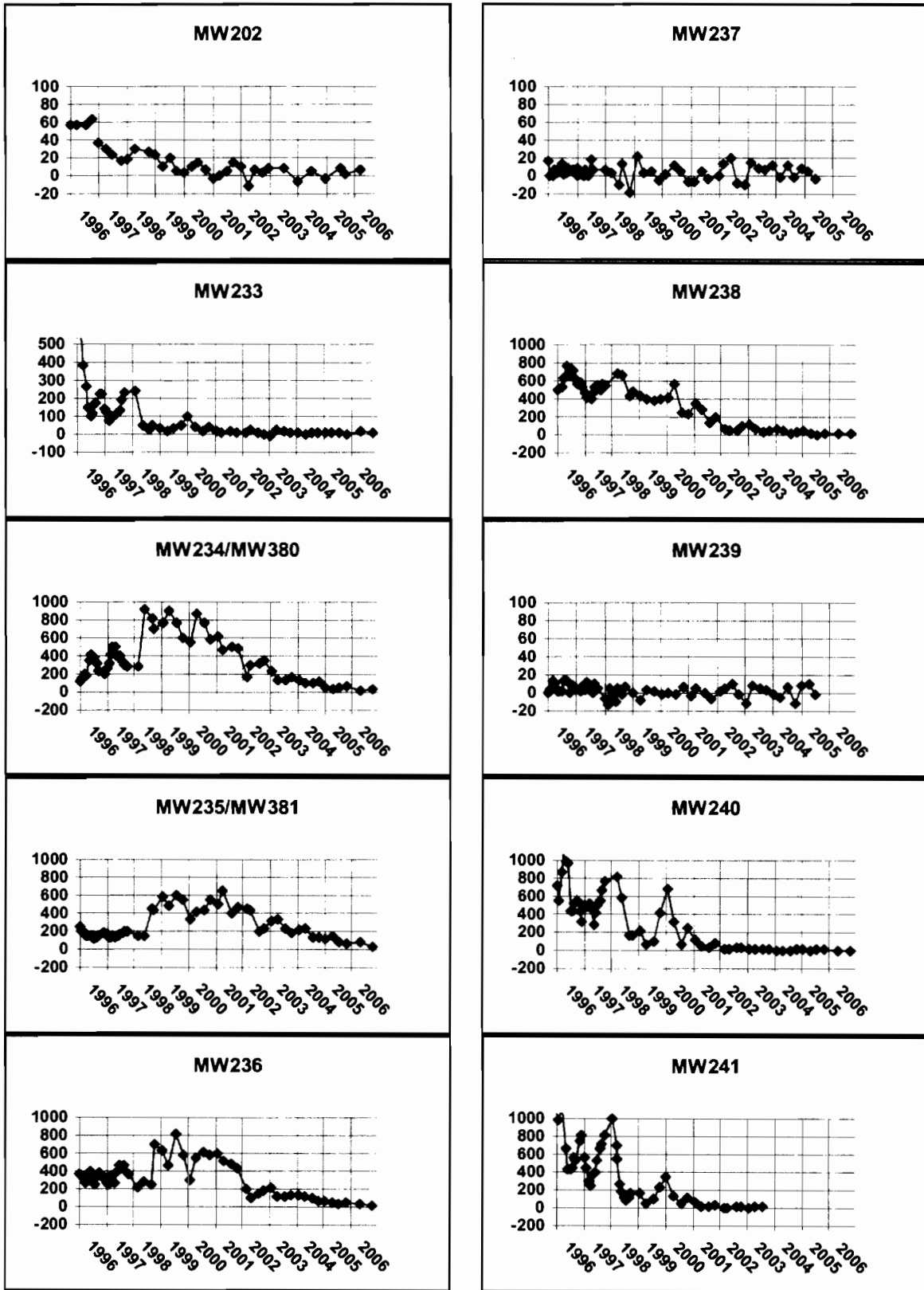
TCE (ppb)



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

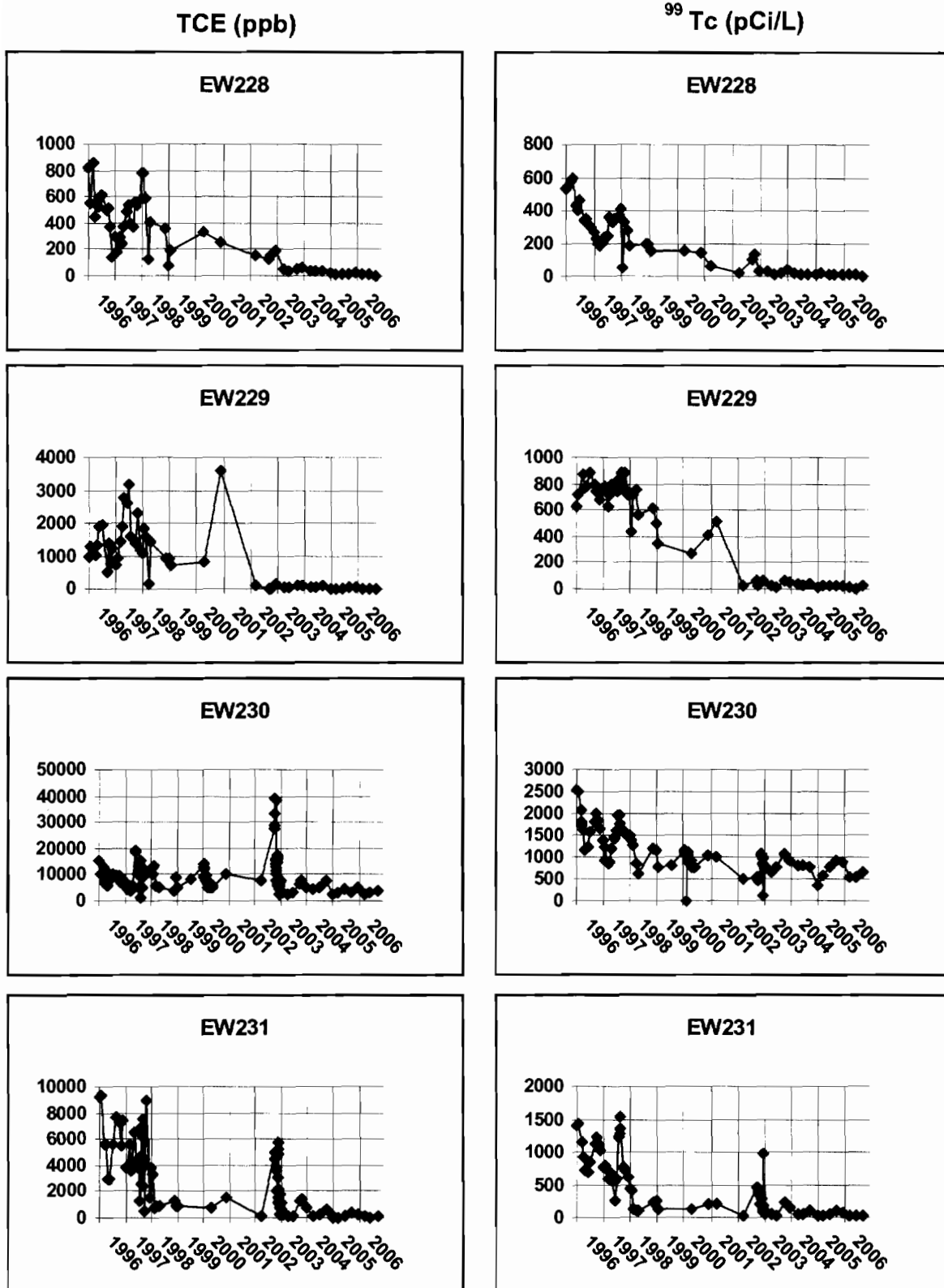
Figure 6c. Northwest Plume—North Well Field TCE Concentrations

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



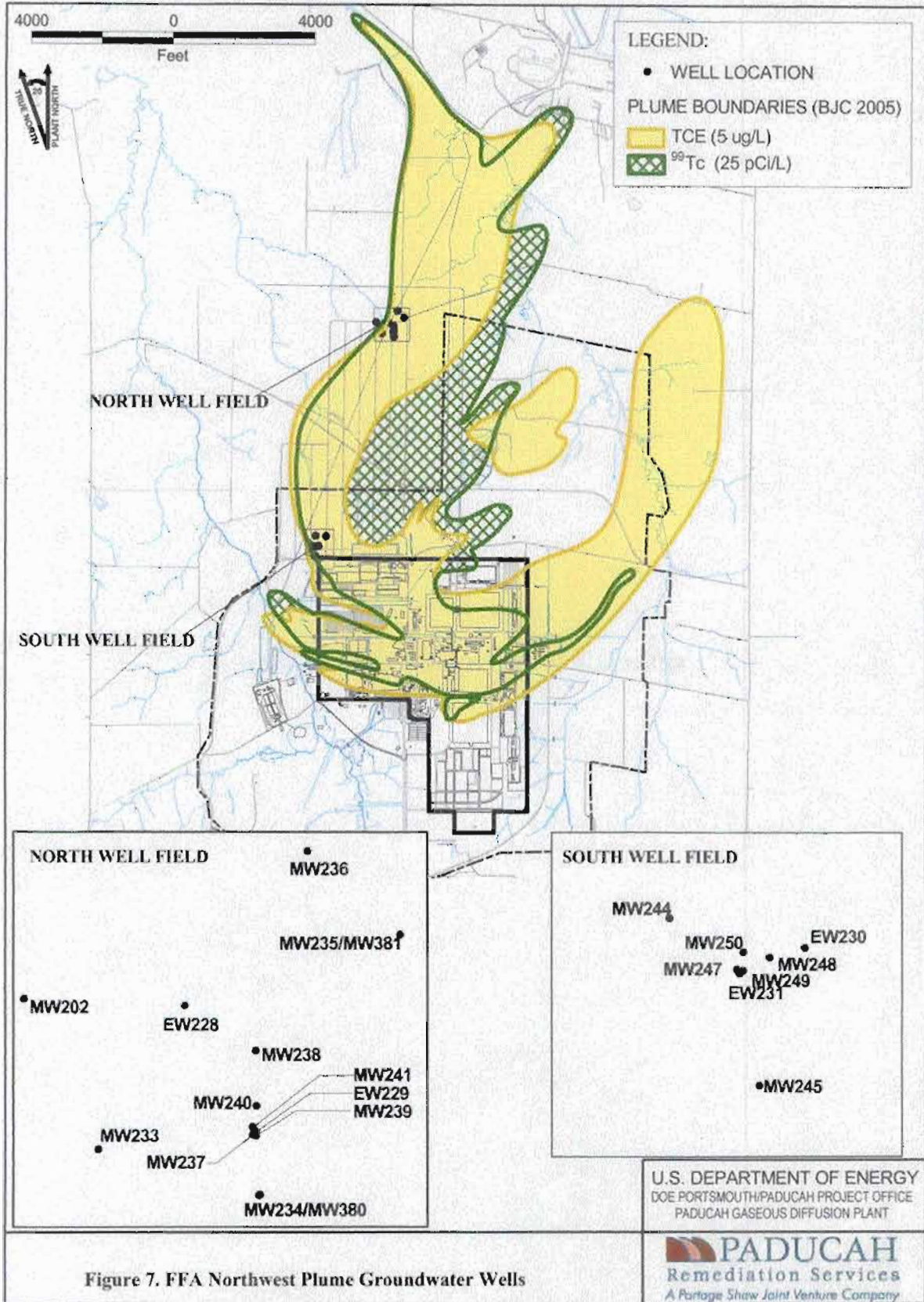


Figure 7. FFA Northwest Plume Groundwater Wells

Figure No. c5ac90005sk016.apr  
DATE 09-12-06

**THIS PAGE INTENTIONALLY LEFT BLANK**

**APPENDIX C**  
**C-746-K LANDFILL DATA**

**THIS PAGE INTENTIONALLY LEFT BLANK**

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW300	Collected	Results	Units	
<b>Volatiles</b>					
					<b>Frequency Semiannual</b>
	<b>1,1,1-Trichloroethane</b>				
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>1,1,2-Trichloroethane</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>1,1-Dichloroethane</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>1,1-Dichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>1,2-Dichloroethane</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Benzene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Bromodichloromethane</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Carbon Tetrachloride</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Chloroform</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>cis-1,2-Dichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	D 530	ug/L	
	<b>Ethylbenzene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Tetrachloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Toluene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Total Xylene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 300	ug/L	
	<b>trans-1,2-Dichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 100	ug/L	
	<b>Trichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW300KG1-07	10/23/2006	U 20	ug/L	

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW300	Collected	Results	Units	Frequency
<b>Vinyl Chloride</b>					
Sample	MW300KG1-07	10/23/2006	D 60	ug/L	Semiannual
<b>Radionuclides</b>					
<b>Gross Alpha</b>					
Sample	MW300KG1-07	10/23/2006	U -0.251	pCi/L	Semiannual
<b>Gross Beta</b>					
Sample	MW300KG1-07	10/23/2006	U 16.2	pCi/L	Semiannual
<b>Technetium-99</b>					
Sample	MW300KG1-07	10/23/2006	U 8.62	pCi/L	Semiannual
<b>Metals</b>					
<b>Aluminum</b>					
Sample	MW300KG1-07	10/23/2006	0.334	mg/L	Semiannual
<b>Arsenic</b>					
Sample	MW300KG1-07	10/23/2006	0.00396	mg/L	Semiannual
<b>Barium</b>					
Sample	MW300KG1-07	10/23/2006	0.0155	mg/L	Semiannual
<b>Beryllium</b>					
Sample	MW300KG1-07	10/23/2006	0.00105	mg/L	Semiannual
<b>Cadmium</b>					
Sample	MW300KG1-07	10/23/2006	U 0.0006	mg/L	Semiannual
<b>Calcium</b>					
Sample	MW300KG1-07	10/23/2006	316	mg/L	Semiannual
<b>Iron</b>					
Sample	MW300KG1-07	10/23/2006	124	mg/L	Semiannual
<b>Iron (2+)</b>					
Sample	MW300KG1-07	10/23/2006	3	mg/L	Semiannual
<b>Lead</b>					
Sample	MW300KG1-07	10/23/2006	0.00216	mg/L	Semiannual
<b>Magnesium</b>					
Sample	MW300KG1-07	10/23/2006	79.9	mg/L	Semiannual
<b>Manganese</b>					
Sample	MW300KG1-07	10/23/2006	16.2	mg/L	Semiannual

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW300	Collected	Results	Units	Frequency	Semiannual
<b>Nickel</b>						
Sample	MW300KG1-07	10/23/2006	N 0.0666	mg/L		
<b>Potassium</b>						
Sample	MW300KG1-07	10/23/2006	19.5	mg/L		
<b>Sodium</b>						
Sample	MW300KG1-07	10/23/2006	22.2	mg/L		
<b>Uranium</b>						
Sample	MW300KG1-07	10/23/2006	U 0.001	mg/L		
<b>Dissolved Metals</b>						
<b>Arsenic, Dissolved</b>						
Sample	MW300KG1-07	10/23/2006	0.00222	mg/L		
<b>Barium, Dissolved</b>						
Sample	MW300KG1-07	10/23/2006	BX 0.0143	mg/L		
<b>Beryllium, Dissolved</b>						
Sample	MW300KG1-07	10/23/2006	0.00126	mg/L		
<b>Cadmium, Dissolved</b>						
Sample	MW300KG1-07	10/23/2006	U 0.0006	mg/L		
<b>Lead, Dissolved</b>						
Sample	MW300KG1-07	10/23/2006	0.00225	mg/L		
<b>Uranium, Dissolved</b>						
Sample	MW300KG1-07	10/23/2006	NU 0.001	mg/L		
<b>Other</b>						
<b>Alkalinity</b>						
Sample	MW300KG1-07	10/23/2006	> 500	mg/L		
<b>Chloride</b>						
Sample	MW300KG1-07	10/23/2006	12	mg/L		
<b>Conductivity</b>						
Sample	MW300KG1-07	10/23/2006	1.87	umho/cm		
<b>Nitrate as Nitrogen</b>						
Sample	MW300KG1-07	10/23/2006	U 1	mg/L		
<b>Sulfate</b>						
Sample	MW300KG1-07	10/23/2006	1340	mg/L		

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW300	Collected	Results	Units	Frequency
					Semiannual
	<b>Turbidity</b>				
Sample	MW300KG1-07	10/23/2006	13.4	NTU	

---



# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW301	Collected	Results	Units	
<b>Volatiles</b>					
					<b>Frequency Semiannual</b>
	<b>1,1,1-Trichloroethane</b>				
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>1,1,2-Trichloroethane</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>1,1-Dichloroethane</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	5.8	ug/L	
	<b>1,1-Dichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	5.9	ug/L	
	<b>1,2-Dichloroethane</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Benzene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Bromodichloromethane</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Carbon Tetrachloride</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Chloroform</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>cis-1,2-Dichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	72	ug/L	
	<b>Ethylbenzene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Tetrachloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Toluene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Total Xylene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 15	ug/L	
	<b>trans-1,2-Dichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 5	ug/L	
	<b>Trichloroethene</b>				<b>Frequency Semiannual</b>
Sample	MW301KG1-07	10/23/2006	U 1	ug/L	

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW301	Collected	Results	Units	Frequency
<b>Vinyl Chloride</b>					
Sample	MW301KG1-07	10/23/2006	4.4	ug/L	Semiannual
<b>Radionuclides</b>					
<b>Gross Alpha</b>					
Sample	MW301KG1-07	10/23/2006	U 13.7	pCi/L	Semiannual
<b>Gross Beta</b>					
Sample	MW301KG1-07	10/23/2006	U 31.7	pCi/L	Semiannual
<b>Technetium-99</b>					
Sample	MW301KG1-07	10/23/2006	U 15.3	pCi/L	Semiannual
<b>Metals</b>					
<b>Aluminum</b>					
Sample	MW301KG1-07	10/23/2006	0.76	mg/L	Semiannual
<b>Arsenic</b>					
Sample	MW301KG1-07	10/23/2006	0.00171	mg/L	Semiannual
<b>Barium</b>					
Sample	MW301KG1-07	10/23/2006	0.0237	mg/L	Semiannual
<b>Beryllium</b>					
Sample	MW301KG1-07	10/23/2006	U 0.001	mg/L	Semiannual
<b>Cadmium</b>					
Sample	MW301KG1-07	10/23/2006	U 0.0006	mg/L	Semiannual
<b>Calcium</b>					
Sample	MW301KG1-07	10/23/2006	512	mg/L	Semiannual
<b>Iron</b>					
Sample	MW301KG1-07	10/23/2006	295	mg/L	Semiannual
<b>Iron (2+)</b>					
Sample	MW301KG1-07	10/23/2006	2.96	mg/L	Semiannual
<b>Lead</b>					
Sample	MW301KG1-07	10/23/2006	BU 0.0013	mg/L	Semiannual
<b>Magnesium</b>					
Sample	MW301KG1-07	10/23/2006	109	mg/L	Semiannual
<b>Manganese</b>					
Sample	MW301KG1-07	10/23/2006	20.5	mg/L	Semiannual

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW301	Collected	Results	Units	Frequency	Semiannual
<b>Nickel</b>						
Sample	MW301KG1-07	10/23/2006	N 0.0147	mg/L		
<b>Potassium</b>						
Sample	MW301KG1-07	10/23/2006	41	mg/L		
<b>Sodium</b>						
Sample	MW301KG1-07	10/23/2006	60.7	mg/L		
<b>Uranium</b>						
Sample	MW301KG1-07	10/23/2006	0.00203	mg/L		
<b>Dissolved Metals</b>						
<b>Arsenic, Dissolved</b>						
Sample	MW301KG1-07	10/23/2006	0.00208	mg/L		
<b>Barium, Dissolved</b>						
Sample	MW301KG1-07	10/23/2006	BX 0.0644	mg/L		
<b>Beryllium, Dissolved</b>						
Sample	MW301KG1-07	10/23/2006	U 0.001	mg/L		
<b>Cadmium, Dissolved</b>						
Sample	MW301KG1-07	10/23/2006	U 0.0006	mg/L		
<b>Lead, Dissolved</b>						
Sample	MW301KG1-07	10/23/2006	U 0.0013	mg/L		
<b>Uranium, Dissolved</b>						
Sample	MW301KG1-07	10/23/2006	N 0.00659	mg/L		
<b>Other</b>						
<b>Alkalinity</b>						
Sample	MW301KG1-07	10/23/2006	25	mg/L		
<b>Chloride</b>						
Sample	MW301KG1-07	10/23/2006	41	mg/L		
<b>Conductivity</b>						
Sample	MW301KG1-07	10/23/2006	2.87	umho/cm		
<b>Nitrate as Nitrogen</b>						
Sample	MW301KG1-07	10/23/2006	U 1	mg/L		
<b>Sulfate</b>						
Sample	MW301KG1-07	10/23/2006	1860	mg/L		

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW301	Collected	Results	Units	Frequency
					Semiannual
	<b>Turbidity</b>				
Sample	MW301KG1-07	10/23/2006	87.1	NTU	

---

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW302	Collected	Results	Units	
<b>Volatiles</b>					
<b>1,1,1-Trichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>1,1,2-Trichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>1,1-Dichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>1,1-Dichloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>1,2-Dichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Benzene</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Bromodichloromethane</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Carbon Tetrachloride</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Chloroform</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>cis-1,2-Dichloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Ethylbenzene</b>					<b>Frequency Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW302	Collected	Results	Units	Frequency
<b>Tetrachloroethene</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Toluene</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Total Xylene</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 15	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 15	ug/L	
<b>trans-1,2-Dichloroethene</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 5	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 5	ug/L	
<b>Trichloroethene</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 1	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 1	ug/L	
<b>Vinyl Chloride</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 2	ug/L	
Sample	MW302DKG1-07	10/26/2006	U 2	ug/L	
<b>Radionuclides</b>					
<b>Gross Alpha</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U -0.702	pCi/L	
Sample	MW302DKG1-07	10/26/2006	U -3.44	pCi/L	
<b>Gross Beta</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 3.23	pCi/L	
Sample	MW302DKG1-07	10/26/2006	U 2.09	pCi/L	
<b>Technetium-99</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 8.62	pCi/L	
Sample	MW302DKG1-07	10/26/2006	U 8.97	pCi/L	
<b>Metals</b>					
<b>Aluminum</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	0.347	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.2	mg/L	
<b>Arsenic</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	0.00119	mg/L	
Sample	MW302DKG1-07	10/26/2006	0.00111	mg/L	

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW302	Collected	Results	Units	Frequency
<b>Barium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	0.0755	mg/L	
Sample	MW302DKG1-07	10/26/2006	0.0654	mg/L	
<b>Beryllium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.001	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.001	mg/L	
<b>Cadmium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.0006	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.0006	mg/L	
<b>Calcium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	49	mg/L	
Sample	MW302DKG1-07	10/26/2006	48	mg/L	
<b>Iron</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	0.479	mg/L	
Sample	MW302DKG1-07	10/26/2006	0.128	mg/L	
<b>Iron (2+)</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	0.26	mg/L	
Sample	MW302DKG1-07	10/26/2006	0.26	mg/L	
<b>Lead</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	BU 0.0013	mg/L	
Sample	MW302DKG1-07	10/26/2006	BU 0.0013	mg/L	
<b>Magnesium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	27.4	mg/L	
Sample	MW302DKG1-07	10/26/2006	27.3	mg/L	
<b>Manganese</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	X 0.99	mg/L	
Sample	MW302DKG1-07	10/26/2006	X 0.986	mg/L	
<b>Nickel</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	N 0.0109	mg/L	
Sample	MW302DKG1-07	10/26/2006	N 0.00876	mg/L	
<b>Potassium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	0.438	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.2	mg/L	

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW302	Collected	Results	Units	Frequency
<b>Sodium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	86.7	mg/L	
Sample	MW302DKG1-07	10/26/2006	82.8	mg/L	
<b>Uranium</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.001	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.001	mg/L	
<b>Dissolved Metals</b>					
<b>Arsenic, Dissolved</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.001	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.001	mg/L	
<b>Barium, Dissolved</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	BX 0.0714	mg/L	
Sample	MW302DKG1-07	10/26/2006	BX 0.0697	mg/L	
<b>Beryllium, Dissolved</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.001	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.001	mg/L	
<b>Cadmium, Dissolved</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.0006	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.0006	mg/L	
<b>Lead, Dissolved</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 0.0013	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 0.0013	mg/L	
<b>Uranium, Dissolved</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	NU 0.001	mg/L	
Sample	MW302DKG1-07	10/26/2006	NU 0.001	mg/L	
<b>Other</b>					
<b>Alkalinity</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	15	mg/L	
Sample	MW302DKG1-07	10/26/2006	15	mg/L	
<b>Chloride</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	11	mg/L	
Sample	MW302DKG1-07	10/26/2006	11	mg/L	
<b>Conductivity</b>					
					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	781	umho/cm	
Sample	MW302DKG1-07	10/26/2006	781	umho/cm	



## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW302	Collected	Results	Units	Frequency
<b>Nitrate as Nitrogen</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	U 1	mg/L	
Sample	MW302DKG1-07	10/26/2006	U 1	mg/L	
<b>Sulfate</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	140	mg/L	
Sample	MW302DKG1-07	10/26/2006	140	mg/L	
<b>Turbidity</b>					<b>Semiannual</b>
Sample	MW302KG1-07	10/26/2006	12.4	NTU	
Sample	MW302DKG1-07	10/26/2006	12.4	NTU	

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW344	Collected	Results	Units	
<b>Volatiles</b>					
<b>1,1,1-Trichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>1,1,2-Trichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>1,1-Dichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>1,1-Dichloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>1,2-Dichloroethane</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Benzene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Bromodichloromethane</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Carbon Tetrachloride</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Chloroform</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>cis-1,2-Dichloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Ethylbenzene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Tetrachloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Toluene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Total Xylene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 15	ug/L	
<b>trans-1,2-Dichloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 5	ug/L	
<b>Trichloroethene</b>					<b>Frequency Semiannual</b>
Sample	MW344KG1-07	10/26/2006	U 1	ug/L	

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW344	Collected	Results	Units	Frequency
<b>Vinyl Chloride</b>					
Sample	MW344KG1-07	10/26/2006	U 2	ug/L	Semiannual
<b>Radionuclides</b>					
<b>Gross Alpha</b>					
Sample	MW344KG1-07	10/26/2006	U 2.45	pCi/L	Semiannual
<b>Gross Beta</b>					
Sample	MW344KG1-07	10/26/2006	U 5.05	pCi/L	Semiannual
<b>Technetium-99</b>					
Sample	MW344KG1-07	10/26/2006	U 13.9	pCi/L	Semiannual
<b>Metals</b>					
<b>Aluminum</b>					
Sample	MW344KG1-07	10/26/2006	4.32	mg/L	Semiannual
<b>Arsenic</b>					
Sample	MW344KG1-07	10/26/2006	0.00488	mg/L	Semiannual
<b>Barium</b>					
Sample	MW344KG1-07	10/26/2006	0.0774	mg/L	Semiannual
<b>Beryllium</b>					
Sample	MW344KG1-07	10/26/2006	U 0.001	mg/L	Semiannual
<b>Cadmium</b>					
Sample	MW344KG1-07	10/26/2006	U 0.0006	mg/L	Semiannual
<b>Calcium</b>					
Sample	MW344KG1-07	10/26/2006	65.6	mg/L	Semiannual
<b>Iron</b>					
Sample	MW344KG1-07	10/26/2006	5.55	mg/L	Semiannual
<b>Iron (2+)</b>					
Sample	MW344KG1-07	10/26/2006	2.67	mg/L	Semiannual
<b>Lead</b>					
Sample	MW344KG1-07	10/26/2006	0.00144	mg/L	Semiannual
<b>Magnesium</b>					
Sample	MW344KG1-07	10/26/2006	21.7	mg/L	Semiannual
<b>Manganese</b>					
Sample	MW344KG1-07	10/26/2006	X 0.472	mg/L	Semiannual

## C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW344	Collected	Results	Units	Frequency
<b>Nickel</b>					
Sample	MW344KG1-07	10/26/2006	N 0.00586	mg/L	Semiannual
<b>Potassium</b>					
Sample	MW344KG1-07	10/26/2006	1.55	mg/L	Semiannual
<b>Sodium</b>					
Sample	MW344KG1-07	10/26/2006	30.8	mg/L	Semiannual
<b>Uranium</b>					
Sample	MW344KG1-07	10/26/2006	U 0.001	mg/L	Semiannual
<b>Dissolved Metals</b>					
<b>Arsenic, Dissolved</b>					
Sample	MW344KG1-07	10/26/2006	0.00395	mg/L	Semiannual
<b>Barium, Dissolved</b>					
Sample	MW344KG1-07	10/26/2006	BX 0.0651	mg/L	Semiannual
<b>Beryllium, Dissolved</b>					
Sample	MW344KG1-07	10/26/2006	U 0.001	mg/L	Semiannual
<b>Cadmium, Dissolved</b>					
Sample	MW344KG1-07	10/26/2006	U 0.0006	mg/L	Semiannual
<b>Lead, Dissolved</b>					
Sample	MW344KG1-07	10/26/2006	U 0.0013	mg/L	Semiannual
<b>Uranium, Dissolved</b>					
Sample	MW344KG1-07	10/26/2006	NU 0.001	mg/L	Semiannual
<b>Other</b>					
<b>Alkalinity</b>					
Sample	MW344KG1-07	10/26/2006	30	mg/L	Semiannual
<b>Chloride</b>					
Sample	MW344KG1-07	10/26/2006	22	mg/L	Semiannual
<b>Conductivity</b>					
Sample	MW344KG1-07	10/26/2006	647	umho/cm	Semiannual
<b>Nitrate as Nitrogen</b>					
Sample	MW344KG1-07	10/26/2006	U 1	mg/L	Semiannual
<b>Sulfate</b>					
Sample	MW344KG1-07	10/26/2006	170	mg/L	Semiannual

# C-746-K Landfill Monitoring Semiannual Report

June - December 2006

STATION	MW344	Collected	Results	Units	Frequency
					Semiannual
	<b>Turbidity</b>				
Sample	MW344KG1-07	10/26/2006	44	NTU	

---

## Laboratory Footnotes and Qualifiers

### Footnote

- A. Insufficient uranium present in the sample to determine an assay.
- B. Maximum assay was used to calculate the MDA for total uranium activities.
- C. Normal assay was used to calculate the MDA for total uranium activities.
- D. Sample was analyzed by a non-destructive test per customer request.
- E. Gross activities are a calculated value. Gamma activity is converted to the corresponding gross alpha/beta measurement.
- F. Insufficient sample available/provided for gross beta analysis.
- G. TIMS assay used to calculate total uranium activity.
- H. No nuclide meet criteria for gross gamma.
- I. The MDA of all principle nuclide not identified and nuclide identified were summed to provide max, reportable activity
- J. No analysis result available. Sample signal too weak.
- K. No analysis result available. Total U below reporting limit.
- L. No minor isotope determination available. Signal strength insufficient.
- M. Result is biased high and MDA is biased low due to interfering lines and/or increases in BKG due to sample activity.
- N. Measured U-235 act/mass was below MDA therefore all other cal. U isotopes & U-total will be rpt as below their resp. MDAs.
- O. Gross Gamma has no output error.
- P. The max plant assay was assumed since the calculated assay was not within the range of the plant cascade assays.
- Q. Mass of U-235 is  $\leq$  MDM, thus mass of total U/U isotopes won't be reported. Total U/U isotopes will be  $<$  their MDAs  
Asbestos – Not Detected
- R. Cs-134 activity will be understated due to the short half-life and will exclude any previous site induced Cs-134.
- S. Gross gamma is a Cs-137 equivalence. Activity assumes branch yield and det eff of Cs-137 for all line in spectrum.
- T. Analyte is a common volatile laboratory contaminant
- T1. Sample analysis is below LCR for concent., however above report. limit for assay.
- T1Z1. Samp analysis below LCR concent., above report. limit assay/.05wt% = or  $>2$  sigma?
- U. Method 5030A (Purge & Trap)
- Y. U/U-234 act are estimated. Assay used was determined by gamma. U/U-234 results can't be used for any NCS/NMC&A purposes. - Uranium
- Z. Std Dev is calculated based on controls (SRM) prepared and analyzed with each sample batch. SRM is  $\sim 0.711$  wt% U-235.
- Z1. This 0.05 wt% value equal to or  $>2$  sigma for controls associated w/data.

### Inorganic Qualifiers

- \* Duplicate analysis not within control limits.
- + Method of standard additions (MSA) correlation coefficient less than 0.995.
- A Indicates that a TIC is suspected aldol-condensation product.
- B Applies when the analyte is found in the associated blank
- D All compounds identified in the analysis at the secondary dilution factor.
- E Result estimated due to interferences.
- J Indicates an estimated value
- M Duplicate injection precision not met.
- N Sample spike recovery not within control limits.
- Q No analytical result available or not required because total analyses  $<$  PQL.
- R QC indicates that data are not usable. Resampling and re-analysis are necessary for verification.
- S Result determined by method of standard additions (MSA).
- U Analyte analyzed for but not detected at or below the lowest concentration reported.
- W Post-digestion spike recovery out of control limits.
- X Other specific flags and footnotes may be required to properly define the results.

### Organic Qualifiers

- A Tentatively identified compound (TIC) is suspected aldol-condensation product.
- B Compound found in blank as well as sample.
- C Compound presence confirmed by GC/MS (GC/MS flag).
- D Compounds identified in an analysis at a secondary dilution filter.
- E Result exceeds calibration range (GC/MS flag).
- J Indicates an estimated value.
- N Presumption evidence of a compound GC/MS flag).
- P Difference between results from two GC columns unacceptable.
- U Compound analyzed for but not detected at or below the lowest concentration reported.
- X Other specific flags and footnotes may be required to properly define the results.
- Y MS, MSD recovery and/or RPD failed acceptance criteria.
- Z (Reserved by CLP for a laboratory-defined organic date qualifier.)

### Rad Qualifiers

- A Analyzed but not detected at the analyte quantitation limit.
- B Method blank not statistically different from sample at 95% level of confidence.
- D Sample is statistically different from duplicate at 95% level of confidence.
- J Indicates an estimated value.
- L Expected and measured value for LCS is statistically different at 95% level of confidence.
- M Expected and measured value for MS is statistically different at 95% level of confidence.
- R QC indicates that data are not usable. Resampling and reanalysis are necessary for verification.
- T Tracer recovery is  $\leq$  or equal to 30% or  $\geq$  or equal to 105%.
- U Value reported is  $<$  the MDA and/or  $<2$  sigma TPE.
- X Other specific flags and footnotes may be required to properly define the results.

## PEMS/OREIS CODES

### Media Codes

AG	Soil Gas
AQ	Air Quality Control Matrix
DC	Drill Cuttings
FR	Filter Residue
FT	Filter
GR	Grout
LD	Drilling Fluid
LF	Floating/Free Product on Groundwater Table
LO	Oil, All Types (Transformer, Waste, Motor, Mineral)
LT	Liquid from tank
MD	Meteorological
MS	Metal Shavings
NA	Not Available
NW	Non-Water Liquid
QA	Aquatic Animal
QB	Aquatic Bird
QC	Aquatic (Some combination of at least 2) of bird, plant, animal; Excludes benthic organism
QN	Benthic Organism
QP	Aquatic Plant
SC	Cement
DIL	Laboratory dilution
SE	Sediment (associated with surface water)
SF	Filter Sandpack
SL	Sludge
SO	Soil
SP	Floor Sweepings
SQ	Soil/Solid Quality Control Matrix
SS	Scrapings
SW	Swab or Wipe
SZ	Solid Waste
TB	Terrestrial Bird
TC	Terrestrial (Some combination at least 2) of bird, plant, or animal.)
TW	Treated Water
WC	Wall corings
WG	Groundwater
WL	Water that has leached through waste
WQ	Water Quality Control Matrix
WS	Surface Water
WW	Waste Water
WZ	Special Water Control Matrix

### Smp Method Codes

?	Other, defined in COMMENTS column
CSF	Continuous Sample Flow
ES	Estimate
FPC	Flow Proportional Composite
GR	Grab
NA	Not Applicable
SC	Spatial Composite
SPLT	Split
TC	Temporal Composite

### Sample Type Codes

?	Other, defined in COMMENTS column
DI	Deionized Water used for preparing blanks, etc.
FB	Field Blank
FR	Field Replicate (Code used for Field Duplicate)
PRBL	Preservative blank
RB	Refrigerator blank
REG	Regular
REG2	Regular sample, secondary analysis
REP	Replicate
REP1	Replicate 1
RI	QC Equipment Rinsate/Decon
TB	Trip Blank
TLC	Toxicity Laboratory Control Sample

### Verification Codes

?	Other, defined in COMMENTS column
B	Result exceeds background criteria
I	Result exceeds established criteria
S	Result exceeds statistical controls based on historical data
T	Holding time exceeded for this analysis
X	Result exceeds permit limits

### Validation Codes

=	Validated result, which is detected and unqualified
?	Other, defined in COMMENTS column
D	Analyte, compound or nuclide detected above the reported detection limit, and the reported detection limit is approximated due to quality deficiency.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
R	Result rejected by validator.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
X	Not validated; Refer to the RSLTQUAL field for more information

### Assessment Codes

BH-ER	Result may be biased high; chemical detected in associated equipment rinseate
BH-FB	Result may be biased high; chemical detected in associated field blank
BH-LAB	Result may be biased high; compound is a known or probable lab contaminant.
BH-LABPR	Result biased high due to laboratory process
BH-PURGE	Result may be biased high; sample may be diluted with drilling fluid due to insufficient purging prior to sampling
BH-RB	Result may be biased high; chemical detected in associated refrigerator blank
BH-RI	Result may be biased high; chemical detected in associated equipment rinsate.
BH-SOLID	Result biased high due to sampling containing a large amount of solids
BH-SS	Results may be biased high; sample may contain particles of the acetate sampling sleeve
BH-TEMP	Result biased high due to a temperature exceedance.
BL-LAB	Result may be biased low; compound is a known or probable lab contaminant
BL-LABPR	Result may be biased low due to laboratory process
BL-PURGE	Result may be biased low; sample may be diluted with drilling fluid due to the insufficient purging prior to sampling
BL-T	Result may be biased low; sample holding time exceeded
BL-TEMP	Result may be biased low to temperature exceedance.
DIS-EDDF1	Discrepancies between the EDD and the Form 1. Form 1s are generated by instrument software that automatically reports all detected compounds. It is the lab's policy to not report quantities below LCRs within their EDD format. Both sets of data are correct. However, the EDD format data, which feeds OREIS, will be used for reporting.

## PEMS/OREIS CODES

### Assessment Codes (cont.)

IN-LAB	Result should be considered information only. Compound is a known or probable lab contaminant.
IN-METH	Result should be considered information only. Lab utilized a modified method.
J	Result estimated
KYRHTAB-50	Kentucky Radiation Health and Toxic Agents Branch (KYRHTAB) has performed an independent data evaluation (not to be confused with data verification and validation) and the rad error accounts for greater than 50% of the results.
KYRHTAB-ER	Kentucky Radiation Health and Toxic Agents Branch (KYRHTAB) has performed an independent data evaluation (not to be confused with data verification and validation) and the data presents error problems (ie., no counting uncertainty or zero counting uncertainty).
KYRHTAB-LT	Kentucky Radiation Health and Toxic Agents Branch (KYRHTAB) has performed an independent data evaluation (not to be confused with data verification and validation) and the results are less than (LT) the maximum detectable activity (MDA) or detection limit and should not be plotted.
KYRHTAB-NE	Kentucky Radiation Health and Toxic Agents Branch (KYRHTAB) has performed an independent data evaluation (not to be confused with data verification and validation) and the ad error exhibits a negative value, which is a statistical outlier.
KYRHTAB-OK	Kentucky Radiation Health and Toxic Agents Branch (KYRHTAB) has performed an independent data evaluation (not to be confused with data verification and validation) and the data is acceptable for use.
N/A	Not Applicable
NR	Assessment question not resolved.
R	Result unusable
R-C	Result questionable, credibility at issue.
R-H	Result unusable due to historical trending (i.e., other)
R-HSS	Rejected due to high suspended solids content.
R-MTRX	Result rejected due to matrix interference.
R-NORAD	Result unusable; Uranium-235 portion of calculation is below reliable detection limits.
R-NTRSFV	Result rejected; not a true representative sample of formation water.
R-PRES	Result rejected due to improper preservative added.
R-RERUN	Result unusable; results for re-analysis should be used
R-T	Result rejected due to missing holding time
U	Not detected
U-RAD	Result considered a non-detect; instrument measurement error is equal to or greater than the reported result



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

**THIS PAGE INTENTIONALLY LEFT BLANK**

ADMINISTRATIVE RECORD  
10/01/06 THROUGH 3/31/07

Object Name	Title	Date On Document	To Affiliation	Author Affiliation	Document Status
I-04810-0010.	PROPOSED MILESTONE EXTENSIONS FOR THE SURFACE WATER OPERABLE (ON-SITE) PROJECT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	10/13/2006	KDEP, USEPA-IV	DOE-PPPO	ARFSWOUOSD
I-04612-0063.	[REQUEST] PROPOSED MILESTONE EXTENSIONS FOR THE GROUNDWATER OPERABLE UNIT SOUTHWEST PLUME INTERIM REMEDIAL ACTION, PADUCAH GASEOUS DIFFUSION PLANT, MCCRACKEN COUNTY, KENTUCKY, KY8-890-008-982	10/13/2006	KDEP, USEPA-IV	DOE-PPPO	ARFSWP
I-04610-0058.	[REVIEW PERIOD EXTENDED FOR] SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2180&D2)	10/16/2006	DOE-PPPO, PRS	USEPA-IV	ARFSWP
I-04810-0011.	[INCORRECT MODIFICATION FORM ATTACHED-SEE NOTES] - [SIGNED] FFA MILESTONE MODIFICATION FORM FOR THE SURFACE WATER OPERABLE UNIT	10/18/2006	DOE-PPPO	KDEP	ARFSWOUOSD
I-04810-0012. UC	[SIGNED] FFA MILESTONE MODIFICATION FORM FOR THE SURFACE WATER OPERABLE UNIT	10/27/2006	DOE-PPPO, PRS	KDEP	ARFSWOUOSD
I-04810-0013.	[APPROVAL OF] PROPOSED MILESTONE EXTENSIONS FOR THE SURFACE WATER OPERABLE UNIT (ON-SITE) REMEDIAL ACTION AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	10/31/2006	DOE-PPPO, PRS	USEPA-IV	ARFSWOUOSD
I-04610-0059. UC	LETTER OF NON-CONCURRENCE FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2180&D2) AND NOTICE OF INFORMAL DISPUTE SUBMISSION OF NEW AND MODIFIED PAGES FOR THE WORK PLAN AND NOTIFICATION OF INVOCATION OF INFORMAL DISPUTE RESOLUTION FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION AT THE PADUCAH GASEOUS DIFFUSION PLANT	11/1/2006	DOE-PPPO, PRS	USEPA-IV	ARFSWP
I-05209-0022.	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&D1)	11/3/2006	KDEP, KDEP, USEF	DOE-PPPO	ARFBGOU
I-04810-0014		11/13/2006	DOE-PPPO	PRS	ARFSWOUOSD

D-3

107

ADMINISTRATIVE RECORD  
10/01/06 THROUGH 3/31/07

I-04810-0015.	TRANSMITTAL 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&D1)	11/13/2006 DOE-PPPO	PRS	ARFSWOUOSD
I-04810-0014a.	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&D1)	11/13/2006 DOE-PPPO	PRS	ARFSWOUOSD
I-04810-0014b.	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&D1)	11/13/2006 DOE-PPPO	PRS	ARFSWOUOSD
I-04810-0014c.	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&D1)	11/13/2006 DOE-PPPO	PRS	ARFSWOUOSD
I-04810-0014d.	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&D1)	11/13/2006 DOE-PPPO	PRS	ARFSWOUOSD
I-04810-0016.	TRANSMITTAL 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&D1)	11/14/2006 KDEP, USEPA-IV	DOE-PPPO	ARFSWOUOSD
I-04906-0003.	NEWLY DISCOVERED SOIL/RUBBLE PILES OUTSIDE OF PADUCAH GASEOUS DIFFUSION PLANT	12/6/2006 DOE-PPPO, PRS	KDEP	ARFSOU
I-04610-0063.	PROPOSED RESOLUTION OF INFORMAL DISPUTE REGARDING THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/OR/07-2180&D2)	12/6/2006 KDEP, USEPA-IV	DOE-PPPO	ARFSWP
I-04906-0001.	RECENT DISCOVERY OF SOIL/RUBBLE PILES ALONG LITTLE BAYOU AND BAYOU CREEK AND IN THE WEST KENTUCKY WILDLIFE MANAGEMENT AREA AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	12/11/2006 DOE-PPPO, PRS	USEPA-IV	ARFSOU

108

D-4

ADMINISTRATIVE RECORD

10/01/06 THROUGH 3/31/07

I-04906-0002.	NEWLY DISCOVERED SOIL/RUBBLE PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, MCCRACKEN COUNTY KY8-890-008-982 [KDEP] REQUEST TO EXTEND THE INFORMAL DISPUTE PERIOD FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT,	12/12/2006	DOE-PPPO, PRS	KDEP	ARFSOU
I-04610-0070.	PADUCAH, KENTUCKY (DOE/OR/07-2180&D2)	12/21/2006	DOE-PPPO, PRS	KDEP	ARFSWP
I-04907-0004.	EXTENSION REQUEST FOR NOTIFICATION OF NEWLY IDENTIFIED SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT [EXTENSION REQUESTED FOR] PROPOSED RESOLUTION OF INFORMAL DISPUTE REGARDING THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	12/22/2006	KDEP, USEPA-IV	DOE-PPPO	ARFSOU
I-04610-0061.	(DOE/OR/07-2180&D2) [EXTENSION GRANTED FOR INFORMAL DISPUTE] SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT,	1/5/2007	DOE-PPPO, PRS	KDEP	ARFSWP
I-04610-0062.	PADUCAH, KENTUCKY (DOE/OR-07-2180&D2) AND NOTICE OF INFORMAL DISPUTE TRANSMITTAL OF THE REMOVAL NOTIFICATION FOR THE SURFACE WATER OPERABLE UNIT (ON-SITE) AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-	1/8/2007	DOE-PPPO, PRS	USEPA-IV	ARFSWP
I-04807-0047.	0011&D1) REQUEST TO EXTEND THE INFORMAL DISPUTE PERIOD FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH,	1/19/2007	KDEP, USEPA-IV	DOE-PPPO	ARFSWOUOSD
I-04610-0064.	KENTUCKY (DOE/OR/07-2180&D2) [EXTENSION FOR INFORMAL DISPUTE GRANTED] SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT,	1/22/2007	DOE-PPPO, PRS	KDEP	ARFSWP
I-04610-0065.	PADUCAH, KENTUCKY (DOE/OR/07-2180&D2) AND NOTICE OF INFORMAL DISPUTE	1/22/2007	DOE-PPPO, PRS	USEPA-IV	ARFSWP

D-5

109

ADMINISTRATIVE RECORD  
10/01/06 THROUGH 3/31/07

I-05209-0023.	[INFORMAL DISPUTE RESOLVED] CERTIFIED REVISIONS TO THE WORK PLAN FOR THE BURIAL GROUNDS OPERABLE UNIT REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2179&D2/R1)	1/23/2007 KDEP, USEPA-IV	DOE-PPPO	ARFBGOU
I-04906-0004.	EXTENSION REQUEST FOR NOTIFICATION OF SOIL AND RUBBLE AREAS AT THE PADUCAH GASEOUS DIFFUSION PLANT SAMPLING AND ANALYSIS PLAN FOR SOIL PILES AT THE PGDP, PADUCAH, KENTUCKY AND ADDENDUM 1A TO SAP (FOR THE CHARACTERIZATION OF THE SOIL PILES CHARACTERIZATION: LITTLE BAYOU CREEK STUDY AREA BETWEEN MCCAW RD. AND OUTFALL 002 DITCH)	1/29/2007 KDEP, USEPA-IV	DOE-PPPO	ARFSOU
I-04909-0003.	[EXTENSION REQUESTED TO INFORMAL DISPUTE RESOLUTION PERIOD] SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/OR/07-2180&D2) MCCRACKEN COUNTY, KENTUCKY	2/1/2007 DOE-PPPO	PRS	ARFSOU
I-04610-0066.	[MODIFICATION APPROVAL GRANTED] FFA MILESTONE MODIFICATION FORM FOR THE SURFACE WATER OPERABLE UNIT	2/5/2007 KDEP, USEPA-IV	DOE-PPPO	ARFSWP
I-04810-0018.	[COMMENTS ON] SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (EPA ID KY8890008982)	2/5/2007 DOE-PPPO, PRS	KPDES	ARFSWOUOSD
I-04810-0017.	TRANSMITTAL OF THE SAMPLING AND ANALYSIS PLAN FOR SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0015&D1)	2/9/2007 DOE-PPPO, PRS	USEPA-IV	ARFSWOUOSD
I-04909-0004.	[KDEP COMMENTS ATTACHED] 1ST NOTICE OF DEFICIENCIES ON THE SURFACE WATER OPERABLE UNIT (ON-SITE) SITE INVESTIGATION AND BASELINE RISK ASSESSMENT REPORT (001&D1)	2/9/2007 KDEP, USEPA-IV	DOE-PPPO	ARFSOU
I-04810-0019.	COMMENT RESPONSE SUMMARY FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST GROUNDWATER PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2180&D2) MCCRACKEN COUNTY, KENTUCKY, KY8-890-008-982	2/12/2007 DOE-PPPO, PRS	KDEP	ARFSWOUOSD
I-04610-0067.		2/13/2007 KDEP, USEPA-IV	DOE-PPPO	ARFSWP

D-6

110

ADMINISTRATIVE RECORD  
10/01/06 THROUGH 3/31/07

I-04907-0001.	NOTIFICATION OF SOIL AND RUBBLE AREAS AT THE PADUCAH GASEOUS DIFFUSION PLANT [EXTENSION GRANTED WITH CONDITIONS] DOE REQUEST TO EXTEND THE INFORMAL DISPUTE RESOLUTION PERIOD FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT (DOE/OR/07-2180&D2)	2/16/2007	KDEP, USEPA-IV	DOE-PPPO	ARFSOU
I-04610-0068.	COMMENTS ON THE SAMPLING AND ANALYSIS PLAN FOR SOIL PILES AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0015&D1)	2/19/2007	DOE-PPPO, PRS	KDEP	ARFSWP
I-04909-0002.	[KDEP] REQUEST TO EXTEND THE INFORMAL DISPUTE PERIOD FOR THE SITE INVESTIGATION REPORT FOR THE SOUTHWEST PLUME AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/OR/07-2180&D2)	2/22/2007	DOE-PPPO, PRS	KDEP	ARFSOU
I-04610-0069.	[KDEP CONDITIONAL CONCURRENCE] REMOVAL NOTIFICATION FOR THE SURFACE WATER OPERABLE UNIT (ON-SITE) (OO11&D1), PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY	3/2/2007	DOE-PPPO, PRS	KDEP	ARFSWP
I-04810-0020.		3/5/2007	DOE-PPPO, PRS	KDEP	ARFSWOUOSD

D-7

111

**THIS PAGE INTENTIONALLY LEFT BLANK**



## DISTRIBUTION

Environmental Information Center  
File

Paducah Remediation Services, LLC

J. Morgan  
M. Redfield  
T. Brindley  
S. Manning  
File-DCC/DMC-RC (2)

U.S. Enrichment Corporation

V. J. Shanks/L. D. Snow

Distributed by U.S. Department of Energy

Commonwealth of Kentucky

J. Maybriar (3)

U.S. Department of Energy

R. Knerr  
W. Murphie

U. S. Environmental Protection Agency

D. Williams (3)