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Part I of II

**MAIN INSTALLATION
ENHANCED BIOREMEDIATION TREATMENT
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT**

Defense Depot Memphis, Tennessee



Defense Logistics Agency



**Air Force Center for Engineering and the
Environment**

Contract No. FA8903-04-D-8722

Task Order No. 0016

**Revision 0
July 2008**

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Prepared for:

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TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	IX
1.0 INTRODUCTION	1-1
1.1 SITE LOCATION AND DESCRIPTION	1-1
1.2 GEOLOGY AND HYDROGEOLOGY	1-2
1.3 GROUNDWATER CONDITIONS	1-3
1.4 MAIN INSTALLATION ROD REQUIREMENTS	1-3
1.5 REMEDIAL ACTION CONSTRUCTION	1-5
1.6 INJECTION WELL REPLACEMENT	1-5
2.0 EBT OPERATIONS AND MAINTENANCE	2-1
2.1 SODIUM LACTATE INJECTION PROCEDURES	2-1
2.1.1 Field Measurements	2-1
2.1.2 Injection Procedures	2-2
2.1.3 Year One Changes to Injection Procedures	2-2
2.2 YEAR ONE INJECTIONS	2-3
2.3 SYSTEM MAINTENANCE	2-4
3.0 GROUNDWATER MONITORING	3-1
3.1 GROUNDWATER MONITORING PROCEDURES	3-1
3.2 BASELINE MONITORING	3-2
3.3 DESIGN MONITORING	3-3
3.4 YEAR ONE QUARTERLY MONITORING	3-4
3.4.1 First Quarter	3-4
3.4.2 Second Quarter	3-4
3.4.3 Third Quarter	3-5
3.4.4 Fourth Quarter	3-5
3.5 IDW MANAGEMENT	3-5
4.0 SUMMARY OF MONITORING RESULTS	4-1
4.1 HYDROGEOLOGY	4-1
4.2 FIELD MEASUREMENTS – SECONDARY PARAMETERS	4-1
4.3 MONITORED NATURAL ATTENUATION RESULTS	4-3
4.3.1 MNA Analyses - Data Quality Evaluation	4-4
4.3.2 MNA Analytical Results	4-9
4.4 VOLATILE ORGANIC COMPOUND RESULTS	4-10
4.4.1 VOC Analyses - Data Quality Evaluation	4-10
4.4.2 VOC Analytical Results	4-13
4.4.3 CVOC Concentration Trends	4-20
5.0 CONCLUSIONS AND RECOMMENDATIONS	5-1
5.1 OPERATING PROPERLY AND SUCCESSFULLY	5-1
5.1.1 Operating Properly	5-1

5.1.2	Operating Successfully	5-3
5.2	OVERALL EVALUATION OF THE EBT SYSTEM AFTER YEAR ONE	5-6
5.3	RECOMMENDATIONS	5-7
5.3.1	Monitoring Parameters	5-7
5.3.2	Injection Procedures	5-8
6.0	REFERENCES	6-1

LIST OF APPENDICES

Appendix

A	Replacement Well Boring Logs
B	Replacement Well Installation Diagrams
C	Injection Summaries
D	Pre-Injection Field Measurements
E	Secondary Parameter Tables
F	Laboratory Analytical Results
G	Data Quality Evaluation
H	EBT Review – AR Environmental
I	PCE Mass Balance Charts

LIST OF TABLES

Table

1	Replacement Well Installation Summary
2	Replacement Well Development Summary
3	EBT Sample Schedule
4	Final Field Measurements, Baseline Samples
5	Final Field Measurements, Design Monitoring Samples
6	Final Field Measurements, First Quarter Samples
7	Final Field Measurements, Second Quarter Samples
8	Final Field Measurements, Third Quarter Samples
9	Final Field Measurements, Fourth Quarter Samples
10	Water Level Measurements
11	MNA Analytical Results, Design Monitoring – TTA-1, MW-21 Area
12	MNA Analytical Results, Design Monitoring – TTA-1, MW-101 Area

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

- 13 MNA Analytical Results, Design Monitoring – TTA-2
- 14 Mean Concentrations of Dissolved Gases and MFA – Design Monitoring
- 15 MNA Analytical Results, Year One – TTA-1, MW-21 Area
- 16 MNA Analytical Results, Year One – TTA-1, MW-101 Area
- 17 MNA Analytical Results, Year One – TTA-2
- 18 Mean Concentrations of MNA Parameters – Year One
- 19 VOC Analytical Results Summary, Baseline – TTA-1, MW-21 Area
- 20 VOC Analytical Results Summary, Baseline – TTA-1, MW-101 Area
- 21 VOC Analytical Results Summary, Baseline – TTA-2
- 22 VOC Analytical Results Summary, First Quarter – TTA-1, MW-21 Area
- 23 VOC Analytical Results Summary, First Quarter – TTA-1, MW-101 Area
- 24 VOC Analytical Results Summary, First Quarter – TTA-2
- 25 VOC Analytical Results Summary, Second Quarter – TTA-1, MW-21 Area
- 26 VOC Analytical Results Summary, Second Quarter – TTA-1, MW-101 Area
- 27 VOC Analytical Results Summary, Second Quarter – TTA-2
- 28 VOC Analytical Results Summary, Third Quarter – TTA-1, MW-21 Area
- 29 VOC Analytical Results Summary, Third Quarter – TTA-1, MW-101 Area
- 30 VOC Analytical Results Summary, Third Quarter – TTA-2
- 31 VOC Analytical Results Summary, Fourth Quarter – TTA-1, MW-21 Area
- 32 VOC Analytical Results Summary, Fourth Quarter – TTA-1, MW-101 Area
- 33 VOC Analytical Results Summary, Fourth Quarter – TTA-2
- 34 CVOC Concentration Trends – TTA-1, MW-21 Area
- 35 CVOC Concentration Trends – TTA-1, MW-101 Area
- 36 CVOC Concentration Trends – TTA-2
- 37 EBT Well Classification for Reductive Dechlorination

LIST OF FIGURES

Figure

- 1 Site Location Map
- 2 Well Locations, TTA-1
- 3 Well Locations, TTA-2
- 4 Lithologic Cross-Section, TTA-2
- 5 Groundwater Elevation Contour Map, TTA-1 – December 2006
- 6 Groundwater Elevation Contour Map, TTA-2 – December 2006
- 7 Groundwater Elevation Contour Map, TTA-1 – March 2007
- 8 Groundwater Elevation Contour Map, TTA-2 – March 2007
- 9 Groundwater Elevation Contour Map, TTA-1 – June 2007
- 10 Groundwater Elevation Contour Map, TTA-2 – June 2007
- 11 Groundwater Elevation Contour Map, TTA-1 – September 2007
- 12 Groundwater Elevation Contour Map, TTA-2 – September 2007
- 13 PCE Time Series - TTA-1, MW-21 Area
- 14 PCE Time Series - TTA-1, MW-101 Area
- 15 PCE Time Series - TTA-2
- 16 TCE Time Series - TTA-1, MW-21 Area
- 17 TCE Time Series - TTA-1, MW-101 Area
- 18 cDCE Time Series - TTA-1, MW-21 Area
- 19 cDCE Time Series - TTA-1, MW-101 Area
- 20 cDCE Time Series - TTA-2
- 21 CT Time Series - TTA-2
- 22 CF Time Series - TTA-2

LIST OF ACRONYMS AND ABBREVIATIONS

BCT	BRAC Cleanup Team
bgs	Below Ground Surface
BRAC	Base Realignment and Closure
cDCE	1,2-cis-Dichloroethene
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CVOC	Chlorinated Volatile Organic Compound
DCE	1,1-Dichloroethene
DDMT	Defense Depot Memphis, Tennessee
DLA	Defense Logistics Agency
DO	Dissolved Oxygen
DQE	Data Quality Evaluation
DRI	Design-related Investigation
EBT	Enhanced Bioremediation Treatment
FFA	Federal Facilities Agreement
HASP	Health and Safety Plan
IDW	Investigation-derived Waste
IRA	Interim Remedial Action
LTM	Long-term Monitoring
MACTEC	MACTEC Engineering and Consulting, Inc.
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
MI	Main Installation
MLGW	Memphis Light, Gas and Water
MNA	Monitored Natural Attenuation
msl	Mean Sea Level
MW	Monitoring Well
NTU	Nephelometric Turbidity Units
OPS	Operating Properly and Successfully
ORP	Oxidation Reduction Potential

LIST OF ACRONYMS AND ABBREVIATIONS

(Continued)

PCA	1,1,2,2-Tetrachloroethane
PCE	Tetrachloroethene
PRB	Permeable Reactive Barrier
PPM	Parts per Million
psi	Pounds per Square Inch
RA	Remedial Action
RAO	Remedial Action Objective
RA SAP	Remedial Action Sampling and Analysis Plan
RD	Remedial Design
RI	Remedial Investigation
RL	Reporting Limit
ROD	Record of Decision
SVE	Soil Vapor Extraction
SVOC	Semivolatile Organic Compound
TCA	1,1,2-Trichloroethane
TCE	Trichloroethene
tDCE	1,2-trans-Dichloroethene
TDEC	Tennessee Department of Environment and Conservation
TEA	Terminal Electron Acceptor
TOC	Total Organic Carbon
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

engineering-environmental Management, Inc (e²M) has prepared this Annual Operations Report for Year One of Enhanced Bioremediation Treatment (EBT) of groundwater on the Main Installation (MI) at Defense Depot Memphis, Tennessee (DDMT) under Contract FA8903-04-D-8722, Task Order 0016 to the Air Force Center for Engineering and the Environment. This report describes the remedial action operations (RA-O) which included biweekly injection of sodium lactate in the injection wells and groundwater monitoring in the injection and performance monitoring wells. The RA-O was conducted in accordance with the *Remedial Action Work Plan, Main Installation, Rev. 1* (RAWP) (MACTEC, 2005a) and the *Main Installation Final Remedial Design, Rev. 1* (RD) (CH2MHILL, 2004a).

EBT is being performed in two general areas, Target Treatment Area 1 (TTA-1) in the southwest area of the MI and TTA-2 in the southeast area of the MI. Within TTA-1, there are two sub-areas, MW-21 area and MW-101 area. Groundwater in both TTA-1 and TTA-2 contains tetrachloroethene (PCE) and trichloroethene (TCE) as primary contaminants; groundwater in TTA-2 also contains carbon tetrachloride (CT) and chloroform (CF).

EBT operations consisted of bi-weekly injection of a two-percent sodium lactate solution into the injection wells in TTA-1 and TTA-2. The initial injection volume per injection well was 167 gallons in TTA-1 MW-21 area, 250 gallons in TTA-1 MW-101 area, and 111 gallons in TTA-2. The injection volume was increased in the MW-21 area to 500 gallons per well to improve lactate distribution. Groundwater monitoring included field measurements in injection wells prior to the injections and laboratory analysis of groundwater samples from injection wells and monitoring wells. Groundwater samples were collected during a baseline event, two design monitoring events during the first quarter of injections, and four quarterly events.

The EBT system has generally met the Operating Properly and Successfully (OPS) criteria in the RAWP although some treatment areas have responded better than others have. The injection and performance monitoring wells have been installed at the locations and to the depths planned; the planned volumes of sodium lactate have been injected; and the lactate has been distributed within the treatment areas but it has not spread as widely as planned. There appear to be preferential pathways of groundwater flow, which have limited distribution of lactate, particularly in the MW-21 area of TTA-1.

Anaerobic aquifer conditions were created within the EBT zones where lactate was present and the areas have expanded since creation. Anaerobic conditions in the MW-21 area have generally been limited to

the injection wells. Concentrations of PCE and TCE in groundwater began to decrease shortly after injections began. Concentrations decreased in all areas, even where anaerobic conditions were not widespread, although decreases were greater where there was demonstrated creation of anaerobic conditions. Concentrations of cis-1,2-Dichloroethene (cDCE), a product of the reductive dechlorination of PCE and TCE, have increased in the EBT zones.

Total organic carbon (TOC) appears to be the most useful indicator of active reductive dechlorination. An increase in TOC at an EBT well correlates to an increase in organic carbon (metabolic fatty acids), carbon dioxide, methane, hydrogen and alkalinity. There is a corresponding decline in nitrate and sulfate as they are used as anaerobic electron acceptors, followed by declines in chlorinated volatile organic compound (CVOC) concentrations. Review of the data suggests that reductive dechlorination is generally occurring where TOC is above 40 to 50 mg/L.

The groundwater monitoring program will be revised to limit laboratory analyses of quarterly groundwater samples to TOC, dissolved gases (methane, carbon dioxide, ethene and ethane), metabolic fatty acids (MFAs) and volatile organic compounds (VOCs). Other analyses (anions, alkalinity, metals, hydrogen) are not considered necessary to monitor the presence or effectiveness of EBT.

Three changes to the injection procedures are recommended to improve the effectiveness of EBT: use of selected monitoring wells for injections; addition of cellulose to the lactate solution; and bioaugmentation to reduce the build-up of cDCE.

There are several locations where TOC concentrations have not increased and no indication of microbial activity has been observed. Injections will be made in nine monitoring wells within these areas to expand the distribution of lactate and development of anaerobic zones. Injections will be made in PMW21-01, PMW21-02, and PMW21-04 in the TTA-1 MW-21 area; PMW101-08A and PMW101-08B in the TTA-1 MW-101 area; and PMW85-05, PMW92-01, PMW92-05, and IW-01 in TTA-2. The injection volume

Addition of cellulose as an electron donor will provide a slower acting carbon source and increase the microbial population available for reductive dechlorination. By adding a substrate a wider range of microorganisms can be employed for the reductive dechlorination process. In addition, it is believed the cellulose will not be transported from the injection point as quickly and will increase TOC at those injection wells where little increase has been observed.

Injection of a bacterial consortium demonstrated to reduce PCE to non-chlorinated ethene is recommended to increase the biodegradation of the parent compounds and daughter products.

1.0 INTRODUCTION

engineering-environmental Management, Inc (e²M) has prepared this Annual Operations Report for Year One of Enhanced Bioremediation Treatment (EBT) of groundwater on the Main Installation (MI) at Defense Depot Memphis, Tennessee (DDMT) under Contract FA8903-04-D-8722, Task Order 0016 to the Air Force Center for Environmental Excellence. The remedial action operations (RA-O) included biweekly injection of sodium lactate in the injection wells and groundwater monitoring in the injection and performance monitoring wells. Maintenance on the lactate-storage and transfer facility and the two trailer-mounted injection systems and repairs to the injection wells were performed as necessary. The RA-O was conducted in accordance with the *Remedial Action Work Plan, Main Installation, Rev. 1* (RAWP) (MACTEC, 2005a) and the *Main Installation Final Remedial Design, Rev. 1* (RD) (CH2MHILL, 2004a).

1.1 SITE LOCATION AND DESCRIPTION

DDMT is located in southeastern Memphis, Shelby County, Tennessee approximately 5 miles east of the Mississippi River and just northeast of Interstate 240 (Figure 1). DDMT originated as a military facility in the early 1940s; it received, warehoused, and distributed supplies common to all U.S. military services and some civil agencies located primarily in the southeastern United States, Puerto Rico, and Panama. Stocked items included food; clothing; petroleum products; construction materials; and industrial, medical, and general supplies. In 1995, DDMT was placed on the list of the Department of Defense facilities to be closed under Base Realignment and Closure (BRAC). Storage and distribution of material continued until the facility closed in September 1997.

The property consists of approximately 642 acres and includes the Main Installation (MI) and Dunn Field. The MI contains approximately 578 acres with open storage areas, warehouses, former military family housing, and outdoor recreational areas. Dunn Field, which is located across Dunn Avenue from the north-northwest portion of the MI, contains approximately 64 acres and includes former mineral storage and waste disposal areas.

In 1992, DDMT was added to the National Priorities List (NPL) (57 Federal Register 47180 No. 199). The lead agency for the environmental restoration activities at DDMT is the Defense Logistics Agency (DLA). The regulatory oversight agencies are U.S. Environmental Protection Agency (USEPA) Region 4 and the Tennessee Department of Environment and Conservation (TDEC). DDMT's USEPA Identification Number is TN4210020570.

1.2 GEOLOGY AND HYDROGEOLOGY

The geologic units of interest at Dunn Field are (from youngest to oldest): loess, including surface soil; fluvial deposits; Jackson formation/Upper Claiborne group; and Memphis Sand.

The loess consists of wind-blown and deposited, brown to reddish-brown, low-plasticity clayey silt to silty clay. The loess deposits are about 20 to 30 feet thick and are continuous throughout the DDMT area.

The fluvial (terrace) deposits consist of two general layers. The upper layer is a silty, sandy clay that transitions to a clayey sand and ranges from about 10 to 40 feet thick. The lower layer is composed of interlayered sand, sandy gravel, and gravelly sand, and has an average thickness of approximately 40 feet. The uppermost aquifer is the unconfined fluvial aquifer, which consists of saturated sands and gravelly sands in the lower portion of the fluvial deposits. Recharge to this unit is mainly from rainfall infiltration; discharge is to underlying units or laterally into adjacent stream channels. The saturated thickness ranges from 0 feet (dry) to approximately 60 feet, and is controlled by the uppermost clay configuration in the Jackson formation/Upper Claiborne group. Groundwater flow in the fluvial aquifer is toward the gap in the uppermost clay in the northwest area of the Main Installation. The flow is toward the low point on the gap's southeast side, and the fluvial aquifer is dewatered (or "pinches out") elsewhere on the gap's perimeter. Water level elevations in the fluvial aquifer at the Main Installation range from a high of approximately 240 feet mean sea level (msl) in the northeast to a low of approximately 195 feet msl in the central area.

The intermediate aquifer is locally developed in Jackson formation/Upper Claiborne group deposits, which contain laterally extensive, thick clay deposits. The uppermost clay unit appears to be continuous, except for a large gap in the Main Installation's northwestern area and Dunn Field's southwestern area. There are other possible gaps in the clay off-site, west and northwest of Dunn Field. Where present, these gaps create connections to the underlying intermediate aquifer from the fluvial deposits. Water level elevations in the intermediate aquifer, away from areas of recharge from the fluvial aquifer, are approximately 160 feet msl with a general westward flow.

The Memphis Sand primarily consists of thick-bedded, white to brown or gray, very fine-grained to gravelly, partly argillaceous and micaceous sand. The Memphis Sand ranges from 500 to 890 feet in thickness and begins at a depth below ground surface (bgs) of approximately 120 to 300 feet. The only MW completed in the Memphis Sand at DDMT is MW-67. The top of the Memphis Sand was identified at 255 feet bgs (elevation of 21 feet above msl). The Memphis aquifer is confined by overlying clays and

silts in the Cook Mountain formation (part of the Jackson/Upper Claiborne group) and contains groundwater under strong artesian (confined) conditions regionally. The City of Memphis obtains the majority of its drinking water from this unit. The Allen Well Field, which is operated by Memphis Light, Gas and Water (MLGW), is located approximately 2 miles west of DDMT. The top of the Memphis aquifer potentiometric surface at MW-67 is approximately 160 feet msl.

1.3 GROUNDWATER CONDITIONS

Groundwater beneath the Main Installation contains elevated concentrations of chlorinated volatile organic compounds (CVOCs). Nine chlorinated volatile organic compounds (CVOCs) have been detected most frequently in past groundwater sampling events:

- Tetrachloroethene (PCE)
- Trichloroethene (TCE)
- 1,2-cis-Dichloroethene (cDCE)
- 1,2-trans-Dichloroethene (tDCE)
- 1,1-Dichloroethene (DCE)
- 1,1,2,2-Tetrachloroethane (PCA)
- 1,1,2-Trichloroethane (TCA)
- Carbon tetrachloride (CT)
- Chloroform (CF)

The wells with the highest CVOC concentrations are located in the southwest and southeast sections of the Main Installation. Both areas, which are identified as target treatment areas TTA-1 and TTA-2, respectively contained several operational areas that could have resulted in groundwater contamination. Multiple sources are considered responsible for the detected groundwater contamination. The CVOCs most frequently detected above Maximum Contaminant levels (MCLs) are PCE, TCE, cDCE, CT and CF.

1.4 MAIN INSTALLATION ROD REQUIREMENTS

Remedial action objectives (RAOs) were developed to allow the transfer and lease of the Main Installation for its intended land use (industrial and recreational). The surface soil RAOs are:

- to prevent direct contact/ ingestion of surface soils contaminated with lead in excess of industrial worker risk-based criteria;
- to prevent direct contact/ ingestion of surface soils contaminated with dieldrin and arsenic in excess of human health risk assessment criteria for residents; and
- to prevent direct contact/ ingestion of surface soils contaminated with lead in excess of risk-based criteria for protection of residential children.

The groundwater RAOs are:

- to prevent human ingestion of water contaminated with VOCs in excess of MCLs from potential future onsite wells;
- to reduce concentrations of chemicals of concern (COCs) to MCLs or lower; and
- to prevent horizontal and vertical offsite migration of groundwater contaminants in excess of MCLs.

The MCLs are 5 µg/L for PCE, TCE, and CT; 70 µg/L for cDCE, and 2 µg/L for VC. The MCL for total trihalomethanes, which includes chloroform, is 80 µg/L.

The selected remedy presented in *Main Installation Final Record of Decision* (CH2MHILL, 2001) contained the following components:

- Excavation, transport and offsite disposal of lead contaminated surface soil near Building 949.
- Deed Restrictions and site controls, which include:
 - Prevention of residential land use, except at the existing Housing area.
 - Daycare restriction controls.
 - Production/consumptive use groundwater controls for the fluvial aquifer and for drilling into deeper aquifers on the Main Installation.
 - Elimination of casual access through maintenance of a boundary fence around the golf course.
- Enhanced bioremediation of CVOCs in the most contaminated part of the groundwater plume.
- Long-term groundwater monitoring to document changes in plume concentrations and to detect potential plume migration to off-site areas or into deeper aquifers.
- 5-year reviews of the selected alternatives.

This RA-O report describes the actions for the enhanced bioremediation component of the remedy. The status of the other components is summarized below:

- Excavation, transportation and disposal of lead-contaminated soil was completed prior to final execution of the ROD;
- Land use controls have been implemented through a recorded Notice of Land Use Restrictions and annual inspections, which are documented through a separate letter report; and
- Long-term groundwater monitoring is being conducted through quarterly groundwater sampling events and is reported separately.

1.5 REMEDIAL ACTION CONSTRUCTION

Remedial action construction (RA-C) was performed from May to August 2006 and included the lactate storage and transfer facility, two injection trailers, and injection and performance monitoring wells.

System construction was documented in the *Main Installation Remedial Action Completion Report, Rev.0* (e²M, 2006).

Based on the criteria presented in the RD, injection wells were installed in areas of TTA-1 and TTA-2 where PCE plus TCE exceed 100 µg/L, and in the area of TTA-2 where CT exceeds 100 µg/L. The injection wells were installed along lines perpendicular to the local groundwater flow direction in the fluvial aquifer. The wells had 15-foot well screens, and multiple wells were installed at some locations in order to screen the entire saturated thickness of the fluvial aquifer. A total of 49 injection wells (IWs) and 30 performance monitoring wells (PMWs) were installed in TTA-1 and TTA-2 at the locations shown on Figures 2 and 3. The well installations in each area are listed below:

- TTA-1 South (MW101 Area): 27 IWs at 9 locations (3-well clusters) and 16 PMWs at 8 locations (2-well clusters).
- TTA-1 South (MW21 Area): 10 IWs at 5 locations (2-well clusters) and 5 PMWs
- TTA-2 (MW85 and MW92 Areas): 12 IWs and 9 PMWs

The final construction inspection was held at Defense Depot Memphis, Tennessee (DDMT) on 28 September 2006 with representatives from USEPA, TDEC, and e²M. The inspection consisted of a review of both the lactate storage and transfer system and the trailer-mounted injection system, and field observation of the injection process. No outstanding items or deficiencies were noted during the inspection and no follow-up actions were required.

1.6 INJECTION WELL REPLACEMENT

Four wells in TTA-2, two injection wells (IW-85-03 and IW85-04) and two monitoring wells (PMW85-02 and PMW85-03), were determined to have been installed in a perched zone above a relatively continuous clay layer 5 to 10 feet above the water level in surrounding wells. Three of the wells (IW85-03, PMW85-02 and PMW85-03) were abandoned on 2 February 2007 in accordance with Shelby County regulations. PCE concentrations in IW85-04 increased to 60 µg/L in the first quarter sample from 1 µg/L in the baseline sample which may have been due to injections mobilizing CVOCs in the vadose zone. Therefore, IW85-04 was not abandoned to allow for future monitoring and or injections, if necessary.

Replacement injection wells (IW85-05 and IW85-06) and monitoring wells (PMW85-04 and PMW85-05) were installed on 19 to 27 February 2007. The wells were installed within 5 feet of the original wells following the drilling and well construction procedures described in the MI RA-C report. The new wells were surveyed by Allen & Hoshall, Inc. of Memphis, Tennessee, a Tennessee Registered Land Surveyor on 4 April 2007. Horizontal and vertical coordinates are based on the North American Datum, 1927 and Tennessee State Plane coordinate system. Well installation data are provided on Table 1.

Soil boring logs are provided in Appendix A and well installation diagrams are provided in Appendix B. The lithologic cross-sections provided in the MI RA-C report were updated to include the replacement wells, as shown on Figure 4. The revised cross-sections show that the replacement wells were installed in the fluvial aquifer.

The replacement wells were developed after well installation in accordance with the RA SAP. Development was begun using a submersible pump and the wells were surged by raising and lowering the pump in the water column. Due to slow recharge in all of the wells, hand bailing and bladder pumps were also used. Water quality measurements were made to evaluate well development in accordance with the RA SAP criteria: stabilized turbidity less than 10 NTU, pH within 0.1 standard units, and temperature and specific conductance within 10 percent within three consecutive readings. All four wells met the development criteria. A well development summary, including volume purged and final stabilization parameters, is shown on Table 2.

2.0 EBT OPERATIONS AND MAINTENANCE

2.1 SODIUM LACTATE INJECTION PROCEDURES

Sodium lactate was injected in all injection wells on a bi-weekly schedule during the first year of RA-O. Each injection event included the following activities:

- Field measurements of groundwater dissolved oxygen (DO), oxygen reduction potential (ORP), pH, temperature, and conductivity in all injection and performance monitoring wells prior to sodium lactate injection. Field measurements are completed in an area prior to injections.
- Filling the trailer-mounted storage tank with sodium lactate injection fluid. 18 gallons of sodium lactate concentrate and 482 gallons of potable water are mixed to create a 2.16-percent sodium lactate injection fluid
- Injections of sodium lactate at TTA-1 and TTA-2 in the order of injection well numbering, starting at IW21-01, IW101-01, IW85-01, and IW92-01, respectively.

The RD provided for larger injections volumes at TTA-1 (relative to screen length) than at TTA-2 based on calculated substrate demand. The initial injection volumes at TTA-1 were 167 gallons for each 10-foot screen and 250 gallons for each 15-foot screen, while at TTA-2 initial injection volumes were 111 gallons for each 10-foot screen.

At the completion of each injection event, the trailer-mounted injection system was returned to the storage and transfer facility and rinsed with potable water to avoid biological growth in the storage tank or in other components between injection events. Rinse water was discarded in a grassed area adjacent to Building 265.

2.1.1 Field Measurements

Field measurements were made to document the creation and maintenance of anaerobic aquifer conditions within the EBT zones and were recorded on forms provided in the RAWP. Field measurements were collected before each injection event. When groundwater samples were collected, the pre-injection field measurements were used to confirm stabilization prior to sampling.

For performance monitoring wells with dedicated bladder pumps, measurements were made at the surface using a flow-through cell. Measurements were recorded at approximately 5-minute intervals until the

readings stabilized. For injection wells and performance monitoring wells without dedicated pumps, the measurement probe was lowered to the middle of the screened interval and measurements were recorded at 5-minute intervals as with the flow-through cell.

During monitoring events when a sample was to be collected from a well, the well was purged with either a dedicated or portable bladder pump. The parameters were allowed to stabilize in accordance with the RASAP and the last set of stabilization measurements were used for the pre-injection measurements.

2.1.2 Injection Procedures

Injection fluid is pumped to the trailer-mounted 500-gallon storage tanks from the concrete-bermed storage and transfer area in Building 265. The injection mix is 18 gallons of sodium lactate concentrate (60 percent sodium lactate by weight) and 482 of gallons potable water to create at 2.16 percent sodium lactate injection solution. Digital batch controllers are used to deliver the proper volumes of concentrate and water to the storage tank. A tank-mounted mixer blends the tank contents following filling activities. Records of injection fluid mixing are made on forms provided in the RAWP.

Field technicians tow the trailer-mounted tank to individual injection wells. The mixer, powered by the on-board generator, continues mixing the solution during transport. At the injection well, sodium lactate mixture is transferred from the storage tank to the injection well via a flexible hose and transfer pump. Injection volumes and sequences outlined in the RAWP were followed. Flowrates and pressures were monitored to ensure hose pressures do not exceed 35 psi and a blow-off valve was installed at each injection well to prevent the well from being over pressurized. Volumes of lactate mixture injected into the wells is monitored using trailer-mounted totalizers and recorded using forms provided in the RAWP.

2.1.3 Year One Changes to Injection Procedures

The initial injections were made as outlined in the RAWP. Changes to injection procedures were made during Year One based on field observations and measurements.

The injection flow rate was increased from 10 gallons per minute (gpm) up to 30 gpm to speed the injection process where the injection wells would accept the higher flow rate without exceeding hose pressure of 35 psi. This change was implemented during the initial injections following testing of the injection wells.

One pound of sugar was added during mixing of each tank of lactate solution in order to remove DO from the near well bore and to improve molecular oxygen removal. Lactate is a preferred substrate for anaerobic bacteria. However, other substrates such as starch or sucrose are preferred for aerobic or nitrate-reducing microorganisms. Addition of table sugar is effective at quickly creating anaerobic conditions. Oxygen is depleted (as well as nitrate) and the incomplete oxidation products (end-products) of this initial oxidation can be used by anaerobic bacteria for the reductive dechlorination process. This recommendation was made in the First Quarter Summary Report, 19 February 2007, and implemented during Injection 13 beginning 26 February 2007.

The injection volume in the MW-21 area of TTA-1 was increased due to the lack of response observed in the monitoring wells in that area. The volume per well was increased from 166 gallons to 250 gallons, which is the volume injected in the MW-101 area of TTA-1. This recommendation was also made in the First Quarter Summary Report and implemented during Injection 13. The injection volume in the MW-21 area was then increased to 500 gallons per well beginning with Injection No.19 on 23 May 2007, following a recommendation in the Second Quarter Summary Report, 7 May 2007.

2.2 YEAR ONE INJECTIONS

The initial injection was performed 11 to 14 September 2006. The specified volume was injected in each well except IW101-03B and IW85-04, which received less than the target volume due to problems in pumping from the bottom of the tank. Reduced injection rates (below 7 gpm) were required in five wells (IW21-01A, IW92-03, IW92-04, IW92-06 and IW92-08). Both injection volumes and flow rates were improved in subsequent injection events.

The injection and monitoring wells are grouped in three general areas, with two areas in TTA-1, MW-21 (10 IWs) and MW-101 (27 IWs), and one area in TTA-2 (12 IWs). Seven injections (1-7) were made prior to the first quarter sampling event, six injections (8-13) were made prior to the second quarter sampling event, six injections (14-19) were made prior to the third quarter sampling event and seven injections (20-26) were prior to the fourth quarter sampling event. Summary data sheets for the Year One injections are provided in Appendix C.

A 2.18 percent solution by volume of sodium lactate in potable water was injected during each event. Beginning with Injection 13, one pound of sugar was added per 500 gallons of lactate solution and the injection volume in the MW-21 area of TTA-1 was increased from 167 to 250 gallons per injection well. Beginning with Injection 19, the injection volume in the MW-21 area of TTA-1 was increased from 250

to 500 gallons per injection well. The target injection volume and the actual injection volumes for each of the three areas are listed below.

Injection	Start Date	Target Injection Volume (gallons)		
		TTA-1, MW-21	TTA-1, MW-101	TTA-2
Target Volume		1670/2500/5000	6750	1332
1	9/11/06	1668	6701	1311
2	9/25/06	1660	6652	1325
3	10/11/06	1656	6634	1331
4	10/23/06	1650	6639	1355
5	11/9/06	1670	6638	1316
6	11/27/06	1657	6691	1351
7	12/11/06	1680	6660	1333
8	12/20/06	1647	6652	1332
9	1/5/07	1670	6645	1312
10	1/18/07	1659	6608	1329
11	1/31/07	1655	6654	1295
12	2/13/07	1650	6798	1349
13	2/28/07	2460	6617	1342
14	3/14/2007	2469	6623	1352
15	3/28/2007	2467	6629	1336
16	4/11/2007	2463	6633	1327
17	4/30/2007	2466	6627	1338
18	5/9/2007	2464	6634	1352
19	5/23/2007	4904	6660	1340
20	6/11/2007	4972	6625	1338
21	6/19/2007	4909	6603	1335
22	7/3/2007	4956	6625	1342
23	7/17/2007	4939	6656	1338
24	7/31/2007	4951	6677	1344
25	8/14/2007	4945	6667	1324
26	8/28/2007	4952	6651	1310

2.3 SYSTEM MAINTENANCE

System maintenance activities for EBT injection equipment and instruments are performed in accordance with the O&M Manual (e²M, 2007) and manufacturer recommendations. The equipment identified in the RAWP and the maintenance activities are summarized below.

- Water level probes - Water level probes were returned to the manufacturer for repair when found to be inoperable or inaccurate.

- Water Quality Instruments - Horiba U-22XD water quality meter was returned to the manufacturer for electronics repair under warranty.
- Batch Controller - No problems encountered; maintenance activities not required.
- Mechanical Equipment –trucks, generators, forklift, mixers, transfer pumps and gauges
 - The trucks and forklift had required maintenance performed under their lease agreements.
 - Regular maintenance is performed every 100 hours on the generators per manufacturing guidelines, including oil changed and air filters cleaned and inspected. Same maintenance procedures completed on the trash pump and portable air compressor.
- Injection Trailer - Injection hoses were replaced on the trailers after kinking resulted in leakage from one of the hoses. The mixer motor and controller was replaced on one injection trailer. Several flat tires were repaired for both trailers. Electrical wiring for brake lights was repaired on both trailers after problems observed during inspection.
- General facility maintenance in Building 265 – The building is cleaned on a weekly basis. The roll-up doors were repaired.

In addition to system maintenance, the surface completion at injection well IW21-04A was replaced with a round 18-inch manhole after the 24-inch square manhole did not hold up to the heavy equipment traffic at Barnhart Crane.

3.0 GROUNDWATER MONITORING

Groundwater monitoring results are used to evaluate the success of EBT in creating anaerobic conditions in the aquifer and reducing concentrations of CVOCs in groundwater. The EBT groundwater monitoring network includes the 49 injection wells and 30 performance monitoring wells installed during RA-C and 8 existing monitoring wells previously used for LTM. Monitoring includes primary and secondary performance parameters. The primary parameters are laboratory analyses of VOCs and natural attenuation parameters. Natural attenuation parameters are anions (bromide, chloride, nitrate, nitrite, sulfate and sulfide), alkalinity, total organic carbon, metabolic fatty acids (MFA), dissolved gases (ethane, ethane, methane and hydrogen) and metals (arsenic, manganese and selenium). Secondary parameters are dissolved oxygen (DO), oxygen reduction potential (ORP), pH, conductivity and temperature. The secondary parameter measurements are made prior to each injection event; when groundwater samples are to be collected, the field measurements are used to confirm stabilization and the injections are made after sampling is completed.

Groundwater monitoring events during Year One included baseline sampling, two design monitoring events at the end of months 1 and 2, and quarterly monitoring events at the end of months 3, 6, 9 and 12. The sample schedule for the first year of RA-O is provided on Table 3.

3.1 GROUNDWATER MONITORING PROCEDURES

Groundwater samples are collected using low-flow purging methods from 49 IWs and 38 PMWs. Samples were collected using dedicated PVC or stainless steel bladder pumps in all performance monitoring wells, except MW-101, and with stainless steel portable pumps in the remaining wells. MW-101 has three screened intervals; groundwater samples are collected from the top and bottom screened intervals. Teflon® bladders and Teflon®-lined polyethylene tubing are used for each well. Following sampling, the bladders and tubing for each well without a dedicated pump are placed in separate, sealed plastic bags and stored for future sample events. The pumping rate at each well was set such that the water levels would not decline more than 1.2 inches (0.1 foot). Field quality control samples are collected to evaluate sampling techniques and decontamination procedures. These samples (field duplicates, trip blanks, field equipment blanks, and matrix spike/matrix spike duplicates) are collected at the frequencies specified in the RA SAP, respectively.

Water quality parameters are measured at 5 to 10 minute intervals during purging using a flow-through cell with either a Horiba U-22XD or a YSI 556. The units are similar, except that the Horiba has an internal turbidity meter; a HACH 2100P turbidity meter is used with the YSI. The units were calibrated each morning prior to sampling, and if abnormal readings were observed during the day, the instruments were recalibrated in the field. Purging continues up to two hours to meet the stabilization criteria in the RA SAP: three successive readings within ± 0.1 for pH, ± 10 millivolts for oxygen reduction potential (ORP), ± 3 percent for specific conductance, < 20 NTU for turbidity, and ± 10 percent for dissolved oxygen (DO). Temperature is also measured and recorded but is not used as a stabilization parameter. Samples are collected when stabilization criteria were met or the field team leader approved the variance from the criteria. All measurements are recorded on the field sampling forms.

During sampling, HACH Instruments field test kits are used to measure ferrous iron and carbon dioxide. These samples were collected according to the manufacturer's instructions. The test kit for carbon dioxide includes three ranges: 0 to 10 mg/L, 0 to 50 mg/L, and 0 to 100 mg/L. The test is repeated with decreasing range until the measured concentration was within the appropriate range.

Water levels measurements are collected in the sampled wells and selected additional wells outside TTA-1 and TTA-2 during the baseline and quarterly sampling events. Measurements are made using a Solinst Model 101 water level meter with an electronic sensor and tape graduated in 0.01-foot increments.

3.2 BASELINE MONITORING

Baseline sampling of 85 of the 87 EBT injection and monitoring wells was performed 8 August to 6 September 2006. Groundwater samples were collected from two screened intervals in well MW101 (MW-101T and MW-101B).

The samples were collected in two phases; the wells in the MW-21 area of TTA-1 were sampled 8 to 11 August and the remaining wells were sampled 21 August to 6 September 2006. Water levels measurements were made on 6 September 2006. Samples were sent to Kemron Environmental Services in Marietta, Ohio for analysis. The final stabilization measurements and the field test results for ferrous iron and carbon dioxide are shown on Table 4. The samples were collected according to the procedures described above with the following exceptions:

- Five wells were purged dry during sampling: IW85-02, IW-85-03, IW85-04, PMW85-02 and PMW85-03. Wells IW85-03 and PMW85-03 did not recharge sufficiently and could not be

sampled. The remaining wells were sampled within 24 hours of being pumped dry in accordance with the RA SAP. Well PMW85-02 had very low recharge and only a partial sample was collected. The sampling crew mistakenly collected the sample for metals rather than VOC analysis. In future sampling events, samples for VOC analysis were collected first as required by the RA SAP.

- Samples were collected from 14 wells (IW21-01B, IW21-05A, IW21-05B, IW92-02, IW92-06, IW92-07, IW92-08, IW101-01A, IW101-03B, IW101-05A, PMW21-03, PMW21-04, PMW92-01 and PMW101-02A) with elevated turbidity measurements (28 NTUs to out of range) after purging the wells from 1 to 4 hours with the other criteria having been met.

3.3 DESIGN MONITORING

Design monitoring samples were collected monthly after injections began to evaluate the effectiveness of injection parameters (lactate concentration and injection rate, volume and frequency), and to monitor for methanogenic conditions. Groundwater samples were collected from the 38 wells listed on Table 3. The first round of samples was collected on 3 to 13 October 2006 prior to Injection 3 and the second round of samples was collected on 3 to 8 November 2006 prior to Injection 5. Samples were sent to Kemron Environmental Services in Marietta, Ohio for analysis of dissolved gases and MFAs. The final stabilization measurements are shown on Table 5. The samples were collected according to the procedures described above with the following exceptions:

Design Monitoring 1

- Samples were collected from five wells (PMW92-01, IW92-05, IW21-01B, IW101-04C, and IW21-03B) with elevated turbidity measurements (20.1 NTUs to 244 NTUs) after purging for approximately 2 hours.
- Injection well IW85-04 was purged dry and sampled the next day.

Design Monitoring 2

- Samples were collected from two wells (PMW92-01, and DR2-1) with elevated turbidity measurements (32.1 NTUs and 27 NTUs, respectively) after purging these wells for approximately 2 hours.
- Injection well IW101-03C was purged for 36 minutes and sampled with a turbidity of 20.9 NTUs.

3.4 YEAR ONE QUARTERLY MONITORING

Quarterly samples were collected immediately before the first injection event of the following quarter and the pre-injection field measurements for that event were used to confirm stabilization prior to sample collection. Thus, the first quarter sample results were collected prior to Injection 7, the first injection of the second quarter. The sample dates for each quarter and the associated injection events are stated in the following sections.

3.4.1 First Quarter

First quarter groundwater samples were collected from 85 of the 87 EBT injection and performance monitoring wells on 4 to 14 December 2006 prior to Injection 7. Wells IW85-03 and PMW85-03 did not recharge sufficiently and could not be sampled. Two samples were collected from the screened intervals in MW-101. Water levels were measured in all EBT wells on 1 December 2006. Samples were sent to Kemron Environmental Services in Marietta, Ohio for analysis. The final stabilization measurements and the field test results for ferrous iron and carbon dioxide in the first quarter event are shown on Table 6. The samples were collected according to the procedures described above with the following exceptions:

- Samples were collected from three wells (IW21-04A, IW21-05A, and IW92-06 with elevated turbidity measurements (29.2 NTUs to 953 NTUs) after purging the wells for a minimum of two hours.
- Wells IW85-04 and PMW85-02 were purged dry and sampled the following recharge.

3.4.2 Second Quarter

Second quarter groundwater samples were collected from 87 EBT injection and performance monitoring wells on 5 to 14 March 2007 prior to Injection 14. Water levels were measured in all EBT wells on 2 March 2007. Samples were sent to Kemron Environmental Services in Marietta, Ohio for analysis. The final stabilization measurements and the field test results for ferrous iron and carbon dioxide in the second quarter event are shown on Table 7. The samples were collected according to the procedures described above with the following exceptions:

- Samples were collected from 5 wells (IW21-04A, IW85-01, IW85-05, IW92-02 and IW101-04A) with elevated turbidity measurements (25.5 NTUs to 290 NTUs) after purging the wells for a minimum of two hours.

- Wells IW92-02 and IW92-05 were purged dry and sampled when wells recovered sufficiently.

3.4.3 Third Quarter

Third quarter groundwater samples were collected from 87 EBT injection and performance monitoring wells on 29 May to 7 June 2007 prior to Injection 20. Water levels were measured in all EBT wells on 25 May. Samples were sent to Kemron Environmental Services in Marietta, Ohio for analysis. The final stabilization measurements and the field test results for ferrous iron and carbon dioxide in the third quarter sampling event are shown on Table 8. The samples were collected according to the procedures described above with the following exceptions:

- Sample was collected from well IW101-09A with elevated turbidity measurements of 25.2 NTUs after purging the well for a minimum of two hours.
- Sample was collected from well IW92-05 with elevated turbidity measurement of 238 NTUs. The well was purged dry and sampled when it recovered sufficiently.

3.4.4 Fourth Quarter

Fourth quarter groundwater samples were collected from 87 EBT injection and performance monitoring wells on 10 to 20 September 2007 prior to Injection 27. Water levels were measured in all EBT wells on 7 September 2007. Samples were sent to Kemron Environmental Services in Marietta, Ohio for analysis. The final stabilization measurements and the field test results for ferrous iron and carbon dioxide in the fourth quarter sampling event are shown on Table 9. The samples were collected according to the procedures described above with the following exceptions:

- Samples were collected from wells (IW101-01A, IW101-06A, IW21-01A, IW21-04A, IW21-05A and IW92-04) with elevated turbidity levels ranging from 26.8 to 55 NTUs after two hours of purging.

3.5 IDW MANAGEMENT

The waste generated during RA-O was classified as either non-investigative waste or IDW. Non-investigative waste, such as packaging materials, personal protective equipment, disposable sampling supplies, and other inert refuse, was collected, containerized, and transported to a designated collection bin for disposal at a municipal landfill.

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

During each groundwater sampling event, the IDW consisted of wastewater from equipment decontamination and groundwater from purging prior to sampling. The purge water and wastewater generated during sampling were transported using sealed 5-gallon buckets to a 550-gallon polyethylene tank on the MI. A grab sample was collected when the tank was full, and the water was discharged following approval of a one-time discharge request from the City of Memphis.

Additional IDW was generated in the second quarter by drilling, well installation and development for replacement wells in TTA-2. The soil cuttings were spread in a fill area in the north-central area of the MI. Wastewater generated during decontamination of the drill rig and downhole equipment between borings and of well construction materials was collected and stored in a 20,000 gallon fractionation tank. The well development water was also transported to the fractionation tank on the MI. A grab sample was collected and a one-time discharge request was approved by the City of Memphis.

4.0 SUMMARY OF MONITORING RESULTS

4.1 HYDROGEOLOGY

Water level measurements for the baseline and quarterly monitoring events are shown on Table 10. Groundwater contour maps for TTA-1 and TTA-2, for each quarter, are shown on Figures 5 to 12.

- The groundwater flow is generally to the east-northeast in TTA1, but it varies locally from easterly in the MW-21 area to northerly in the MW-101 area.
- The groundwater flow is generally to the southwest in TTA2.

4.2 FIELD MEASUREMENTS – SECONDARY PARAMETERS

Field measurements of secondary parameters are measured in all injection and performance monitoring wells prior to injections in each area. The results are used to document the creation and maintenance of anaerobic aquifer conditions within the EBT zones. Summary data sheets for each round of pre-injection measurements during Year One are provided in Appendix D. The pre-injection measurements for Injections 1 through 26 are summarized separately for injections wells (IWs) and monitoring wells (MWs) in each treatment area in Appendix E.

The RAWP identified specific metrics for anaerobic aquifer conditions:

- ORP: Sustained in the range of -50 mV to – 200 mV to promote conditions favorable for reductive dechlorination and less favorable for methanogenesis
- DO: Sustained at concentrations less than 1 milligram per liter (mg/L)
- pH: Sustained between 6 and 8 standard units

ORP: ORP measurements are shown on pages E-1 through E-3. The dominant terminal electron acceptor (TEA) in a well for each measurement is denoted on the tables by blue, yellow, green, orange and red shading of data points denoting oxygen, nitrate, iron, sulfate and carbon dioxide (methanogenic), respectively. The following assumptions were made:

- 1) Aerobic conditions are represented by an ORP of 200 mV or higher.
- 2) Nitrate reduction is the dominant TEA process from 200 to -50 mV.

- 3) Iron reduction is the dominant TEA process from -50 to -220 mV.
- 4) Sulfate reduction is dominant between -220 and -240 mV.
- 5) Methanogenesis will occur below -240 mV.

ORP values in the iron reducing stage -50 to -220 mV and below are indicative of anaerobic conditions. ORP values decreased in the injection wells in all three areas; ORP values in monitoring wells were variable.

In the TTA-1 MW-21 area, the ORP values in the injection wells were initially in the nitrate reduction range (-50 to 200 mV) but dropped over the next few months with some wells showing methanogenic conditions (ORP < -240 mV). In the fourth quarter, the ORP values rebounded with most values falling within the iron reduction range. The monitoring wells in the MW-21 area although variable, primarily exhibited average ranges typical of nitrate reduction (150 to 191mV) throughout the year (see Appendix E- 1)

In the TTA-1 MW-101 area, ORP in most injection wells were initially in the nitrate reduction range and dropped to methanogenesis ranges into the second quarter. For the remainder of the year the injection wells were fairly consistently in the upper iron-reducing to lower nitrate range (-45 to -182mV) with some still exhibiting methanogenesis (< -240mV). The ORP in the monitoring wells in the MW-101 area initially exhibited values in the mid-nitrate range (-14 to 97mV) but decreased to a lower nitrate range in the second half of the year, with more than half exhibiting anaerobic conditions. (see Appendix E-2)

In the TTA-2 area, the injection wells averaged ORP values from the mid to lower iron reduction ranges (-91 to -192mV). The monitoring wells averaged ORP values in the mid-nitrate range (37 to 84mV) throughout the year (see Appendix E-3).

DO: DO concentrations in mg/L or parts per million (ppm) are shown on pages E-4 through E-6. The condition in each well is denoted by blue, yellow and red shading denoting aerobic, nitrate reducing or anaerobic conditions, respectively.

The following assumptions were made:

- 1) DO above 2 ppm suggests aerobic conditions,
- 2) DO of 0-2 ppm represents nitrate-reducing conditions, which is transitional between aerobic and anaerobic conditions (defined by the RAWP as < 1 ppm DO); and

3) absence of DO (0 ppm) means conditions are anaerobic.

The DO measurements are generally consistent with the ORP values. DO decreased significantly in the injection wells and was variable in the monitoring wells.

In the TTA-1 MW-21 area, the injection wells exhibited average values DO primarily in the aerobic range in the first quarter. This changed to primarily anaerobic conditions through the second and third quarters and increased to nitrate-reducing condition in the fourth quarter. The average DO ranges in monitoring wells in the MW-21 area were predominantly aerobic throughout the year (see Appendix E- 4)

In the TTA-1 MW-101 area, the DO values were in the aerobic range in the beginning of the first quarter and then became almost exclusively anaerobic through the third quarter and were variable from anaerobic to nitrate-reducing in the fourth quarter. The DO in the monitoring wells in the MW-101 area exhibited aerobic values through the second quarter and became variable from anaerobic to nitrate-reducing through the third and fourth quarter (see Appendix E-5).

In the TTA-2 area, the injection wells exhibited average DO values from nitrate-reducing in the first quarter to primarily anaerobic through the third quarter and then nitrate-reducing to anaerobic in the fourth quarter. The monitoring wells had decreasing DO concentrations, which still averaged aerobic values in the four quarter. Measurements taken prior to the last injection events of the quarter indicated eight (Injection 25) and four (Injection 26) monitoring wells with anaerobic DO values (see Appendix E-6).

pH: pH measurements are shown on pages E-7 through E-9. The pH range for bioremediation is considered to be from 5 to 9, with values outside this range considered inhibitory to microbial processes. The pH of the injection solution after mixing and prior to injection was measured at approximately 5.6.

pH measurements prior to the first few injections events were higher in some wells in the TTA-1 MW-21 and TTA-2 areas. Based on later measurements, these early measurements are considered inaccurate. In general, pH measurements were consistently near 6 in both injection and monitoring wells in both TTA-1 and TTA-2 areas throughout the year.

4.3 MONITORED NATURAL ATTENUATION RESULTS

MNA analyses were performed on groundwater samples collected during baseline sampling, two design monitoring events at the end of months 1 and 2, and quarterly monitoring events at the end of months 3,

6, 9 and 12. During the baseline and quarterly sampling events, groundwater samples were collected from 49 injection wells and 38 monitoring well; the MNA parameters were anions (bromide chloride, nitrate, nitrite, sulfate, and sulfide), alkalinity, total organic carbon (TOC), metabolic fatty acids (MFAs), dissolved gases (carbon dioxide, ethane, ethene, methane, and hydrogen) and metals (arsenic, manganese, and selenium). During the design monitoring sampling events, groundwater samples were collected from a subset of 38 EBT injection and monitoring wells; the samples were only analyzed for dissolved gases and MFAs. The complete analytical results for MNA analyses of groundwater samples collected during Year One are presented in Appendix F.

4.3.1 MNA Analyses - Data Quality Evaluation

e²M performed data quality evaluation (DQE) of the laboratory data packages for the samples collected in 2007 to qualify the data relative to the data quality objectives (DQOs) described in the RA SAP. Data qualifiers are shown on the analytical results tables. Any result reported below the reporting limit (RL) but above the method detection limit (MDL) was flagged "J" and considered an estimated result (unless overridden by other QC flags). Also, any minor qualifications such as blank contamination were evaluated with respect to DQOs and if there were not significant impacts then these qualifications are not discussed.

The DQE is summarized for each event in the following sections and the DQE narratives are provided in Appendix G.

4.3.1.1 Baseline Sampling-August/September 2006

During the two phases of Baseline Sampling in August and September of 2006, 121 groundwater samples including 86 field samples and 35 QA/QC samples (duplicates, MS/MSD, trip blanks, rinsate blanks) were collected from 85 EBT injection and monitoring wells; two wells were dry. Two samples were collected from the screened intervals in MW101. Samples were analyzed for VOCs and MNA parameters; only MNA parameters are discussed in this section (see Tables 15-17). The data are usable with the following qualifications:

- Carbon dioxide was consistently outside continuing calibration verification (CCV) acceptance limits. Associated data were qualified estimated J, where CCV %D was observed. Such results may be biased due to calibration drift.

- Carbon dioxide was recovered low in one LCS (IW-01), although in control in the LCSD. The result is qualified as estimated J for associated samples
- Methane, ethene and ethane were qualified estimated J in one sample (MW-101B) and pyruvic acid in one sample (PMW101-01A) based on MS/MSD recoveries.
- Total organic carbon could be biased low based on low matrix spike/matrix spike duplicate analyte recovery in one sample (IW21-03B); the associated result was flagged estimated J.
- Data could be biased high for manganese as indicated by the serial dilution percent difference. Associated samples (IW92-08 and IW-01) were flagged estimated J.
- Nitrite and nitrate data could be biased very slightly low due to an exceedence of the holding time by several hours. Associated samples (DR2-1, IW92-01, PMW101-01A, and PMW101-01B) were flagged estimated J.

4.3.1.2 Design Monitoring-October/November 2006

During the October and November 2006 Design Monitoring events, 50 and 47 groundwater samples including QA/QC (duplicates, MS/MSD, rinsate blanks) were collected, respectively from 38 EBT selected injection and monitoring wells in each event. Samples were analyzed for Dissolved Gases, Metabolic Fatty Acids and Hydrogen only. (See Tables 11-13) The October and November 2006 data are usable with the following qualifications:

- Carbon dioxide results do not meet the 30% D criterion specified for RSK-175 for over half of the closing calibrations; the associated samples were flagged as estimated J. When the closing calibration has drifted, it indicates that at least some of the sample results prior to the CCV may be biased, and for this reason the results are qualified as J.

4.3.1.3 First Quarter-December 2006

During the December 2006 EBT-1 sampling event, 115 groundwater samples including 86 field samples and 29 QA/QC (duplicates, MS/MSD, trip blanks, rinsate blanks) were collected from 85 EBT injection and monitoring wells; two wells were dry. Two samples were collected from the screened intervals in MW101. Samples were analyzed for VOCs and MNA parameters; only MNA parameters are discussed in this section. (See Tables 15-17) The December 2006 data are usable with the following qualifications:

- Hydrogen in thirty samples was analyzed outside of the holding time due to equipment malfunctions. Sample results for hydrogen with holding times outside of the method recommendation are qualified as estimated J. It should be noted that laboratory data indicates sample stability well beyond the 14-day holding time so this is not expected to impact the hydrogen data significantly.
- All detected carbon dioxide results are qualified as estimated J, indicating the possibility of bias due to poor initial calibration linearity.
- Three samples were qualified as estimated J based on MS/MSD results. One sample had a high recovery in Lactic acid (IW101-03C), Two samples had low recoveries for acetic acid (IW101-09A) and pyruvic acid (PMW92-05).
- Analysis results qualified as rejected due to holding time violation are considered unusable. Note that only the IC nitrate and nitrite analyses are affected and that the laboratory did provide alternate analytical methods to obtain usable nitrate and nitrite results. The rejected IC results were removed from the EDD and replaced with valid results using alternative methods 353.3 and 354.1 for nitrate and nitrite, respectively.
- Two nitrate samples, PMW92-03 and PMW92-05 were qualified estimated J based on MS/MSD results. Also, one sample for nitrate and four for sulfide were qualified as rejected based on spike recoveries.
- Three total alkalinity samples(IW101-09A, IW101-09B,IW101-09C) , and four total organic carbon samples (IW21-01B, IW21-02A, IW21-03A, IW21-03B) could be biased low based on low matrix spike/matrix spike duplicate analyte recoveries and were qualified estimated J.

4.3.1.4 Second Quarter-March 2007

During the March 2007 EBT-2 sampling event, 123 groundwater samples including 91 field samples (includes filtered and unfiltered samples) and 32 QA/QC (duplicates, MS/MSD, trip blanks, rinsate blanks) were collected from 87 EBT injection and monitoring wells. Two samples were collected from the screened intervals in MW101. Samples were analyzed for VOCs and MNA parameters; only MNA parameters are discussed in this section. (See Tables 15-17) The March 2007 data are usable with the following qualifications:

- Six sample results for hydrogen (IW101-01C, IW21-01B, IW21-02B, IW21-05A, IW101-06C, IW101-08C) with holding times outside of the method recommendation were qualified as estimated J based on holding time exceedances.
- For sample IW21-02B, three analytes (acetic acid, butyric acid, and pyruvic acid) were not recovered in the matrix spike for metabolic acids, although they were recovered in the MSD. These results are qualified as R (rejected) to indicate that the sample non-detect is rejected because of the failure to recover the analyte in the matrix spike.
- Field duplicate results were in control except for one acetic acid result (PMW21-03) and three hydrogen results in the DUP-1 (IW21-01A), in the DUP-7 (IW92-06), and the DUP-4 (IW101-01A) pairs, respectively..
- Several samples for bromide, sulfate, and chloride were qualified estimated J based on deviations greater than 10% RSD indicating variability of the instrument calibration response over a range of concentrations and MS/MSD recoveries.

4.3.1.5 Third Quarter-May/June 2007

During the May/June 2007 EBT-3 sampling event, 117 groundwater samples including 88 field samples and 29 QA/QC (duplicates, MS/MSD, trip blanks, rinsate blanks) were collected from 87 EBT injection and monitoring wells. Two samples were collected from the screened intervals in MW101. Samples were analyzed for VOCs and MNA parameters; only MNA parameters are discussed in this section. (See Tables 15-17) The May/June 2007 data are usable with the following qualifications:

- Seven sample results for hydrogen (IW21-03A, IW21-03B, IW21-02B, IW101-09C, IW21-01A, PMW21-04, IW21-05A) with holding times outside of the method recommendation are qualified as estimated J. It should be noted that laboratory data indicates sample stability well beyond the 14-day holding time so this is not expected to impact the hydrogen data significantly.
- For two samples (IW21-03B, IW92-08), pyruvic acid was not recovered in the matrix spike for metabolic acids, although they were recovered in the MSD. These results are qualified as R (rejected) to indicate that the sample non-detect is rejected because of the failure to recover the analyte in the matrix spike. Two samples for butyric (IW-92-08, IW21-03B), four for methane (IW101-02C, DR1-3 IW101-07C, IW92-08) and seven for hydrogen were qualified as estimated J based on MS/MSD results.

- Five samples (IW101-01C, IW101-02A, IW101-02B, PMW101-02A, PMW101-03B) for carbon dioxide was qualified estimated J based on an elevated LCS recovery indicating a high bias.
- Samples from seven SDGs for alkalinity were qualified estimated J based on the possibility of some bias associated with calibration drift, where a discrepancy in % D is observed.
- Several samples for alkalinity, chloride, and TOC were qualified estimated J based on MS/MSD recoveries.

4.3.1.6 Fourth Quarter-September 2007

During the September EBT-4 sampling event, 118 groundwater samples including 88 field samples and 30 QA/QC (duplicates, MS/MSD, trip blanks, rinsate blanks) were collected from 87 EBT injection and monitoring wells. Two samples were collected from the screened intervals in MW101. Samples were analyzed for VOCs and MNA parameters; only MNA parameters are discussed in this section. (See Tables 15-17) The September 2007 data are usable with the following qualifications:

- Certain VOA vials for RSK-175 analysis were not free of headspace, but there were enough vials free of headspace from the 8260 vials that resampling was generally not necessary. There were two samples for RSK-175 that required resampling, PMW85-04 and -05
- One sample (IW101-07A) for acetic acid and propionic acid were qualified as estimated J based on MS/MSD results.
- Twelve samples for carbon dioxide did not meet the 30% criterion for closing calibrations resulting in the qualification as estimated J.
- Three samples for carbon dioxide (IW101-07A, IW21-02B, IW101-03A) and one for methane (IW-01) were qualified estimated J based on MS/MSD recoveries.
- Several samples for bromide and alkalinity were qualified estimated J based on deviations greater than 10% RSD indicating variability of the instrument calibration response over a range of concentrations and MS/MSD recoveries
- The laboratory has noted holding time exceedence for samples in SDGs L0709471 and L0709237. The samples for SDG L0709471 were analyzed for nitrate /nitrite 4 days outside of holding time. The nitrate values may be usable, but the nitrite component was qualified as

rejected R. Some of the samples for SDG L0709237 were analyzed shortly after the holding time had expired. These samples were qualified estimated J.

4.3.2 MNA Analytical Results

The complete analytical results for MNA analyses of groundwater samples collected during Year One are presented in Appendix F. Comparison of the results for the baseline event with the design monitoring events and the quarterly events are discussed in the following two sections.

4.3.2.1 Design Monitoring

Design monitoring of the 38 selected EBT injection and monitoring wells was performed as an initial evaluation of the effectiveness of injection parameters (lactate concentration and injection rate, volume and frequency). The analytical results (dissolved gases and MFAs) for the baseline and design monitoring events are shown by area on Tables 11, 12 and 13. A summary of the mean concentrations of the dissolved gases and MFAs in each area is shown on Table 14.

All of the MFAs, except pyruvic acid, increased in all three areas after injections began. The highest concentrations were reported in the initial design monitoring event in October. Concentrations of carbon dioxide, methane and hydrogen increased in all three areas. Ethane and ethane were generally not detected. No changes in injection parameters were made as a result of the design monitoring.

4.3.2.2 Quarterly Monitoring

Quarterly monitoring of MNA parameters was performed to evaluate the success of EBT in creating anaerobic conditions in the aquifer. The MNA analytical results for the baseline and four quarterly events during Year One are shown by treatment area on Tables 15, 16 and 17. A summary of the mean concentrations of the dissolved gases and MFAs in injection wells and performance monitoring wells in each treatment area are shown on Table 18.

The injection wells in all EBT areas had decreases in nitrate and sulfate, and increases in alkalinity, TOC, MFAs, carbon dioxide, and methane. The greatest changes were from the baseline results to the second quarter results, with more stable concentrations thereafter. The concentrations of all MFAs decreased in

the TTA-1 MW-21 area in the third and fourth quarters, while only one MFA (lactic acid) decreased in the TTA-1 MW-101 area and in TTA-2.

Monitoring wells in the MW-21 area showed limited change in MNA parameters except for fluctuations in dissolved gases (carbon dioxide, methane and hydrogen). MFAs were first detected in the MW-21 area monitoring wells in the third quarter.

Monitoring wells in the MW-101 and TTA-2 areas had decreases in sulfate and nitrate, and increases in alkalinity, TOC, MFAs, and methane through the second quarter, with more stable results thereafter.

Methane concentrations generally increased throughout Year One in the injection and monitoring wells in all EBT areas. Ethane and ethane were generally not detected in either injection or monitoring wells.

4.4 VOLATILE ORGANIC COMPOUND RESULTS

VOC analyses were performed on groundwater samples collected from injection wells and monitoring wells during baseline and quarterly monitoring events at the end of months 3, 6, 9 and 12. Although 87 wells were to be sampled in the baseline and first quarter events, two of the wells were dry. During the second, third and fourth quarter events (after four replacement wells were installed), samples were collected from 87 wells as planned. During each event, two samples were collected from the screened intervals in MW-101. The complete analytical results for groundwater samples collected during Year One are presented in Appendix F.

4.4.1 VOC Analyses - Data Quality Evaluation

e²M performed data quality evaluation (DQE) of the laboratory data packages for the samples collected in 2007 to qualify the data relative to the data quality objectives (DQOs) described in the RA SAP. Data qualifiers are shown on the analytical results tables. Any result reported below the reporting limit (RL) but above the method detection limit (MDL) was flagged "J" and considered an estimated result (unless overridden by other QC flags). Also, any minor qualifications such as blank contamination were evaluated with respect to DQOs and if there were not significant impacts then these qualifications were either generalized in the text or not discussed. The DQE is summarized for each event in the following sections and the DQE narratives are provided in Appendix G.

4.4.1.1 Baseline-August/September 2006

During the two phases of Baseline Sampling in August and September of 2006, 121 groundwater samples including QA/QC were collected from 84 EBT injection and monitoring wells. Samples were analyzed for VOCs and MNA parameters; only VOC parameters are discussed in this section (see Tables 19-21). The data are usable with the following qualifications:

- Some trip blanks and some method blanks contained VOCs that resulted in the qualification of data as possible false positives or biased high values based on the blank data. This resulted in the "B" qualification of some of the acetone and methylene chloride results in the water samples. The "B"-qualified data were reported at levels below RLs and MCLs and are most likely related to laboratory contamination. Therefore, these results should not adversely impact data quality.
- 1,2-DCA and PCE results in one sample (IW21-03B) were flagged "J" and qualified as estimated based on MS/MSD performance.

4.4.1.2 First Quarter-December 2006

During the December 2006 EBT-1 sampling event, 115 groundwater samples including QA/QC were collected from 85 EBT injection and monitoring wells. Samples were analyzed for VOCs and MNA parameters; only VOC parameters are discussed in this section (see Tables 22-24). The December 2006 data are usable with the following qualifications:

- The possibility of some bias associated with calibration drift with respect to carbon tetrachloride was indicated in four samples (PMW21-03, PMW21-04, MW115, DR2-1), and where the discrepancy in % D was observed, the associated samples were qualified estimated J
- Carbon tetrachloride and PCE results in samples PMW92-05 and IW101-03C, respectively were flagged "J" and qualified as estimated based on MS/MSD performance.
- There were a number of elevated LCS recoveries observed. When a high recovery is associated with a non-detect in samples, no qualifier is added since the indicated bias is high. When the target is detected, the result is qualified as estimated J. Two samples (PMW92-02, PMW92-04) for cis-1,2-DCE were qualified as estimated J based on elevated LCS recoveries.
- Some trip blanks and some method blanks contained VOCs that resulted in the qualification of data as possible false positives or biased high values based on the blank data. This resulted in the "B"

qualification of some of the acetone and methylene chloride results in the water samples. The “B”-qualified data were reported at levels below RLs and MCLs and are most likely related to laboratory contamination. Therefore these results should not adversely impact data quality.

4.4.1.3 Second Quarter-March 2007

During the March 2007 EBT-2 sampling event, 123 groundwater samples including QA/QC were collected from 87 EBT injection and monitoring wells. Samples were analyzed for VOCs and MNA parameters; only VOC parameters are discussed in this section (see Tables 25-27). The March 2007 data are usable with the following qualifications:

- Results for MTBE in three samples (IW21-04A, OW21-05A, IW21-05B) were qualified estimated J based on slightly elevated LCS recoveries. No qualifier was added for non-detect data a high bias.
- In the case of DUP5, the parent sample (IW92-08) has a reported level of carbon tetrachloride at 8.2, and the duplicate is at 1.2 µg/L. All other analytes matched in all other duplicate samples.

4.4.1.4 Third Quarter-May/June 2007

During the May/June 2007 EBT-3 sampling event, 117 groundwater samples including QA/QC were collected from 87 EBT injection and monitoring wells. Samples were analyzed for VOCs and MNA parameters; only VOC parameters are discussed in this section (see Tables 28-30). The May/June 2007 data are usable with the following qualifications:

- Results for MEK in one sample (PMW92-03), and for carbon tetrachloride in three samples (MW-85, DR2-1, DR2-5) were qualified estimated J based on the possibility of some bias associated with calibration drift, where a discrepancy in % D is observed.
- When a high LCS recovery is associated with a non-detect in samples, no qualifier is added since the indicated bias is high. One sample for vinyl chloride (IW101-08C) was qualified as estimated J based on an elevated LCS recovery.
- Results for PCE (IW101-07C), cis-1,2-DCE (IW101-02C), and acetone (IW92-08, respectively) were qualified estimated J based on MS/MSD recoveries.

4.4.1.5 Fourth Quarter-September 2007

During the September EBT-4 sampling event, 118 groundwater samples, including QA/QC samples, were collected from 87 EBT injection and monitoring wells. Samples were analyzed for VOCs and MNA parameters; only VOC analyses are discussed in this section (see Tables 31-33) The data are usable with the following qualifications:

- When a high LCS recovery is associated with a non-detect in samples, no qualifier is added since the indicated bias is high. Several samples for acetone (IW92-06, IW92-07, IW85-02, IW21-01A) were qualified as estimated J based on an elevated LCS recovery.
- Results for PCE and cis-DCE in one sample (PMW101-05B) and for trichloropropane, acetone and carbon tetrachloride in a second sample (IW-01) were qualified estimated J based on MS/MSD recoveries.
- Whenever methylene chloride or acetone is detected in associated samples at a level less than 10x the method blank (corrected for dilution), the result is qualified as UB, and is the corrected at method blank level. Such results are usable as non-detects.

4.4.2 VOC Analytical Results

The complete analytical results for VOC analyses of groundwater samples collected during Year One are presented in Appendix F. The results for each sampling event are discussed in the following sections based on concentrations detected above the reporting limit for the CVOCs that are the EBT target compounds and daughter products: PCE, TCE, tDCE, cDCE, vinyl chloride (VC), CT and CF. The analytical results were compared to the maximum contaminant levels (MCLs).

4.4.2.1 Baseline Monitoring Results

Baseline sampling of the EBT injection and monitoring wells was performed 8 August to 6 September 2006. VOCs detected above the reporting limits are shown by treatment area on Tables 19, 20 and 21.

Groundwater samples were collected from 17 wells from the MW-21 area. Table 19 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 17 wells with a maximum concentration of 286 µg/L in IW21-04B.
- TCE was reported in samples from 17 wells with a maximum concentration of 87.7 µg/L in PMW21-04.
- cDCE was reported in samples from 13 wells with a maximum concentration of 4.2 µg/L in MW-115.

Groundwater samples were collected from 45 wells from the MW-101 area. Table 20 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 42 wells with a maximum concentration of 257 µg/L in PMW101-02A.
- TCE was reported in samples from 23 wells with a maximum concentration of 316 µg/L in IW101-09C.
- cDCE was reported in samples from 13 wells with a maximum concentration of 22.9 µg/L in IW101-09C.
- CF was reported in samples from 9 wells with a maximum concentration of 0.52 µg/L in IW101-09C.

Groundwater samples were collected from 22 wells from the TTA-2 area. Table 21 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 22 wells with a maximum concentration of 252 µg/L in PMW92-03.
- TCE was reported in samples from 21 wells with a maximum concentration of 39.7 µg/L in PMW92-06.
- cDCE was reported in samples from 21 wells with a maximum concentration of 149 µg/L in IW-01.

- CT was reported in samples from 22 wells with a maximum concentration of 222 µg/L in PMW85-01.
- CF was reported in samples from 22 wells with a maximum concentration of 82.7 µg/L in PMW92-06.

4.4.2.2 First Quarter Results

First quarter sampling of the EBT injection and monitoring wells was performed 4 to 14 December 2006. VOCs detected above the reporting limits are shown by treatment area on Tables 22, 23 and 24.

Groundwater samples were collected from 17 wells in the MW-21 area. Table 22 lists the analytical results for all constituents detected above the RL in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in 17 wells with a maximum concentration of 223 µg/L in IW21-04B.
- TCE was reported in 17 wells with a maximum concentration of 84.5 µg/L in PMW21-04.
- cDCE was reported in 10 wells with a maximum concentration of 70.3 µg/L in IW21-04A.
- tDCE was reported in IW21-04B with a concentration of 1.77 µg/L in IW21-04A.

Groundwater samples were collected from 45 wells in the MW-101 area. Table 23 lists the analytical results for all constituents detected above the RL in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in 43 wells with a maximum concentration of 196 µg/L in MW-101T.
- TCE was reported in 26 wells with a maximum concentration of 402 µg/L in IW101-07C.
- cDCE was reported in 16 wells with a maximum concentration of 94.3 µg/L in IW101-04B.
- CF was reported in 9 wells with a maximum concentration of 0.672 µg/L in IW101-09C.

Groundwater samples were collected from 23 wells in the TTA-2 area. Table 24 lists the analytical results for all constituents detected above the RL in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in 23 wells with a maximum concentration of 252 µg/L in PMW92-03.

- TCE was reported in 23 wells with a maximum concentration of 37.8 µg/L in PMW92-06.
- cDCE was reported in 23 wells with a maximum concentration of 172 µg/L in PMW92-02.
- CT was reported in 22 wells with a maximum concentration of 199 µg/L in PMW85-01.
- CF was reported in 23 wells with a maximum concentration of 191 µg/L in IW85-04.

4.4.2.3 Second Quarter Results

Second quarter sampling of the EBT injection and monitoring wells was performed 5 to 14 March 2007. VOCs detected above the reporting limits are shown by treatment area on Tables 25, 26 and 27.

Groundwater samples were collected from 16 wells in the MW-21 area. Table 25 lists the analytical results for all constituents detected above reporting limits (RLs) in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 16 wells with a maximum concentration of 167 µg/L in IW21-03A.
- TCE was reported in samples from 16 wells with a maximum concentration of 64.3 µg/L in PMW21-04.
- cDCE was reported in samples from 15 wells with a maximum concentration of 68.8 µg/L in IW21-04A.

Groundwater samples were collected from 45 wells in the MW-101 area. Table 26 lists the analytical results for all constituents detected above RLs in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 41 wells with a maximum concentration of 195 µg/L in IW101-02B
- TCE was reported in samples from 30 wells with a maximum concentration of 267 µg/L in IW101-07C.
- cDCE was reported in samples from 34 wells with a maximum concentration of 240 µg/L in IW101-08C.

- CF was reported in samples from 6 wells with a maximum concentration of 0.603 µg/L in IW101-09C.

Groundwater samples were collected from 25 wells from the TTA-2 area. Table 27 lists the analytical results for all constituents detected above RLs in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 25 wells with a maximum concentration of 195 µg/L in PMW92-05.
- TCE was reported in samples from 24 wells with a maximum concentration of 37.9 µg/L in PMW85-05.
- cDCE was reported in samples from 25 wells with a maximum concentration of 171 µg/L in PMW92-02, which was also the well in which PCE was slightly above the RL (1.58 µg/L) and TCE was below the RL.
- CT was reported in samples from 21 wells with a maximum concentration of 199 µg/L in PMW85-05.
- CF was reported in samples from 25 wells with a maximum concentration of 97.2 µg/L in IW92-08.

4.4.2.4 Third Quarter Results

Third quarter sampling of the EBT injection and monitoring wells was performed 29 May to 7 June 2007. VOCs detected above the reporting limits are shown by treatment area on Tables 28, 29 and 30.

Groundwater samples were collected from 17 wells from the MW-21 area. Table 28 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 17 wells with a maximum concentration of 189 µg/L in IW21-03A.
- TCE was reported in samples from 17 wells with a maximum concentration of 60.2 µg/L in PMW21-04.

- cDCE was reported in samples from 12 wells with a maximum concentration of 64.8 µg/L in IW21-01B.

Groundwater samples were collected from 45 wells from the MW-101 area. Table 29 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 40 wells with a maximum concentration of 138 µg/L in PMW101-04A
- TCE was reported in samples from 29 wells with a maximum concentration of 207 µg/L in IW101-09C.
- cDCE was reported in samples from 41 wells with a maximum concentration of 255 µg/L in IW101-08C.
- tDCE was reported in a sample from 1 well with a concentration of 1.75 µg/L in IW101-04C.
- CF was reported in samples from 3 wells with a maximum concentration of 0.468 µg/L in IW101-07C.

Groundwater samples were collected from 25 wells from the TTA-2 area. Table 30 lists the analytical results for all constituents detected in one or more samples. A total of 13 VOCs were detected above RLs in the June 2007 samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 25 wells with a maximum concentration of 194 µg/L in PMW92-05.
- TCE was reported in samples from 23 wells with a maximum concentration of 36.5 µg/L in PMW85-05.
- cDCE was reported in samples from 25 wells with a maximum concentration of 192 µg/L in IW92-08
- tDCE was reported in a sample from 1 well with a concentration of 1.93 µg/L in PMW85-05.
- CT was reported in samples from 21 wells with a maximum concentration of 171 µg/L in PMW85-01.

- CF was reported in samples from 25 wells with a maximum concentration of an estimated 89.7 µg/L in IW92-08.

4.4.2.5 Fourth Quarter Results

Fourth quarter sampling of the EBT injection and monitoring wells was performed 10 to 19 September 2007. VOCs detected above the reporting limits are shown by treatment area on Tables 31, 32 and 33.

Groundwater samples were collected from 17 wells from the MW-21 area. Table 31 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 17 wells with a maximum concentration of 132 µg/L in IW21-02A and MW-21.
- TCE was reported in samples from 17 wells with a maximum concentration of 50.7 µg/L in PMW21-04.
- cDCE was reported in samples from 14 wells with a maximum concentration of 109 µg/L in IW21-01B.

Groundwater samples were collected from 45 wells from the MW-101 area. Table 32 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 37 wells with a maximum concentration of 147 µg/L in MW-101B.
- TCE was reported in samples from 27 wells with a maximum concentration of 161J µg/L in PMW101-05B.
- cDCE was reported in samples from 40 wells with a maximum concentration of 286 µg/L in IW101-08C.
- CF was reported in samples from 4 wells with a maximum concentration of 0.556 µg/L in IW101-07C.

Groundwater samples were collected from 25 wells from the TTA-2 area. Table 33 lists the analytical results for all constituents detected in one or more samples. The analytical results for the primary groundwater contaminants were:

- PCE was reported in samples from 23 wells with a maximum concentration of 222 µg/L in PMW92-05.
- TCE was reported in samples from 21 wells with a maximum concentration of 35.4 µg/L in PMW85-05.
- cDCE was reported in samples from 25 wells with a maximum concentration of 182 µg/L in PMW92-03.
- CT was reported in samples from 18 wells with a maximum concentration of 152 µg/L in PMW85-05.
- CF was reported in samples from 25 wells with a maximum concentration of an estimated 114 µg/L in PMW92-06.
- VC was reported in a sample from DR2-1 with a concentration of 1.25 µg/L.

4.4.3 CVOC Concentration Trends

A comparison of reported concentrations for PCE, TCE, and cDCE in the baseline and quarterly sampling events for each treatment area are shown on Tables 34, 35 and 36. CT and CF are also shown for TTA-2 on Table 36. From the baseline event through the fourth quarter, PCE and TCE decreased in all three areas in the injection wells and to a lesser extent in the performance monitoring wells. cDCE generally increased in all three areas in both sets of wells. In TTA-2, CT concentrations decreased in injection and monitoring wells, while there was a slight decrease in CF concentrations in the injection wells and a small increase of CF in the monitoring wells.

The trend in the plume isopleths over time for PCE, TCE, cDCE, CT and CF are shown by treatment area in Figures 13 to 22. In all three areas, there is a reduction in the plume extent and the maximum concentrations for PCE and TCE, and an increase in the maximum concentrations for cDCE.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following sections present conclusions in regard to the specific 'Operating Properly and Successfully' (OPS) criteria presented in the RAWP and to the general progress of EBT in reducing groundwater contaminant concentrations to below MCLs.

5.1 OPERATING PROPERLY AND SUCCESSFULLY

The metrics for determining that EBT is operating properly are:

- Injection and performance monitoring wells are installed at the locations and to the depths indicated in this RAWP.
- Lactate is distributed throughout the EBT zones.
- Planned volumes of sodium lactate injection fluid can be injected into each TTA area injection well.

The metrics for determining that EBT is operating successfully are:

- Anaerobic aquifer conditions are created within the EBT zones after no more than two quarters of injections.
- Anaerobic aquifer conditions are maintained within the EBT zones.
- Concentrations of dissolved PCE and TCE in an EBT zone begin to decrease no more than two quarters after anaerobic aquifer conditions have been created in the EBT zone.

5.1.1 Operating Properly

The operating properly criteria have generally been met.

Well Installation

The injection and performance monitoring wells were installed as described in the RAWP. Two injection wells and two monitoring wells in TTA-2 were found to have been screened above the target zone. Replacement wells were installed in February 2007.

Lactate Distribution

Sodium lactate has been distributed throughout the treatment areas to varying degrees based on the MFA and TOC analyses. By the first quarter sampling event, MFA and TOC analyses had increased above baseline levels in most injection wells within the treatment areas and within some monitoring wells in the MW-101 area of TTA-1 and TTA-2. MFAs were not reported in monitoring wells from the MW-21 area of TTA-1 until the third quarter; approximately half of the MW-21 area monitoring wells had MFAs reported as of the fourth quarter.

The following table lists the total number of injection and monitoring wells in each treatment area and the number of wells with MFAs reported as of the fourth quarter (from Tables 15 to 17):

	TTA-1, MW-21		TTA-1, MW-101		TTA-2	
Well Type	IWs	MWs	IWs	MWs	IWs	MWs
Total Wells	10	7	27	18	12	13
Wells with MFAs Reported	10	5	26	12	12	7

The amount of lactate distributed throughout the aquifer is indicated by the following table which lists the average TOC concentration and the total of the average concentration of each MFA for the injection wells and monitoring wells in each area (from Table 18):

			Baseline	Quarter 1	Quarter 2	Quarter 3	Quarter 4
TTA-1, MW-21	Injection Wells	TOC	4	181	737	283	169
		Total MFAs	0	355	1699	1236	290
	Monitoring Wells	TOC	4	2	0	0	6
		Total MFAs	0	0	0	3	13
TTA-1, MW-101	Injection Wells	TOC	4	264	237	237	225
		Total MFAs	0	569	485	521	448
	Monitoring Wells	TOC	3	105	120	129	153
		Total MFAs	0	354	229	264	258
TTA-2	Injection Wells	TOC	4	954	900	1236	1449
		Total MFAs	1	1678	2264	1993	2389
	Monitoring Wells	TOC	7	45	54	66	159
		Total MFAs	0	82	103	139	243

All values in milligrams per Liter.

Injection Volumes

The planned injection volumes were met, as documented by the injection summaries in Appendix C.

5.1.2 Operating Successfully

The operating successfully criteria have generally been met with anaerobic conditions created and PCE and TCE concentrations decreased in the treatment areas. The anaerobic conditions have not been created over the full extent of the treatment areas and MW-21 area of TTA-1 has shown the least success.

Anaerobic Conditions Created and Maintained

The OPS criteria are that anaerobic conditions will be created in the treatment areas after no more than two quarters of injections and then maintained. Secondary parameters metrics were provided in the RAWP: DO less than 1 mg/L; ORP between -50 and -200 mV and pH between 6 and 8.

The following table lists the average ORP (mV) and DO (mg/L) concentration for the injection wells and monitoring wells in each area (from Appendix E-1 to E-6):

EBT Wells		Baseline		1st Quarter		2 nd Quarter		3 rd Quarter		4 th Quarter	
		ORP	DO	ORP	DO	ORP	DO	ORP	DO	ORP	DO
TTA-1, MW-21	IW	58	1.3	-12	3.0	-108	0.9	-141	0.6	-92	0.9
	MW	111	3.4	160	5.9	175	4.6	191	4.2	143	4.0
TTA-1, MW-101	IW	133	4.9	-37	3.1	-174	0.2	-142	0.6	-145	1.1
	MW	175	3.5	105	4.8	49	3.4	-14	2.2	-32	1.7
TTA-2	IW	63	3.6	-92	1.7	-177	0.7	-126	1.2	-122	1.8
	MW	142	4.1	90	5.1	73	4.2	44	2.7	37	1.9

Anaerobic conditions were achieved by the second quarter in the injection wells and were maintained, for the most part, through the fourth quarter. The extent of anaerobic conditions in monitoring wells increased over the year in the MW-101 area of TTA-1 and in TTA-2, but the monitoring wells in the MW-21 area of TTA-1 showed little reduction in ORP or DO from the baseline. Specific results for each area as of the fourth quarter are provided below.

The ORP criteria for anaerobic conditions were met for most injection wells in the TTA-1 MW-21 area (7 of 10), the TTA-1-MW-101 area (20 of 27) and TTA-2 (11 of 12). Similarly, the number of wells exhibiting anaerobic DO conditions included 9 of 10 wells in TTA-1 MW-21 area, 27 of 27 wells in the TTA-1 MW-101 area, and 10 of 12 wells in the TTA-2 area. The performance monitoring wells in the

TTA-1 MW-21 area were mainly aerobic with 6 of 7 wells in the nitrate-reducing range based on ORP and 5 of 7 above 2 mg/L DO indicative of aerobic conditions. In the TTA-1 MW-101 area, the ORP results had 13 of 19 wells at or below the iron-reducing range and 6 wells in the nitrate-reducing range, while based on DO 8 of 19 wells were anaerobic, 7 were nitrate-reducing, and 4 were aerobic. In the TTA-2 monitoring wells, the ORP results had 3 of 13 wells at or below the iron-reducing range, 9 in the nitrate-reducing range, and one aerobic; while based on DO, 4 of 13 were anaerobic, 4 were nitrate-reducing, and 5 were aerobic. The pH criterion was met in the IWs and MWs in all areas.

Decrease in PCE and TCE Concentrations

The OPS criteria was that PCE and TCE concentrations begin to decrease no more than two quarters after anaerobic aquifer conditions created. Decreases in PCE concentrations were seen in a few wells (IW21-04A, IW101-04C and PMW92-02) in the first quarter samples after injections began. The number of wells showing decreases in PCE and TCE concentrations, and increases in cDCE concentrations, increased during Year One (Tables 34 to 36). The following tables compare the maximum, minimum and average concentrations for PCE, TCE and cDCE in all three areas, and for CT and CF in TTA-2. In all three areas, maximum and average concentrations have decreased for PCE and TCE and increased for cDCE. In TTA-2, concentrations have decreased for CT and increased for CF.

The number of EBT wells with concentrations above the MCL area also shown. The number of wells exceeding MCLs have decreased slightly for PCE, TCE and CT, although the average concentration in each area is still above the respective MCL. The number of MCL exceedances have increased for cDCE and CF.

PCE	MCL	Baseline				EBT-4			
	5 µg/L	Max	Min	Avg	MCL Exceedance	Max	Min	Avg	MCL Exceedance
TTA-1, MW-21	IW	286	41.5	148.7	10	132	1.3	49.8	9
	PMW	199	6.4	110.1	7	132	9.6	70.9	7
TTA-1, MW-101	IW	232	0.6	97.2	24	127	0.6	31.8	17
	PMW	257	0.6	113.3	16	147	0.3	27.3	12
TTA-2	IW	196	1.1	122.2	10	51.4	0.4	16.8	7
	PMW	252	40.4	134.0	11	222	0.7	78.6	12

Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee

July 2008
Revision 0

TCE	MCL	Baseline				EBT-4			
	5 µg/L	Max	Min	Avg	MCL Exceedance	Max	Min	Avg	MCL Exceedance
TTA-1, MW-21	IW	64.5	14.8	36.5	10	41.9	1.3	16.5	9
	PMW	87.7	5.0	40.0	6	50.7	1.5	25.9	6
TTA-1, MW-101	IW	316.0	0.3	53.4	10	78.1	0.5	14.9	13
	PMW	232.0	0.3	32.9	5	161.0	0.3	17.6	3
TTA-2	IW	26.9	2.6	10.0	8	14.0	0.8	5.0	3
	PMW	39.7	2.9	15.3	10	35.4	4.1	12.0	9

cDCE	MCL	Baseline				EBT-4			
	70 µg/L	Max	Min	Avg	MCL Exceedance	Max	Min	Avg	MCL Exceedance
TTA-1, MW-21	IW	4.1	0.8	2.2	0	109	1.8	39.8	3
	PMW	4.2	0.5	2.2	0	10.2	0.5	2.6	0
TTA-1, MW-101	IW	22.9	0.3	3.4	0	387	0.4	76.1	8
	PMW	14.6	0.3	2.2	0	110	0.5	39.5	6
TTA-2	IW	57.9	0.7	17.7	0	105	39.9	74.0	6
	PMW	149.0	4.7	37.8	2	182	18.0	79.4	6

CT	MCL	Baseline				EBT-4			
	5 µg/L	Max	Min	Avg	MCL Exceedance	Max	Min	Avg	MCL Exceedance
TTA-2	IW	168	2.0	47.1	10	83	0.3	15.1	5
	PMW	222	8.9	88.5	11	152	2.3	49.8	11

CF	MCL	Baseline				EBT-4			
	80 µg/L*	Max	Min	Avg	MCL Exceedance	Max	Min	Avg	MCL Exceedance
TTA-2	IW	68.9	7.0	23.4	0	87.9	0.7	28.4	1
	PMW	82.7	5.6	29.8	1	114	0.8	40.6	2

* MCL for total trihalomethanes shown.

The change in CVOC concentrations in the two areas of TTA-1 and in TTA-2 is shown on the isopleths plots shown on Figures 13 to 22.

5.2 OVERALL EVALUATION OF THE EBT SYSTEM AFTER YEAR ONE

The aquifer is responding as expected from the introduction of oxidizable carbon. Microbial activity is responsible for a loss of oxygen, nitrate and sulfate. This has resulted in a decrease in ORP, and production of end-products of microbial metabolism, carbon dioxide, methane and hydrogen. Nitrate and sulfate concentrations have decreased in the injection wells and, in the monitoring wells in the MW-101 area and to a lesser extent in the TTA-2 area. The treatment areas continue to exhibit conditions at a reduction potential at or below sulfate reduction, and at values conducive for reductive dechlorination. There has been a continued increase or sustained levels in the mean concentration of carbon dioxide and methane within the injection wells during the fourth quarter. There has been a decline in hydrogen in all three areas. Carbon dioxide has increased over the four quarters in the MW-21 and MW-101 monitoring well areas and remained constant in monitoring wells in TTA-2 area. Methane has shown an increase in all areas through the fourth quarter.

The Year One EBT data was also reviewed by e²M subcontractor, Hugh Russell of AR Environmental; his report is included as Appendix H. Dr. Russell classified the EBT wells as positive where either reductive dechlorination was apparent or there was a loss of CVOC mass, or negative where there was neither reductive dechlorination nor CVOC mass loss. The wells were classified based on VOC analytical results from the baseline sampling through the fourth quarter. Wells were considered positive for reductive dechlorination where a definite loss of progenitor (PCE or CT) was mirrored by an increase in known daughter products (TCE/cDCE or CF). Wells considered negative had no evidence of CVOC attenuation.

The positive wells were further analyzed by determining the percent mass of the progenitor and daughter products to the total mass of CVOCs. During active reductive dechlorination, the percent of the total of the progenitor should decrease, while the percent of the total of one or more daughter products should increase. Some of the positive wells were responding better than others and had very active reductive dechlorination; these wells were then classified best. The wells in each classification are shown on Table 37; there were a total of 45 wells classified 'best'; 22 wells classified 'positive' and 20 wells classified 'negative'. Dr. Russell's report classified 18 wells as negative, but additional review by e²M resulted in re-classification of two wells (DR2-5 and PMW101-08B) from positive to negative. Mass balance charts, which illustrate the breakdown of PCE to daughter products are shown for 33 of the EBT wells in Appendix I.

Twenty wells were classified as negative for reductive dechlorination or mass loss. Three of these wells (IW-101-08A, IW-101-09A and PMW-101-07A) have low CVOC concentrations (less than 1 ppb) and may not belong in any group. Most of the remaining negative wells appear to be limited in carbon substrate based on TOC and MFA results and the other parameters do not indicate favorable conditions for reductive dechlorination. At one well, IW-21-03B, all the parameters appear to be in place; TOC and MFAs are elevated, ORP is between -100 to -250 mV, sulfate and nitrate has been removed, but PCE and TCE concentrations have remained stable.

The results at IW-21-03B notwithstanding, TOC appears to be the most useful indicator of active reductive dechlorination. All other MNA parameters appear to simply respond as expected in the presence of oxidizable (usable) organic carbon. An increase in TOC at an EBT well correlates to an increase in organic carbon (lactate or metabolic fatty acids), carbon dioxide, methane, hydrogen and alkalinity. There is a corresponding decline in nitrate and sulfate concentration as they are used as anaerobic TEAs. The concentration of CVOCs also decline as they are used as TEAs. In several wells, parameters that would suggest microbial activity (TOC, lactate, MFAs, carbon dioxide, methane and hydrogen) had an initial increase and then declined in concentration suggesting that microbial activity within the aquifer has increased (carbon degradation) to a point where lactate was assimilated after injection. Review of the data suggests that reductive dechlorination is occurring where TOC is above 40 to 50 mg/L.

One surprising result was the lack of increase in TOC or MFA concentrations at some injection wells. At several wells in the MW-21 area (e.g. IW-21-02A), the lactate appears to move away from these locations rapidly after injection without any affect on CVOC concentration.

5.3 RECOMMENDATIONS

The following recommendations will be implemented to improve the EBT operations and effectiveness:

5.3.1 Monitoring Parameters

Laboratory analyses of primary monitoring parameters will be limited to TOC, dissolved gases (methane, carbon dioxide, ethene and ethane), MFAs and VOCs. TOC will be monitored to assure that the substrate is sufficient to drive the reductive dechlorination process. Methane and carbon dioxide are useful as direct indicators of microbial growth, and ethene and ethane are included in the same analysis. MFAs provide supporting information for TOC in regard to microbial activity. VOCs are the main parameter for success

of EBT. Other parameters (anions, alkalinity, metals, hydrogen) are not considered to provide necessary information. There is either little difference in these parameters at locations where reductive dechlorination is active or not active, or the necessary information is provided by the recommended analyses.

5.3.2 Injections Procedures

Injections are recommended for selected monitoring wells to increase the area being treated. There are several locations where TOC concentrations have not increased and no indication of microbial activity has been observed. This could be the result of preferential pathways for groundwater flow or areas where the monitoring wells are not directly downgradient of the injection wells. Injections will be made in PMW21-01, PMW21-02, PMW-21-04, PMW101-08A/B, PMW85-05, PMW92-01, PMW92-05 and IW-01. The injections will have the same target volume as nearby injection wells, although the injection flow rate may need to be reduced.

Addition of cellulose as an electron donor is recommended to provide a slower acting carbon source and to increase the microbial population used for reductive dechlorination. The initial conversion of cellulose is by fermentative bacteria and some clostridia (fermentative bacteria) are capable of dechlorinating cDCE. Thus, by mixing substrates a wider range of microorganisms (consortium) can be employed for the reductive dechlorination process. In addition, it is believed this additional source will not be transported from the injection point as quickly and will increase TOC at those injection wells where little increase has been observed.

Injection of a bacterial consortium demonstrated to reduce PCE to the environmentally benign non-chlorinated ethane is recommended to increase the biodegradation of the parent compounds and daughter products.

6.0 REFERENCES

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*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

TABLES

TABLE 1
REPLACEMENT WELL INSTALLATION SUMMARY
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Area	Date Completed	Northing	Easting	Top of		Ground Elevation (ft. msl)	Boring Depth (ft. bgs)	Depth to Clay (ft. bgs)	Depth to Groundwater (ft. toc)	Date Measured	Depth to Top of Screen (ft. bgs)	Screen Length (ft)	Total Well Depth (ft. bgs)
					Casing Elevation (ft. msl)	Total								
IW85-05	- TTA-2	2/22/2007	276815.58	806162.75	304.73	111	305.30	111	102	95.17	3/2/07	92.97	10	103.4
IW85-06	TTA-2	2/27/2007	276779.47	806183.37	304.81	111	305.45	111	-	96.05	2/28/07	96.14	10	106.5
PMW85-04	TTA-2	2/21/2007	276763.5	806168.69	305.18	111	305.33	111	102	97.27	3/2/07	91.88	10	102.7
PMW85-05	TTA-2	2/22/2007	276752.08	806222.46	305.12	111	305.32	111	103	96.27	3/2/07	93.36	10	103.0

TABLE 2
REPLACEMENT WELL DEVELOPMENT SUMMARY
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Final Stabilization Parameters										
Well ID	Start Date	Start Time	Finish Date	Finish Time	Volume Purged (Liters)	pH	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Total Depth (feet)
PMW85-04	2/27/2007	12:17	2/28/07	15:46	43	6.2	0.400	9.8	20.9	102.55
PMW85-05	2/28/2007	11:01	3/1/07	9:13	38	6.0	0.395	9.8	21.4	102.83
IW85-05	2/28/2007	11:43	3/1/07	12:49	28	5.9	0.401	9.7	20.9	102.80
IW85-06	2/28/2007	9:20	3/1/07	9:30	18	10.8	0.499	9.8	22.2	105.90

TABLE 3
EBT SAMPLING SCHEDULE
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Baseline	Design	Design	EBT Quarter	EBT Quarter	EBT Quarter	EBT Quarter
	Aug-06 to Sept-06	Monitoring 1 Oct-06	Monitoring 2 Nov-06	1 Dec-06	2 Mar-07	3 Jun-07	4 Sep-07
1 IW101-01A	X	X	X	X	X	X	X
2 IW101-01B	X	X	X	X	X	X	X
3 IW101-01C	X	X	X	X	X	X	X
4 IW101-02A	X	-	-	X	X	X	X
5 IW101-02B	X	-	-	X	X	X	X
6 IW101-02C	X	-	-	X	X	X	X
7 IW101-03A	X	X	X	X	X	X	X
8 IW101-03B	X	X	X	X	X	X	X
9 IW101-03C	X	X	X	X	X	X	X
10 IW101-04A	X	X	X	X	X	X	X
11 IW101-04B	X	X	X	X	X	X	X
12 IW101-04C	X	X	X	X	X	X	X
13 IW101-05A	X	-	-	X	X	X	X
14 IW101-05B	X	-	-	X	X	X	X
15 IW101-05C	X	-	-	X	X	X	X
16 IW101-06A	X	-	-	X	X	X	X
17 IW101-06B	X	-	-	X	X	X	X
18 IW101-06C	X	-	-	X	X	X	X
19 IW101-07A	X	-	-	X	X	X	X
20 IW101-07B	X	-	-	X	X	X	X
21 IW101-07C	X	-	-	X	X	X	X
22 IW101-08A	X	X	X	X	X	X	X
23 IW101-08B	X	X	X	X	X	X	X
24 IW101-08C	X	X	X	X	X	X	X
25 IW101-09A	X	X	X	X	X	X	X
26 IW101-09B	X	X	X	X	X	X	X
27 IW101-09C	X	X	X	X	X	X	X
28 IW21-01A	X	X	X	X	X	X	X
29 IW21-01B	X	X	X	X	X	X	X
30 IW21-02A	X	-	-	X	X	X	X
31 IW21-02B	X	-	-	X	X	X	X
32 IW21-03A	X	X	X	X	X	X	X
33 IW21-03B	X	X	X	X	X	X	X
34 IW21-04A	X	-	-	X	X	X	X
35 IW21-04B	X	-	-	X	X	X	X
36 IW21-05A	X	-	-	X	X	X	X
37 IW21-05B	X	-	-	X	X	X	X
38 IW85-01	X	-	-	X	X	X	X
39 IW85-02	X	-	-	X	X	X	X
40 IW85-03	X	-	-	X	A	A	A
41 IW85-04	X	X	X	X	X	-	-
IW85-05	*	*	*	*	X	X	X
IW85-06	*	*	*	*	X	X	X
42 IW92-01	X	X	X	X	X	X	X
43 IW92-02	X	-	-	X	X	X	X
44 IW92-03	X	X	X	X	X	X	X
45 IW92-04	X	-	-	X	X	X	X
46 IW92-05	X	X	X	X	X	X	X
47 IW92-06	X	-	-	X	X	X	X
48 IW92-07	X	X	X	X	X	X	X
49 IW92-08	X	-	-	X	X	X	X
50 DR1-3	X	-	-	X	X	X	X

TABLE 3
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YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Baseline	Design	Design	EBT Quarter	EBT Quarter	EBT Quarter	EBT Quarter
	Aug-06 to Sept-06	Monitoring 1 Oct-06	Monitoring 2 Nov-06	1 Dec-06	2 Mar-07	3 Jun-07	4 Sep-07
51 DR2-1	X	-	-	X	X	X	X
52 DR2-5	X	-	-	X	X	X	X
53 IW-01	X	-	-	X	X	X	X
54 MW-21	X	X	X	X	X	X	X
55 MW-85	X	-	-	X	X	X	X
56 MW101B ¹	X	-	-	X	X	X	X
57 MW101T ¹	X	-	-	X	X	X	X
58 MW-115	X	-	-	X	X	X	X
59 PMW101-01A	X	-	-	X	X	X	X
60 PMW101-01B	X	-	-	X	X	X	X
61 PMW101-02A	X	X	X	X	X	X	X
62 PMW101-02B	X	X	X	X	X	X	X
63 PMW101-03A	X	-	-	X	X	X	X
64 PMW101-03B	X	-	-	X	X	X	X
65 PMW101-04A	X	X	X	X	X	X	X
66 PMW101-04B	X	X	X	X	X	X	X
67 PMW101-05A	X	X	X	X	X	X	X
68 PMW101-05B	X	X	X	X	X	X	X
69 PMW101-06A	X	-	-	X	X	X	X
70 PMW101-06B	X	-	-	X	X	X	X
71 PMW101-07A	X	X	X	X	X	X	X
72 PMW101-07B	X	X	X	X	X	X	X
73 PMW101-08A	X	X	X	X	X	X	X
74 PMW101-08B	X	X	X	X	X	X	X
75 PMW21-01	X	-	-	X	X	X	X
76 PMW21-02	X	-	-	X	X	X	X
77 PMW21-03	X	X	X	X	X	X	X
78 PMW21-04	X	-	-	X	X	X	X
79 PMW21-05	X	-	-	X	X	X	X
80 PMW85-01	X	X	X	X	X	X	X
81 PMW85-02	X	-	-	X	A	A	A
82 PMW85-03	X	-	-	X	A	A	A
PMW85-04	*	*	*	*	X	X	X
PMW85-05	*	*	*	*	X	X	X
83 PMW92-01	X	X	X	X	X	X	X
84 PMW92-02	X	-	-	X	X	X	X
85 PMW92-03	X	-	-	X	X	X	X
86 PMW92-04	X	X	X	X	X	X	X
87 PMW92-05	X	X	X	X	X	X	X
88 PMW92-06	X	-	-	X	X	X	X

Notes:

X: Sample collected

-: Sample not collected or not planned

P: Sample planned

A: Well Abandoned

*: Not Installed

1) Note MW101T and MW101B are two screened intervals in the same well

TABLE 4
FINAL FIELD MEASUREMENTS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Reduction Potential mV	Oxidation Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW101-01A	8/21/2006	14:00	129.0	88.7	280	35.1	5.6	22.9	0.390	7.0	42	42	108	1	60
IW101-01B	8/22/2006	8:14	120.0	88.7	120	2.8	4.6	22.0	0.430	6.5	140	140	0	0	65
IW101-01C	8/22/2006	11:00	99.0	88.7	240	12.4	5.2	23.0	0.380	6.0	75	75	10	1	70
IW101-02A	8/22/2006	14:26	131.0	88.9	240	14.0	5.3	25.0	0.390	5.9	136	136	8	0	70
IW101-02B	8/23/2006	9:00	117.0	89.0	320	12.0	5.4	22.2	0.380	5.8	130	130	9	0	70
IW101-02C	8/23/2006	10:05	100.0	89.4	171	4.1	6.2	22.1	0.370	3.2	67	67	4	0	80
IW101-03A	8/23/2006	12:30	133.0	89.5	120	3.9	5.9	26.1	0.350	5.8	84	84	9	0	100
IW101-03B	8/23/2006	15:16	117.0	89.3	140	17.4	4.9	24.6	0.420	7.1	171	171	39	0	60
IW101-03C	8/24/2006	7:50	101.0	89.6	120	3.9	4.8	21.9	0.220	5.7	160	160	9	0	45
IW101-04A	8/24/2006	10:51	131.0	89.2	140	10.6	5.6	24.7	0.420	5.9	95	95	12	0	60
IW101-04B	8/24/2006	12:41	115.0	89.5	100	4.6	5.5	23.5	0.410	6.1	114	114	9	0	60
IW101-04C	8/24/2006	15:20	99.0	89.1	140	12.6	5.8	22.2	0.430	4.2	128	128	10	0	60
IW101-05A	8/28/2006	12:20	129.0	89.5	140	11.5	5.9	25.9	0.410	8.9	126	126	120	0	35
IW101-05B	8/28/2006	9:30	115.0	89.3	135	14.6	5.0	23.0	0.410	8.1	246	246	10	0	35
IW101-05C	8/25/2006	15:10	98.0	89.3	140	19.5	4.4	22.2	0.350	3.3	223	223	15	0	60
IW101-06A	8/29/2006	10:38	131.0	90.0	200	9.7	5.9	23.3	0.355	3.0	150	150	10	0	120
IW101-06B	8/28/2006	9:30	101.0	90.0	280	13.3	5.9	24.4	0.246	0.0	146	146	10	0	105
IW101-06C	8/28/2006	11:50	101.0	90.0	280	8.6	5.9	24.0	0.186	0.0	143	143	7	0	85
IW101-07A	8/28/2006	14:46	131.0	90.6	280	14.7	6.1	24.2	0.434	0.0	185	185	19	0	120
IW101-07B	8/29/2006	7:49	113.0	90.6	186	9.7	5.9	22.3	0.229	0.0	68	68	8	2	60
IW101-07C	8/29/2006	9:30	100.0	90.5	280	5.2	5.8	23.2	0.161	0.0	113	113	10	0	105
IW101-08A	8/28/2006	14:15	131.0	89.9	95	2.7	5.1	24.1	0.510	9.3	262	262	10	0	60
IW101-08B	8/28/2006	15:40	115.0	90.0	130	4.9	5.1	23.6	0.200	7.2	113	113	10	0	45
IW101-08C	8/29/2006	8:40	99.0	90.6	140	10.1	5.3	22.2	0.190	5.1	71	71	10	0	20
IW101-09A	8/29/2006	10:00	132.0	90.4	140	3.4	4.5	22.6	0.550	7.1	256	256	9	0	85
IW101-09B	8/29/2006	13:30	116.0	90.3	13	5.3	5.3	22.9	0.200	6.2	71	71	10	1	30
IW101-09C	8/29/2006	15:35	101.0	90.3	140	12.0	5.6	23.0	0.170	4.2	77	77	10	0	35
IW21-01A	8/8/2006	14:43	102.0	90.8	110	15.5	8.0	22.0	0.370	2.1	-21	-21	0	2.9	50
IW21-01B	8/8/2006	10:18	94.0	91.0	119	8.9	9.3	21.5	0.550	1.2	-130	-130	78	4.8	125
IW21-02A	8/9/2006	8:46	105.0	91.0	240	8.0	5.9	20.8	0.273	0.0	119	119	10	0.8	25
IW21-02B	8/8/2006	14:15	95.0	91.2	240	4.1	5.5	21.5	0.272	0.0	161	161	0	0.1	50
IW21-03A	8/9/2006	12:15	104.0	89.8	260	6.3	5.9	22.4	0.287	1.5	94	94	7	0	55
IW21-03B	8/9/2006	13:40	96.0	89.4	220	3.8	5.8	24.6	0.375	0.0	45	45	0	0.6	45
IW21-04A	8/10/2006	7:57	105.0	89.6	167	5.0	5.8	20.9	0.324	2.2	150	150	5	0	40
IW21-04B	8/10/2006	9:40	94.0	89.8	280	7.3	5.9	21.0	0.296	0.2	94	94	10	0	55
IW21-05A	8/10/2006	14:20	106.0	89.1	128	9.1	6.8	22.1	0.300	2.2	9	9	29	0.6	25
IW21-05B	8/10/2006	12:50	95.0	89.1	155	8.5	6.4	22.1	0.280	3.8	61	61	40	0.6	45
IW85-01	9/1/2006	13:40	96.0	94.1	120	1.2	4.8	24.7	0.210	5.2	147	147	0	0	80
IW85-02	9/1/2006	12:10	98.0	94.8	145	16.7	5.2	23.1	0.240	6.1	105	105	34	0	25
IW85-03	9/1/2006	Well Dry	NA	83.7	5	0.3	5.9	23.7	0.260	7.9	-15	-15	328	NA	NA
IW85-04 ¹	9/1/2006	7:05	79.9	79.8	18	0.8	5.8	32.1	0.200	7.1	66	66	41	0	15
IW92-01	8/31/2006	10:00	89.0	86.9	120	1.6	5.2	23.0	0.280	7.3	167	167	2	0	50

TABLE 4
FINAL FIELD MEASUREMENTS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW92-02	8/31/2006	13:30	90.0	82.8	120	13.1	5.8	22.6	0.220	8.3	121	OR	0	20
IW92-03	8/31/2006	10:13	92.0	92.0	101	1.8	5.9	23.7	0.195	0.0	21	14	0	45
IW92-04	8/31/2006	12:20	92.0	91.8	120	8.2	6.2	24.6	0.231	1.3	-1	10	0.4	85
IW92-05	8/31/2006	14:50	92.0	91.9	72	2.4	6.2	25.6	0.295	0.5	-59	12	2.6	105
IW92-06	9/1/2006	9:15	93.0	91.9	56	6.8	6.9	23.7	0.294	0.0	138	376	0	45
IW92-07	9/1/2006	13:27	95.0	92.9	200	13.4	6.0	23.9	0.267	0.0	-4	48	2	95
IW92-08	9/5/2006	13:48	95.0	94.5	80	7.9	5.9	26.4	0.220	0.0	72	44	0.4	105
DR1-3	8/25/2006	7:59	121.6	90.3	200	2.7	5.9	21.4	0.332	1.4	287	6	0	140
DR2-1	8/31/2006	9:15	92.3	88.2	114	14.3	4.7	22.5	0.280	6.6	293	14	1	60
DR2-5	8/31/2006	14:40	98.6	95.8	97	1.4	5.0	24.6	0.190	5.9	160	0	0	20
IW-01	9/5/2006	8:18	97.8	94.3	140	2.3	5.5	23.9	0.461	0.0	-39	10	7	385
MW-21	8/8/2006	11:59	99.2	91.2	200	11.2	5.9	21.4	0.241	0.0	219	11	0	55
MW-85	8/30/2006	9:00	105.1	88.4	120	4.5	4.6	22.7	0.200	5.9	239	9	0	45
MW101B	8/25/2006	9:50	133.0	89.1	180	20.8	3.5	21.5	0.400	6.1	302	18	0	40
MW101T	8/25/2006	11:50	115.0	89.1	168	12.6	3.8	26.7	0.410	5.9	301	9	0	50
MW-115	8/10/2006	14:20	94.9	87.9	140	12.4	5.6	21.4	0.243	0.6	94	3	0	55
PMW101-01A	8/21/2006	9:48	129.6	88.8	240	8.7	6.0	23.9	0.425	0.0	17	7	1.7	150
PMW101-01B	8/21/2006	13:10	108.9	89.0	160	10.3	6.0	23.2	0.391	6.5	86	10	0	65
PMW101-02A	8/22/2006	9:50	128.0	89.7	200	14.0	6.0	22.7	0.419	13.0	68	49	0	130
PMW101-02B	8/22/2006	10:51	108.3	89.8	200	2.2	5.9	22.9	0.401	10.5	99	6	0	70
PMW101-03A	8/23/2006	10:02	130.1	89.9	200	4.5	6.0	21.3	0.326	0.0	46	8	1.2	120
PMW101-03B	8/30/2006	12:25	110.1	89.8	123	2.8	5.6	21.8	0.322	0.0	203	9	0	130
PMW101-04A	8/22/2006	12:15	128.8	89.3	91	3.3	5.9	23.3	0.494	9.7	156	2	0	120
PMW101-04B	8/29/2006	14:24	109.5	89.7	240	7.8	5.8	22.8	0.278	0.9	189	10	0	90
PMW101-05A	8/22/2006	14:10	115.7	89.5	200	4.5	5.8	23.3	0.429	8.5	225	0	0	105
PMW101-05B	8/23/2006	8:31	98.2	89.8	200	3.8	5.8	21.2	0.175	0.0	264	6	0	50
PMW101-06A	8/23/2006	14:56	130.8	90.0	200	9.8	6.1	22.3	0.398	0.0	83	9	0	120
PMW101-06B	8/24/2006	7:45	110.2	90.0	200	2.6	5.8	21.1	0.274	0.0	240	5	0	115
PMW101-07A	8/25/2006	10:34	128.7	90.0	240	3.4	5.9	22.7	0.500	2.3	200	9	0	120
PMW101-07B	8/24/2006	11:32	108.7	90.2	200	2.7	5.7	23.2	0.173	0.0	228	10	0	100
PMW101-08A	8/24/2006	12:45	108.9	90.8	180	2.6	5.9	24.1	0.585	0.0	241	8	0	140
PMW101-08B	8/24/2006	15:43	108.9	90.7	160	3.0	5.8	25.6	0.192	0.0	84	8	0.6	40
PMW21-01	8/9/2006	8:29	100.9	90.9	120	4.7	5.6	21.6	0.290	4.3	131	0	4.8	125
PMW21-02	8/9/2006	10:24	102.1	90.0	200	4.2	5.9	21.6	0.301	1.7	28	7	1.4	60
PMW21-03	8/10/2006	11:05	101.2	89.2	160	14.2	6.0	21.2	0.320	5.5	119	41	0	25
PMW21-04	8/9/2006	15:39	100.2	89.1	75	9.8	5.8	26.2	0.330	2.2	105	28	0	55
PMW21-05	8/10/2006	17:13	105.1	87.2	113	8.2	6.1	26.9	0.240	9.4	82	16	0.8	40
PMW85-01	8/30/2006	7:45	100.7	96.6	120	3.1	4.8	22.3	0.210	5.5	138	7	0	60
PMW85-02	8/30/2006	9:40	84.3	80.2	40	8.7	6.1	23.4	0.209	1.7	-55	113	NA	NA
PMW85-03	8/30/2006	Well Dry	NA	NA	140	0.1	5.6	25.2	0.000	9.5	42	OR	NA	NA
PMW92-01	8/30/2006	13:51	99.0	93.6	124	9.3	6.1	25.0	0.317	1.9	88	145	2	95
PMW92-02	8/31/2006	7:55	100.7	93.3	240	1.4	5.9	23.2	0.200	0.6	220	16	0	80

TABLE 4
FINAL FIELD MEASUREMENTS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (bioc)	Depth to Water ft (bioc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
PMW92-03	8/30/2006	15:35	98.6	93.1	100	0.7	4.7	24.1	0.270	4.7	232	3	0	45
PMW92-04	8/30/2006	14:10	98.5	93.9	140	5.2	5.0	23.0	0.290	2.8	145	10	0	45
PMW92-05	8/30/2006	12:50	96.7	93.6	120	1.9	4.8	24.4	0.230	4.0	201	9	0	35
PMW92-06	8/30/2006	11:50	98.9	94.4	100	3.8	4.8	23.1	0.210	4.6	182	9	0	45

Notes: 1) IW85-04 was purged dry 8/31/06 and sampled 9/1/06
2) IW85-03 and PMW85-03 went dry and no sample was collected
3) PMW85-02 went dry during sampling, only metals and TOC samples were collected
4) OR - out of range
5) NA - not available

TABLE 5
FINAL FIELD MEASUREMENTS, DESIGN MONITORING SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs
IW101-01A	10/5/2006	13:07	129.0	88.86	120	6.6	6.3	23.5	0.2	-195	10
IW101-01B	10/5/2006	15:09	120.0	88.82	120	3.2	6.2	22.3	2.6	50	7
IW101-01C	10/6/2006	8:00	99.0	88.95	120	3.2	6.1	19.1	2.5	39	6
IW101-03A	10/6/2006	10:15	133.0	90.90	104	3.1	6.0	22.3	4.9	-90	2
IW101-03B	10/6/2006	11:29	117.0	89.94	150	4.6	6.0	22.1	2.7	57	2
IW101-03C	10/6/2006	13:40	101.0	89.98	112	15.3	6.3	22.5	7.7	-55	9
IW101-04A	10/9/2006	9:32	131.0	89.68	120	8.2	6.3	22.3	7.3	-93	5
IW101-04B	10/9/2006	11:20	115.0	89.75	120	5.9	6.4	21.8	1.2	-124	0
IW101-04C	10/9/2006	14:13	99.0	89.64	160	16.7	6.5	21.5	0.4	-127	20
IW101-08A	10/10/2006	8:15	131.0	90.07	140	4.0	6.1	21.3	6.8	104	5
IW101-08B	10/10/2006	10:00	115.0	90.19	140	5.1	5.9	22.3	6.3	87	0
IW101-08C	10/10/2006	10:50	99.0	90.61	140	5.0	5.9	22.4	1.4	-95	9
IW21-01A	10/10/2006	12:40	102.0	90.80	140	11.4	6.1	20.6	0.4	-161	17
IW21-01B	10/11/2006	7:35	94.0	90.83	140	17.9	6.4	19.0	3.4	-77	40
IW21-03A	10/11/2006	10:53	104.0	89.74	140	4.7	5.9	19.6	2.4	144	7
IW21-03B	10/11/2006	13:28	96.0	89.48	166	20.0	6.3	20.5	5.6	-62	20
IW85-04 ¹	10/13/2006	7:25	79.9	79.30	60	0.0	6.1	17.9	1.0	-101	583
IW92-01	10/11/2006	14:25	89.0	85.15	140	4.0	5.8	22.7	2.6	64	8
IW92-03	10/12/2006	8:25	92.0	91.69	130	3.7	5.8	18.8	1.8	11	9
IW92-05	10/12/2006	11:40	92.0	91.99	130	6.5	5.9	17.3	0.6	-48	89
IW92-07	10/12/2006	13:12	95.0	93.04	120	3.3	6.0	20.7	0.9	-62	8
DR2-1	10/12/2006	15:32	92.3	88.13	206	4.1	6.0	19.1	7.5	60	19
MW-21	10/10/2006	10:05	99.2	91.35	200	3.9	5.2	19.5	6.1	228	3
PMW101-02A	10/3/2006	12:16	128.0	89.81	200	3.3	7.0	22.7	6.1	144	0
PMW101-02B	10/3/2006	13:30	108.3	89.99	200	3.6	6.2	21.8	4.7	202	0
PMW101-04A	10/6/2006	8:20	128.8	89.53	200	5.7	6.8	19.3	6.9	161	11
PMW101-04B	10/6/2006	9:43	109.5	90.07	240	4.6	5.8	19.6	7.6	224	4
PMW101-05A	10/6/2006	11:05	115.7	89.80	200	3.3	10.5	20.2	2.5	-82	6
PMW101-05B	10/9/2006	8:25	98.2	89.97	200	5.6	4.9	19.0	8.5	263	8
PMW101-07A	10/9/2006	9:50	128.7	90.33	200	4.7	7.2	20.7	2.1	88	5
PMW101-07B	10/9/2006	12:20	108.7	90.47	160	8.0	5.1	22.1	8.6	228	14
PMW101-08A	10/9/2006	14:20	108.9	91.02	200	6.3	5.7	22.6	7.0	186	19
PMW101-08B	10/10/2006	8:25	108.9	90.94	200	5.8	5.9	21.1	6.3	176	13
PMW21-03	10/10/2006	12:00	101.2	89.48	180	4.2	5.5	21.3	7.1	214	16
PMW85-01	10/13/2006	9:45	100.7	96.85	120	4.3	5.6	21.8	6.6	174	19
PMW92-01	10/13/2006	12:25	99.0	93.71	65	7.8	5.8	22.0	1.5	145	244
PMW92-04	10/13/2006	13:05	98.5	93.94	120	3.0	5.6	22.2	3.2	131	3
PMW92-05	10/13/2006	14:30	96.7	93.65	160	2.8	5.5	22.9	4.5	214	15

Notes. 1) IW85-04 was purged dry 10/12/06 and sampled 10/13/06

TABLE 5
FINAL FIELD MEASUREMENTS, DESIGN MONITORING SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs
IW101-01A	11/3/2006	8:10	129.0	89.3	140	7.2	5.3	18.4	2.4	-150	8
IW101-01B	11/3/2006	9:23	120.0	89.2	140	9.1	4.2	18.7	2.1	26	0
IW101-01C	11/3/2006	10:35	99.0	89.3	140	6.0	4.6	18.4	1.7	-32	4
IW101-03A	11/3/2006	11:54	133.0	90.3	140	7.5	4.8	19.6	2.8	-102	7
IW101-03B	11/3/2006	13:36	117.0	90.1	140	8.3	4.4	19.7	2.4	31	3
IW101-03C	11/6/2006	8:29	101.0	89.8	140	8.4	3.5	19.2	0.5	-37	21
IW101-04A	11/6/2006	10:32	131.0	89.6	140	6.3	5.9	17.9	3.4	-139	0
IW101-04B	11/6/2006	11:35	115.0	89.6	140	6.6	5.9	18.9	1.7	-156	0
IW101-04C	11/6/2006	12:55	99.0	89.6	120	7.5	5.2	19.0	0.7	-63	4
IW101-08A	11/6/2006	14:36	131.0	89.9	140	6.0	5.3	20.2	4.0	-67	0
IW101-08B	11/6/2006	15:18	115.0	90.1	140	5.8	4.7	20.1	4.5	24	0
IW101-08C	11/7/2006	9:20	99.0	90.7	140	8.2	4.4	19.5	0.0	31	3
IW21-01A	11/7/2006	11:30	102.0	91.0	140	9.5	4.0	17.1	4.7	15	19
IW21-01B	11/7/2006	12:39	94.0	91.0	140	8.5	4.4	18.0	2.4	1	4
IW21-03A	11/7/2006	14:50	104.0	89.9	130	2.4	4.5	17.3	6.4	183	0
IW21-03B	11/8/2006	8:59	96.0	89.7	140	7.7	6.9	22.2	0.9	-150	0
IW85-04	11/9/2006	9:05	79.9	79.1	120	3.9	6.8	25.8	0.8	-153	14
IW92-01	11/8/2006	14:03	89.0	85.8	100	5.2	6.5	24.2	2.2	24	15
IW92-03	11/8/2006	11:05	92.0	91.6	120	4.0	6.2	24.4	2.7	-111	4
IW92-05	11/8/2006	12:50	92.0	91.8	100	4.0	7.1	24.4	2.3	-112	17
IW92-07	11/8/2006	15:25	95.0	92.9	100	3.2	7.4	24.8	3.3	-69	0
DR2-1	11/8/2006	11:05	92.3	87.9	100	10.0	6.0	20.3	5.8	111	27
MW-21	11/7/2006	10:35	99.2	91.3	240	11.0	5.8	17.5	4.5	243	18
PMW101-02A	11/3/2006	8:50	128.0	90.2	240	14.2	6.1	18.3	5.0	119	19
PMW101-02B	11/3/2006	9:35	108.3	90.3	240	4.4	6.0	19.0	3.3	108	3
PMW101-04A	11/3/2006	12:06	128.8	89.7	160	3.2	6.0	19.9	5.0	196	5
PMW101-04B	11/3/2006	12:50	109.5	90.2	240	4.8	5.9	19.0	4.8	198	2
PMW101-05A	11/3/2006	14:20	115.7	89.9	160	3.5	6.4	19.2	1.2	-135	1
PMW101-05B	11/6/2006	8:20	98.2	89.9	240	5.3	5.9	17.9	6.2	188	0
PMW101-07A	11/6/2006	9:55	128.7	90.2	240	4.8	6.3	18.9	0.8	-18	0
PMW101-07B	11/6/2006	13:30	108.7	90.2	160	2.3	11.5	17.7	7.2	-37	4
PMW101-08A	11/6/2006	14:50	108.9	90.8	240	3.1	6.2	22.3	4.8	202	0
PMW101-08B	11/7/2006	8:05	108.9	90.8	200	3.3	5.8	19.9	5.2	128	7
PMW21-03	11/7/2006	12:55	101.2	89.4	120	3.2	5.9	17.6	5.6	260	11
PMW85-01	11/8/2006	15:05	100.7	96.5	100	3.5	5.7	22.9	4.7	173	0
PMW92-01	11/8/2006	8:10	99.0	93.7	120	9.8	5.9	19.1	4.6	219	32
PMW92-04	11/8/2006	12:40	98.5	93.8	100	2.4	6.0	22.3	1.1	-8	4
PMW92-05	11/8/2006	13:45	96.7	93.4	100	1.9	5.7	23.4	2.9	196	9

TABLE 6
FINAL FIELD MEASUREMENTS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (bloc)	Depth to Water ft (bloc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Dissolved Oxygen mg/L	Reduction Potential mV	Oxidation Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW101-01A	12/4/2006	9:00	129.0	90.1	140	3.5	6.0	17.8	0.0	-144	-144	0	6.2	145
IW101-01B	12/4/2006	11:20	120.0	90.1	180	8.2	6.3	17.5	0.0	-25	-25	15	3.0	65
IW101-01C	12/4/2006	13:10	99.0	91.0	140	8.0	6.2	17.0	0.0	-133	-133	0	1.2	65
IW101-02A	12/4/2006	15:07	131.0	91.2	146	6.9	6.2	17.5	0.0	-149	-149	0	1.0	60
IW101-02B	12/4/2006	16:30	117.0	91.3	200	7.9	6.2	17.9	1.1	89	89	0	0.0	60
IW101-02C	12/5/2006	8:45	100.0	91.7	140	6.5	6.2	17.9	0.0	-163	-163	19	2.0	55
IW101-03A	12/5/2006	11:40	133.0	92.1	202	14.6	6.0	18.0	0.0	-125	-125	18	3.5	85
IW101-03B	12/5/2006	14:15	117.0	92.3	140	14.2	6.0	19.1	0.0	-13	-13	0	2.0	0
IW101-03C	12/5/2006	15:15	101.0	92.1	160	8.6	5.9	18.7	0.0	-176	-176	16	2.5	65
IW101-04A	12/5/2006	8:17	131.0	91.9	160	6.4	5.9	16.9	0.0	-213	-213	17	4.8	180
IW101-04B	12/6/2006	9:15	115.0	91.9	180	6.0	6.5	18.2	0.0	-142	-142	0	5.8	135
IW101-04C	12/6/2006	11:30	99.0	91.8	140	7.4	6.3	18.4	0.0	-130	-130	3	6.8	110
IW101-05A	12/6/2006	12:20	129.0	91.8	160	6.6	6.2	18.9	0.0	-64	-64	0	8.6	90
IW101-05B	12/6/2006	13:17	115.0	91.6	172	6.0	6.1	19.0	0.0	-8	-8	11	3.6	90
IW101-05C	12/6/2006	15:17	98.0	91.5	140	5.4	6.0	19.8	0.0	-73	-73	2	8.4	100
IW101-06A	12/6/2006	16:55	131.0	92.3	160	4.6	6.0	19.0	0.3	-128	-128	0	6.0	100
IW101-06B	12/7/2006	8:40	101.0	92.4	140	6.9	6.1	16.0	0.0	-32	-32	12	0.0	60
IW101-06C	12/7/2006	10:26	101.0	92.4	140	11.8	6.1	16.4	0.0	-32	-32	0	2.0	75
IW101-07A	12/7/2006	15:22	131.0	93.0	140	7.9	6.2	14.7	0.0	-89	-89	18	2.8	75
IW101-07B	12/7/2006	16:30	113.0	93.0	180	6.0	6.2	17.2	0.0	-104	-104	0	2.2	45
IW101-07C	12/8/2006	9:10	100.0	93.0	140	7.7	6.1	15.9	0.3	-114	-114	0	3.4	70
IW101-08A	12/8/2006	11:10	131.0	92.4	120	6.8	6.2	18.6	3.2	-102	-102	0	0.2	80
IW101-08B	12/8/2006	12:10	115.0	92.5	140	5.2	6.0	19.0	2.2	62	62	0	0.4	40
IW101-08C	12/8/2006	14:10	99.0	93.0	120	5.8	5.8	19.2	0.5	-144	-144	0	1.4	70
IW101-09A	12/8/2006	14:37	132.0	92.8	280	8.4	6.2	19.2	1.2	-128	-128	17	0.4	85
IW101-09B	12/8/2006	16:20	116.0	92.7	280	4.6	5.9	17.7	0.9	-76	-76	4	4.0	155
IW101-09C	12/8/2006	16:00	101.0	92.7	160	6.4	6.0	19.2	0.4	-49	-49	0	1.8	30
IW21-01A	12/11/2006	9:25	102.0	91.5	280	14.0	6.0	16.7	0.4	-91.7	-91.7	13	3.2	120
IW21-01B	12/11/2006	9:10	94.0	91.4	210	10.4	6.0	17.6	0.3	-175	-175	0	3.6	160
IW21-02A	12/11/2006	11:15	105.0	91.7	340	8.6	5.9	18.0	4.1	120	120	0	0.0	85
IW21-02B	12/11/2006	12:20	95.0	91.8	280	8.2	5.7	17.9	2.0	38	38	1	0.4	85
IW21-03A	12/11/2006	14:05	104.0	90.4	280	7.1	6.0	18.2	2.8	120	120	0	0.2	120
IW21-03B	12/11/2006	16:47	96.0	90.1	300	6.6	6.3	18.2	0.8	-171	-171	0	2.8	95
IW21-04A	12/11/2006	14:35	105.0	90.0	300	17.0	6.7	17.9	0.8	-129.5	-129.5	29	3.0	75
IW21-04B	12/12/2006	8:35	94.0	90.5	140	8.6	6.1	18.0	5.7	-76	-76	7	3.2	70
IW21-05A	12/12/2006	12:00	106.0	89.9	200	18.0	5.9	18.3	0.5	-126	-126	90	3.2	155
IW21-05B	12/12/2006	9:30	95.0	89.9	300	12.0	6.0	18.1	0.6	-123	-123	0	2.2	45
IW85-01	12/14/2006	11:55	96.0	94.1	100	3.1	6.3	21.9	2.2	-90	-90	7	3.0	100
IW85-02	12/14/2006	8:35	98.0	95.1	120	7.4	6.3	18.6	0.0	-150	-150	14	1.2	105
IW85-03	12/13/2006	DRY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IW85-04	12/14/2006	12:55	79.9	79.1	100	2.2	6.7	20.0	0.8	-130	-130	106	4.5	150
IW92-01	12/12/2006	12:30	89.0	86.9	260	7.2	6.0	20.6	2.2	-19	-19	0	2.0	45

TABLE 6
FINAL FIELD MEASUREMENTS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Purge Volume Liters	pH	Temp °C	Dissolved Oxygen mg/L	Reduction Potential mV	Oxidation Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW92-02	12/12/2006	14:15	90.0	84.9	260	4.4	6.1	20.5	0.6	-26	-26	18	3.0	55
IW92-03	12/12/2006	15:00	92.0	91.5	120	6.0	5.8	20.2	0.7	-140	-140	1	3.0	100
IW92-04	12/13/2006	8:05	92.0	91.9	120	2.7	6.3	18.0	0.2	-115	-115	4	2.0	85
IW92-05	12/13/2006	8:10	92.0	91.7	120	3.3	6.3	17.9	0.0	-91	-91	11	2.2	250
IW92-06	12/13/2006	11:55	93.0	92.0	120	8.4	6.2	21.8	0.4	-129	-129	953	4.3	150
IW92-07	12/13/2006	11:21	95.0	93.2	140	14.0	6.1	21.3	0.5	-62	-62	18	3.4	200
IW92-08	12/13/2006	13:30	95.0	93.7	60	2.3	5.8	22.1	2.8	-48	-48	6	3.4	140
DR1-3	12/15/2006	14:56	121.6	92.8	210	4.8	9.6	17.0	1.8	-143	-143	0	0.8	25
DR2-1	12/16/2006	16:46	92.3	88.1	220	11.3	7.5	19.4	4.6	-111.4	-111.4	20	3.6	35
DR2-5	12/17/2006	14:30	98.6	98.9	120	2.2	6.0	11.8	8.0	155	155	5	0.0	15
IW-01	12/17/2006	12:25	97.8	94.6	120	2.9	5.8	16.1	0.0	1	1	8	4.4	250
MW-21	12/16/2006	9:20	99.2	91.8	240	5.0	5.8	12.5	3.2	199	199	0	0.0	40
MW-85	12/18/2006	9:20	105.1	97.9	240	5.4	5.6	15.8	5.4	321.1	321.1	6	0.0	100
MW101B	12/17/2006	13:55	133.0	91.5	240	5.4	6.2	12.9	0.0	91	91	3	0.6	85
MW101T	12/17/2006	12:24	115.0	91.5	180	10.7	6.2	16.9	0.0	-18	-18	10	0.0	75
MW-115	12/16/2006	9:22	94.9	89.6	240	7.7	8.6	17.4	2.9	-48.4	-48.4	3	0.0	30
PMW101-01A	12/14/2006	8:31	129.6	91.2	260	4.0	5.8	16.7	5.7	-127.4	-127.4	5	>1	175
PMW101-01B	12/14/2006	11:02	108.9	91.3	260	3.7	5.9	17.1	9.5	-132.1	-132.1	1	>1	65
PMW101-02A	12/14/2006	10:07	128.0	91.9	240	15.8	6.1	16.7	3.3	110	110	11	0.6	200
PMW101-02B	12/14/2006	11:43	108.3	92.7	200	6.1	6.1	17.9	0.1	72	72	2	1.0	130
PMW101-03A	12/14/2006	13:40	130.1	92.2	240	3.5	6.0	18.2	4.9	148	148	5	0.0	130
PMW101-03B	12/14/2006	16:00	110.1	92.2	280	6.4	5.9	17.8	3.3	224	224	8	0.0	55
PMW101-04A	12/15/2006	8:45	128.8	92.6	120	5.5	6.0	16.0	4.5	248	248	1	0.0	45
PMW101-04B	12/15/2006	10:35	109.5	92.1	280	6.5	6.0	18.4	1.8	255	255	0	0.0	80
PMW101-05A	12/14/2006	12:57	115.7	91.9	220	3.6	6.3	16.4	1.1	-81.7	-81.7	0	6.0	75
PMW101-05B	12/14/2006	14:28	98.2	92.2	240	2.8	5.7	16.8	7.8	150.8	150.8	1	0.0	25
PMW101-06A	12/14/2006	16:13	130.8	92.4	120	4.1	5.8	16.1	1.7	114.1	114.1	4	1.0	25
PMW101-06B	12/15/2006	9:51	110.2	92.5	210	4.4	10.3	16.0	0.9	-204.5	-204.5	0	2.4	50
PMW101-07A	12/15/2006	11:46	128.7	92.5	220	4.0	8.6	19.0	0.8	-195	-195	1	2.6	65
PMW101-07B	12/15/2006	13:11	108.7	92.6	180	2.0	8.8	19.1	7.2	-115.8	-115.8	6	0.0	20
PMW101-08A	12/15/2006	12:18	108.9	93.2	160	2.9	6.1	19.5	4.8	267	267	0	0.0	130
PMW101-08B	12/15/2006	14:10	108.9	93.2	200	4.0	5.9	19.7	7.1	224	224	0	0.0	55
PMW21-01	12/16/2006	11:00	100.9	91.5	160	3.5	6.0	17.8	0.3	193	193	0	0.0	120
PMW21-02	12/16/2006	12:50	102.1	90.6	240	4.7	5.9	18.3	3.2	182	182	0	0.0	125
PMW21-03	12/16/2006	13:10	101.2	90.0	160	7.0	8.2	17.9	5.5	-34.5	-34.5	2	0.0	60
PMW21-04	12/16/2006	10:52	100.2	89.7	200	5.4	7.8	17.7	1.6	-84.8	-84.8	4	0.0	40
PMW21-05	12/15/2006	16:05	105.1	88.1	240	3.9	5.9	18.1	8.9	234	234	0	0.0	55
PMW85-01	12/18/2006	11:33	100.7	76.9	100	3.9	5.6	17.3	5.7	241.4	241.4	16	0.0	25
PMW85-02	12/18/2006	14:40	84.3	82.1	180	3.0	5.6	14.0	5.5	380.7	380.7	576	NS	NS
PMW85-03	12/17/2006	DRY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PMW92-01	12/16/2006	15:10	99.0	94.0	120	2.3	5.9	20.5	4.6	201	201	2	0.0	60
PMW92-02	12/17/2006	8:15	100.7	93.6	120	2.0	6.4	15.7	1.5	-82	-82	7	4.4	190

TABLE 6
FINAL FIELD MEASUREMENTS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Dissolved Oxygen mg/L	Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
PMW92-03	12/7/2006	9:05	98.6	93.2	200	6.7	6.3	16.9	2.5	-30.1	1	0.0	40
PMW92-04	12/7/2006	10:25	98.5	94.2	120	3.3	6.2	14.8	0.8	-60	10	5.0	140
PMW92-05	12/7/2006	11:40	96.7	93.7	120	1.9	7.2	14.2	3.6	-12.2	12	0.0	20
PMW92-06	12/7/2006	14:30	98.9	94.7	200	4.8	6.1	16.5	1.6	-33.2	1	0.0	15

Notes: 1) IW85-04 was purged dry 12/13/06 and sampled 12/14/06
 2) IW85-03 and PMW85-03 went dry and no sample was collected
 3) PMW85-02 went dry during sampling, only VOCs and Anions were collected
 4) OR - out of range
 5) NA - not available

TABLE 7
FINAL FIELD MEASUREMENTS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW101-01A	3/5/2007	8:46	129.0	91.21	200	9.160	6.07	17.94	3.46	0	-113	3.2	3	215
IW101-01B	3/5/2007	10:30	120.0	91.06	180	7.240	6.34	18.10	0.563	0.34	-118	0	2.4	100
IW101-01C	3/5/2007	12:10	99.0	91.07	160	5.620	6.11	19.05	0.716	0.21	-138	13.7	2.8	70
IW101-02A	3/5/2007	14:00	131.0	91.27	110	6.440	6.12	18.91	0.581	0.48	-116	0	0	75
IW101-02B	3/5/2007	15:25	117.0	91.32	200	7.220	6.09	19.10	0.489	1.66	38	0	1	75
IW101-02C	3/6/2007	12:25	100.0	91.7	320	19.600	6.1	19.94	2.06	0	-115	11.2	3	100
IW101-03A	3/6/2007	14:05	133.0	91.96	120	3.860	6.08	20.63	0.9	3.31	-137	11	3.4	55
IW101-03B	3/6/2007	15:40	117.0	91.82	160	5.800	6.02	19.73	0.739	0.48	-137	19.5	3	100
IW101-03C	3/7/2007	8:02	101.0	91.83	260	4.420	6.07	18.80	0.9	0.2	-111	11	2.2	100
IW101-04A	3/8/2007	11:30	131.0	91.65	280	14.960	6.17	19.52	3.14	2.88	-81	162	2.9	175
IW101-04B	3/8/2007	13:50	115.0	91.56	220	4.720	6.42	19.56	0.926	0.34	-112	5.4	3	100
IW101-04C	3/8/2007	15:06	99.0	91.56	240	5.620	6.52	19.62	0.665	0.15	-147	6.8	3.1	60
IW101-05A	3/9/2007	8:12	129.0	91.4	200	12.620	6.27	19.00	0.628	2.95	-71	16.4	3	50
IW101-05B	3/9/2007	9:41	115.0	91.35	280	4.740	6.21	19.24	3.38	0.16	-8	8.8	2.8	75
IW101-05C	3/9/2007	10:55	98.0	91.28	240	4.440	6.14	19.45	0.9	0	-110	14.3	2.6	85
IW101-06A	3/9/2007	13:20	131.0	91.6	220	8.380	6.24	20.75	4.3	0.08	-119	8.7	2	100
IW101-06B	3/9/2007	15:15	101.0	91.98	180	5.020	5.94	20.39	OR*	0	39	7.8	0	45
IW101-06C	3/9/2007	16:22	101.0	91.97	210	5.520	5.99	20.03	OR*	0	-73	14.8	2.4	40
IW101-07A	3/7/2007	9:35	131.0	92.65	180	5.620	6.17	19.17	0.655	0.79	-19	0	3	65
IW101-07B	3/7/2007	11:05	113.0	92.65	160	6.680	6.36	20.20	0.572	10.33	-58	14.8	3.8	40
IW101-07C	3/7/2007	12:35	100.0	92.61	180	4.780	6.04	20.27	0.61	0.4	-80	17.6	3	85
IW101-08A	3/12/2007	9:15	131.0	92.28	180	5.520	6.23	19.36	OR*	0	-17	12.9	1	75
IW101-08B	3/12/2007	11:30	115.0	92.28	210	4.440	6.17	20.53	0.9	0.45	7	19.7	2.5	60
IW101-08C	3/12/2007	0:00	99.0	92.75	210	5.280	6.19	20.59	54.8	0	-108	3.3	2.7	85
IW101-09A	3/7/2007	13:57	132.0	92.41	140	2.640	6.2	20.35	0.753	3.57	-107	8.9	0	50
IW101-09B	3/7/2007	15:30	116.0	92.28	180	2.960	6.16	20.38	3.16	4.1	-48	19.9	2.4	170
IW101-09C	3/8/2007	8:22	101.0	92.44	260	6.860	6.1	18.82	0.885	3.94	-13	18.8	3	40
IW21-01A	3/8/2007	14:30	102.0	91.24	240	10.180	6.31	22.78	5.26	0	-185	10.7	2.8	355
IW21-01B	3/8/2007	16:07	94.0	91.35	240	7.100	6.26	20.57	4.88	0	-111	11.5	4.2	600
IW21-02A	3/9/2007	14:05	105.0	91.48	200	9.280	5.81	22.42	0.313	0.32	-112	0	0.8	85
IW21-02B	3/9/2007	10:50	95.0	91.6	280	6.000	6.03	19.52	0.296	0	-100	0	2.3	95
IW21-03A	3/8/2007	10:00	104.0	90.29	280	6.260	6.43	16.35	0.443	0	24	17.3	3.1	125
IW21-03B	3/8/2007	11:45	96.0	89.9	280	8.180	6.6	19.55	1.8	1.61	-210	19	3.6	255
IW21-04A	3/12/2007	11:00	105.0	91.31	280	24.000	6.24	20.37	0.518	0	-200	29.6	2.8	160
IW21-04B	3/9/2007	16:05	94.0	90.12	280	6.880	6.15	19.71	0.824	1.01	-130	12.8	2.8	135
IW21-05A	3/12/2007	13:30	106.0	89.8	280	10.520	5.95	23.00	3.92	0	-153	19.8	4	375
IW21-05B	3/12/2007	15:17	95.0	90.66	240	9.300	6.18	23.59	0.411	0	-89	19.2	2	115
IW85-01	3/13/2007	13:48	96.0	94.23	160	9.800	6.1	19.91	0.613	0	-74	25.5	3	150
IW85-02	3/14/2007	8:08	98.0	95.15	140	13.860	6.1	17.45	3.35	0	-110	0.9	1	150
IW85-05	3/14/2005	11:52	101.0	95.58	140	11.000	5.88	23.15	0.298	0	81	107	0.8	200
IW85-06	3/14/2007	13:40	103.0	96.08	140	6.100	6.17	25.68	5.72	0	-127	0	2.8	450
IW92-01	3/12/2007	15:22	89.0	88.86	100	3.240	6.07	22.99	OR*	0	-41	2.6	2	70

TABLE 7
FINAL FIELD MEASUREMENTS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW92-02	3/13/2007	9:48	90.0	88.42	100	2,620	6.37	18.71	0.999*	1.06	-75	290		
IW92-03	3/13/2007	10:45	92.0	91.9	120	2,100	5.8	20.25	0.9	1.17	-51	7	2.7	100
IW92-04	3/13/2007	13:55	92.0	92.07	100	2,680	6.26	21.01	1.8	3.23	-55	12.3	2.7	100
IW92-05	3/14/2007	7:52	92.0	91.95	120	6,260	6.27	20.07	17.5	0	-105	13.6	3	270
IW92-06	3/14/2007	13:20	93.0	92.09	120	3,320	6.2	22.79	6.03	0.55	-79	12.9	4	270
IW92-07	3/14/2007	15:20	95.0	93.32	120	5,480	6.05	21.61	2.57	0.52	-86	13.8	2.9	200
IW92-08	3/13/2007	8:47	95.0	93.93	100	3,100	6.18	16.84	1.07	0	-98	0	3.8	260
DR1-3	3/7/2007	8:43	121.6	90.76	140	3,680	6.24	17.77	0.794	0.71	124	9	0	155
DR2-1	3/8/2007	8:20	92.3	88.14	160	12,740	6.11	18.07	0.401	9.45	50	10.9	0.2	140
DR2-5	3/13/2007	8:00	98.6	95.88	100	1,520	6.05	19.98	0.361	8.17	149	3.4	0	90
IW-01	3/12/2007	10:10	97.8	94.75	120	10,000	5.41	20.69	0.557	1.42	142	0.2	3.6	140
MW-21	3/7/2007	11:20	99.2	91.6	200	5,640	6.32	20.01	0.409	3.78	257	0	0	100
MW-85	3/12/2007	15:40	105.1	98.01	240	4,580	5.48	23.14	0.372	6.78	185	10	0	130
MW101B	3/6/2007	9:30	133.0	91.47	320	4,440	6.21	19.15	0.489	0.31	-82	0.4	1.9	75
MW101T	3/6/2007	8:25	115.0	91.47	320	9,340	6.2	17.36	0.439	3.07	104	5.4	0	75
MW-115	3/7/2007	12:55	94.9	89.31	240	6,480	5.77	18.91	0.401	0	158	13.7	0	115
PMW101-01A	3/5/2007	8:50	129.6	89.6	220	6,700	6.06	17.87	4.37	0.32	-38	0.3	5.1	380
PMW101-01B	3/5/2007	12:03	108.9	89.64	280	7,500	5.84	20.03	1.56	0.11	-95	0	4.2	240
PMW101-02A	3/5/2007	9:12	128.0	90.29	240	8,400	6.54	17.86	.997*	0	-125	10.4	2	180
PMW101-02B	3/5/2007	11:05	108.3	90.49	200	5,100	6.4	18.57	.90*	0	-149	0	3	115
PMW101-03A	3/5/2007	12:50	130.1	90.54	200	3,460	5.93	19.74	0.521	6.04	125	8.4	0	165
PMW101-03B	3/5/2007	15:10	110.1	90.48	200	13,900	6.25	18.73	0.572	0.68	-97	0	2.2	90
PMW101-04A	3/6/2007	9:20	128.8	89.87	220	5,820	6.15	17.19	.999*	4.33	202	0	0	95
PMW101-04B	3/6/2007	11:20	109.5	90.32	280	7,520	6.31	19.23	.999*	0.27	-61	0.8	2.2	145
PMW101-05A	3/5/2007	14:35	115.7	90.1	160	5,760	6.19	18.39	1.23	0.52	-94	0	4.2	185
PMW101-05B	3/5/2007	16:10	98.2	90.38	240	5,320	5.77	18.31	0.9	6.4	8	0	2.3	75
PMW101-06A	3/6/2007	8:55	130.8	90.69	200	8,800	6.12	17.44	0.561	0.35	-92	4.6	1.6	165
PMW101-06B	3/6/2007	10:30	110.2	90.7	200	4,640	6.46	18.50	0.9	0.08	-108	0.5	3.4	205
PMW101-07A	3/6/2007	12:30	128.7	90.66	200	6,300	6.4	19.64	0.909	0	-159	1.4	3.4	185
PMW101-07B	3/6/2007	15:05	108.7	90.75	180	4,800	5.51	19.32	0.292	7.12	183	8.1	0	145
PMW101-08A	3/6/2007	12:27	108.9	91.36	260	6,480	6.35	20.78	2.04	1.62	-36	0	4.3	130
PMW101-08B	3/6/2007	15:40	108.9	91.29	100	5,680	5.9	20.39	.999*	9.03	202	0	0	55
PMW21-01	3/7/2007	8:40	100.9	91.33	140	5,000	6.12	12.34	0.385	3.81	198	5.5	0	90
PMW21-02	3/7/2007	14:07	102.1	90.35	200	5,520	6.31	22.21	0.473	3.77	244	0	0	105
PMW21-03	3/7/2007	16:08	101.2	89.73	140	3,360	6.37	20.16	0.569	5.65	298	0	0	70
PMW21-04	3/7/2007	14:40	100.2	89.55	200	8,360	5.91	18.74	0.511	1.43	151	16.8	0	150
PMW21-05	3/7/2007	10:55	105.1	88.02	200	10,360	5.85	19.08	0.444	8.66	156	18.9	0	95
PMW85-01	3/13/2007	11:35	100.7	95.53	100	3,200	6.04	21.20	0.41	4.31	130	9.9	0	65
PMW85-04	3/13/2007	14:40	100.0	97.21	100	9,700	6.24	21.66	0.852	0.34	-113	17.9	2.8	30
PMW85-05	3/13/2007	16:20	101.0	96.15	200	5,960	5.75	22.22	0.408	4.44	139	18.3	0	80
PMW92-01	3/8/2007	10:11	99.0	93.91	180	1,840	5.96	20.17	0.329	7.12	162	3.6	0	75
PMW92-02	3/8/2007	13:07	100.7	93.6	100	1,980	6.42	22.36	2.15	0.86	-125	10.2	3.2	405

TABLE 7
FINAL FIELD MEASUREMENTS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation			
											Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
PMW92-03	3/8/2007	15:50	98.6	93.18	200	3.440	6.38	20.80	0.73	1.41	-32	4.4	0.2	165
PMW92-04	3/9/2007	12:20	98.5	94.14	100	3.560	6.42	21.47	0.942	0	-111	0	0	150
PMW92-05	3/9/2007	15:45	96.7	93.63	100	2.680	5.78	21.62	0.366	3.71	180	5.4	0	70
PMW92-06	3/12/2007	12:45	98.9	94.79	100	4.600	5.74	22.54	0.437	1.5	-26	10.6	2.4	215

Notes: 1) IW85-03, IW85-04, PMW85-02, and PMW85-03 were abandoned and replaced by IW85-05, IW85-06, PMW85-04, and PMW85-05 respectively

2) * = malfunctioning conductivity probe

3) OR=out of range

4) **=Turbidity too high to perform Fe or CO₂ field test

TABLE 8
FINAL FIELD MEASUREMENTS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Sample d	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation		Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
											Reduction Potential mV				
IW101-01A	6/1/2007	14:10	129.0	89.08	300	10.1	6.0	20.9	3.944	0.34	-130.2		14.5	2.7	375
IW101-01B	5/29/2007	9:00	120.0	89.04	260	8.5	6.1	21.4	0.591	4.64	-148.0		4.3	3.5	110
IW101-01C	5/29/2007	11:20	99.0	89.05	280	9.4	5.9	22.3	0.859	4.05	-103.0		14.9	3.0	180
IW101-01A	5/29/2007	13:45	131.0	89.28	240	6.4	5.9	23.5	0.522	3.47	-92.0		7.0	2.8	175
IW101-02B	5/29/2007	16:10	117.0	89.36	260	8.7	5.9	21.3	0.493	2.69	-48.0		10.3	1.6	155
IW101-02C	5/30/2007	9:55	100.0	89.88	280	15.8	6.1	20.2	0.714	0.70	-105.9		7.4	3.4	195
IW101-03A	5/30/2007	15:25	133.0	90.18	180	6.6	6.0	21.8	0.978	1.09	-167.7		3.2	3.8	190
IW101-03B	6/1/2007	8:50	117.0	90.10	120	6.6	6.0	22.6	0.355	1.04	31.8		4.5	1.8	160
IW101-03C	6/1/2007	10:55	101.0	90.15	280	5.0	5.9	22.0	0.597	1.05	-107.7		3.8	2.4	145
IW101-04A	6/4/2007	11:35	131.0	90.01	180	7.7	6.1	23.0	5.048	0.45	-116.5		14.3	7.6	430
IW101-04B	6/4/2007	13:49	115.0	89.93	200	9.4	6.6	22.5	0.709	1.18	-107.4		0.9	5.4	220
IW101-04C	6/4/2007	16:10	99.0	89.89	240	9.0	6.7	22.9	0.638	0.82	-118.5		2.9	3.8	150
IW101-05A	6/5/2007	9:10	129.0	90.01	220	9.4	6.1	22.9	1.022	4.00	-221.9		19.1	3.4	230
IW101-05B	6/5/2007	11:21	115.0	89.77	240	11.0	6.1	22.2	0.385	0.89	-38.3		1.6	1.6	120
IW101-05C	6/5/2007	13:05	98.0	89.76	220	8.7	6.2	21.1	0.704	0.60	-195.6		4.2	4.8	200
IW101-06A	6/5/2007	15:25	131.0	90.40	240	12.2	6.3	22.9	0.729	6.39	-123.8		18.9	3.8	115
IW101-06B	6/6/2007	8:20	101.0	90.60	280	9.1	5.7	21.4	0.590	0.78	-82.6		7.2	0.4	95
IW101-06C	6/6/2007	10:05	101.0	90.58	200	7.9	5.8	22.2	0.583	0.53	-107.4		2.6	2.4	110
IW101-07A	6/4/2009	9:00	131.0	90.93	220	10.5	7.8	21.4	0.371	0.00	-33.0		0.0	2.2	155
IW101-07B	6/4/2007	11:15	113.0	90.88	260	9.1	7.7	21.4	0.225	1.44	-40.0		0.0	3.0	100
IW101-07C	6/4/2007	13:05	100.0	90.90	280	7.3	7.7	22.7	0.337	7.35	-40.0		16.2	2.4	75
IW101-08A	6/4/2007	15:35	131.0	90.31	180	4.1	7.7	24.2	0.368	0.81	-1.0		8.9	2.8	135
IW101-08B	6/5/2007	9:15	115.0	90.58	260	16.0	7.5	21.2	0.369	0.00	-36.0		4.4	2.0	150
IW101-08C	6/5/2007	11:15	99.0	91.08	260	9.2	8.3	22.0	1.240	0.00	-61.0		2.0	3.0	180
IW101-09A	6/5/2007	14:22	132.0	90.90	240	19.2	6.5	22.0	0.737	13.49	-112.0		25.2	0.0	120
IW101-09B	6/6/2007	8:30	116.0	90.85	240	7.1	6.2	21.6	1.960	2.45	-62.0		2.8	3.0	275
IW101-09C	6/6/2007	10:05	101.0	90.86	280	5.9	5.9	22.2	0.681	5.76	7.0		3.6	2.4	125
IW21-01A	6/5/2007	12:05	102.0	91.47	140	5.0	6.4	21.2	9.691	0.18	-170.0		8.1	2.6	750
IW21-01B	6/5/2007	14:10	94.0	91.46	120	4.7	6.1	21.9	1.645	0.46	-132.0		7.8	2.6	300
IW21-02A	6/6/2007	8:10	105.0	91.56	200	4.5	5.7	19.3	0.289	0.88	-22.4		5.5	0.6	175
IW21-02B	6/6/2007	9:40	95.0	91.80	120	5.3	6.0	19.9	0.260	0.91	-77.7		3.6	1.6	100
IW21-03A	6/6/2007	11:25	104.0	90.50	140	6.8	6.2	20.6	0.303	0.61	2.6		4.5	0.4	125
IW21-03B	6/6/2007	13:00	96.0	90.10	140	5.6	6.1	22.2	1.154	0.65	-163.4		8.4	2.2	200
IW21-04A	6/6/2007	13:30	105.0	90.20	260	6.0	6.2	20.6	0.643	0.61	-157.8		16.9	0.0	150
IW21-04B	6/6/2007	12:00	94.0	90.34	240	8.0	6.1	20.5	0.841	2.33	-78.0		17.2	2.8	140
IW21-05A	6/6/2007	12:00	106.0	90.00	280	8.4	5.7	22.2	9.521	0.70	-143.4		17.9	4.4	350
IW21-05B	6/6/2007	14:00	95.0	89.85	240	9.2	5.8	21.3	1.108	0.52	-100.0		4.7	3.2	120
IW85-01	6/1/2007	13:00	96.0	93.89	120	5.1	5.8	25.6	1.296	0.93	-152.9		4.4	3.8	350
IW85-02	6/1/2007	15:15	98.0	95.21	100	5.9	6.1	24.6	3.821	1.28	-52.6		4.6	3.4	750
IW85-05	6/4/2007	9:00	101.0	95.99	120	12.6	6.3	23.8	0.456	1.91	-36.2		10.0	3.6	175
IW85-06	6/6/2007	15:30	103.0	96.26	120	4.0	6.2	26.7	1.129	0.60	-90.7		1.6	2.0	200
IW92-01	6/1/2007	10:30	89.0	87.55	80	2.8	6.1	24.8	0.589	1.35	-139.6		2.5	2.4	200

TABLE 8
FINAL FIELD MEASUREMENTS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Sample d	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation		Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
											Reduction Potential mV				
IW92-02	6/7/2007	8:50	90.0	87.82	40	3.8	6.0	24.4	1.050	0.23	-74.8		17.7	7.8	270
IW92-03	6/6/2007	16:35	92.0	91.71	120	5.8	5.8	25.0	0.942	1.68	-75.0		9.9	2.6	200
IW92-04	6/7/2007	12:40	92.0	92.40	120	7.2	6.2	24.7	4.196	0.78	-92.2		4.8	6.6	435
IW92-05	6/7/2007	15:35	92.0	91.76	160	3.9	6.5	24.5	13.400	0.10	-131.0		238.0	NT	NT
IW92-06	6/7/2007	10:45	93.0	91.97	200	5.0	6.3	23.8	9.307	0.29	-79.6		17.2	3.0	650
IW92-07	6/7/2007	7:20	95.0	93.33	120	5.8	6.1	23.1	4.320	0.82	-108.9		7.3	3.0	350
IW92-08	6/7/2007	9:30	95.0	93.92	60	2.1	6.2	26.4	0.701	2.04	-77.3		4.4	4.0	180
DR1-3	6/1/2007	14:00	121.6	90.75	240	5.4	8.3	21.0	0.518	0.75	-53.0		0.0	4.0	200
DR2-1	5/29/2007	9:50	92.3	88.43	100	9.5	6.2	24.2	0.292	19.99*	50.0		6.6	0.0	50
DR2-5	5/29/2007	11:10	98.6	96.02	110	4.2	6.1	26.7	0.201	19.99*	146.0		-0.6	0.0	70
IW-01	5/30/2007	8:37	97.8	95.12	170	7.3	5.3	22.2	0.278	1.33	83.9		3.8	3.8	300
MW-21	6/4/2007	9:50	99.2	91.55	120	2.7	5.9	19.8	0.214	5.68	126.6		2.2	0.0	150
MW-85	5/29/2007	14:20	105.1	98.18	80	2.0	6.0	30.6	0.238	19.99*	163.0		16.6	0.0	75
MW101B	5/30/2007	12:15	133.0	89.62	200	7.1	6.1	20.5	0.376	2.96	78.2		2.4	0.0	135
MW101T	5/30/2007	13:30	115.0	89.60	300	4.0	6.1	23.7	0.375	3.75	70.0		10.2	0.0	150
MW-115	6/5/2007	10:00	94.9	89.46	120	6.0	6.0	20.4	0.227	0.75	59.4		1.2	0.4	125
PMW101-01A	5/30/2007	12:00	129.6	89.34	250	19.8	9.0	20.9	4.960	0.00	0.1		13.0	5.6	1100
PMW101-01B	5/30/2007	14:45	108.9	89.34	240	14.2	8.8	20.3	0.843	0.00	-85.0		0.0	0.8	375
PMW101-02A	5/29/2007	10:15	128.0	89.89	240	10.2	8.9	24.3	0.571	0.60	-124.0		15.6	4.2	145
PMW101-02B	5/29/2007	14:25	108.3	90.15	200	13.7	8.8	22.1	0.983	0.29	-92.0		15.3	3.6	165
PMW101-03A	5/30/2007	9:15	130.1	90.30	260	9.1	5.4	19.4	0.201	7.82	164.0		5.3	0.0	175
PMW101-03B	5/29/2007	17:00	110.1	90.18	280	6.2	7.1	20.3	0.255	0.94	26.0		0.0	1.0	80
PMW101-04A	5/31/2007	8:30	128.8	89.57	260	7.3	7.3	19.9	0.405	0.63	-7.0		4.8	2.0	50
PMW101-04B	5/31/2007	10:10	109.5	90.11	260	9.6	8.4	20.0	0.383	0.00	-68.0		2.6	4.0	90
PMW101-05A	5/31/2007	8:45	115.7	98.90	200	5.5	6.5	19.3	1.700	0.00	-109.0		0.0	2.4	230
PMW101-05B	5/31/2007	10:20	98.2	90.22	260	9.7	6.1	19.4	1.850	4.01	-3.0		0.7	3.2	160
PMW101-06A	5/31/2007	15:45	130.8	90.48	170	16.0	6.2	21.8	33.100	0.09	-30.0		4.0	2.8	160
PMW101-06B	5/31/2007	13:30	110.2	90.54	200	22.2	6.6	21.0	2.890	0.00	-123.0		0.0	3.6	165
PMW101-07A	5/31/2007	12:35	128.7	90.49	160	6.2	8.4	23.1	0.386	0.00	-107.0		4.7	4.2	200
PMW101-07B	5/31/2007	15:00	108.7	90.64	220	7.1	5.3	22.0	0.130	7.95	155.0		4.9	0.4	100
PMW101-08A	6/1/2007	10:49	108.9	91.27	220	14.3	7.6	21.9	0.373	3.18	0.0		0.0	2.0	185
PMW101-08B	5/31/2007	16:45	108.9	91.15	200	8.3	5.7	22.6	0.102	8.53	158.0		18.5	0.4	115
PMW21-01	6/4/2007	8:30	100.9	91.42	200	4.8	5.1	18.9	0.259	5.01	138.7		1.0	0.4	120
PMW21-02	6/4/2007	11:35	102.1	90.42	160	4.3	6.0	20.6	0.225	6.52	89.9		9.6	0.2	150
PMW21-03	6/4/2007	13:20	101.2	89.74	100	3.2	5.9	22.1	0.214	7.51	97.7		7.5	0.0	150
PMW21-04	6/4/2007	15:10	100.2	89.59	100	2.8	6.1	22.7	0.281	2.87	104.4		2.0	0.0	75
PMW21-05	6/5/2007	8:15	105.1	87.92	160	4.2	5.9	20.2	0.251	7.46	104.7		1.7	0.0	125
PMW85-01	6/1/2007	8:30	100.7	96.89	120	5.2	5.8	23.5	0.222	0.98	-25.7		1.8	0.6	150
PMW85-04	5/31/2007	16:00	100.0	97.73	80	3.5	6.4	26.2	0.429	0.93	-114.4		4.2	6.6	75
PMW85-05	5/31/2007	13:20	101.0	96.32	120	6.8	5.6	24.4	0.184	4.02	167.6		9.3	0.8	150
PMW92-01	5/30/2007	10:30	99.0	95.12	100	4.0	5.9	21.9	0.227	4.74	156.7		3.7	0.6	75
PMW92-02	5/30/2007	12:30	100.7	93.84	100	2.8	6.5	24.0	2.586	0.36	-125.0		11.0	3.8	500

TABLE 8
FINAL FIELD MEASUREMENTS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sample d	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
PMW92-03	5/30/2007	14:35	98.6	93.48	110	4.4	6.4	23.5	0.627	0.58	-124.0	1.7	3.0	155
PMW92-04	5/30/2007	16:13	98.5	94.46	120	3.9	6.4	23.2	0.545	0.15	-134.9	5.4	3.4	150
PMW92-05	5/31/2007	8:47	96.7	T.O.P	100	2.9	5.7	23.1	0.215	3.77	172.3	1.2	0.4	100
PMW92-06	5/31/2007	11:10	98.9	94.92	120	4.3	5.7	24.3	0.212	1.07	-42.7	7.6	3.8	150

Notes:

- 1) IW85-03, IW85-04, PMW85-02, and PMW85-03 were abandoned and replaced by IW85-05, IW85-06, PMW85-04, and PMW85-05 respectively
- 2) * = malfunctioning dissolved oxygen probe
- 3) TOP = water level meter on top of pump
- 4) NT = not tested

TABLE 9
FINAL FIELD MEASUREMENTS, FOURTH QUARTER
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Purge Volume Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW101-01A	9/10/2007	10:50	129.0	89.55	240	14.1	6.0	21.9	4.600	4.90	-23	30.8	5.0	500
IW101-01B	9/10/2007	12:55	120.0	89.26	200	4.0	6.4	22.9	0.561	10.43	-68	19.9	4.8	130
IW101-01C	9/11/2007	8:10	99.0	89.37	180	20.2	5.8	21.2	0.292	1.50	-86	0.0	2.2	150
IW101-02A	9/11/2007	15:00	131.0	89.72	260	10.7	6.1	21.9	0.472	7.04	-20	39.2	5.0	150
IW101-02B	9/12/2007	8:10	117.0	89.92	260	5.6	6.3	20.8	0.273	1.93	110	2.7	0.0	130
IW101-02C	9/12/2007	9:45	100.0	90.34	280	6.5	6.4	21.5	0.417	2.70	-96	12.7	6.2	150
IW101-03A	9/12/2007	11:45	133.0	90.64	260	6.6	6.3	22.2	0.449	3.57	-68	15.1	3.4	190
IW101-03B	9/12/2007	14:00	117.0	90.59	240	6.2	6.1	22.1	0.218	1.57	33	2.4	1.0	170
IW101-03C	9/12/2007	15:22	101.0	90.57	280	5.5	6.1	22.1	0.268	1.22	-27	2.7	3.0	140
IW101-04A	9/12/2007	16:05	131.0	90.54	120	7.6	6.2	24.4	7.660	5.54	-27	19.4	3.4	425
IW101-04B	9/14/2007	11:25	115.0	90.45	240	8.3	6.5	22.0	0.858	1.91	-102	4.1	4.4	300
IW101-04C	9/14/2007	12:50	99.0	90.34	280	5.2	6.8	21.9	0.595	1.40	-123	2.6	3.9	50
IW101-05A	9/11/2007	16:05	129.0	90.42	280	5.5	6.1	21.8	1.920	1.17	-156	8.3	4.4	335
IW101-05B	9/12/2007	9:20	115.0	90.31	180	6.3	6.2	21.7	0.999	0.34	-33	3.6	3.2	210
IW101-05C	9/12/2007	12:20	98.0	90.27	200	10.9	6.2	22.0	0.999	2.08	-104	15.8	2.8	205
IW101-06A	9/11/2007	9:50	131.0	90.87	200	19.7	6.4	21.2	0.999	11.03	-66	33.3	2.8	125
IW101-06B	9/11/2007	12:50	101.0	90.96	200	9.8	6.0	20.9	0.999	0.52	62	0.8	0.2	145
IW101-06C	9/11/2007	14:10	101.0	90.95	280	6.0	6.0	21.0	0.999	0.37	-83	1.6	0.4	155
IW101-07A	9/13/2007	8:35	131.0	91.43	260	8.2	6.1	21.9	0.349	0.98	-56	14.3	3.6	100
IW101-07B	9/13/2007	11:00	113.0	91.45	240	7.1	6.2	20.9	0.278	0.92	-105	2.8	2.0	125
IW101-07C	9/12/2007	12:25	100.0	91.38	280	5.0	6.0	21.4	0.252	1.07	-41	3.1	3.5	95
IW101-08A	9/10/2007	9:25	131.0	90.95	240	8.7	6.3	22.0	0.999	5.51	-81	15.6	4.6	190
IW101-08B	9/10/2007	11:55	115.0	91.00	240	6.7	6.2	22.4	0.999	0.40	-118	11.2	4.8	300
IW101-08C	9/10/2007	14:45	99.0	91.45	250	6.0	6.1	22.9	1.930	2.03	-81	17.3	3.6	175
IW101-09A	9/13/2007	15:19	132.0	91.26	240	11.1	6.3	21.4	0.465	3.90	-24	16.0	0.0	130
IW101-09B	9/13/2007	16:10	116.0	91.02	260	6.2	6.2	21.7	2.960	7.80	-69	1.6	3.2	130
IW101-09C	9/14/2007	9:25	101.0	91.12	200	11.9	6.1	21.8	1.080	6.26	-15	3.4	4.0	165
IW21-01A	9/14/2007	15:50	102.0	91.72	200	23.8	6.4	21.8	1.570	6.32	-54	26.8	3.4	150
IW21-01B	9/19/2007	15:30	94.0	91.69	280	5.2	6.3	21.3	1.300	2.81	-78	7.1	3.0	90
IW21-02A	9/20/2007	8:15	105.0	91.9	240	7.3	5.8	19.1	0.900	1.98	75	10.8	1.0	50
IW21-02B	9/20/2007	10:15	95.0	92.01	280	7.3	5.9	19.9	0.334	2.31	4	6.5	2.0	50
IW21-03A	9/20/2007	12:28	104.0	90.51	160	7.6	6.0	21.3	0.286	8.70	72	4.8	0.5	90
IW21-03B	9/20/2007	12:45	96.0	90.42	240	8.0	6.1	21.8	0.376	3.99	-88	10.4	4.5	50
IW21-04A	9/19/2007	13:35	90.5	90.46	200	17.4	6.5	21.4	0.515	7.77	12	46.5	2.3	185
IW21-04B	9/19/2007	13:40	94.0	90.79	200	14.1	6.2	21.0	0.365	2.64	103	15.8	3.4	90
IW21-05A	9/20/2007	8:23	106.0	89.98	140	19.8	5.8	19.7	2.381	0.37	26	30.6	2.0	690
IW21-05B	9/20/2007	10:33	95.0	89.99	220	4.6	5.8	20.3	0.385	0.75	-10	9.1	2.1	100
IW85-01	9/13/2007	12:34	96.0	94.23	160	9.8	6.1	19.9	0.613	0.00	-74	25.5	3.0	150
IW85-02	9/14/2007	11:20	98.0	95.39	240	6.9	6.4	23.0	2.597	0.50	-77	4.5	2.8	420
IW85-05	9/14/2007	8:27	101.0	96.00	100	12.0	6.4	22.7	0.422	3.36	-30	8.8	1.4	125
IW85-06	9/13/2007	14:38	103.0	96.42	120	7.6	6.6	23.6	0.962	4.51	-38	11.6	2.5	230
IW92-01	9/19/2007	8:48	89.0	87.21	120	3.8	6.2	23.3	0.392	2.63	39	7.0	2.2	205

TABLE 9
FINAL FIELD MEASUREMENTS, FOURTH QUARTER
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
IW92-02	9/19/2007	16:07	90.0	88.29	20	5.1	6.1	29.3	0.595	1.05	17	6.4	2.6	240
IW92-03	9/18/2007	11:40	92.0	T.O.P	80	7.8	5.9	25.2	0.883	1.31	13	15.6	2.6	200
IW92-04	9/18/2007	8:47	92.0	92.19	100	5.0	6.4	26.8	1.991	0.68	-58	55.3	2.8	250
IW92-05	9/17/2007	9:00	92.0	92.01	60	4.1	6.3	23.0	11.340	0.18	-45	18.6	2.8	805
IW92-06	9/14/2007	16:20	93.0	91.92	160	5.6	6.7	26.0	13.960	0.14	-69	17.2	2.8	650
IW92-07	9/14/2007	14:05	95.0	93.48	240	9.3	6.1	24.7	5.910	2.03	-64	12.4	1.6	300
IW92-08	9/17/2007	14:30	95.0	93.96	60	3.3	6.8	26.7	2.134	4.64	-92	8.0	2.2	100
DR1-3	9/19/2007	10:50	121.6	91.5	220	6.5	6.5	20.8	0.999	1.30	-96	4.3	3.6	100
DR2-1	9/12/2007	16:07	92.3	88.2	120	12.7	6.4	24.7	0.865	0.26	-1	5.1	2.8	275
DR2-5	9/13/2007	8:23	98.6	95.89	1200	4.6	6.1	23.4	0.179	6.69	214	0.9	0.0	100
IW-01	9/14/2007	13:10	97.8	94.89	200	4.3	5.3	23.9	0.258	0.76	168	6.1	2.4	125
MW-21	9/18/2007	10:10	99.2	92.17	160	4.0	5.8	19.6	0.999	2.97	195	3.2	0.0	150
MW-85	9/11/2007	9:15	105.1	98.39	50	3.0	6.4	23.4	0.605	1.07	-8	1.6	2.6	250
MW101B	9/11/2007	11:32	133.0	89.9	280	4.5	5.8	21.0	0.252	0.98	33	12.7	0.0	100
MW101T	9/11/2007	10:10	115.0	89.9	200	7.9	5.9	21.6	0.243	4.76	104	9.0	0.0	75
MW-115	9/19/2007	11:30	94.9	89.97	360	12.4	6.1	20.5	0.999	0.00	-107	3.3	1.6	145
PMW101-01A	9/13/2007	9:05	129.6	89.84	160	3.5	6.4	21.2	9.990	0.00	-166	3.3	4.4	825
PMW101-01B	9/13/2007	11:15	108.9	89.87	240	5.1	6.3	20.1	0.999	0.00	-181	4.1	5.0	300
PMW101-02A	9/13/2007	13:05	128.0	90.5	200	3.7	6.7	21.2	0.900	0.00	-181	12.7	3.8	290
PMW101-02B	9/13/2007	14:36	108.3	90.7	240	4.2	6.5	21.0	0.910	0.00	-143	8.8	2.6	300
PMW101-03A	9/17/2007	8:45	130.1	90.78	180	3.3	6.0	20.3	0.727	2.82	106	9.7	0.0	150
PMW101-03B	9/17/2007	10:00	110.1	90.83	260	4.7	6.4	20.6	0.999	2.03	-77	3.0	5.0	100
PMW101-04A	9/17/2007	11:20	128.8	90.11	280	5.0	6.8	20.8	1.010	0.82	-157	4.4	3.0	125
PMW101-04B	9/17/2007	12:50	109.5	90.67	260	5.0	6.1	21.4	0.999	1.37	-87	2.0	6.0	140
PMW101-05A	9/17/2007	14:20	115.7	90.3	200	5.9	6.4	21.5	0.999	0.69	-137	2.0	5.0	200
PMW101-05B	9/17/2007	15:45	98.2	90.67	260	9.1	6.1	20.6	0.578	1.29	-12	1.7	3.4	105
PMW101-06A	9/18/2007	8:45	130.8	90.97	280	4.8	5.9	20.5	0.871	2.49	95	10.4	0.0	140
PMW101-06B	9/18/2007	10:10	110.2	91.01	180	3.5	6.6	20.7	0.999	1.21	-135	1.5	3.0	165
PMW101-07A	9/18/2007	11:40	128.7	91.04	180	3.4	6.1	22.6	0.999	2.06	-56	4.2	4.0	150
PMW101-07B	9/18/2007	13:45	108.7	91.14	240	7.3	5.7	22.6	0.999	1.35	119	10.9	0.0	80
PMW101-08A	9/18/2007	15:45	108.9	91.64	180	3.3	6.1	25.2	2.760	1.68	26	6.2	0.0	120
PMW101-08B	9/19/2007	9:05	108.9	91.75	200	7.7	5.7	21.9	0.804	1.70	150	3.4	0.0	85
PMW21-01	9/18/2007	12:05	100.9	91.88	200	4.9	5.9	20.5	0.999	2.78	154	11.6	0.0	175
PMW21-02	9/18/2007	13:35	102.1	90.95	240	6.6	5.9	20.3	0.999	4.72	176	5.9	0.0	215
PMW21-03	9/19/2007	8:35	101.2	90.38	180	6.3	5.9	20.0	0.999	5.43	242	3.5	0.0	150
PMW21-04	9/18/2007	15:30	100.2	90.17	200	7.4	5.9	20.4	0.999	0.72	158	9.4	0.0	235
PMW21-05	9/18/2007	-8:30	105.1	88.53	200	7.1	5.9	20.0	0.999	7.85	202	16.1	0.0	105
PMW85-01	9/10/2007	13:20	100.7	98.04	140	10.0	5.9	24.0	0.330	1.57	22	1.5	2.8	185
PMW85-04	9/10/2007	10:52	100.0	97.9	160	5.9	6.4	25.8	1.624	0.16	-102	11.9	3.0	450
PMW85-04*	9/15/2007	9:17	100.0	TOP	140	3.0	6.6	22.7	1.310	1.32	-135	12.0	NT	NT

TABLE 9
FINAL FIELD MEASUREMENTS, FOURTH QUARTER
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Date	Time Sampled	Sample Depth ft (btoc)	Depth to Water ft (btoc)	Purge Rate mL/min	Purge Volume Liters	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Potential mV	Turbidity NTUs	Ferrous Iron mg/L	Carbon Dioxide mg/L
PMW85-05	9/10/2007	8:28	101.0	96.51	120	6.5	5.4	23.7	0.191	3.36	225	16.1	0.0	60
PMW85-05*	9/15/2007	10:30	101.0	96.6	120	10.7	5.7	22.5	0.567	3.59	202	16.9	NT	NT
PMW92-01	9/12/2007	12:45	99.0	94.12	100	3.9	6.1	24.2	0.299	2.61	184	8.3	0.0	185
PMW92-02	9/12/2007	10:47	100.7	93.8	100	3.2	6.6	23.5	3.049	0.14	-86	6.6	3.9	720
PMW92-03	9/12/2007	8:25	98.6	93.2	120	4.4	6.5	22.0	0.463	0.83	41	1.3	0.2	140
PMW92-04	9/11/2007	15:15	98.5	94.29	120	6.4	6.4	23.4	0.506	0.19	-40	4.8	2.7	185
PMW92-05	9/11/2007	13:31	96.7	TOP	80	3.4	5.8	23.3	0.235	3.14	217	2.5	0.0	185
PMW92-06	9/11/2007	11:20	98.9	95.00	140	5.7	6.2	22.7	0.401	0.59	-27	2.7	3.2	260

Notes:

- 1) IW85-03, IW85-04, PMW85-02, and PMW85-03 were abandoned and replaced by IW85-05, IW85-06, PMW85-04, and PMW85-05 respectively
- 2) * = Resampled for dissolved gasses only
- 3) OR= out of range
- 4) TOP= Top of Pipe

TABLE 10
WATER LEVEL MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Aquifer	Top of Casing Elevation (ft. msl)	Top of Screen Elevation (ft. msl)	Baseline - 9/6/2006			EBT Quarter 1 - 12/1/2006			EBT Quarter 2 - 3/2/07			EBT Quarter 3 - 5/25/07			EBT Quarter 4 - 9/7/07		
				Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	
DR1-3	Fluvial	290.93	181.26	89.55	201.38	92.82	90.81	198.11	90.81	200.12	91.00	91.42	199.93	91.42	199.51			
DR1-4	Fluvial	292.78	186.50	89.78	203.00	93.01	91.09	199.77	91.09	201.69	91.25	91.55	201.53	91.55	201.23			
DR1-7	Fluvial	289.15	180.86	89.11	200.04	91.35	89.32	197.80	89.32	199.83	89.52	90.00	199.63	90.00	199.15			
DR1-8	Fluvial	290.02	197.37	87.86	202.16	90.21	89.88	199.81	89.88	200.14	88.26	88.62	201.76	88.62	201.40			
DR2-1	Fluvial	304.90	231.00	87.91	216.99	88.09	88.11	216.81	88.11	216.79	88.11	88.02	216.79	88.02	216.88			
DR2-5	Fluvial	305.44	220.44	94.45	210.99	98.92	95.87	206.52	95.87	209.57	95.90	95.87	209.54	95.87	209.57			
DR2-6	Fluvial	304.70	210.10	99.86	204.84	100.62	100.64	204.08	100.64	204.06	100.65	100.76	204.05	100.76	203.94			
IW-01	Fluvial	304.03	215.03	-	-	-	-	-	-	-	-	-	-	-	-			
IW101-01A	Fluvial	290.76	168.68	88.75	202.01	90.05	90.98	198.78	90.98	199.78	89.47	84.85	209.24	84.85	219.18			
IW101-01B	Fluvial	290.70	183.64	88.66	202.04	90.11	90.75	200.59	90.75	199.95	89.31	89.69	201.29	89.69	201.07			
IW101-01C	Fluvial	290.66	198.82	88.76	201.90	90.97	90.76	199.69	90.76	199.90	89.25	89.59	201.41	89.59	201.07			
IW101-02A	Fluvial	291.12	167.14	89.02	202.10	91.22	91.16	199.90	91.16	199.96	89.64	90.35	201.48	90.35	200.77			
IW101-02B	Fluvial	291.14	181.08	89.12	202.02	91.31	91.14	199.83	91.14	200.00	89.63	89.92	201.51	89.92	201.22			
IW101-02C	Fluvial	291.53	197.81	89.57	201.96	91.74	91.53	199.79	91.53	200.00	90.01	89.87	201.52	89.87	201.66			
IW101-03A	Fluvial	291.94	166.78	89.87	202.07	92.14	91.94	199.80	91.94	200.00	90.43	90.68	201.26	90.68	201.26			
IW101-03B	Fluvial	291.91	182.55	89.80	202.11	92.25	91.80	199.66	91.80	200.11	90.31	90.60	201.60	90.60	201.31			
IW101-03C	Fluvial	292.04	198.45	89.85	202.19	92.11	91.84	199.93	91.84	200.20	90.32	90.65	201.72	90.65	201.39			
IW101-04A	Fluvial	291.72	168.31	89.71	202.01	91.91	91.91	199.81	91.91	199.81	90.44	90.68	201.04	90.68	201.04			
IW101-04B	Fluvial	291.59	184.58	89.69	201.90	91.85	91.64	199.74	91.64	199.95	90.19	90.63	200.93	90.63	200.96			
IW101-04C	Fluvial	291.47	201.78	89.64	201.83	91.81	91.81	199.66	91.81	199.80	90.12	90.54	200.93	90.54	200.98			
IW101-05A	Fluvial	291.52	170.08	89.61	201.91	91.82	91.71	199.70	91.71	199.81	90.22	90.54	201.30	90.54	200.98			
IW101-05B	Fluvial	291.41	183.63	89.44	201.97	91.6	91.44	199.81	91.44	199.97	89.96	90.27	201.14	90.27	201.06			
IW101-05C	Fluvial	291.27	202.89	89.35	201.92	91.51	91.35	199.76	91.35	199.92	89.82	90.21	201.45	90.21	201.14			
IW101-06A	Fluvial	292.16	168.54	90.01	202.15	92.34	92.21	199.82	92.21	199.95	90.62	90.94	201.54	90.94	201.22			
IW101-06B	Fluvial	292.19	183.67	90.13	202.06	92.36	92.23	199.83	92.23	199.96	90.64	90.90	201.55	90.90	201.29			
IW101-06C	Fluvial	292.18	198.09	90.10	202.08	92.36	92.15	199.82	92.15	200.03	90.60	90.87	201.58	90.87	201.31			
IW101-07A	Fluvial	292.83	169.83	90.69	202.14	92.98	92.74	199.85	92.74	200.09	91.24	91.60	201.59	91.60	201.23			
IW101-07B	Fluvial	292.81	186.22	90.65	202.16	93	92.71	199.81	92.71	200.10	91.19	91.51	201.62	91.51	201.30			
IW101-07C	Fluvial	292.78	199.48	90.67	202.11	92.96	92.67	199.82	92.67	200.11	91.15	91.47	201.63	91.47	201.31			
IW101-08A	Fluvial	292.28	167.16	90.12	202.16	92.41	92.31	199.87	92.31	199.97	90.78	90.84	201.50	90.84	201.44			
IW101-08B	Fluvial	292.20	184.53	90.22	201.98	92.49	92.26	199.71	92.26	199.94	90.75	91.00	201.45	91.00	201.20			
IW101-08C	Fluvial	292.73	199.75	90.72	202.01	92.95	92.70	199.78	92.70	200.03	91.21	91.39	201.52	91.39	201.34			
IW101-09A	Fluvial	292.59	167.54	90.55	202.04	92.8	92.60	199.79	92.60	199.99	91.11	91.37	201.48	91.37	201.22			
IW101-09B	Fluvial	292.51	182.56	90.44	202.07	92.67	92.44	199.84	92.44	200.07	90.96	91.25	201.55	91.25	201.26			
IW101-09C	Fluvial	292.59	197.71	90.48	203.11	92.71	92.43	200.16	92.43	201.67	91.24	91.84	202.50	91.84	202.50			
IW21-01A	Fluvial	294.34	195.63	90.91	203.43	91.49	93.21	202.85	93.21	201.35	91.62	91.93	202.72	91.93	202.68			
IW21-01B	Fluvial	294.61	204.72	91.01	203.60	91.38	93.26	203.23	93.26	201.35	91.68	91.84	202.93	91.84	202.93			
IW21-02A	Fluvial	294.62	194.43	91.15	203.47	91.65	93.28	202.97	93.28	201.34	91.76	92.00	202.86	92.00	202.62			
IW21-02B	Fluvial	294.65	202.96	91.25	203.40	91.75	93.32	202.90	93.32	201.33	91.86	92.11	202.54	92.11	202.54			
IW21-03A	Fluvial	292.81	193.10	89.94	202.87	90.41	92.02	200.79	92.02	200.79	90.53	90.65	202.28	90.65	202.16			
IW21-03B	Fluvial	292.50	202.68	89.63	202.87	90.1	92.01	202.40	92.01	200.79	90.18	90.40	202.32	90.40	202.10			
IW21-04A	Fluvial	292.69	192.77	89.81	202.88	90.04	90.46	202.65	90.46	200.68	90.43	90.62	202.26	90.62	202.07			
IW21-04B	Fluvial	292.79	203.06	89.96	202.83	90.46	92.09	202.33	92.09	200.70	90.51	90.75	202.28	90.75	202.04			
IW21-05A	Fluvial	291.78	191.01	89.33	202.45	89.85	91.51	201.93	91.51	200.27	89.93	90.30	201.85	90.30	201.48			
IW21-05B	Fluvial	291.82	201.87	89.31	202.51	89.93	91.41	200.41	91.41	200.41	89.90	90.23	201.92	90.23	201.59			
IW85-01	Fluvial	304.79	216.53	94.02	210.77	94.09	94.20	210.70	94.20	210.59	94.16	94.28	210.63	94.28	210.51			
IW85-02	Fluvial	304.93	213.73	94.06	210.87	95.11	95.14	209.82	95.14	209.79	95.23	95.39	209.70	95.39	209.54			
IW85-05	Fluvial	304.73	212.33	-	-	-	95.17	209.56	95.17	209.56	95.81	96.04	208.92	96.04	208.69			

TABLE 10
WATER LEVEL MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Aquifer	Top of Casing Elevation (ft. msl)	Top of Screen Elevation (ft. msl)	Baseline - 9/6/2006			EBT Quarter 1 - 12/1/2006			EBT Quarter 2 - 3/2/07			EBT Quarter 3 - 5/25/07			EBT Quarter 4 - 9/7/07		
				Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)
IW85-06	Fluvial	304.81	209.31	-	-	-	-	-	217.57	87.45	217.06	87.37	217.14	87.37	217.48	87.03	217.48	
IW92-01	Fluvial	304.51	224.16	86.61	217.90	86.94	87.45	217.06	87.37	87.37	217.14	87.03	217.48	87.03	217.48	87.03	217.48	
IW92-02	Fluvial	304.05	224.53	82.33	221.72	84.93	87.93	219.12	88.60	88.60	215.45	88.37	215.68	88.37	215.68	88.37	215.68	
IW92-03	Fluvial	304.20	220.73	91.69	212.51	91.52	91.75	212.68	91.75	91.75	212.45	91.75	212.45	91.75	212.45	91.53	212.67	
IW92-04	Fluvial	303.80	220.55	91.89	211.91	91.93	91.23	211.87	91.23	91.23	212.57	91.82	211.98	91.82	211.70	92.10	211.70	
IW92-05	Fluvial	303.99	220.48	91.83	212.16	91.74	91.69	212.25	91.69	91.69	212.30	91.45	212.54	91.67	212.32	91.67	212.32	
IW92-06	Fluvial	304.07	219.67	91.90	212.17	91.95	91.80	212.12	91.80	91.80	212.27	91.80	212.27	91.80	212.07	92.00	212.07	
IW92-07	Fluvial	303.78	216.00	92.89	210.89	93.15	93.20	210.63	93.20	93.20	210.58	93.31	210.47	93.31	210.31	93.47	210.31	
IW92-08	Fluvial	304.55	219.25	93.60	210.95	93.69	93.74	210.86	93.74	93.74	210.81	93.70	210.85	93.79	210.76	93.79	210.76	
MW-102B	Fluvial	311.40	190.90	106.90	204.50	109.11	107.29	202.29	107.29	107.29	204.11	107.38	204.02	107.65	203.75	107.65	203.75	
MW-115	Fluvial	291.67	202.17	89.03	202.64	89.6	89.41	202.07	89.41	89.41	202.26	89.58	202.09	89.85	201.82	89.85	201.82	
MW-197A	Fluvial	291.26	129.30	-	-	95.46	93.33	195.80	93.33	93.33	197.93	93.46	197.80	93.98	197.28	93.98	197.28	
MW-197B	Fluvial	291.03	196.88	-	-	95.37	93.24	195.66	93.24	93.24	197.79	93.37	197.66	93.89	197.14	93.89	197.14	
MW-198	Fluvial	291.50	201.47	-	-	96.06	93.99	195.44	93.99	93.99	197.51	94.14	197.36	94.59	196.91	94.59	196.91	
MW-199A	Fluvial	301.53	155.45	-	-	110.98	108.36	190.55	108.36	108.36	193.17	108.81	192.72	110.21	191.32	110.21	191.32	
MW-199B	Fluvial	301.73	197.12	-	-	107.1	104.94	196.79	104.94	104.94	196.79	105.07	196.66	105.67	196.06	105.67	196.06	
MW-201	Fluvial	304.23	237.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-202A	Fluvial	299.23	122.73	-	-	123.88	121.98	175.35	121.98	121.98	177.25	122.58	176.65	126.43	172.80	126.43	172.80	
MW-202B	Fluvial	299.51	180.42	-	-	122.97	121.58	176.54	121.58	121.58	177.93	122.04	177.47	124.60	174.91	124.60	174.91	
MW-21	Fluvial	295.00	202.90	91.30	203.70	91.78	91.70	203.22	91.70	91.70	203.30	91.78	203.22	92.15	202.85	92.15	202.85	
MW-22	Fluvial	298.04	202.64	92.19	205.85	96.45	96.45	201.59	96.45	96.45	203.47	96.16	203.88	95.03	203.01	95.03	203.01	
MW-23	Fluvial	298.99	197.79	96.51	202.48	98.78	98.78	200.21	98.78	98.78	202.13	96.96	202.03	97.13	201.86	97.13	201.86	
MW-26	Fluvial	303.69	206.09	98.02	205.67	98.75	98.80	204.94	98.80	98.80	204.89	98.79	204.90	98.87	204.82	98.87	204.82	
MW-50	Fluvial	298.82	183.82	84.63	214.19	85.18	85.03	213.64	85.03	85.03	213.79	85.00	213.82	85.45	213.37	85.45	213.37	
MW-64	Fluvial	304.21	202.21	105.94	198.27	106.65	106.22	197.56	106.22	106.22	197.99	106.16	198.05	106.96	197.25	106.96	197.25	
MW-85	Fluvial	304.13	208.23	97.39	206.74	97.89	98.06	206.24	98.06	98.06	206.07	98.14	205.99	98.18	205.95	98.18	205.95	
MW-88	Fluvial	305.15	223.15	79.24	225.91	79.51	79.51	225.64	79.51	79.51	225.66	79.61	225.54	79.70	225.45	79.70	225.45	
MW-93	Fluvial	294.08	202.08	98.97	195.11	99.58	99.11	194.50	99.11	99.11	194.97	99.01	195.07	99.91	194.17	99.91	194.17	
MW-96	Fluvial	289.02	213.52	80.62	208.40	99.05	97.01	207.18	97.01	97.01	207.77	97.12	207.77	97.39	207.62	97.39	207.62	
MW-97	Fluvial	297.44	199.94	96.74	200.70	99.05	97.14	198.39	97.14	97.14	200.43	97.19	200.32	98.02	200.05	98.02	200.05	
MW-98	Fluvial	294.43	157.43	97.05	197.38	99.3	99.3	195.13	99.3	99.3	197.29	99.35	197.24	98.85	196.41	98.85	196.41	
PMW101-01A	Fluvial	290.78	169.95	88.89	201.89	91.19	89.20	199.59	89.20	89.20	201.58	89.35	201.43	89.85	200.93	89.85	200.93	
PMW101-01B	Fluvial	290.86	192.79	89.02	201.84	91.3	91.3	199.56	89.30	89.30	201.56	89.43	201.43	90.88	200.98	89.43	200.98	
PMW101-02A	Fluvial	291.47	174.35	89.72	201.75	91.91	91.91	199.56	89.98	89.98	201.49	90.05	201.42	90.44	201.03	90.44	201.03	
PMW101-02B	Fluvial	291.60	194.17	89.85	201.75	92.65	90.13	198.95	90.13	90.13	201.47	90.26	201.34	90.68	200.92	90.26	200.92	
PMW101-03A	Fluvial	291.61	172.42	89.92	201.69	92.2	90.25	199.41	90.25	90.25	201.36	90.35	201.26	90.75	200.86	90.35	200.86	
PMW101-03B	Fluvial	291.55	192.24	89.96	201.59	92.21	90.24	199.34	90.24	90.24	201.31	90.34	201.21	90.75	200.80	90.34	200.80	
PMW101-04A	Fluvial	291.07	173.13	89.32	201.75	92.59	89.62	198.48	89.62	89.62	201.45	89.67	201.40	90.08	200.99	89.67	200.99	
PMW101-04B	Fluvial	291.47	192.91	89.82	201.65	92.09	90.13	199.38	90.13	90.13	201.34	90.23	201.24	90.63	200.84	90.23	200.84	
PMW101-05A	Fluvial	291.43	186.61	89.58	201.85	91.85	89.89	199.58	89.89	89.89	201.54	89.97	201.46	90.32	201.11	89.97	201.11	
PMW101-05B	Fluvial	291.68	206.83	89.91	201.77	92.15	90.21	199.53	90.21	90.21	201.47	90.30	201.38	90.70	200.98	90.30	200.98	
PMW101-06A	Fluvial	292.13	172.12	90.18	201.95	92.41	90.49	199.72	90.49	90.49	201.64	90.57	201.56	90.91	201.22	90.57	201.22	
PMW101-06B	Fluvial	292.17	192.92	90.23	201.94	92.5	90.56	199.67	90.56	90.56	201.61	90.64	201.53	91.50	200.67	90.64	200.67	
PMW101-07A	Fluvial	292.20	174.27	90.23	201.97	92.47	90.54	199.73	90.54	90.54	201.66	90.61	201.59	91.04	201.16	90.61	201.16	
PMW101-07B	Fluvial	292.36	194.37	90.39	201.97	92.64	90.90	199.72	90.90	90.90	201.46	90.78	201.58	91.21	201.15	90.78	201.15	
PMW101-08A	Fluvial	293.01	173.26	90.98	202.03	93.22	91.30	199.79	91.30	91.30	201.71	91.36	201.65	91.70	201.31	91.36	201.31	
PMW101-08B	Fluvial	293.03	194.96	90.95	202.08	93.2	91.25	199.83	91.25	91.25	201.78	91.34	201.69	91.67	201.36	91.34	201.36	
PMW21-01	Fluvial	294.73	206.34	90.99	203.74	91.48	91.42	203.25	91.42	91.42	203.31	91.50	203.23	91.85	202.88	91.50	202.88	

TABLE 10
WATER LEVEL MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Aquifer	Top of Casing Elevation (ft. msl)	Top of Screen Elevation (ft. msl)	Baseline - 9/6/2006			EBT Quarter 1 - 12/1/2006			EBT Quarter 2 - 3/2/07			EBT Quarter 3 - 5/25/07			EBT Quarter 4 - 9/7/07		
				Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)	Depth to Water (ft. bloc)	Groundwater Elevation (ft. msl)
PMW21-02	Fluvial	292.98	201.72	90.10	202.88	90.64	90.49	202.34	90.49	202.49	90.56	202.42	90.90	202.08	90.24	201.87	90.10	201.77
PMW21-03	Fluvial	292.11	201.80	89.42	202.69	89.98	89.81	202.13	89.81	202.30	90.00	202.11	90.24	201.87	90.10	201.77	90.10	201.77
PMW21-04	Fluvial	291.87	202.88	89.30	202.57	89.68	89.67	202.19	89.67	202.20	89.89	201.98	90.10	201.77	90.10	201.77	90.10	201.77
PMW21-05	Fluvial	288.53	194.28	88.55	199.98	88.11	87.88	200.42	87.88	200.65	88.06	200.47	88.50	200.03	88.50	200.03	88.50	200.03
PMW85-01	Fluvial	305.08	211.88	96.46	208.62	96.88	89.06	208.20	89.06	216.02	96.85	208.23	96.97	208.11	97.39	207.79	97.39	207.79
PMW85-04	Fluvial	305.18	213.45	-	-	-	97.24	-	97.24	207.94	97.28	207.90	97.39	207.79	97.39	207.79	97.39	207.79
PMW85-05	Fluvial	305.12	211.96	-	-	-	96.27	-	96.27	208.85	96.31	208.81	96.39	208.73	96.39	208.73	96.39	208.73
PMW92-01	Fluvial	304.23	211.63	93.56	210.67	93.97	94.00	210.26	94.00	210.23	93.91	210.32	93.96	210.27	93.96	210.27	93.96	210.27
PMW92-02	Fluvial	304.17	209.40	93.16	211.01	93.58	93.54	210.59	93.54	210.63	93.55	210.62	93.65	210.52	93.65	210.52	93.65	210.52
PMW92-03	Fluvial	303.91	211.42	92.93	210.98	93.23	93.16	210.68	93.16	210.75	93.23	210.68	93.22	210.69	93.22	210.69	93.22	210.69
PMW92-04	Fluvial	303.93	212.72	93.65	210.28	94.18	94.11	209.75	94.11	209.82	94.18	209.75	94.27	209.66	94.27	209.66	94.27	209.66
PMW92-05	Fluvial	304.07	215.74	93.40	210.67	93.71	93.70	210.36	93.70	210.37	93.65	210.42	93.30	210.77	93.30	210.77	93.30	210.77
PMW92-06	Fluvial	304.65	213.02	94.23	210.42	94.72	94.75	209.93	94.75	209.90	94.83	209.82	93.98	210.67	93.98	210.67	93.98	210.67

Notes.

Anomalous readings PMW85-01 and DR2-5 (Not used in groundwater elevations contour map)

- Not Measured

TABLE 11
MNA ANALYTICAL RESULTS, DESIGN MONITORING - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Design Monitoring 2										
Parameter	Method	Sample Date	IW21-01A	IW21-01B	IW21-03A	IW21-03B	MW-21	PMW21-03		
Carbon Dioxide	RSK17515021	ug/L	390000 J	290000 J	90000 J	130000	110000 J	91000		
Ethane	RSK17515021	ug/L	<5	<5	<5	<5	<5	<5		
Ethene	RSK17515021	ug/L	<5	<5	<5	<5	<5	<5		
Methane	RSK17515021	ug/L	5.3	28	4.8 J	16	7.8	5.5		
Hydrogen	AM20GAX	nM	1100	16	3.5	8.4	1.2	7.4		
Design Monitoring 1										
Parameter	Method	Sample Date	IW21-01A	IW21-01B	IW21-03A	IW21-03B	MW-21	PMW21-03		
Carbon Dioxide	RSK17515021	ug/L	160000 J	70000 J	33000 J	75000	300000 J	260000 J		
Ethane	RSK17515021	ug/L	<5	<5	<5	<5	<25	<5		
Ethene	RSK17515021	ug/L	<5	<5	<5	<5	<25	<5		
Methane	RSK17515021	ug/L	11	13	6.8	8.7	40	7.7		
Hydrogen	AM20GAX	nM	1000	4000	5.9	20	14	2.1		
Baseline										
Parameter	Method	Sample Date	IW21-01A	IW21-01B	IW21-03A	IW21-03B	MW-21	PMW21-03		
Carbon Dioxide	RSK17515021	ug/L	87000 J	74000 J	85000 J	82000 J	100000 J	100000		
Ethane	RSK17515021	ug/L	<5	3 J	<5	<5	<5	<5		
Ethene	RSK17515021	ug/L	2.6 J	4.7 J	<5	<5	<5	<5		
Methane	RSK17515021	ug/L	6.9 B	9.5 B	7.2 B	7.9 B	11 B	8		
Hydrogen	AM20GAX	nM	--	--	--	--	1.6	9.4		
Design Monitoring 2										
Parameter	Method	Sample Date	IW21-01A	IW21-01B	IW21-03A	IW21-03B	MW-21	PMW21-03		
Acetic Acid	830-MBA	mg/L	857	448	<1	94.1	<1	<1		
Butyric Acid	830-MBA	mg/L	57.3	21.4	<1	<1	<1	<1		
Lactic Acid	830-MBA	mg/L	526	<10	<1	83.9	<1	<1		
Propionic Acid	830-MBA	mg/L	1080	559	<10	66.3	<10	<10		
Pyruvic Acid	830-MBA	mg/L	<2	<1	<0.1	<0.1	<0.1	<0.1		
Design Monitoring 1										
Parameter	Method	Sample Date	IW21-01A	IW21-01B	IW21-03A	IW21-03B	MW-21	PMW21-03		
Acetic Acid	830-MBA	mg/L	592	496	<1	<1	<1	<1		
Butyric Acid	830-MBA	mg/L	16.2	5.35	<1	<1	<1	<1		
Lactic Acid	830-MBA	mg/L	3180	869	<1	22	<1	<1		
Propionic Acid	830-MBA	mg/L	1070	652	<10	14.6	<10	<10		
Pyruvic Acid	830-MBA	mg/L	<0.1	1.71	<0.1	<0.1	<0.1	<0.1		
Baseline										
Parameter	Method	Sample Date	IW21-01A	IW21-01B	IW21-03A	IW21-03B	MW-21	PMW21-03		
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1		
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1		
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1		
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10	<10		
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

--: Not Sampled

TABLE 12
MNA ANALYTICAL RESULTS, DESIGN MONITORING - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Design Monitoring 2		Sample	IW101-01A	IW101-01B	IW101-01C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-08A	IW101-08B	IW101-08C
Parameter	Method	Date	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/7/2006
Carbon Dioxide	RSK1755021	ug/L	210000 J	81000 J	33000 J	180000 J	73000 J	89000 J	390000 J	120000 J	85000 J	150000 J	70000 J	79000 J
Ethane	RSK1755021	ug/L	<0.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	ug/L	0.35 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	0.86	6.2	7.5	8.4	7.3	6.7	8.6	7.1	5.2	5.7	6.5	3.9 J
Hydrogen	AM20GAX	nM	280	23	2.3	22000	23	41	34000	1.9	6	25	2.2	8300
Design Monitoring 1		Sample	IW101-01A	IW101-01B	IW101-01C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-08A	IW101-08B	IW101-08C
Parameter	Method	Date	10/5/06	10/5/06	10/6/06	10/6/06	10/6/06	10/6/06	10/9/06	10/9/06	10/9/06	10/10/06	10/10/06	10/10/06
Carbon Dioxide	RSK1755021	ug/L	140000	70000	55000	180000	91000	58000	150000 J	130000 J	94000 J	110000 J	72000 J	79000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	6.2	6.4	6.2	6.3	59	9.1	7.1	6.3	7.6	9.5	7.6	8.5
Hydrogen	AM20GAX	nM	340	290	2	5600	23	69	3.4	9.3	3.9	36	3.6	58
Baseline		Sample	IW101-01A	IW101-01B	IW101-01C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-08A	IW101-08B	IW101-08C
Parameter	Method	Date	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/24/06	8/24/06	8/24/06	8/24/06	8/28/06	8/28/06	8/29/06
Carbon Dioxide	RSK1755021	ug/L	72000	110000 J	87000 J	89000 J	100000 J	67000 J	100000 J	96000 J	88000 J	78000	47000 J	22000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	4.8 J	6	4.6 J	7.3	7.7	6.6	9.1	6.6	7.4	6.8	6.6	8
Hydrogen	AM20GAX	nM	-	-	-	-	-	-	-	-	-	-	-	-
Design Monitoring 2		Sample	IW101-01A	IW101-01B	IW101-01C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-08A	IW101-08B	IW101-08C
Parameter	Method	Date	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/7/2006
Acetic Acid	830-MBA	mg/L	319	13.6	20.7	211	14.7	32.4	478	36.1	30.5	<1	<1	99.2
Butyric Acid	830-MBA	mg/L	<100	<1	<1	6.43	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	3350	<1	<1	109	4.02	<1	135	<1	<1	3.21	<1	61.4
Propionic Acid	830-MBA	mg/L	509	<10	18.6	276	7.58 J	30.7	762	63.3	45	<10	<10	177
Pyruvic Acid	830-MBA	mg/L	<10	<0.1	<0.1	0.363	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Design Monitoring 1		Sample	IW101-01A	IW101-01B	IW101-01C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-08A	IW101-08B	IW101-08C
Parameter	Method	Date	10/5/06	10/5/06	10/6/06	10/6/06	10/6/06	10/6/06	10/9/06	10/9/06	10/9/06	10/10/06	10/10/06	10/10/06
Acetic Acid	830-MBA	mg/L	171	<1	<1	172	<1	48.1	223	16.2	30.7	<1	<1	77
Butyric Acid	830-MBA	mg/L	<1	<1	<1	4.58	<1	<1	6.11	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	8630	<1	<1	62.7	7.93	3.39	27.5	<1	<1	<1	<1	103
Propionic Acid	830-MBA	mg/L	<10	<10	14.7	298	<0.1	<0.1	368	65.9	65	<10	<10	80.1
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Baseline		Sample	IW101-01A	IW101-01B	IW101-01C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-08A	IW101-08B	IW101-08C
Parameter	Method	Date	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/24/06	8/24/06	8/24/06	8/24/06	8/28/06	8/28/06	8/29/06
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

--: Not Sampled

TABLE 12
MNA ANALYTICAL RESULTS, DESIGN MONITORING - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Design Monitoring 2		Sample Date	PMW101-02A	PMW101-02B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/7/2006
Carbon Dioxide	RSK1755021	31000 J	45000 J	26000 J	41000 J	58000 J	75000 J	76000 J	64000 J	61000 J	61000 J	61000 J
Ethane	RSK1755021	<0.5	0.26 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethene	RSK1755021	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methane	RSK1755021	0.55	0.8	1.1	0.37 J	7.1	6.7	7	6.3	6.3	6.3	6.3
Hydrogen	AM20GAX	2.5	1.5	1.4	100	2.6	0.86	1.5	1.5	1.5	1.5	1.7
Design Monitoring 1		Sample Date	PMW101-02A	PMW101-02B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	10/5/06	10/5/06	10/5/06	10/6/06	10/6/06	10/6/06	10/9/06	10/9/06	10/9/06	10/9/06	10/10/06
Carbon Dioxide	RSK1755021	55000	90000 J	77000	95000	75000	79000 J	110000 J	200000 J	180000 J	180000 J	180000 J
Ethane	RSK1755021	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	<25
Ethene	RSK1755021	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	<25
Methane	RSK1755021	6.8	8.4	65	64	49	7	8.5	6.9	7	7	41
Hydrogen	AM20GAX	2.1	1.4	3.2	1.8	3.8	1.4	2	3.4	2.2	2.2	2.2
Baseline		Sample Date	PMW101-02A	PMW101-02B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	8/22/06	8/22/06	8/22/06	8/29/06	8/22/06	8/23/06	8/25/06	8/24/06	8/24/06	8/24/06	8/24/06
Carbon Dioxide	RSK1755021	110000 J	88000 J	84000 J	60000 J	87000 J	57000 J	140000 J	53000 J	120000 J	48000 J	48000 J
Ethane	RSK1755021	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5
Ethene	RSK1755021	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5
Methane	RSK1755021	6.3	6.3	14	4.3 J	7.6	5.9	52	5.1	6.3	6.3	6.7
Hydrogen	AM20GAX	-	-	-	-	-	-	-	-	31	-	-
Design Monitoring 2		Sample Date	PMW101-02A	PMW101-02B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/3/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/7/2006
Acetic Acid	830-MBA	12.8	14.9	14.6	13.9	10.1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	<10	6.46 J	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Design Monitoring 1		Sample Date	PMW101-02A	PMW101-02B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	10/5/06	10/5/06	10/6/06	10/6/06	10/6/06	10/9/06	10/9/06	10/9/06	10/9/06	10/9/06	10/10/06
Acetic Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Baseline		Sample Date	PMW101-02A	PMW101-02B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	8/22/06	8/22/06	8/22/06	8/29/06	8/22/06	8/23/06	8/25/06	8/24/06	8/24/06	8/24/06	8/24/06
Acetic Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

-: Not Sampled

TABLE 13
MNA ANALYTICAL RESULTS: DESIGN MONITORING - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Design Monitoring 2		Sample	IW85-04	IW92-01	IW92-03	IW92-05	IW92-07	DR2-1	PMW85-01	PMW92-01	PMW92-04	PMW92-05
Parameter	Method	Date	11/9/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006
Carbon Dioxide	RSK175/5021	ug/L	530000	120000	110000	380000	930000	81000	89000	73000	100000	110000
Ethane	RSK175/5021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK175/5021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK175/5021	ug/L	7.1	5.6	8.4	48	100	7.2	7	5.8	9.2	9.6
Hydrogen	AM20GAX	nM	45000	350	63000	6800	1200	6.4	8.4	1.5	2	13
Design Monitoring 1		Sample	IW85-04	IW92-01	IW92-03	IW92-05	IW92-07	DR2-1	PMW85-01	PMW92-01	PMW92-04	PMW92-05
Parameter	Method	Date	10/13/06	10/11/06	10/12/06	10/12/06	10/12/06	10/12/06	10/13/06	10/13/06	10/13/06	10/13/06
Carbon Dioxide	RSK175/5021	ug/L	170000	84000	93000 J	400000	770000	61000 J	79000 J	62000 J	79000 J	82000 J
Ethane	RSK175/5021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK175/5021	ug/L	<5	<5	<5	<5	2.8 J	<5	<5	3.6 J	<5	<5
Methane	RSK175/5021	ug/L	7	8.8	8.3	14	15	6.2	7.4	8.3	8.6	9.1
Hydrogen	AM20GAX	nM	75000	6.8	24	2700	3800	1.8	12	2.6	3	2.4
Baseline		Sample	IW85-04	IW92-01	IW92-03	IW92-05	IW92-07	DR2-1	PMW85-01	PMW92-01	PMW92-04	PMW92-05
Parameter	Method	Date	9/1/06	8/31/06	8/31/06	8/31/06	9/1/06	8/31/06	8/30/06	8/30/06	8/30/06	8/30/06
Carbon Dioxide	RSK175/5021	ug/L	7200 J	40000 J	46000 J	49000 J	49000	51000 J	61000 J	48000 J	67000 J	67000 J
Ethane	RSK175/5021	ug/L	<0.5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK175/5021	ug/L	0.86	<5	<5	<5	<5	<5	<5	2.8 J	<5	<5
Methane	RSK175/5021	ug/L	0.54	5.9 B	6.7 B	7 B	4.5 B	5.1 B	6.4	7.4	6.5	5.9
Hydrogen	AM20GAX	nM	--	--	--	17	--	2.3	--	--	2.1	--
Design Monitoring 2		Sample	IW85-04	IW92-01	IW92-03	IW92-05	IW92-07	DR2-1	PMW85-01	PMW92-01	PMW92-04	PMW92-05
Parameter	Method	Date	11/9/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006
Acetic Acid	830-MBA	mg/L	686	<1	60.2	<1	<1	<1	<1	<1	12.4	11.1
Butyric Acid	830-MBA	mg/L	1500	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	3370	20.2	37.8	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	1950	73.6	35.3	10.2	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Design Monitoring 1		Sample	IW85-04	IW92-01	IW92-03	IW92-05	IW92-07	DR2-1	PMW85-01	PMW92-01	PMW92-04	PMW92-05
Parameter	Method	Date	10/13/06	10/11/06	10/12/06	10/12/06	10/12/06	10/12/06	10/13/06	10/13/06	10/13/06	10/13/06
Acetic Acid	830-MBA	mg/L	808	<1	<1	1360	2740	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	185	<1	<1	353	256	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	9620	22.4	30.4	260	251	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	1350	<10	<10	1760	3400	8.95 J	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	1.04	1.81	<0.1	<0.1	<0.1	<0.1	<0.1
Baseline		Sample	IW85-04	IW92-01	IW92-03	IW92-05	IW92-07	DR2-1	PMW85-01	PMW92-01	PMW92-04	PMW92-05
Parameter	Method	Date	9/1/06	8/31/06	8/31/06	8/31/06	9/1/06	8/31/06	8/30/06	8/31/06	8/30/06	8/30/06
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	11.1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

--: Not Sampled

TABLE 14
 MEAN CONCENTRATIONS OF DISSOLVED GASES AND MFA - DESIGN MONITORING
 YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
 Main Installation - Defense Depot Memphis, Tennessee

TTA-1, MW-21 Area				
Parameter	units	Baseline	Design Monitoring 1	Design Monitoring 2
Acetic Acid	mg/L	0	185	233
Butyric Acid	mg/L	0	4	13
Lactic Acid	mg/L	0	678	102
Propionic Acid	mg/L	0	290	284
Pyruvic Acid	mg/L	0	0	0
Carbon Dioxide	ug/L	88,000	149,667	183,500
Ethane	ug/L	0	0	0
Ethene	ug/L	0	0	0
Methane	ug/L	8	15	11
Hydrogen	nM	6	838	189

TTA-1, MW-101 Area				
Parameter	units	Baseline	Design Monitoring 1	Design Monitoring 2
Acetic Acid	mg/L	0	34	60
Butyric Acid	mg/L	0	0	0
Lactic Acid	mg/L	0	402	166
Propionic Acid	mg/L	0	43	86
Pyruvic Acid	mg/L	0	0	0
Carbon Dioxide	ug/L	81,955	103,136	92,591
Ethane	ug/L	0	0	0
Ethene	ug/L	0	0	0
Methane	ug/L	9	18	5
Hydrogen	nM	-	294	2,947

TTA-2				
Parameter	units	Baseline	Design Monitoring 1	Design Monitoring 2
Acetic Acid	mg/L	0	491	77
Butyric Acid	mg/L	0	79	150
Lactic Acid	mg/L	1	1,019	343
Propionic Acid	mg/L	0	651	207
Pyruvic Acid	mg/L	0	0	0
Carbon Dioxide	ug/L	48,520	188,000	252,300
Ethane	ug/L	0	0	0
Ethene	ug/L	0	1	0
Methane	ug/L	6	9	21
Hydrogen	nM	7	8,155	11,638

TABLE 15
MNA ANALYTICAL RESULTS, YEAR ONE - ITA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	9/14/07	9/19/07	9/20/07	9/20/07	9/20/07	9/20/07	9/19/07	9/19/07	9/20/07	9/20/07	9/18/07	9/19/07	9/18/07	9/18/07	9/19/07	9/18/07	9/18/07
Bromide	300	mg/L	8.85	2.49	0.244	0.17 J	12.7 J	13.5 J	0.115 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloride	300	mg/L	10.2 J	11	16.1 J	15.6 J	12.7 J	13.5 J	11.6	9.78	10.3 J	11.7 J	14.8	11.7	12.9	11.7	12.6	12.7	24.4
Nitrate	300/353.2	mg/L	<0.6	<0.6	2.37	2.52	1.93	<0.6	<0.6	<0.6	0.329 J	3.89	2.36	3.5	4.15	4.18	3.73	4.27	4.27
Nitrite	300/354.1	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	5.74	0.529 J	12.4	6.08	18.4	1.55	2.26	10.5	4.34	5.77	10.9	9.12	16.2	13.5	14	17.7	18.2
Sulfide	376.1	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	754 J	584	80.8 J	88.2 J	107 J	259 J	266	180	1390 J	179 J	81.2	226	100	89.9	81.4	115	68.4
Total Organic Carbon	9060	mg/L	373	261	0.72 J	3.23	1.66	91.4	62.3	29.6	822	43.5	<1	40.9	<1	<1	<1	<1	<1
EBT Quarter 3		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	6/5/07	6/5/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/4/07	6/5/07	6/4/07	6/4/07	6/4/07	6/4/07	6/5/07
Bromide	300	mg/L	<0.2	<0.2	0.245	0.178 J	0.213	4.97	0.968	1.22	<0.2	1.16	0.188 J	<0.2	0.206	0.155 J	0.151 J	0.204	<0.2
Chloride	300	mg/L	53.9	16.8	9.7	16.5	14	10.8	9.92	8.95	8.16	8.57	16.7	11.8	9.83	11.8	12.3	9.85	19.4
Nitrate	300/353.2	mg/L	<0.6	<0.6	0.268 J	1.05	1.83	<0.6	<0.6	<0.6	<0.6	<0.6	4.25	3.66	3.86	4.41	4.56	3.83	4.47
Nitrite	300/354.1	mg/L	<0.4	<0.4	<0.4	0.115 J	<0.4	<0.4	<0.4	<0.4	0.291 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	<1	<1	10.3	5.67	20	2.13	17.1	5.73	0.857 J	8.69	11	15.3	16.3	13.9	12.9	19.4	21.1
Sulfide	376.1	mg/L	<1	<1	<1	<1	<1	1.32	0.952 J	0.648 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	3790	948	95.5	78.2	101	290	258	283	1140	251	67	59.5	91.4	76.1	65.3	109	45.6
Total Organic Carbon	9060	mg/L	4180	451	7.28	10.9	1.59	345	106	123	2130	109	0.614 J	<1	0.985 J	0.582 J	0.603 J	<1	<1
EBT Quarter 2		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/8/2007	3/8/2007	3/12/2007	3/9/2007	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007
Bromide	300	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.313 J	1.4 J	28.6 J	0.591 J	0.29 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloride	300	mg/L	7.92 J	7.39 J	14.7	16.4	13.7 J	9.58 J	13.8	15.6	100	11.7	16 J	11.6 J	13 J	11.6 J	12.1 J	13.5 J	19 J
Nitrate	300/353.2	mg/L	<0.6	<0.6	0.888	0.79	1.15	<0.6	0.478 J	<0.6	<0.6	0.692	3.98	4.14	3.65	4.57	4.42	3.64	4.67
Nitrite	300/354.1	mg/L	0.877	0.458	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.98 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	1.7 J	<1	7.17	6.51	17.4 J	1.36 J	8	4.07	<5	10.3	11.5	16.2	15.4	14.1	13.3	19.5	21.9
Sulfide	376.1	mg/L	<1	<1	0.504 J	<1	0.8 J	<1	1.13	4.87 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	3120	2780	124	118	115	1010	223	456 J	2460	204	72.8	76.4	91.2	83.2	74.2	121	62.6
Total Organic Carbon	9060	mg/L	2580	2190	14.1	17.6	0.873 B	506	53.7	210	1750	45.2	<1	<1	<1	<1	<1	<1	<1
EBT Quarter 1		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/12/2006	12/12/2006	12/12/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/5/2006
Bromide	300	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.157 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloride	300	mg/L	15.6	12.1	14.9	19.5	13.3	12.5	10.2	13.8	13.2	11.7	15.4	12	13.9	11.7	12.8	14.5	18.5
Nitrate	300/353.2	mg/L	0.298 J	0.396 J	3.38	3.82	3.33	0.313 J	0.308 J	0.647	<0.6	1.84	4.01	4.18	3.44	4.07	3.9	3.13	3.8
Nitrite	300/354.1	mg/L	0.102 J	0.104 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.00527 J	<0.01	0.00632 J	<0.01	<0.01	<0.01
Sulfate	300	mg/L	11.9	8	9.49	10.2	16.5	12.5	5.46	12.9	2.69	12	10.6	13.7	15.7	14.2	14.2	19.1	17.8
Sulfide	376.1	mg/L	<1	<1	<1	<1	<1	<1	<1	0.6 J	0.6 J	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	880	1250	81	77.2	87.5	232	424	180	997	125	64.5	69.3	87.9	73.7	82.5	109	83.2
Total Organic Carbon	9060	mg/L	455	653 J	7.46 J	7.41	2.89 J	46.8 J	83.5	51.8	479	20.9	3.13	1.33	4.72	3.04	1.24	2.06	1.37
Baseline		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	8/8/06	8/8/06	8/9/06	8/8/06	8/9/06	8/9/06	8/10/06	8/10/06	8/10/06	8/10/06	8/8/06	8/10/06	8/9/06	8/9/06	8/10/06	8/9/06	8/10/06
Bromide	300	mg/L	0.439	0.342	<0.2	0.312	0.324	0.305	0.406	<0.2	0.305	<0.2	<0.2	<0.2	<0.2	<0.2	0.255	0.409	<0.2
Chloride	300	mg/L	13.8	12.6	14.6	20.7	13.2	11.5	13.3	13.9	17	11.4	15.2	12.1	12.9	12.3	13.6	13.7	14.3
Nitrate	300	mg/L	1.9	0.406 J	3.33	3.84	3.14	3.23	3.64	3.15	2.3	4.03	3.93	3.76	3.34	3.3	3.39	3.14	3.87
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	15.3	37.6	8.95	7.31	15.2	33.3	14.8	13.4	11.8	10.8	8.63	13.3	14.6	22.4	15.8	30.3	14.6
Sulfide	9030	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	156	210	95.3	77	92.5	118	93.5	95.3	110	77.9	75.5	57.8	91.7	102	91.3	114	61.6
Total Organic Carbon	9060	mg/L	1.45	6.31	4.27 B	1.09	2.56 B	2.93 B	5.76	5.38	4.57	4.73	1.35	4.69	3.31 B	3.15 B	4.97	3.98 B	3.43

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B: Estimated result; possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 15
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	Date	Method	Units	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter																						
Arsenic, Total		6010B/3005A	mg/L			<0.01	0.00534 J	<0.01	0.0437	0.133	<0.01	0.00752 J	0.00688 J	0.0055 J	0.00959 J	<0.01	0.00755 J	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total		6010B/3005A	mg/L			0.118 J	0.148	0.0143	0.0437	0.124	0.124	0.109	0.0889	0.324	0.137	<0.01	0.238	<0.01	0.0328	<0.01	0.00648 J	0.0287
Selenium, Total		6010B/3005A	mg/L			<0.01	<0.01	0.00651 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00559 J	<0.01	<0.01	<0.01	0.00591 J
EBT Quarter 3		Sample	Date	Method	Units	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter																						
Arsenic, Total		6010B/3005A	mg/L			0.0117	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0124	0.00657 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total		6010B/3005A	mg/L			0.611	0.147	0.0356	0.0225	0.0601	0.0967	0.328	0.0672	0.632	0.149	<0.01	0.0133	<0.01	0.0484	<0.01	<0.01	0.0278
Selenium, Total		6010B/3005A	mg/L			0.0147	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 2		Sample	Date	Method	Units	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter																						
Arsenic, Total		6010B/3005A	mg/L			<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total		6010B/3005A	mg/L			0.613	0.338	0.0311	0.0234	0.079	0.121	0.252	0.0672	0.68	0.0949	<0.01	0.0136	<0.01	0.0728	<0.01	<0.01	0.0446
Selenium, Total		6010B/3005A	mg/L			0.0115	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00634 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 1		Sample	Date	Method	Units	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter																						
Arsenic, Total		6010B/3005A	mg/L			<0.01	0.00661 J	<0.01	<0.01	<0.01	<0.01	0.0281	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total		6010B/3005A	mg/L			0.289	0.247	0.0287	0.0138	0.132	0.0903	0.84	0.187	0.789	0.067	<0.01	0.00726 J	0.00707 J	0.12	<0.01	<0.01	0.0821
Selenium, Total		6010B/3005A	mg/L			<0.01	<0.01	<0.01	0.00654 J	<0.01	<0.01	0.00796 J	<0.01	<0.01	<0.01	<0.01	0.00502 J	<0.01	<0.01	<0.01	<0.01	0.00653 J
Baseline		Sample	Date	Method	Units	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter																						
Arsenic, Total		6010B/3005A	mg/L			<0.01	<0.01	<0.01	<0.01	0.00542 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total		6010B/3005A	mg/L			1.12	1.4	0.00684 J	0.0166	0.0322	0.116	0.0146	0.108	0.463	0.0315	0.0131	0.0392	0.0281	0.675	0.0109	<0.01	0.274
Selenium, Total		6010B/3005A	mg/L			<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.01	<0.02	<0.01	<0.02	<0.02

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

-: Not Sampled

TABLE 15
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	9/14/07	9/19/07	9/20/07	9/20/07	9/20/07	9/20/07	9/19/07	9/19/07	9/20/07	9/20/07	9/18/07	9/19/07	9/18/07	9/18/07	9/18/07	9/18/07	9/18/07
Acetic Acid	830-MBA	mg/L	210	189	<1	3.31	1.28	69.2	47.6	27.3	385	43.2	<1	17.1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	82.9	33.3	<1	<1	<1	16.1	8.59	2.6	158	0.833 J	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	0.804 J	<1	<1	<1	0.727 J	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	351	290	<10	<10	<10	96.9	60.7	15.8	763	40.3	11	58.9	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	0.732 B	<0.1	<0.1	0.288 B	0.423	0.391	0.826 B	0.406 B	<0.1	0.411	<0.1	<0.1	0.394	0.232	0.236

EBT Quarter 3		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	6/5/07	6/5/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/4/07	6/5/07	6/4/07	6/4/07	6/4/07	6/4/07	6/5/07
Acetic Acid	830-MBA	mg/L	811	410	6.85	9.45	<1	265	81	95.3	788	101	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	2010	31.7	<1	<1	<1	41 J	7.05	8.32	453	8.64	1.37	112	1.23	1.26	1.26	1.21	0.792 J
Lactic Acid	830-MBA	mg/L	878	<1	<1	2.64	<1	11.2	<1	<1	1400	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	1650	614	5.52 J	12.1	<10	394	133	156	1830	145	<10	<10	<10	<10	<10	<10	10.7
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

EBT Quarter 2		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/8/2007	3/8/2007	3/12/2007	3/8/2007	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007
Acetic Acid	830-MBA	mg/L	1040	1460	<1	<1	<1	437	46.9	176	780	53.2	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	214	96.2 J	<1	<1	<1	15.6	1.95	10.6	116	5.64	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	4250	871	18.5	11.8	<1	119	<1	46.9	1300	13.9	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	1520	2510	<10	11.9	<10	521	42.1	216	1220	58.2	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	5.62 J	<10	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

EBT Quarter 1		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/12/2006	12/12/2006	12/12/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/5/2006
Acetic Acid	830-MBA	mg/L	286	528	23.3	41.1	25.6	68.5	111	41.1	386	43.2 B	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	82.3	44.1	<1	<1	<1	2.15	3.03	5.73	36.8	1.56	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	129	28.8	<1	18.6	<1	9.34	<1	51.3	43.6	4.35	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	353	579	<10	<10	<10	37.7	98	23.6	431	17.1	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Baseline		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	8/8/06	8/8/06	8/9/06	8/8/06	8/9/06	8/9/06	8/10/06	8/10/06	8/10/06	8/10/06	8/8/06	8/10/06	8/9/06	8/9/06	8/10/06	8/9/06	8/10/06
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

< Not detected above Reporting Limit (RL)
J Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data
-: Not Sampled

TABLE 15
MNA ANALYTICAL RESULTS, YEAR ONE - ITA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	9/14/07	9/19/07	9/20/07	9/20/07	9/20/07	9/20/07	9/19/07	9/19/07	9/20/07	9/20/07	9/18/07	9/19/07	9/18/07	9/18/07	9/18/07	9/18/07	9/18/07
Carbon Dioxide	RSK1755021	ug/L	140000	180000	190000	130000 J	64000	140000	100000	160000	310000	140000	150000	130000	99000	64000	82000	87000	81000
Ethane	RSK1755021	ug/L	<5	<25	<25	<25	<5	<25	<25	<25	<25	<25	<25	<25	<25	<50	<25	<25	<5
Ethene	RSK1755021	ug/L	<5	<25	<25	<25	<5	<25	<25	<25	<25	<25	<25	<25	<25	<50	<25	<25	<5
Methane	RSK1755021	ug/L	1800	2100	51	40	72	1600	1100	4000	3400	740	39	5800	45	110	45	43	5.8
Hydrogen	AM20GAX	nM	39	1.3	3.2	14	27	2.8	1.9	7.5	14	4.4	1.9	2.3	1.7	6.8	2.7	1.9	1.7
EBT Quarter 3		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	6/5/07	6/5/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/6/07	6/4/07	6/5/07	6/4/07	6/4/07	6/4/07	6/4/07	6/5/07
Carbon Dioxide	RSK1755021	ug/L	880000	170000	120000 J	140000 J	130000 J	240000 J	160000 J	130000 J	710000 J	140000 J	51000 J	66000	80000 J	100000 J	110000 J	130000 J	77000
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<25	<50	<25	<5	<5
Ethene	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<50	<25	<5	<5	<25	<50	<25	<5	<5
Methane	RSK1755021	ug/L	4000	1100	7.6	24	27	2700 J	5000	2700	3100	1900	4.2 J	650	41 B	65 B	30 B	5.1	7.4
Hydrogen	AM20GAX	nM	2900	2.1	5.7	150	79	240	27	10	18000	5.8	3.6	1.7	2	1.7	9.8	4500	3.2
EBT Quarter 2		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/8/2007	3/8/2007	3/12/2007	3/9/2007	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007
Carbon Dioxide	RSK1755021	ug/L	650000 J	560000 J	170000	150000	200000 J	250000	180000	180000	450000	150000	150000	120000	160000	130000	130000	170000	140000
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	2.6 J	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	280	550	6	18	3.3 J	120	3300	170	670	490	3.7 J	230	3.5 J	3.7 J	5 J	4.1 J	7.3
Hydrogen	AM20GAX	nM	40000	41	4.4	74	10	39000	25	5.1	40000	27	1.6	1.1	1.5	1.4	1.8	1.2	1.6
EBT Quarter 1		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/12/2006	12/12/2006	12/12/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/5/2006
Carbon Dioxide	RSK1755021	ug/L	230000 J	300000 J	140000 J	160000 J	150000 J	160000 J	75000 J	110000 J	230000 J	180000 J	95000 J	140000 J	160000 J	140000 J	140000 J	110000 J	87000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	10 B	50	5.7	7.5 B	5.8 B	26	66	12 B	71	26 B	4.8 J	460	5.1	3.3 J	9	9	6.1 B
Hydrogen	AM20GAX	nM	8.2	65000	6.4	0.94	3.9	20	2.8	6.2	64000	4.2	1.6	1.4	1.6	2.2	1.6	2.3	1.6
Baseline		Sample	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-21	MW-115	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Parameter	Method	Date	8/8/06	8/8/06	8/9/06	8/8/06	8/9/06	8/9/06	8/10/06	8/10/06	8/10/06	8/10/06	8/8/06	8/10/06	8/9/06	8/9/06	8/10/06	8/9/06	8/10/06
Carbon Dioxide	RSK1755021	ug/L	87000 J	74000 J	100000 J	95000 J	85000 J	82000 J	110000	110000	100000	89000	100000 J	96000	89000 J	88000 J	100000	120000 J	55000
Ethane	RSK1755021	ug/L	<5	3 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	ug/L	2.6 J	4.7 J	<5	<5	<5	<5	<5	<5	2.9 J	<5	<5	<5	<5	2.6 J	<5	<5	<5
Methane	RSK1755021	ug/L	6.9 B	9.5 B	6 B	5.5 B	7.2 B	7.9 B	9 B	7.3 B	9.5	6.8	11 B	670	7.1 B	6.3 B	8	7 B	8.4
Hydrogen	AM20GAX	nM	--	--	--	--	--	--	--	--	--	--	1.6	1.6	2.2	--	9.4	--	--

<: Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

--: Not Sampled

TABLE 16

Not detected above Reporting Limit (RL)

1: Estimated result based on QC data or reported below RL
2: Not detected above Reporting Limit (RL)
3: Estimated result possibly biased high or false positive based on blank data
4: Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - ITA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	units	9/19/07	9/13/07	9/13/07	9/13/07	9/13/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/18/07	9/18/07
Bromide	300	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	0.176 J	0.271	0.204	0.17 J	0.216	0.154 J	<0.2	<0.2
Chloride	300	mg/L	19.9	23.3	18.7	16.6	19.8	20.9	20.1	20.7	20.9	19.5	10.8	17.9	19.3
Nitrate	300/353.2	mg/L	<0.6	<0.6	0.383 J	0.167 J	<0.6	1.33	0.3 J	0.322 J	0.304 J	<0.6	0.757	3.11	<0.6
Nitrite	300/354.1	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	<1	<1	15	7.73	1.33	17.7	2.39	1.9	3.29	7.08	0.652 J	17.5	3.06
Sulfide	376.1	mg/L	<1	<1	<1	<1	<1	<1	0.536 J	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	252	3580	342	374	413	174	274	502	210	191	180	99.8	201
Total Organic Carbon	9060	mg/L	<1	2500	94.2	53.3	104	<1	30.2	54.6	30.4	<1	40.1	<1	2.69
EBT Quarter 3		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	units	6/1/07	5/30/07	5/30/07	5/29/07	5/29/07	5/30/07	5/29/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07
Bromide	300	mg/L	0.17 J	<2	<0.8	0.643	0.167 J	0.133 J	0.143 J	0.178 J	0.21	<0.8	<0.8	0.148 J	<2
Chloride	300	mg/L	19.9	19.9	19.1	17.7	18.7	20.8	19.1	21.6	18.6	19.6	10.2	20.8	16.1
Nitrate	300/353.2	mg/L	<0.6	<0.6	0.42 J	0.514 J	1.95	5.34	0.652	1.33	0.576 J	<2.4	1.11 J	2.91	<6
Nitrite	300/354.1	mg/L	<0.4	<0.4	<1.6	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<1.6	<0.4	<0.4	<4
Sulfate	300	mg/L	0.788 J	<10	5.59	7.41	15.1	18.9	8.9	14.2	3.55	<4	<4	15.9	<10
Sulfide	376.1	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	237	2580	288	278	157	83.6	166	240	104	221	160	142	232
Total Organic Carbon	9060	mg/L	2.29	1850	323	59.8	16.5	<1	0.944 J	1.83	14	36.3	27.1	4.08	96.7
EBT Quarter 2		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	units	3/7/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007
Bromide	300	mg/L	<0.2	<0.2	<0.2	0.23 J	0.204 J	0.214 J	0.182 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chloride	300	mg/L	19.9 J	8.44	16.2	16.6	19.3	19.6	20	20.7 J	20 J	19.8	11.4	20.6 J	16.8 J
Nitrate	300/353.2	mg/L	0.299 J	<0.6	<0.6	1.01 J	<0.4	5.57	1.55	4.15	0.286 J	<0.6	1.65	1.48	<0.6
Nitrite	300/354.1	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	3.93	0.577 J	0.645 J	12 J	2.64 J	15.8 J	12.5 J	20.5	8.93	<1	2.21	14.5	<1
Sulfide	376.1	mg/L	<1	<1	<1	<1	0.635 J	<1	<1	<1	190 J	<1	0.504 J	<1	<1
Alkalinity, Total	310.2	mg/L	243	3210	797	297	330	93.8	151	119 J	190 J	271	84.9	154 J	385.5 J
Total Organic Carbon	9060	mg/L	<2	1790 B	213	19.4	46.1 B	<1	0.535 J	0.543 J	4.67	37.2	10.4	3.56 B	122
EBT Quarter 1		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	units	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006
Bromide	300	mg/L	0.179 J	<0.8	<0.8	0.206	0.226	<0.2	<0.2	0.158 J	0.169 J	<0.2	<0.2	0.22	0.254
Chloride	300	mg/L	19.5	8.62	17.5	16.3	17.2	18.8	18.8	20.2	19.6	18.7	9.47	19.9	17.6
Nitrate	300/353.2	mg/L	0.848	<2.4	<2.4	3.6	2.57	5.27	5.01	4.68	2.74	<0.6	3.11	3.58	<0.2
Nitrite	300/354.1	mg/L	0.00632 J	<1.6	<1.6	<0.4	<0.4	<0.4	<0.4	0.00527 J	<0.01	<0.4	<0.4	<0.4	<0.01
Sulfate	300	mg/L	13.6	2.94 J	2.77 J	22.6	19.9	15.2	14.8	18	13.5	<1	4.92	16.1	<1
Sulfide	376.1	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	142	4470	844	123	113	74.7	77.4	116	116	289	39	112	292
Total Organic Carbon	9060	mg/L	6.79	1360 J	522	1.89	2.91	0.782 J	0.735 J	1.73	1.39	22.1	0.566 J	2.05	53.2
Baseline		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	units	8/25/06	8/21/06	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/22/06	8/23/06	8/22/06	8/23/06	8/23/06	8/24/06
Bromide	300	mg/L	<0.2	0.339	0.276	<0.2	0.447	0.282	0.342	0.309	0.339	0.314	<0.2	0.403	<0.2
Chloride	300	mg/L	18.9	14.1	15.9	17	20	19.4	19.6	19.2	17	18.9	10.8	21	16.4
Nitrate	300	mg/L	5.36	3.54 J	4.27 J	4.52	5.3	5.41	5.7	5.19	5.02	5.33	3.44	4.96	4.92
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	14.5	24.7	30.8	21.8	15.4	15.6	15	17	11.8	17.8	9.36	19.2	10.8
Sulfide	9030	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	91.3	128	124	126	95	84.5	78.6	97.6	76.3	105	58.9	116	81
Total Organic Carbon	9060	mg/L	2.64	5.73	4.96	4.16	4.02	1.05	0.758 J	3.72	1.69 B	4.4	9.01	0.954 J	0.758 J

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

- Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4									
Parameter	Method	Sample Date	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	Sample Date	PMW101-07A	PMW101-07B
Bromide	300	mg/L	<0.2	<0.2	<0.2	<0.2	9/18/07	9/18/07	9/19/07
Chloride	300	mg/L	23.2	11.3	29.4	7.73			
Nitrate	300/353.2	mg/L	<0.6	4.5	1.91	3.37			
Nitrite	300/354.1	mg/L	<0.4	0.25 J	<0.4	<0.4			
Sulfate	300	mg/L	36.7	6.93	36.1	2.46			
Sulfide	376.1	mg/L	<1	<1	<1	<1			
Alkalinity, Total	310.2	mg/L	178	55.2	221	41.2			
Total Organic Carbon	9060	mg/L	<1	0.555 J	0.548 J	0.846 J			
EBT Quarter 3									
Parameter	Method	Sample Date	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	Sample Date	PMW101-07A	PMW101-07B
Bromide	300	mg/L	0.226	<0.2	0.237	0.14 J	5/31/07	6/1/07	5/31/07
Chloride	300	mg/L	25.6	11.9	29.9	7.45			
Nitrate	300/353.2	mg/L	<0.6	5	2.08	3.28			
Nitrite	300/354.1	mg/L	<0.4	<0.4	<0.4	<0.4			
Sulfate	300	mg/L	10.5	6.6	30.2	2.45			
Sulfide	376.1	mg/L	<1	<1	<1	<1			
Alkalinity, Total	310.2	mg/L	181	27.7	198	19.9			
Total Organic Carbon	9060	mg/L	6.13	<1	0.892 J	<1			
EBT Quarter 2									
Parameter	Method	Sample Date	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	Sample Date	PMW101-07A	PMW101-07B
Bromide	300	mg/L	<0.2	<0.2	<0.2	<0.2	3/6/2007	3/6/2007	3/6/2007
Chloride	300	mg/L	24.6 J	11.6 J	29.8 J	7.38 J			
Nitrate	300/353.2	mg/L	<0.6	5.02	1.39	3.31			
Nitrite	300/354.1	mg/L	<0.4	<0.4	<0.4	<0.4			
Sulfate	300	mg/L	3.34	6.53	32.8	2.59			
Sulfide	376.1	mg/L	0.55 J	<1	<1	<1			
Alkalinity, Total	310.2	mg/L	157 J	46.7 B	209 J	59.1 B			
Total Organic Carbon	9060	mg/L	22.8	<1	2.56	0.519 J			
EBT Quarter 1									
Parameter	Method	Sample Date	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	Sample Date	PMW101-07A	PMW101-07B
Bromide	300	mg/L	0.203	0.109 J	0.236	0.102 J	12/5/2006	12/5/2006	12/5/2006
Chloride	300	mg/L	26.2	11.9	30	7.12			
Nitrate	300/353.2	mg/L	<0.2	3.52	5.59	43.7			
Nitrite	300/354.1	mg/L	<0.01	<0.01	<0.01	<0.01			
Sulfate	300	mg/L	15.3	5.43	42.3	3.45			
Sulfide	376.1	mg/L	<1	<1	<1	<1			
Alkalinity, Total	310.2	mg/L	222	53.5	174	23.3			
Total Organic Carbon	9060	mg/L	16.7	2.86	1.97	1.05			
Baseline									
Parameter	Method	Sample Date	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	Sample Date	PMW101-07A	PMW101-07B
Bromide	300	mg/L	0.3	<0.2	0.384	<0.2	8/24/06	8/24/06	8/24/06
Chloride	300	mg/L	25.8	10.7	29.2	6.68			
Nitrate	300	mg/L	5.33	4.03	6.87	1.29			
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4			
Sulfate	300	mg/L	32.1	4.18	42.1	2.23			
Sulfide	9030	mg/L	<1	<1	<1	<1			
Alkalinity, Total	310.2	mg/L	150	42	153	51.2			
Total Organic Carbon	9060	mg/L	2.31	0.632 J	1.07	0.815 J			

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

— Not Sampled

TABLE 16

EBT Quarter 4												
Parameter	Sample Date	units	Method	9/10/07	9/10/07	9/11/07	9/11/07	9/11/07	9/11/07	9/12/07	9/12/07	9/12/07
Arsenic, Total	6010B13005A	mg/L		<0.01	0.017	<0.01	<0.01	<0.01	0.0147	<0.01	<0.01	<0.01
Manganese, Total	6010B13005A	mg/L		1.81	0.519	0.04	0.0137	0.199	0.0807	0.0313	0.0269	0.0519
Selenium, Total	6010B13005A	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 3												
Parameter	Sample Date	units	Method	6/11/07	5/29/07	5/29/07	5/29/07	5/29/07	5/30/07	6/11/07	6/11/07	6/11/07
Arsenic, Total	6010B13005A	mg/L		0.00627 J	0.00603 J	<0.01	0.0103	0.00773 J	<0.01	<0.01	0.0204	0.0129
Manganese, Total	6010B13005A	mg/L		1.31	0.272	0.0471	0.446	0.0851	0.0962	0.0177	0.46	0.598
Selenium, Total	6010B13005A	mg/L		0.00565 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0119	<0.01
EBT Quarter 2												
Parameter	Sample Date	units	Method	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/6/2007	3/7/2007	3/8/2007
Arsenic, Total	6010B13005A	mg/L		<0.01	0.0102	<0.01	<0.01	0.015	<0.01	<0.01	<0.01	0.0102
Manganese, Total	6010B13005A	mg/L		1.38	0.263	0.0493	0.0104	0.079	0.0787	0.0853	0.0369	0.677
Selenium, Total	6010B13005A	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 1												
Parameter	Sample Date	units	Method	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006	12/6/2006
Arsenic, Total	6010B13005A	mg/L		0.00901 J	0.00671 J	<0.01	<0.01	0.00932 J	<0.01	<0.01	<0.01	0.00777 J
Manganese, Total	6010B13005A	mg/L		1.85	0.159	0.0326	0.124	0.0707	0.285	0.0375	1.73	0.524
Selenium, Total	6010B13005A	mg/L		0.00918 J	<0.01	<0.01	<0.01	<0.01	<0.01	0.00611 J	<0.01	<0.01
Baseline												
Parameter	Sample Date	units	Method	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/23/06	8/24/06	8/24/06	8/24/06
Arsenic, Total	6010B13005A	mg/L		<0.01	<0.01	<0.01	0.00792 J	0.00506 J	0.005 J	<0.01	<0.01	<0.01
Manganese, Total	6010B13005A	mg/L		0.225	0.00715 J	0.0327	0.00816 J	0.0581	0.207	0.0124	0.0603	0.0196
Selenium, Total	6010B13005A	mg/L		<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.01	<0.01	<0.05

C: Not detected above Reporting Limit (RL)
J Estimated result based on QC data or reported below RL
B Estimated result possibly biased high or false positive based on blank data
Not Sampled

TABLE 15

c: Not detected above Reporting Limit (RL)

1. Estimated result based on QC data or reported below RL

3. Estimated result possibly biased high or false positive based on blank data
Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Date	9/19/07	9/13/07	9/13/07	9/13/07	9/13/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/18/07	9/18/07
Arsenic, Total	6010B\3005A	mg/L	<0.01	0.0187	0.00336 J	0.0227	0.017	<0.01	0.0164	0.0533 J	0.00705 J	0.0124	<0.01	<0.01	0.00693 J
Manganese, Total	6010B\3005A	mg/L	2.93	17.4	0.337	8.61	0.778	0.013	0.613	3.1	1.12	1.21	0.157	0.0629	0.419
Selenium, Total	6010B\3005A	mg/L	<0.01	<0.02	0.00656	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00583 J	<0.01
EBT Quarter 3		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Date	6/1/07	5/30/07	5/30/07	5/29/07	5/29/07	5/30/07	5/29/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07
Arsenic, Total	6010B\3005A	mg/L	<0.01	0.0367	0.0213	0.00606 J	<0.01	<0.01	<0.01	<0.01	<0.01	0.00581 J	<0.01	<0.01	<0.01
Manganese, Total	6010B\3005A	mg/L	2.17 J	65.8	0.954	6.16	0.016	0.0111	0.0564	0.157	0.41	1.46	0.141	0.079	0.667
Selenium, Total	6010B\3005A	mg/L	<0.01	0.0085 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 2		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Date	3/7/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007
Arsenic, Total	6010B\3005A	mg/L	<0.01	0.0111	0.0194	<0.01	0.00792 J	<0.01	<0.01	<0.01	<0.01	0.0111	<0.01	<0.01	<0.01
Manganese, Total	6010B\3005A	mg/L	0.0227	94	1.35	1.97	0.17	0.02	0.167	<0.01	0.05	1.72	0.0331	0.0482	0.765
Selenium, Total	6010B\3005A	mg/L	<0.01	0.0381	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 1		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Date	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006
Arsenic, Total	6010B\3005A	mg/L	<0.01	<0.01	0.00757 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0139	<0.01	<0.01	0.0137
Manganese, Total	6010B\3005A	mg/L	0.00684 J	78.3 J	1.2	0.0438	0.0174	0.0258	<0.01	0.00905 J	<0.01	1.19	<0.01	0.044	0.138
Selenium, Total	6010B\3005A	mg/L	0.00721 J	<0.01	0.00582 B	<0.01	<0.01	<0.01	<0.01	<0.01	0.00562 J	<0.01	<0.01	<0.01	<0.01
Baseline		Sample Date	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Date	8/25/06	8/21/06	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/22/06	8/29/06	8/22/06	8/23/06	8/23/06	8/24/06
Arsenic, Total	6010B\3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00648 J	<0.01	<0.01	<0.01
Manganese, Total	6010B\3005A	mg/L	<0.01	0.153	0.0134	0.0456	0.0195	0.0971	<0.01	0.0682	0.0105	<0.01	0.00677 J	0.0652	0.0065 J
Selenium, Total	6010B\3005A	mg/L	<0.05	<0.02	0.0105 J	<0.02	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01

< Not detected above Reporting Limit (RL)

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B Estimated result possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4			PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date units	9/18/07	9/18/07	9/18/07	9/19/07
Arsenic, Total	6010B3005A	mg/L	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B3005A	mg/L	0.425	<0.01	0.24	0.00541 J
Selenium, Total	6010B3005A	mg/L	<0.01	<0.01	<0.01	<0.01

EBT Quarter 3			PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date units	5/31/07	5/31/07	6/1/07	5/31/07
Arsenic, Total	6010B3005A	mg/L	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B3005A	mg/L	0.594	<0.01	0.279	<0.01
Selenium, Total	6010B3005A	mg/L	<0.01	<0.01	<0.01	<0.01

EBT Quarter 2			PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date units	3/6/2007	3/6/2007	3/6/2007	3/6/2007
Arsenic, Total	6010B3005A	mg/L	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B3005A	mg/L	0.672	<0.01	0.338	<0.01
Selenium, Total	6010B3005A	mg/L	<0.01	<0.01	<0.01	<0.01

EBT Quarter 1			PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date units	12/5/2006	12/5/2006	12/5/2006	12/5/2006
Arsenic, Total	6010B3005A	mg/L	0.0668 J	<0.01	<0.01	<0.01
Manganese, Total	6010B3005A	mg/L	0.746	<0.01	<0.01	0.014
Selenium, Total	6010B3005A	mg/L	<0.01	0.00592 J	0.00764 J	0.00517 J

Baseline			PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date units	8/25/06	8/24/06	8/24/06	8/24/06
Arsenic, Total	6010B3005A	mg/L	<0.01	<0.01	0.00646 J	<0.01
Manganese, Total	6010B3005A	mg/L	0.00872 J	0.017	0.00837 J	0.0822
Selenium, Total	6010B3005A	mg/L	<0.02	<0.01	<0.05	<0.02

< Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4																	
Parameter	Method	Sample Date	IW101-01A 9/10/07	IW101-01B 9/10/07	IW101-01C 9/11/07	IW101-02A 9/11/07	IW101-02B 9/12/07	IW101-02C 9/12/07	IW101-03A 9/12/07	IW101-03B 9/12/07	IW101-03C 9/12/07	IW101-04A 9/12/07	IW101-04B 9/14/07	IW101-04C 9/14/07	IW101-05A 9/11/07	IW101-05B 9/12/07	IW101-05C 9/12/07
Acetic Acid	830-MBA	mg/L	557	29.2	30.3	76.6	1.7	90.3	104	8.94	47.4	696	7.52	30.5	353	<1	25.3
Butyric Acid	830-MBA	mg/L	156	1.42	3.19	5.91	<1	4.17	3.77	1.68	12.6	148	3.77	0.518 J	12.1	<1	1.47
Lactic Acid	830-MBA	mg/L	384	0.768 J	<1	5.8	<10	<1	<1	<1	<1	873	<1	0.768 J	31.5	<1	<1
Propionic Acid	830-MBA	mg/L	1270	39.1	24.8	152	<10	88.5	174	12	81	1640	31.8	91.2	728	<10	93.5
Pyruvic Acid	830-MBA	mg/L	10.2	<0.1	<0.1	0.787	<0.1	<0.1	<0.1	<0.1	<0.1	25.4	<0.1	<0.1	0.487	<0.1	<0.1
EBT Quarter 3																	
Parameter	Method	Sample Date	IW101-01A 6/11/07	IW101-01B 5/29/07	IW101-01C 5/29/07	IW101-02A 5/29/07	IW101-02B 5/29/07	IW101-02C 5/30/07	IW101-03A 5/30/07	IW101-03B 6/11/07	IW101-03C 6/11/07	IW101-04A 6/4/07	IW101-04B 6/4/07	IW101-04C 6/4/07	IW101-05A 6/5/07	IW101-05B 6/5/07	IW101-05C 6/5/07
Acetic Acid	830-MBA	mg/L	622	32.7	120	30.3	42.6	146	109	15.1	115	775	53.9	70	154	<1	<1
Butyric Acid	830-MBA	mg/L	181	<1	11	<1	1.69	7.63	5.85	1.52 B	18.6	543	6.2	2.02	1.31	1.01	6.74
Lactic Acid	830-MBA	mg/L	1280	3.02	4.17	37.2	<1	3.03	593	<1	<1	792	<1	<1	31	<1	<1
Propionic Acid	830-MBA	mg/L	1470	30.3	205	21.1	75.3	195	148	19.2	177	2010	83	90.4	353	<10	175
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EBT Quarter 2																	
Parameter	Method	Sample Date	IW101-01A 3/5/2007	IW101-01B 3/5/2007	IW101-01C 3/5/2007	IW101-02A 3/5/2007	IW101-02B 3/5/2007	IW101-02C 3/6/2007	IW101-03A 3/6/2007	IW101-03B 3/6/2007	IW101-03C 3/7/2007	IW101-04A 3/8/2007	IW101-04B 3/8/2007	IW101-04C 3/8/2007	IW101-05A 3/9/2007	IW101-05B 3/9/2007	IW101-05C 3/9/2007
Acetic Acid	830-MBA	mg/L	218	14.2	84.3	18.8	3.98	103	50.4	88.3	232	703	121	66.3	32.7	<1	225 J
Butyric Acid	830-MBA	mg/L	15.3	<1	2.34	<1	<1	2.73	<1	6.24	16.5	29.6	3.24	1.38	<1	<1	7.92
Lactic Acid	830-MBA	mg/L	2970	<1	62.6	29.9	6.98	1.53	524	24.9	1.88	765	3.28	5.01	56.2	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	117	18.3	<10	124	48	146	223	994	102	93	12.3	<10	234 J
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1
EBT Quarter 1																	
Parameter	Method	Sample Date	IW101-01A 12/4/2006	IW101-01B 12/4/2006	IW101-01C 12/4/2006	IW101-02A 12/4/2006	IW101-02B 12/4/2006	IW101-02C 12/5/2006	IW101-03A 12/5/2006	IW101-03B 12/5/2006	IW101-03C 12/5/2006	IW101-04A 12/6/2006	IW101-04B 12/6/2006	IW101-04C 12/6/2006	IW101-05A 12/6/2006	IW101-05B 12/6/2006	IW101-05C 12/6/2006
Acetic Acid	830-MBA	mg/L	429	<1	28.2	19.8	<1	73.5	133	20	111	731	73.5	41.5	26.8	<1	205
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	1.27	3.97	1.12	4.86	22.7	1.27	<1	<1	<1	2.73
Lactic Acid	830-MBA	mg/L	6970	<10	6.09	166	2.07	2.64	238	12.8	2.07 J	600	<1	1.87	36.8	<1	<1
Propionic Acid	830-MBA	mg/L	610	<10	42.2	13.5	<10	113	197	23.5	131	1200	117	54.1	22.1	<10	375
Pyruvic Acid	830-MBA	mg/L	2.03	<0.1	1.38	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Baseline																	
Parameter	Method	Sample Date	IW101-01A 8/21/06	IW101-01B 8/22/06	IW101-01C 8/22/06	IW101-02A 8/22/06	IW101-02B 8/23/06	IW101-02C 8/23/06	IW101-03A 8/23/06	IW101-03B 8/23/06	IW101-03C 8/24/06	IW101-04A 8/24/06	IW101-04B 8/24/06	IW101-04C 8/24/06	IW101-05A 8/28/06	IW101-05B 8/28/06	IW101-05C 8/25/06
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

<: Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

—: Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4																	
Parameter	Method	Sample Date	units	IW101-06A 9/11/07	IW101-06B 9/11/07	IW101-06C 9/11/07	IW101-07A 9/13/07	IW101-07B 9/13/07	IW101-07C 9/13/07	IW101-08A 9/10/07	IW101-08B 9/10/07	IW101-08C 9/10/07	IW101-09A 9/13/07	IW101-09B 9/13/07	IW101-09C 9/14/07	MW-101B 9/11/07	MW-101T 9/11/07
Acetic Acid	830-MBA		mg/L	82.5	4.72	39.6	28.9	28.4	52.9	27.5	127	197	29.5	449	173	<1	<1
Butyric Acid	830-MBA		mg/L	5.04	<1	6.34	<1	<1	7.5	1.93	8.63	85.7	<1	426	146	<1	<1
Lactic Acid	830-MBA		mg/L	44.9	<1	<1	<1	<1	<1	1.39	<1	1.39	7.51	1.09	0.589 J	<1	<1
Propionic Acid	830-MBA		mg/L	157	<10	50.3	30.3	25.8	69.9	59.3	119	324	<10	851	247	<10	<10
Pyruvic Acid	830-MBA		mg/L	2.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.738	<0.1
EBT Quarter 3																	
Parameter	Method	Sample Date	units	IW101-06A 6/5/07	IW101-06B 6/6/07	IW101-06C 6/6/07	IW101-07A 6/4/07	IW101-07B 6/4/07	IW101-07C 6/4/07	IW101-08A 6/4/07	IW101-08B 6/5/07	IW101-08C 6/5/07	IW101-09A 6/5/07	IW101-09B 6/6/07	IW101-09C 6/6/07	MW-101B 5/30/07	MW-101T 5/30/07
Acetic Acid	830-MBA		mg/L	160	13.8	36.6	29.8	40.6	74.3 J	<1	34.3	197	22.4	233	<1	<1	<1
Butyric Acid	830-MBA		mg/L	10.3	<1	2.36	<1	2.39	13.6	<1	7.11	103	<1	352	<1	<1	<1
Lactic Acid	830-MBA		mg/L	98.1	<1	<1	<1	<1	1.71	<1	<1	<1	9.51	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	184	9.53 J	47.9	28.7	40.4	95.5	13.3	34.9	333	<10	449	<10	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EBT Quarter 2																	
Parameter	Method	Sample Date	units	IW101-06A 3/9/2007	IW101-06B 3/9/2007	IW101-06C 3/9/2007	IW101-07A 3/7/2007	IW101-07B 3/7/2007	IW101-07C 3/7/2007	IW101-08A 3/12/2007	IW101-08B 3/12/2007	IW101-08C 3/12/2007	IW101-09A 3/7/2007	IW101-09B 3/7/2007	IW101-09C 3/8/2007	MW-101B 3/6/2007	MW-101T 3/6/2007
Acetic Acid	830-MBA		mg/L	328 J	<1	<1	<1	76.6	<1	<1	<1	259	22	579	203	<1	<1
Butyric Acid	830-MBA		mg/L	7.45 J	<1	3.4	<1	0.995 J	4.08	<1	1.2	18	<1	471	19.9	<1	<1
Lactic Acid	830-MBA		mg/L	5.6 J	<1	<1	<1	<1	<1	9.37	<1	<1	33	354	<10	<1	<1
Propionic Acid	830-MBA		mg/L	377 J	22.8	73.4	31.4	71.7	125	<10	<10	315	<10	893	177	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<1	<0.1	<0.1
EBT Quarter 1																	
Parameter	Method	Sample Date	units	IW101-06A 12/6/2006	IW101-06B 12/7/2006	IW101-06C 12/7/2006	IW101-07A 12/7/2006	IW101-07B 12/7/2006	IW101-07C 12/8/2006	IW101-08A 12/8/2006	IW101-08B 12/8/2006	IW101-08C 12/8/2006	IW101-09A 12/8/2006	IW101-09B 12/8/2006	IW101-09C 12/8/2006	MW-101B 12/7/2006	MW-101T 12/7/2006
Acetic Acid	830-MBA		mg/L	177	8.91	48.1	27.2	22.2	86.2 B	43 B	37.6 B	190 B	64.1 J	75.8	125 J	3.89	2.71
Butyric Acid	830-MBA		mg/L	7.79	<1	2.56	<1	<1	2.06	<1	<1	9.5	1.02	321	4.39	<1	<1
Lactic Acid	830-MBA		mg/L	57.2	15.4	6.11	28.6	<1	14.8	14.3	<1	31	321	227	9.83	1.48	<1
Propionic Acid	830-MBA		mg/L	302	<10	51.3	22.6	28.4	86	<10	<10	213	8.39 J	118	<10	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Baseline																	
Parameter	Method	Sample Date	units	IW101-06A 8/29/06	IW101-06B 8/28/06	IW101-06C 8/28/06	IW101-07A 8/28/06	IW101-07B 8/29/06	IW101-07C 8/29/06	IW101-08A 8/28/06	IW101-08B 8/28/06	IW101-08C 8/29/06	IW101-09A 8/29/06	IW101-09B 8/29/06	IW101-09C 8/29/06	MW-101B 8/25/06	MW-101T 8/25/06
Acetic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

< Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data
-: Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4				DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	units	9/19/07	9/13/07	9/13/07	9/13/07	9/13/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/18/07	9/18/07
Acetic Acid	830-MBA		mg/L	<1	959	45.5	44.5	86.3	<1	9.92	21.2	29.6	<1	19.2	<1	5.07
Butyric Acid	830-MBA		mg/L	<1	595	5.6	3.17	3.88	<1	0.522 J	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	1.83	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	<10	2530	120	59.2	139	<10	45.1	85.3	29.4	<10	58.6	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<2	<0.1	<0.1	<0.1	0.474	0.308	0.377	0.441	<0.1	<0.1	<0.1	0.347

EBT Quarter 3				DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	units	6/1/07	5/30/07	5/30/07	5/29/07	5/29/07	5/30/07	5/29/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07
Acetic Acid	830-MBA		mg/L	<1	872	186	57.9	16.1	<1	<1	<1	<1	<1	<1	<1	74.9
Butyric Acid	830-MBA		mg/L	<1	1230	53.4	5.37	<1	<1	<1	<1	3.18	<1	<1	<1	3.65
Lactic Acid	830-MBA		mg/L	<1	<1	<1	<1	40.3	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	<10	1710	401	53.9	<10	<10	<10	<10	18.9	<10	65.6	<10	123
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

EBT Quarter 2				DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	units	3/7/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007
Acetic Acid	830-MBA		mg/L	<1	822	424	11	31.3	<1	<1	<1	<1	32.4	<1	5.54	126
Butyric Acid	830-MBA		mg/L	<1	419	30.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.38
Lactic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	<10	1500	595	26	73.1	<10	<10	<10	<10	40.7	12.2	<10	132
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

EBT Quarter 1				DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	units	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006
Acetic Acid	830-MBA		mg/L	<1	2150	275	<1	<1	<1	<1	<1	<1	15.8	<1	<1	19.2
Butyric Acid	830-MBA		mg/L	<1	33.1	13.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.81
Lactic Acid	830-MBA		mg/L	<1	1170	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	<10	2500	429	<10	<10	<10	<10	<10	<10	25.4	<10	<10	71.6
Pyruvic Acid	830-MBA		mg/L	<0.1	1.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Baseline				DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	units	8/25/06	8/21/06	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/22/06	8/29/06	8/22/06	8/23/06	8/23/06	8/24/06
Acetic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA		mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

< Not detected above Reporting Limit (RL)

J- Estimated result based on QC data or reported below RL

B- Estimated result possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4									
Parameter	Method	Sample Date	PMW101-07A 9/18/07	PMW101-07B 9/18/07	PMW101-08A 9/18/07	PMW101-08B 9/19/07			
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1			
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10			
Pyruvic Acid	830-MBA	mg/L	0.418	<0.1	<0.1	<0.1			

EBT Quarter 3									
Parameter	Method	Sample Date	PMW101-07A 5/31/07	PMW101-07B 5/31/07	PMW101-08A 6/1/07	PMW101-08B 5/31/07			
Acetic Acid	830-MBA	mg/L	12.9	<1	<1	<1			
Butyric Acid	830-MBA	mg/L	<1	<1	1.17 B	<1			
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10			
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1			

EBT Quarter 2									
Parameter	Method	Sample Date	PMW101-07A 3/6/2007	PMW101-07B 3/6/2007	PMW101-08A 3/6/2007	PMW101-08B 3/6/2007			
Acetic Acid	830-MBA	mg/L	37.3 J	<1	5.71	<1			
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1			
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Propionic Acid	830-MBA	mg/L	11.4	<10	<10	<10			
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1			

EBT Quarter 1									
Parameter	Method	Sample Date	PMW101-07A 12/5/2006	PMW101-07B 12/5/2006	PMW101-08A 12/5/2006	PMW101-08B 12/5/2006			
Acetic Acid	830-MBA	mg/L	15	<1	<1	<1			
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1			
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10			
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1			

Baseline									
Parameter	Method	Sample Date	PMW101-07A 8/25/06	PMW101-07B 8/24/06	PMW101-08A 8/24/06	PMW101-08B 8/24/06			
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1			
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1			
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10			
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1			

< Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data
- Not Sampled

TABLE 16

EBT Quarter 4																		
Parameter	Method	Sample Date	units	IW101-01A 9/10/07	IW101-01B 9/10/07	IW101-01C 9/11/07	IW101-02A 9/11/07	IW101-02B 9/12/07	IW101-02C 9/12/07	IW101-03A 9/12/07	IW101-03B 9/12/07	IW101-03C 9/12/07	IW101-04A 9/14/07	IW101-04B 9/14/07	IW101-04C 9/14/07	IW101-05A 9/11/07	IW101-05B 9/12/07	IW101-05C 9/12/07
Carbon Dioxide	RSK1755021	390000	ug/L	110000	150000	170000	170000	170000	230000	84000	200000	99000	530000	190000	26000	280000	190000	170000
Ethane	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	3900	ug/L	250	670	1900	1900	30	3600	4800	110	3200	5000	8900	3700	5600	430	4600
Hydrogen	AM20GAX	1.2	nM	13	3.8	2.5	15	370	370	1.5	17	79	2.6	2.4	19	3	18	28

EBT Quarter 3																		
Parameter	Method	Sample Date	units	IW101-01A 6/1/07	IW101-01B 5/29/07	IW101-01C 5/29/07	IW101-02A 5/29/07	IW101-02B 5/29/07	IW101-02C 5/30/07	IW101-03A 5/30/07	IW101-03B 6/1/07	IW101-03C 6/1/07	IW101-04A 6/4/07	IW101-04B 6/4/07	IW101-04C 6/4/07	IW101-05A 6/5/07	IW101-05B 6/5/07	IW101-05C 6/5/07
Carbon Dioxide	RSK1755021	550000	ug/L	90000	240000	200000	180000	180000	210000	220000	150000	78000	530000	140000	61000	100000	110000	170000
Ethane	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
Ethene	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5
Methane	RSK1755021	1400	ug/L	23	96	870	99	5.9	1100	1200	57	2100	6800	5000	1100	110	23	4500
Hydrogen	AM20GAX	23	nM	93	780	7.1	1.5	52	7800	1.1	220	16	11	3.8	2.5	19	5.6	5.6

EBT Quarter 2																		
Parameter	Method	Sample Date	units	IW101-01A 3/5/2007	IW101-01B 3/5/2007	IW101-01C 3/5/2007	IW101-02A 3/5/2007	IW101-02B 3/5/2007	IW101-02C 3/6/2007	IW101-03A 3/6/2007	IW101-03B 3/6/2007	IW101-03C 3/7/2007	IW101-04A 3/8/2007	IW101-04B 3/8/2007	IW101-04C 3/8/2007	IW101-05A 3/9/2007	IW101-05B 3/9/2007	IW101-05C 3/9/2007
Carbon Dioxide	RSK1755021	210000	ug/L	92000	160000	110000	130000	95000	130000	170000	150000	550000	210000	75000	90000	110000	200000	200000
Ethane	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	8.2	ug/L	3.9	59	8.6	3.7	65	22	41	1100	960	450	170	14	11	460	460
Hydrogen	AM20GAX	150000	nM	330	37000	33	9.7	4100	20	1.6	12	2600	10	5.6	2.7	2.7	4.8	4.8

EBT Quarter 1																		
Parameter	Method	Sample Date	units	IW101-01A 12/4/2006	IW101-01B 12/4/2006	IW101-01C 12/4/2006	IW101-02A 12/4/2006	IW101-02B 12/4/2006	IW101-02C 12/5/2006	IW101-03A 12/5/2006	IW101-03B 12/5/2006	IW101-03C 12/5/2006	IW101-04A 12/6/2006	IW101-04B 12/6/2006	IW101-04C 12/6/2006	IW101-05A 12/6/2006	IW101-05B 12/6/2006	IW101-05C 12/6/2006
Carbon Dioxide	RSK1755021	260000	ug/L	150000	99000	81000	140000	140000	110000	190000	110000	110000	460000	150000	97000	160000	91000	210000
Ethane	RSK1755021	<25	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	<25	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	<25	ug/L	6.1	7.6	5.9	5.8	6.4	6.4	6.9	7.7	10	26	27	55	6.1	7.5	8.8
Hydrogen	AM20GAX	8900	nM	16	25000	6.4	7.8	27000	23000	6	91000	100000	26	15	3.8	2.3	12	12

Baseline																		
Parameter	Method	Sample Date	units	IW101-01A 8/21/06	IW101-01B 8/22/06	IW101-01C 8/22/06	IW101-02A 8/22/06	IW101-02B 8/23/06	IW101-02C 8/23/06	IW101-03A 8/23/06	IW101-03B 8/23/06	IW101-03C 8/24/06	IW101-04A 8/24/06	IW101-04B 8/24/06	IW101-04C 8/24/06	IW101-05A 8/28/06	IW101-05B 8/28/06	IW101-05C 8/25/06
Carbon Dioxide	RSK1755021	72000	ug/L	110000	87000	90000	100000	100000	90000	89000	100000	67000	100000	96000	88000	53000	97000	85000
Ethane	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethene	RSK1755021	<5	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	4.8	ug/L	6	4.6	6	7.1	8.4	8.4	7.3	7.7	6.6	9.1	6.6	7.4	7.9	7.6	6.3
Hydrogen	AM20GAX	-	nM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<: Not detected above Reporting Limit (RL)

J- Estimated result based on QC data or reported below RL

3. Estimated result possibly biased high or false positive based on blank data

5. Estimated results - Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T
Parameter	Method	Date	9/11/07	9/11/07	9/11/07	9/13/07	9/13/07	9/13/07	9/10/07	9/10/07	9/10/07	9/13/07	9/13/07	9/14/07	9/11/07	9/11/07
Carbon Dioxide	RSK1755021	ug/L	110000	140000	110000	120000 J	100000 J	82000 J	160000	160000	410000	160000 J	470000 J	190000	160000	95000
Ethane	RSK1755021	ug/L	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	1800	21	2200	1800 J	2500	1800	2100	8500	4800	62	7400	4700	260	8.3
Hydrogen	AM20GAX	nM	2.4	14	16	5.1	2.7	74	2.6	16	220	1.5	2.2	180	1.5	1.6

EBT Quarter 3		Sample	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T
Parameter	Method	Date	6/5/07	6/6/07	6/6/07	6/4/07	6/4/07	6/4/07	6/4/07	6/5/07	6/5/07	6/5/07	6/6/07	6/6/07	5/30/07	5/30/07
Carbon Dioxide	RSK1755021	ug/L	140000	250000 J	110000 J	120000 J	73000 J	48000 J	130000 J	98000	140000	70000	180000 J	81000 J	170000 B	210000 J
Ethane	RSK1755021	ug/L	<5	<50	<10	<5	<25	<5	<25	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	<50	<10	<5	<25	<5	<25	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	3100	70	830	570	620	320 J	590	950	2300	9.5	4300	1600	9.3	37
Hydrogen	AM20GAX	nM	2	2.2	30	2.6	1.7	3.8	1.9	3.4	28	1.5	2.7	640	1.6	2

EBT Quarter 2		Sample	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T
Parameter	Method	Date	3/9/2007	3/9/2007	3/9/2007	3/7/2007	3/7/2007	3/7/2007	3/12/2007	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/8/2007	3/6/2007	3/6/2007
Carbon Dioxide	RSK1755021	ug/L	200000 J	110000 J	110000 J	150000	72000	86000	150000 J	84000	190000 J	150000	410000	170000 J	61000	79000
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.5 J	<5	<5	<5
Methane	RSK1755021	ug/L	260	5.7	370	100	70	830	19	15	390	5 J	1400	900	75	130
Hydrogen	AM20GAX	nM	2.6	1.7	440	1.6	2.2	71	3.3	14	120	3.2	1.8	560	2.8	2.3

EBT Quarter 1		Sample	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T
Parameter	Method	Date	12/6/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/7/2006	12/7/2006
Carbon Dioxide	RSK1755021	ug/L	280000 J	250000 J	210000 J	240000 J	92000 J	79000 J	160000 J	76000 J	100000 J	150000 J	270000 J	84000 J	310000 J	120000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	7.7	8.8	5.5	6.6	31	62	5.8	5.5	7.7	6	10 B	6.9 B	7.2	7.4
Hydrogen	AM20GAX	nM	1100	6	27	6.1	20	2400	6.2	54000	7.8	7	76	28000	1.3	8.3

Baseline		Sample	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T
Parameter	Method	Date	8/29/06	8/28/06	8/28/06	8/28/06	8/29/06	8/29/06	8/28/06	8/28/06	8/29/06	8/29/06	8/29/06	8/29/06	8/25/06	8/25/06
Carbon Dioxide	RSK1755021	ug/L	95000 J	78000 J	63000 J	85000 J	57000 J	44000 J	78000	47000 J	22000 J	97000 J	41000	31000	120000 J	110000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<5
Methane	RSK1755021	ug/L	6	6.5	6	5 J	9.7	7.5	6.8	6.6	8	6.1	9.3	7.9	39 J	8.3
Hydrogen	AM20GAX	nM	-	-	-	-	-	-	-	-	-	-	-	-	2.2	2.5

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

- Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - ITA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	9/13/07	9/13/07	9/13/07	9/13/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/17/07	9/18/07	9/18/07
Carbon Dioxide	RSK1755021	ug/L	160000	980000 J	180000 J	92000 J	53000 J	100000	83000	94000	95000 J	130000	91000	140000
Ethane	RSK1755021	ug/L	<25	<5	<5	<5	<5	<5	<50	<5	<5	<25	<5	<25
Ethane	RSK1755021	ug/L	<25	<5	<5	<5	<5	<5	<50	<5	<5	<25	<5	<25
Methane	RSK1755021	ug/L	9000	22000	7600	2700	5000	19 B	12000	160	5500 J	13000	1800 J	12000
Hydrogen	AM20GAX	nM	2	2.1	2	1.6	4.9	2	3	4.5	1.9	1.5	2	2.5
EBT Quarter 3		DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	5/30/07	5/30/07	5/29/07	5/29/07	5/30/07	5/29/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07	5/31/07
Carbon Dioxide	RSK1755021	ug/L	120000 J	560000	300000	86000	180000 J	170000 B	230000 J	87000 J	150000 J	58000 J	77000 J	150000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	510 J	4100	6100	56	1800	5 J	110	4.1 J	310	920	13	1700
Hydrogen	AM20GAX	nM	1.7	2.5	1.8	1.9	4	1.8	1.5	37	1.6	8.3	2.7	4.2
EBT Quarter 2		DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007
Carbon Dioxide	RSK1755021	ug/L	160000	530000 J	140000 J	92000 J	94000 J	43000 J	87000	81000	140000	140000 J	67000 J	100000
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	27	34	260	5.1 B	5.8 B	5.2 B	16	4.8	6.4 B	88	3.8 J	390
Hydrogen	AM20GAX	nM	1.7	3.8	3.3	4.1	2.6	1.4	1.3	1.6	1.9	3.8	1.4	7.6
EBT Quarter 1		DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006
Carbon Dioxide	RSK1755021	ug/L	40000 J	760000 J	290000 J	93000 J	140000 J	130000 J	120000 J	130000 J	150000 J	56000 J	160000 J	85000 J
Ethane	RSK1755021	ug/L	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	2.5 J	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	5.3	22	<25	5.9	6.1	7.2	5.7	6.1 B	7.4	5.7	5.1	6.8 B
Hydrogen	AM20GAX	nM	1.3	2.5	3.2	2	9.9	1.4	1.4	1.6	6.9	1.5	5.3	2
Baseline		DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B
Parameter	Method	Sample Date	8/21/06	8/21/06	8/22/06	8/22/06	8/23/06	8/23/06	8/22/06	8/29/06	8/22/06	8/23/06	8/23/06	8/24/06
Carbon Dioxide	RSK1755021	ug/L	92000 J	94000 J	110000 J	88000 J	100000 J	100000 J	84000 J	60000 J	87000 J	57000 J	110000 J	93000 J
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methane	RSK1755021	ug/L	7.2	5.8	6.9	6.3	7.7	8.4	14	4.3 J	7.6	5.9	6.5	6.2
Hydrogen	AM20GAX	nM	1.5	—	—	—	7.4	—	—	—	—	—	—	—

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

—: Not Sampled

TABLE 16
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4				PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date	units	9/18/07	9/18/07	9/18/07	9/19/07
Carbon Dioxide	RSK1755021		ug/L	150000	98000	210000	67000
Ethane	RSK1755021		ug/L	<25	<25	<25	<5
Ethene	RSK1755021		ug/L	<25	<25	<25	<5
Methane	RSK1755021		ug/L	1400	3900	3600	1100
Hydrogen	AM20GAX		nM	2.3	1.6	2	1.8

EBT Quarter 3				PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date	units	5/31/07	5/31/07	6/1/07	5/31/07
Carbon Dioxide	RSK1755021		ug/L	140000 J	60000 J	120000	61000 J
Ethane	RSK1755021		ug/L	<5	<5	<5	<5
Ethene	RSK1755021		ug/L	<5	<5	<5	<5
Methane	RSK1755021		ug/L	920	5.5	58	6.6
Hydrogen	AM20GAX		nM	2	1.2	1.4	1.3

EBT Quarter 2				PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date	units	3/6/2007	3/6/2007	3/6/2007	3/6/2007
Carbon Dioxide	RSK1755021		ug/L	110000	65000 J	100000	61000
Ethane	RSK1755021		ug/L	<5	<5	<5	<5
Ethene	RSK1755021		ug/L	<5	<5	<5	<5
Methane	RSK1755021		ug/L	120	4.2 B	9.5 B	3.7 B
Hydrogen	AM20GAX		nM	5.2	1.7	2.1	1.7

EBT Quarter 1				PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date	units	12/5/2006	12/5/2006	12/5/2006	12/5/2006
Carbon Dioxide	RSK1755021		ug/L	130000 J	5800 B	140000 J	57000 J
Ethane	RSK1755021		ug/L	<5	<0.5	<5	<5
Ethene	RSK1755021		ug/L	<5	<0.5	<5	<5
Methane	RSK1755021		ug/L	7.3 B	<0.5	6.5 B	8.6 B
Hydrogen	AM20GAX		nM	2	21	1.7	1.4

Baseline				PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Parameter	Method	Sample Date	units	8/25/06	8/24/06	8/24/06	8/24/06
Carbon Dioxide	RSK1755021		ug/L	140000 J	53000 J	120000 J	48000 J
Ethane	RSK1755021		ug/L	<25	<5	<5	<5
Ethene	RSK1755021		ug/L	<25	<5	<5	<5
Methane	RSK1755021		ug/L	52	5.1	6.3	6.7
Hydrogen	AM20GAX		nM	--	--	31	--

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4															
Parameter	Method	Sample Date	IW85-01 9/13/07	IW85-02 9/14/07	IW85-04 9/14/07	IW85-05 9/14/07	IW85-06 9/13/07	IW92-01 9/19/07	IW92-02 9/19/07	IW92-03 9/18/07	IW92-04 9/18/07	IW92-05 9/17/07	IW92-06 9/14/07	IW92-07 9/14/07	IW92-08 9/17/07
Bromide	300	mg/L	<0.2	6.87	—	1.04	<0.2	<0.2	0.856	3.58	3.08	<0.2	90.9	—	14.9
Chloride	300	mg/L	19.1	30.6 J	—	19.2 J	25.9	16.8	16.4	14.7	15.7	<0.2	25.8 J	16.1 J	27
Nitrate	300/353.2	mg/L	0.89	<0.6	—	<0.6	0.135 J	<0.6	<0.6	<0.6	<0.6	<0.6	0.138 J	0.59 J	<0.6
Nitrite	300/354.1	mg/L	<0.4	<0.4	—	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	5.03	<1	—	3.42	1.29	7.36	17.6	3.03	1.35	<1	<1	7.16	<1
Sulfide	376.1	mg/L	<1	<1	—	<1	<1	<1	<1	0.568 J	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	165	1400 J	—	189 J	480	180	278	296	1130	9130	3960 J	1430 J	1380
Total Organic Carbon	9060	mg/L	57.9	878	—	58.9	184	54.3	198	176	668	6790	6450	1150	723

EBT Quarter 3															
Parameter	Method	Sample Date	IW85-01 6/1/07	IW85-02 6/1/07	IW85-04 6/4/07	IW85-05 6/4/07	IW85-06 6/6/07	IW92-01 6/1/07	IW92-02 6/7/07	IW92-03 6/6/07	IW92-04 6/7/07	IW92-05 6/7/07	IW92-06 6/7/07	IW92-07 6/7/07	IW92-08 6/7/07
Bromide	300	mg/L	<0.2	<2	—	2.21	4.51	<0.2	0.811	4.52	5.09	—	144	45.3	6.27
Chloride	300	mg/L	22.3	28.2	—	11.8	13.4	19.1	15.4	10.5	17.7	—	36.5	29.4	29.3
Nitrate	300/353.2	mg/L	0.223 J	<6	—	0.315 J	<0.6	0.896	0.745	<0.6	<0.6	—	<0.6	<0.6	<0.6
Nitrite	300/354.1	mg/L	<0.4	<4	—	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	—	<0.4	<0.4	<0.4
Sulfate	300	mg/L	2.77	<10	—	7.47	<1	8.62	6.25	1.98	<1	—	<1	4.9	<1
Sulfide	376.1	mg/L	<1	<1	—	<1	<1	<1	<1	<1	<1	—	<1	<1	<1
Alkalinity, Total	310.2	mg/L	285	593	—	206	300	213	220	263	523	—	183	2330	572
Total Organic Carbon	9060	mg/L	397	1450	—	67.3	201	120	47.3	139	625	6360	3900	1420	106

EBT Quarter 2															
Parameter	Method	Sample Date	IW85-01 3/13/2007	IW85-02 3/14/2007	IW85-04 3/14/2007	IW85-05 3/14/2007	IW85-06 3/14/2007	IW92-01 3/12/2007	IW92-02 3/14/2007	IW92-03 3/13/2007	IW92-04 3/13/2007	IW92-05 3/14/2007	IW92-06 3/14/2007	IW92-07 3/14/2007	IW92-08 3/13/2007
Bromide	300	mg/L	<1	<0.8	—	<0.2	<0.8	0.476 J	<0.2	<0.2	<1	<2	<2	<1	<1
Chloride	300	mg/L	19.6	24.2	—	19.2	25.3	18.9	12.8	12.4	14.5	21.4	25.2	25.8	22.5
Nitrate	300/353.2	mg/L	1.52 J	<2.4	—	1.17	<2.4	1.71	<0.6	0.105 J	<3	<6	<6	<3	<3
Nitrite	300/354.1	mg/L	<2	<1.6	—	<0.4	<1.6	<0.4	<0.4	<0.4	<2	<4	<4	<2	<2
Sulfate	300	mg/L	10.2 J	<4	—	11 J	6.63 J	13.3	3.98 J	4.64 J	3.07 J	<10	<10	7.66 J	<5
Sulfide	376.1	mg/L	<1	<1	—	<1	<1	<1	5.67	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	199	1040	—	111	3540	149	376	161	983	5640	4080	1610	994
Total Organic Carbon	9060	mg/L	88.8 J	741	—	6.26	2720	27.9	77.4	55 J	405 J	3400	1900	838	537 J

EBT Quarter 1															
Parameter	Method	Sample Date	IW85-01 12/14/2006	IW85-02 12/14/2006	IW85-04 12/14/2006	IW85-05 12/14/2006	IW85-06 12/12/2006	IW92-01 12/12/2006	IW92-02 12/12/2006	IW92-03 12/12/2006	IW92-04 12/13/2006	IW92-05 12/13/2006	IW92-06 12/13/2006	IW92-07 12/13/2006	IW92-08 12/13/2006
Bromide	300	mg/L	<0.2	<0.2	<2	—	—	<0.2	<0.2	<0.2	<0.2	<2	<1	<0.2	<0.2
Chloride	300	mg/L	19.4	25.5	11.2	—	—	18.1	10.8	12.7	12.1	5.65	28.3	23	21.7
Nitrate	300/353.2	mg/L	0.379 J	<0.6	<0.6	—	—	3.8	0.227 J	0.244 J	<0.6	<0.6	0.342 J	1.07	<0.6
Nitrite	300/354.1	mg/L	<0.4	<0.4	0.196 J	—	—	<0.4	<0.4	<0.4	<0.4	0.113 J	<0.4	<0.4	<0.4
Sulfate	300	mg/L	4.14	1.71	<1	—	—	14.3	6.17	3.24	1.49	0.835 J	6.95	10.9	<1
Sulfide	376.1	mg/L	<1	<1	<1	—	—	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	253	1040	6860	—	—	115	265	440	708	9150	1150	1360	294
Total Organic Carbon	9060	mg/L	165	565	5540 J	—	—	33.3	72.5	251	275	2150 J	530	749	163

Baseline															
Parameter	Method	Sample Date	IW85-01 9/1/06	IW85-02 9/1/06	IW85-04 9/1/06	IW85-05 9/1/06	IW85-06 9/1/06	IW92-01 8/31/06	IW92-02 8/31/06	IW92-03 8/31/06	IW92-04 8/31/06	IW92-05 8/31/06	IW92-06 9/1/06	IW92-07 9/1/06	IW92-08 9/5/06
Bromide	300	mg/L	0.332	0.42	<0.2	—	—	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.26
Chloride	300	mg/L	19.2	22.1	6.98	—	—	17.5	12	11.6	10.4	11.5	19.4	18.8	18.8
Nitrate	300	mg/L	3.55	2.11	<0.6	—	—	4.28 J	3.96	2.69	2.57	0.526 J	1.34	1.19	1.87
Nitrite	300	mg/L	<0.4	<0.4	<0.4	—	—	<0.4	<0.4	0.116 J	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	10.1	10.2	7.07	—	—	16.1	11.5	8.55	11.4	10.9	13.5	12.6	9.87
Sulfide	9030	mg/L	<1	<1	<1	—	—	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	33.9	59.8	58.6	—	—	62.8	44.7	52.2	54.6	97	98.6	73.3	49.5
Total Organic Carbon	9060	mg/L	3.13	1.58	2.27	—	—	4.84	17	3.52	2.62	11.7	2.15	7.79	4.2

< Not detected above Reporting Limit (RL)

J- Estimated result based on QC data or reported below RL

B- Estimated result possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	9/12/07	9/13/07	9/14/07	9/11/07	9/10/07	9/10/07	9/10/07	9/10/07	9/12/07	9/12/07	9/12/07	9/11/07	9/11/07	9/11/07
Bromide	300	0.606	<0.2	0.43	21.2 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	3.4	0.13 J	<0.2	<0.2	<0.2
Chloride	300	22.8 J	16.3	16.3	16.3	17.6	19.5	19.5	27.4	22.7	23.8 J	36.2 J	19.2 J	25.6	21.5	20.8
Nitrate	300/353.2	<0.6	3.66	1.53	1.11 J	1.36	1.36	1.36	<0.6	2.63	1.77	<0.6	<0.6	0.363 J	2.56 J	0.182 J
Nitrite	300/354.1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	7.98	8.55	16.5	16.5	10.7	7.35	7.35	1.49	8.76	8.68	<1	2.1	4.38	14.2	3.91
Sulfide	376.1	<1	0.723 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	588 J	46.2	55.9 J	265	233	233	233	530	35.6	62.8 J	1490 J	228 J	191	62.1	156
Total Organic Carbon	9060	105 J	<1	1.53	70.2	71.3	71.3	71.3	470	<1	<1	1270 J	<1	44.4	<1	35.3
EBT Quarter 3		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	5/29/07	5/29/07	5/30/07	6/1/07	6/1/07	5/31/07	5/31/07	5/31/07	5/30/07	5/30/07	5/30/07	5/30/07	5/31/07	5/31/07
Bromide	300	0.124 J	0.156 J	0.156 J	0.156 J	0.123 J	0.164 J	<0.8	<0.8	0.149 J	<0.2	<0.8	0.114 J	<0.8	0.118 J	0.148 J
Chloride	300	21.6	16.9	16.9	20.3	17.3	19.4	22.7	22.7	23.5	23.1	16	17.7	29.5	21.8	21.3
Nitrate	300/353.2	4.75	3.78	3.78	1.08	2.59	1.01	<2.4	<2.4	2.77	2.23	<2.4	0.161 J	<2.4	2.65	1.88
Nitrite	300/354.1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<1.6	<1.6	<0.4	<0.4	<1.6	<1.6	<1.6	<0.4	<0.4
Sulfate	300	15.6	8.37	22.8	7.61	13.8	7.61	2.03 J	2.03 J	7.95	10.8	<4	2.53	<4	15.2	6.73
Sulfide	376.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	52.6	31.1	53.8	39	53.4	53.4	149	149	26.9	40.9	1210	233	205	41.7	51
Total Organic Carbon	9060	1.3	<1	3.57	<1	<1	0.725 J	37.4	37.4	<1	<1	748	10.1	49.4	1.7	0.581 J
EBT Quarter 2		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	3/8/2007	3/13/2007	3/12/2007	3/12/2007	3/13/2007	3/13/2007	3/13/2007	3/13/2007	3/8/2007	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/12/2007
Bromide	300	<0.2	<0.2	0.841 J	0.137 J	<0.2	<0.2	<0.8	<0.8	<0.2	<0.2	<0.2	<0.2	0.755 J	<0.2	0.147 J
Chloride	300	20.2 J	17.1	19	17.2	19.4	19.4	24.5	24.5	24.2	21.5 J	8.12 J	18.2 J	28	19.9	21.1
Nitrate	300/353.2	4.95	3.88	0.926	2.98	1.87	1.87	<2.4	<2.4	2.66	2.99	<0.6	0.863	0.236 J	2.77	2.15
Nitrite	300/354.1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<1.6	<1.6	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	13.4 J	8.51 J	13.6	12.1	10.7 J	10.7 J	4.68 J	8.27 J	8.27 J	9.16 J	<1	8.35 J	3.15	15.3	7.71
Sulfide	376.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	67.9	36.2 B	97.7	46.6	50	50	184	39.9 B	47.9	47.9	1100	189	218	55.5	60.3
Total Organic Carbon	9060	<1	0.812 B	1.3	0.853 J	1.44 B	1.44 B	45 J	0.724 B	<1	<1	605	<1	48.8	0.697 J	1.77
EBT Quarter 1		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	12/6/2006	12/7/2006	12/7/2006	12/8/2006	12/8/2006	12/8/2006	3/13/2007	3/13/2007	12/6/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006
Bromide	300	<0.2	<0.2	<0.2	1.49	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.141 J	<0.2	<0.2	<0.2
Chloride	300	19.6	16.8	14	19	16.9	16.9	16.9	<0.2	<0.2	20.4	12.7	19.3	31	20.7	21.7
Nitrate	300/353.2	3.74	3.56	0.44	3.38	3.13	3.13	3.13	<0.4	<0.4	3.04	0.225 J	1.86 J	0.385	2.62 J	<0.25
Nitrite	300/354.1	<0.01	0.00632 J	0.00701 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.01	<0.01	<0.01	<0.01	<0.01	0.0696
Sulfate	300	10	10.8	4.56	10.6	10.2	10.2	10.2	<0.4	<0.4	9.68	<1	15.1	9.16	15.1	9.14
Sulfide	376.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	271	42.9	306	48.3	42.7	42.7	42.7	<1	<1	36.1	715	72.1	127	49.1	44.4
Total Organic Carbon	9060	91.1	0.611 J	74.3	2.86	2.08	2.08	2.08	<1	<1	1.53	305	3.18	8.8	2.75	3.99
Baseline		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	8/31/06	8/31/06	9/5/06	8/30/06	8/30/06	8/30/06	3/13/2007	3/13/2007	8/30/06	8/31/06	8/30/06	8/30/06	8/30/06	8/30/06
Bromide	300	<0.2	0.244	0.244	1.24	0.235	0.286	<0.2	<0.2	<0.2	<0.2	<0.2	0.249	0.248	<0.2	0.302
Chloride	300	20.6	16.7	16.7	16.2	17.2	18.1	<0.2	<0.2	<0.2	20.4	14	18.2	33.8	18.3	22.8
Nitrate	300	5.09 J	3.59	0.669	3.43	3.43	3.07	<0.4	<0.4	<0.4	0.677	2.37	4.81	2.58	2.65	3.21
Nitrite	300	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	14.5	8.64	8.45	10.5	10.5	10.6	<0.4	<0.4	<0.4	11.7	9.49	12.4	13.4	15.3	8.27
Sulfide	9030	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	56.8	33.9	164	42.3	40.7	40.7	<1	<1	<1	82.8	58.1	56.4	55.9	55.7	35
Total Organic Carbon	9060	2.98	1.8	21.4	2.34	2.67	2.67	16.7	<1	<1	15.6	1.8	1.7	1.52	1.59	1.67

< Not detected above Reporting Limit (RL)
J- Estimated result based on QC data or reported below RL
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- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4																		
Parameter	Method	Sample Date	IW85-01 9/13/07	IW85-02 9/14/07	IW85-04 9/14/07	IW85-05 9/14/07	IW85-06 9/13/07	IW92-01 9/19/07	IW92-02 9/19/07	IW92-03 9/18/07	IW92-04 9/18/07	IW92-05 9/17/07	IW92-06 9/14/07	IW92-07 9/14/07	IW92-08 9/17/07			
Arsenic, Total	6010B13005A	mg/L	< 0.01	< 0.01	—	< 0.01	< 0.01	< 0.01	< 0.01	0.00666 J	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01			
Manganese, Total	6010B13005A	mg/L	0.194	0.591 J	—	0.377 J	2.33	0.282	0.415	0.294	10.2	0.884	1.35 J	0.82 J	0.102			
Selenium, Total	6010B13005A	mg/L	< 0.01	< 0.01	—	0.00632 J	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0113	0.00915 J	< 0.01	0.00795 J			
EBT Quarter 3																		
Parameter	Method	Sample Date	IW85-01 6/1/07	IW85-02 6/1/07	IW85-04 6/1/07	IW85-05 6/4/07	IW85-06 6/6/07	IW92-01 6/1/07	IW92-02 6/7/07	IW92-03 6/6/07	IW92-04 6/7/07	IW92-05 6/7/07	IW92-06 6/7/07	IW92-07 6/7/07	IW92-08 6/7/07			
Arsenic, Total	6010B13005A	mg/L	< 0.01	0.0109	—	< 0.01	< 0.01	< 0.01	0.0365	< 0.01	< 0.01	< 0.05	< 0.02	< 0.01	< 0.01			
Manganese, Total	6010B13005A	mg/L	0.378	1.04	—	0.335	2.88	0.391	0.698	11.2	1.42	1.36	2.13	1.57	0.0776			
Selenium, Total	6010B13005A	mg/L	< 0.01	< 0.01	—	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0175	< 0.01	0.00552 J	< 0.01			
EBT Quarter 2																		
Parameter	Method	Sample Date	IW85-01 3/13/2007	IW85-02 3/14/2007	IW85-04 3/14/2007	IW85-05 3/14/2007	IW85-06 3/14/2007	IW92-01 3/12/2007	IW92-02 3/14/2007	IW92-03 3/13/2007	IW92-04 3/13/2007	IW92-05 3/14/2007	IW92-06 3/14/2007	IW92-07 3/14/2007	IW92-08 3/13/2007			
Arsenic, Total	6010B13005A	mg/L	< 0.01	< 0.01	—	0.0219	< 0.02	< 0.01	0.0327	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01			
Manganese, Total	6010B13005A	mg/L	0.344	2.27	—	0.8992	2.23	0.0913	2.76	1.08 J	11.6	1.36	1.36	2.19	0.637			
Selenium, Total	6010B13005A	mg/L	< 0.01	< 0.01	—	< 0.01	0.00556 J	0.00661 J	< 0.02	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01			
EBT Quarter 1																		
Parameter	Method	Sample Date	IW85-01 12/14/2006	IW85-02 12/14/2006	IW85-04 12/14/2006	IW85-05 12/14/2006	IW85-06 12/14/2006	IW92-01 12/12/2006	IW92-02 12/12/2006	IW92-03 12/12/2006	IW92-04 12/13/2006	IW92-05 12/13/2006	IW92-06 12/13/2006	IW92-07 12/13/2006	IW92-08 12/13/2006			
Arsenic, Total	6010B13005A	mg/L	0.0064 J	0.0128	0.0382 J	—	—	< 0.01	< 0.01	< 0.01	0.00698 J	0.0281	0.045	< 0.01	0.00542 J			
Manganese, Total	6010B13005A	mg/L	0.979	3.8	4.46 J	—	—	0.0518	1.45	1.02	8.31	1.55	1.01	3.07	0.246			
Selenium, Total	6010B13005A	mg/L	< 0.01	< 0.02	< 0.05	—	—	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.04	< 0.01	< 0.02			
Baseline																		
Parameter	Method	Sample Date	IW85-01 9/1/06	IW85-02 9/1/06	IW85-04 9/1/06	IW85-05 9/1/06	IW85-06 9/1/06	IW92-01 8/31/06	IW92-02 8/31/06	IW92-03 8/31/06	IW92-04 8/31/06	IW92-05 8/31/06	IW92-06 9/1/06	IW92-07 9/1/06	IW92-08 9/5/06			
Arsenic, Total	6010B13005A	mg/L	< 0.01	0.00633 J	0.00829 J	—	—	0.00512 J	0.0212	< 0.01	< 0.01	0.00567 J	< 0.01	< 0.01	< 0.01			
Manganese, Total	6010B13005A	mg/L	0.0625	0.464	0.0975	—	—	0.0836	0.11	0.169	0.0857	0.126	0.124	1.44	0.288 J			
Selenium, Total	6010B13005A	mg/L	< 0.01	< 0.01	< 0.01	—	—	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01			

< Not detected above Reporting Limit (RL)

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B- Estimated result possibly biased high or false positive based on blank data

-- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	9/12/07	9/13/07	9/14/07	9/11/07	9/10/07	9/10/07	9/10/07	9/10/07	9/12/07	9/12/07	9/12/07	9/11/07	9/11/07	9/11/07
Arsenic, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.02	<0.01	0.0267	0.0187	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B/3005A	mg/L	0.301	0.00508 J	0.625 J	5.67	0.805	-	11.7	0.00792 J	0.253	10.4	0.0431	1.23	<0.01	0.65
Selenium, Total	6010B/3005A	mg/L	<0.01	0.0066	<0.01	<0.01	<0.01	-	<0.02	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
EBT Quarter 3		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	5/29/07	5/29/07	5/30/07	6/1/07	6/1/07	6/1/07	5/31/07	5/31/07	5/30/07	5/30/07	5/30/07	5/30/07	5/31/07	5/31/07
Arsenic, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.0161	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B/3005A	mg/L	0.00895 J	<0.01	0.702	<0.01	0.166	7.24	-	0.01	0.404	13.8	0.467	1.17	<0.01	0.283
Selenium, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 2		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	3/8/2007	3/13/2007	3/12/2007	3/12/2007	3/13/2007	3/13/2007	3/13/2007	3/13/2007	3/8/2007	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/12/2007
Arsenic, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B/3005A	mg/L	0.0139	<0.01	0.914	<0.01	0.133	-	4.78	0.0444	0.395	14.4	0.602	1.32	<0.01	0.441
Selenium, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	0.00544 J	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EBT Quarter 1		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	12/6/2006	12/7/2006	12/7/2006	12/8/2006	12/8/2006	-	-	-	12/6/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006
Arsenic, Total	6010B/3005A	mg/L	<0.01	<0.01	0.0162	<0.01	<0.01	-	-	-	0.0359	0.0171	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B/3005A	mg/L	0.592	0.00717 J	1.06	<0.01	0.00794 J	-	-	-	0.47	20.5	0.0215	0.815	<0.01	0.137
Selenium, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.01	<0.02	<0.01	<0.01	<0.01	0.00787 J
Baseline		Sample	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
Parameter	Method	Date	8/31/06	8/31/06	9/5/06	8/30/06	8/30/06	8/30/06	-	-	8/30/06	8/31/06	8/30/06	8/30/06	8/30/06	8/30/06
Arsenic, Total	6010B/3005A	mg/L	<0.01	0.00636 J	0.0152	<0.01	0.00589 J	0.00701 J	-	-	0.00726 J	<0.01	<0.01	<0.01	<0.01	0.00576 J
Manganese, Total	6010B/3005A	mg/L	0.0099 J	0.0067 J	1.45 J	<0.01	0.0103	0.483	-	-	1.34	0.563	0.0615	0.157	0.0242	0.0113
Selenium, Total	6010B/3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

< Not detected above Reporting Limit (RL)

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B Estimated result possibly biased high or false positive based on blank data

- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4		Sample Date	Method	Units	IW85-01 9/13/07	IW85-02 9/14/07	IW85-04 9/14/07	IW85-05 9/14/07	IW85-06 9/13/07	IW92-01 9/18/07	IW92-02 9/19/07	IW92-03 9/18/07	IW92-04 9/18/07	IW92-05 9/17/07	IW92-06 9/14/07	IW92-07 9/14/07	IW92-08 9/17/07
Parameter																	
Acetic Acid	830-MBA	40.9	mg/L		557	63.4	--	40.3	108	47.2	25.9	91.5	492	4080	3360	749	414
Butyric Acid	830-MBA	6.96	mg/L		63.4	2.15	--	8.6	12.2	2.25	8.83	30	31.3	756	1090	187	127
Lactic Acid	830-MBA	1.02	mg/L		1140	67	--	<1	1.08	0.732 J	0.878 J	0.57 J	0.57 J	5.52	12.9	1.36	0.919 J
Propionic Acid	830-MBA	67	mg/L		<0.1	<0.1	--	65.1	227	49.5	39.8	159	654	6620	4840	1500	934
Pyruvic Acid	830-MBA	<0.1	mg/L		<0.1	<0.1	--	<0.1	<0.1	0.214	<0.1	0.713	0.236	0.923	2.04	<0.1	<0.1
EBT Quarter 3		Sample Date	Method	Units	IW85-01 6/1/07	IW85-02 6/1/07	IW85-04 6/6/07	IW85-05 6/4/07	IW85-06 6/6/07	IW92-01 6/1/07	IW92-02 6/7/07	IW92-03 6/6/07	IW92-04 6/7/07	IW92-05 6/7/07	IW92-06 6/7/07	IW92-07 6/7/07	IW92-08 6/7/07
Parameter																	
Acetic Acid	830-MBA	203	mg/L		612	136	--	45.3	163	87.7	50.1	50.2	432	--	2570	1450	344
Butyric Acid	830-MBA	65.3	mg/L		136	175	--	22.3	40.6	17.6	8.81	32.8	45.1	--	1360	845	69.2 J
Lactic Acid	830-MBA	34.6	mg/L		175	440	--	<1	3.09	20.9	<1	171	3.36	--	89.3	15.1	7.32
Propionic Acid	830-MBA	440	mg/L		1720	<0.1	--	71	333	101	56.7	86.2	756	--	5170	3130	691
Pyruvic Acid	830-MBA	<0.1	mg/L		<0.1	<0.1	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	--	<0.1	<0.1	<0.1
EBT Quarter 2		Sample Date	Method	Units	IW85-01 3/13/2007	IW85-02 3/14/2007	IW85-04 3/14/2007	IW85-05 3/14/2007	IW85-06 3/14/2007	IW92-01 3/12/2007	IW92-02 3/14/2007	IW92-03 3/13/2007	IW92-04 3/13/2007	IW92-05 3/14/2007	IW92-06 3/14/2007	IW92-07 3/14/2007	IW92-08 3/13/2007
Parameter																	
Acetic Acid	830-MBA	<1	mg/L		329	91.3	--	<1	3230	<1	129	29.2	279	2020	1350	498	343
Butyric Acid	830-MBA	14.1	mg/L		91.3	<1	--	<1	43.2	3.6	3.96	13.3	98.2	388	607	164	80.2
Lactic Acid	830-MBA	56.2	mg/L		<1	<1	--	5.96	2900	4.34	23.2	61.3 J	55.3	18.7	28	13.1	55.2
Propionic Acid	830-MBA	81.9	mg/L		529	<0.1	--	<10	5960	26.5	103	412 J	406	3170	2590	801	526
Pyruvic Acid	830-MBA	<0.1	mg/L		<0.1	<0.1	--	<0.1	1.76	<0.1	<0.1	<0.1	<0.1	1.09	1.07	<0.1	<0.1
EBT Quarter 1		Sample Date	Method	Units	IW85-01 12/14/2006	IW85-02 12/14/2006	IW85-04 12/14/2006	IW85-05 12/14/2006	IW85-06 12/14/2006	IW92-01 12/12/2006	IW92-02 12/12/2006	IW92-03 12/12/2006	IW92-04 12/13/2006	IW92-05 12/13/2006	IW92-06 12/13/2006	IW92-07 12/13/2006	IW92-08 12/13/2006
Parameter																	
Acetic Acid	830-MBA	60.1	mg/L		226	229	8310	--	--	52.2 B	42.7	113 B	142	557	244	153	64.9
Butyric Acid	830-MBA	34.2	mg/L		423	185	229	--	--	<1	1.34	68.7	10.5	1990	480	191	55.5
Lactic Acid	830-MBA	49.2	mg/L		559	242	185	--	--	14.6	4.3	188	83.8	73.1	16.6	7.04	84.6
Propionic Acid	830-MBA	95.4	mg/L		<0.1	<0.1	1.28	--	--	25.4	48.6	139	251	1880	443	231	123
Pyruvic Acid	830-MBA	<0.1	mg/L		<0.1	<0.1	<0.1	--	--	<0.1	<0.1	<0.1	<0.1	1.03	<0.1	<0.1	<0.1
Baseline		Sample Date	Method	Units	IW85-01 9/1/06	IW85-02 9/1/06	IW85-04 9/1/06	IW85-05 9/1/06	IW85-06 9/1/06	IW92-01 8/31/06	IW92-02 8/31/06	IW92-03 8/31/06	IW92-04 8/31/06	IW92-05 8/31/06	IW92-06 9/1/06	IW92-07 9/1/06	IW92-08 9/5/06
Parameter																	
Acetic Acid	830-MBA	<1	mg/L		<1	<1	<1	--	--	<1	<1	<1	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	<1	mg/L		<1	<1	<1	--	--	<1	<1	<1	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	<1	mg/L		<1	<1	<1	--	--	<1	<1	<1	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	<10	mg/L		<10	<10	<10	--	--	<10	<10	<10	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	<0.1	mg/L		<0.1	<0.1	<0.1	--	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

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TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4													
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-06
Acetic Acid	mg/L	31.8	<1	<1	28.5	61	-	293	<1	<1	770	<1	25.4
Butyric Acid	mg/L	4.9	<1	<1	6.28	6.61	-	19.9	<1	<1	28.2	<1	3.16
Lactic Acid	mg/L	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Propionic Acid	mg/L	163	<10	<10	109	122	-	657	<10	<10	697	<10	41.3
Pyruvic Acid	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EBT Quarter 3													
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-06
Acetic Acid	mg/L	<1	<1	<1	<1	<1	37.3	-	<1	<1	554	<1	<1
Butyric Acid	mg/L	<1	<1	<1	<1	<1	<1	-	<1	<1	80.1	<1	<1
Lactic Acid	mg/L	<1	<1	3.87	<1	<1	<1	-	<1	<1	19.8	<1	<1
Propionic Acid	mg/L	<10	<10	<10	<10	<10	44.2	-	<10	<10	959	<10	<10
Pyruvic Acid	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1
EBT Quarter 2													
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-06
Acetic Acid	mg/L	<1	<1	<1	<1	<1	-	<1	<1	<1	426	<1	<1
Butyric Acid	mg/L	<1	<1	<1	<1	0.721 J	-	1.9	<1	<1	38.1	<1	<1
Lactic Acid	mg/L	<1	<1	<1	<1	2.79	-	<1	<1	<1	<10	<1	<1
Propionic Acid	mg/L	<10	<10	<10	<10	<10	-	47.2	<10	<10	707	<10	<10
Pyruvic Acid	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<1	<0.1	<0.1
EBT Quarter 1													
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-06
Acetic Acid	mg/L	63	3.84	39.3	2.9	3.49	-	-	-	<1	249	4.83	6.12
Butyric Acid	mg/L	1.37	<1	1.67	<1	<1	-	-	-	<1	3.92	<1	<1
Lactic Acid	mg/L	<1	1.43	<1	<1	<1	-	-	-	<1	4.17	1.85	2
Propionic Acid	mg/L	114	<10	54.6	<10	<10	-	-	-	<10	323	<10	<10
Pyruvic Acid	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	0.642	<0.1
Baseline													
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-06
Acetic Acid	mg/L	<1	<1	<1	<1	<1	-	-	-	<1	<1	<1	<1
Butyric Acid	mg/L	<1	<1	<1	<1	<1	-	-	-	<1	<1	<1	<1
Lactic Acid	mg/L	<1	<1	<1	<1	<1	-	-	-	<1	<1	<1	<1
Propionic Acid	mg/L	<10	<10	<10	<10	<10	-	-	-	<10	<10	<10	<10
Pyruvic Acid	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4																
Parameter	Sample Date	Method	units	IW85-01 9/13/07	IW85-02 9/14/07	IW85-04 9/14/07	IW85-05 9/14/07	IW85-06 9/13/07	IW92-01 9/19/07	IW92-02 9/19/07	IW92-03 9/18/07	IW92-04 9/18/07	IW92-05 9/17/07	IW92-06 9/14/07	IW92-07 9/14/07	IW92-08 9/17/07
Carbon Dioxide	RSK1755021	ug/L	94000 J	360000	-	54000	120000	120000	140000	220000	140000	470000	580000	210000	71000	
	RSK1755021	ug/L	<5	<5	<25	<25	<5	<25	<25	<25	<25	<5	<5	<5	<5	
	RSK1755021	ug/L	<5	<5	<25	<25	<5	<25	<25	<25	<25	<5	<5	<5	<5	
	RSK1755021	ug/L	940	5300	-	39	1300	210	490	1800	500	1200	4500	2500	2300	
	AM20GAX	nM	3.5	5.9	-	2.6	3.5	2.9	-	-	-	-	-	1.9	-	
EBT Quarter 3																
Parameter	Sample Date	Method	units	IW85-01 6/1/07	IW85-02 6/1/07	IW85-04 6/6/07	IW85-05 6/7/07	IW85-06 6/7/07	IW92-01 6/1/07	IW92-02 6/7/07	IW92-03 6/6/07	IW92-04 6/7/07	IW92-05 6/7/07	IW92-06 6/7/07	IW92-07 6/7/07	IW92-08 6/7/07
Carbon Dioxide	RSK1755021	ug/L	250000	430000	-	90000 J	380000 J	97000	130000 J	480000 J	360000 J	-	750000 J	590000 J	150000 J	
	RSK1755021	ug/L	<5	<5	-	<5	<50	<5	<5	<5	<5	<5	<50	<50	<25	
	RSK1755021	ug/L	<5	<5	-	<5	<50	<5	<5	<5	<5	<5	<50	<50	<25	
	RSK1755021	ug/L	1500	2100	-	5.9 B	330	250	140	860	1700	-	5300	2400	710 J	
	AM20GAX	nM	2.5	-	-	2.4	1.6	-	-	-	-	-	-	36	-	
EBT Quarter 2																
Parameter	Sample Date	Method	units	IW85-01 3/13/2007	IW85-02 3/14/2007	IW85-04 3/14/2007	IW85-05 3/14/2007	IW85-06 3/14/2007	IW92-01 3/12/2007	IW92-02 3/14/2007	IW92-03 3/13/2007	IW92-04 3/13/2007	IW92-05 3/14/2007	IW92-06 3/14/2007	IW92-07 3/14/2007	IW92-08 3/13/2007
Carbon Dioxide	RSK1755021	ug/L	150000 J	550000 J	-	140000 J	510000 J	85000 J	180000 J	180000 J	500000 J	730000 J	660000 J	450000 J	310000 J	
	RSK1755021	ug/L	<5	<5	-	<5	2.8 J	<5	<5	<5	<5	<5	<5	<5	<5	
	RSK1755021	ug/L	<5	<5	-	<5	2.5 J	<5	<5	<5	<5	<5	<5	<5	<5	
	RSK1755021	ug/L	110	6900	-	5.2	4.3 J	13	250	150	480	1800	3300	1900	3000	
	AM20GAX	nM	160	7400	-	-	-	2	-	7.2	150	-	15	2.3	12000	
EBT Quarter 1																
Parameter	Sample Date	Method	units	IW85-01 12/14/2006	IW85-02 12/14/2006	IW85-04 12/14/2006	IW85-05 12/12/2006	IW85-06 12/12/2006	IW92-01 12/12/2006	IW92-02 12/12/2006	IW92-03 12/12/2006	IW92-04 12/13/2006	IW92-05 12/13/2006	IW92-06 12/13/2006	IW92-07 12/13/2006	IW92-08 12/13/2006
Carbon Dioxide	RSK1755021	ug/L	460000 J	170000 J	110000 J	-	-	-	93000 J	170000 J	240000 J	190000 J	650000 J	290000 J	230000 J	190000 J
	RSK1755021	ug/L	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	<5	
	RSK1755021	ug/L	<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	<5	
	RSK1755021	ug/L	6.6 B	53	7.1	-	-	-	6.8 B	5.5 B	9 B	7.1 B	4900	310	1000	17
	AM20GAX	nM	24000	81000	-	-	-	-	1.6	0.35	93000	2600	17	14	6.1	-
Baseline																
Parameter	Sample Date	Method	units	IW85-01 9/1/06	IW85-02 9/1/06	IW85-04 9/1/06	IW85-05 8/31/06	IW85-06 9/1/06	IW92-01 8/31/06	IW92-02 8/31/06	IW92-03 8/31/06	IW92-04 8/31/06	IW92-05 8/31/06	IW92-06 9/1/06	IW92-07 9/1/06	IW92-08 9/5/06
Carbon Dioxide	RSK1755021	ug/L	56000 J	29000 J	7200 J	-	-	-	40000 J	8100 J	46000 J	49000 J	49000 J	4700	49000	56000 J
	RSK1755021	ug/L	<5	<5	<0.5	<0.5	<0.5	-	<5	<0.5	<5	<5	<5	<5	<5	
	RSK1755021	ug/L	<5	<5	0.86	-	-	-	<5	<0.5	<5	<5	<5	<5	<5	
	RSK1755021	ug/L	5.9 B	7.4 B	0.54	-	-	-	5.9 B	<0.5	6.7 B	11 B	7 B	5.4 B	4.5 B	9.1 B
	AM20GAX	nM	-	-	-	-	-	-	-	-	-	-	17	-	-	

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

- Not Sampled

TABLE 17
MNA ANALYTICAL RESULTS, YEAR ONE - ITA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

EBT Quarter 4																								
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06									
Method	units	9/12/07	9/13/07	9/14/07	9/11/07	9/10/07	9/10/07	9/10/07	9/10/07	9/12/07	9/12/07	9/12/07	9/11/07	9/11/07	9/11/07									
Carbon Dioxide	RSK1755021	280000 J	41000	250000 J	120000 J	130000	-	190000	58000	120000 J	460000 J	78000 J	96000	110000 J	150000 J									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5									
Methane	RSK1755021	ug/L	7800	4200 J	9.1	26	-	1900	9 B	7.6	14000	6.4	290	10	130									
Hydrogen	AM20GAX	nM	2	1.7	1.3	2.3	-	720	1.3	1.6	2.7	1.7	2.4	-	1.9									

EBT Quarter 3																								
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06									
Method	units	5/29/07	5/29/07	5/30/07	6/1/07	6/1/07	5/31/07	5/31/07	5/31/07	5/30/07	5/30/07	5/30/07	5/30/07	5/31/07	5/31/07									
Carbon Dioxide	RSK1755021	73000 J	57000 J	490000 J	76000 J	100000	-	79000 J	100000 B	300000 J	180000 B	120000 B	93000 J	80000 J	80000 J									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5									
Methane	RSK1755021	ug/L	270	4.8 B	4300	4.3 B	11	5.6	3.9 J	4.6 J	3400	53	140	3.9 J	19									
Hydrogen	AM20GAX	nM	1.2	1.9	0.83	3.5	-	2.7	1.2	2.2	1.8	1.4	3.3	1.4	2.3									

EBT Quarter 2																								
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06									
Method	units	3/8/2007	3/13/2007	3/12/2007	3/12/2007	3/13/2007	3/13/2007	3/13/2007	3/13/2007	3/8/2007	3/8/2007	3/8/2007	3/8/2007	3/9/2007	3/12/2007									
Carbon Dioxide	RSK1755021	59000	31000 J	440000 J	79000 J	58000 J	-	78000 J	77000 J	65000	260000	88000	91000	82000 J	89000 J									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5									
Methane	RSK1755021	ug/L	21	5.5 B	4600	3.2 J	-	4 B	2.7 B	4.1 J	400	4 J	36	3.6 J	4.6 J									
Hydrogen	AM20GAX	nM	1.4	1.4	1.6	1.4	5	-	-	1.4	-	3.3	3	1.4	2.3									

EBT Quarter 1																								
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06									
Method	units	12/6/2006	12/7/2006	12/7/2006	12/8/2006	12/8/2006	-	12/8/2006	12/6/2006	12/6/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006									
Carbon Dioxide	RSK1755021	64000 J	33000 J	660000 J	77000 J	73000 J	-	69000 J	68000 J	160000 J	74000 J	90000 J	84000 J	85000 J	85000 J									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	<5	<5									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	<5	<5									
Methane	RSK1755021	ug/L	8.9	6.4	4800	6.3 B	5.5 B	7.2	9	4.2 J	12	5.6	7.2	7.2	7.2									
Hydrogen	AM20GAX	nM	1.7	1.5	1.7	1.8	1.4	1.4	1.4	550	240	19	2	3.6	3.6									

Baseline																								
Parameter	Sample Date	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-02	PMW85-04	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06									
Method	units	8/31/06	8/31/06	9/5/06	8/30/06	8/30/06	8/30/06	8/30/06	8/30/06	8/30/06	8/31/06	8/30/06	8/30/06	8/30/06	8/30/06									
Carbon Dioxide	RSK1755021	51000 J	24000 J	430000 J	66000 J	61000 J	-	48000 J	31000 J	62000 J	67000 J	62000 J	67000 J	67000 J	71000 J									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	<5	<5									
Ethane	RSK1755021	ug/L	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	<5	<5									
Methane	RSK1755021	ug/L	5.1 B	5.8 B	4600	6.4	6.4	7.4	6 B	6.8	6.5	6.8	6.5	5.9	6.4									
Hydrogen	AM20GAX	nM	2.3	2.5	2	1.6	-	-	-	-	2.1	-	2.1	-	-									

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result, possibly biased high or false positive based on blank data

--: Not Sampled

TABLE 18
 MEAN CONCENTRATIONS OF MNA PARAMETERS
 YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
 Main Installation - Defense Depot Memphis, Tennessee

TTA-1, MW-21 Area						
Parameter	units	Baseline	Injection Wells			
			EBT Quarter 1	EBT Quarter 2	EBT Quarter 3	EBT Quarter 4
Bromide	mg/L	0.2	0.0	3.2	0.9	1.2
Chloride	mg/L	14.2	13.7	21.1	8.7	12.2
Nitrate	mg/L	2.9	1.4	0.4	0.3	0.7
Nitrite	mg/L	0.0	0.0	0.1	0.0	0.0
Sulfate	mg/L	16.8	10.2	5.7	7.0	6.8
Sulfide	mg/L	0.0	0.1	0.3	0.3	0.1
Alkalinity, Total	mg/L	112.6	433.4	1061.0	249.7	388.8
Total Organic Carbon	mg/L	3.9	180.8	736.7	283.3	168.8
Parameter	units					
Arsenic, Total	mg/L	0.0	0	0.0	0.0	0.0
Manganese, Total	mg/L	0.3	0.3	0.2	0.2	0.1
Selenium, Total	mg/L	0.0	0	0.0	0.0	0.0
Parameter	units					
Acetic Acid	mg/L	0.0	155.4	399.3	256.8	97.6
Butyric Acid	mg/L	0.0	17.6	46.0	256.0	30.2
Lactic Acid	mg/L	0.0	28.5	643.1	229.2	0.2
Propionic Acid	mg/L	0.0	153.9	609.9	494.0	161.8
Pyruvic Acid	mg/L	0.0	0.0	0.6	0.0	0.3
Parameter	units					
Carbon Dioxide	ug/L	92200	173500	294000	282000	155400
Ethane	ug/L	0.0	0	0.0	0.0	0.0
Ethene	ug/L	0.0	0	0.3	0.0	0.0
Methane	ug/L	7.6	28	560.7	2055.9	1490.3
Hydrogen	nM	NA	13005.3	11918.7	2142.0	11.5

TTA-1, MW-21 Area						
Parameter	units	Baseline	Performance Monitoring Wells			
			EBT Quarter 1	EBT Quarter 2	EBT Quarter 3	EBT Quarter 4
Bromide	mg/L	0.1	0.0	0.0	0.1	0.0
Chloride	mg/L	13.4	14.1	13.8	13.1	14.4
Nitrate	mg/L	3.5	3.8	4.2	4.1	3.7
Nitrite	mg/L	0.0	0.0	0.0	0.0	0.0
Sulfate	mg/L	17.1	15.0	16.0	15.7	14.2
Sulfide	mg/L	0.0	0.0	0.0	0.0	0.0
Alkalinity, Total	mg/L	84.8	81.4	83.1	73.4	108.8
Total Organic Carbon	mg/L	3.6	2.4	0.0	0.4	5.8
Parameter	units					
Arsenic, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Manganese, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Selenium, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Parameter	units					
Acetic Acid	mg/L	0.0	0.0	0.0	0.0	2.4
Butyric Acid	mg/L	0.0	0.0	0.0	1.2	0.0
Lactic Acid	mg/L	0.0	0.0	0.0	0.0	0.0
Propionic Acid	mg/L	0.0	0.0	0.0	1.5	10.0
Pyruvic Acid	mg/L	0.0	0.0	0.0	0.0	0.2
Parameter	units					
Carbon Dioxide	ug/L	92429	124571	142857	87714	99000
Ethane	ug/L	0.0	0.0	0.0	0.0	0.0
Ethene	ug/L	0.4	0.0	0.0	0.0	0.0
Methane	ug/L	102.5	71.0	36.8	114.7	869.7
Hydrogen	nM	3.7	1.8	1.5	646.0	2.7

TABLE 18
MEAN CONCENTRATIONS OF MNA PARAMETERS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

TTA-1, MW-101 Area						
Parameter	units	Baseline	Injection Wells			
			EBT Quarter 1	EBT Quarter 2	EBT Quarter 3	EBT Quarter 4
Bromide	mg/L	0.2	0.1	0.2	3.7	1.3
Chloride	mg/L	15.9	16.7	16.0	17.7	16.7
Nitrate	mg/L	4.3	1.1	0.7	0.7	0.6
Nitrite	mg/L	0.0	0.1	0.1	0.0	0.0
Sulfate	mg/L	17.0	9.9	8.2	7.5	7.3
Sulfide	mg/L	0.0	0.1	0.3	0.2	0.4
Alkalinity, Total	mg/L	99.1	440	459.9	355.5	480.5
Total Organic Carbon	mg/L	3.8	264.3	237.1	237.3	225.2
Parameter	units					
Arsenic, Total	mg/L	0.0	0	0.0	0.0	0.0
Manganese, Total	mg/L	0.1	0.3	0.3	0.2	0.2
Selenium, Total	mg/L	0.0	0	0.0	0.0	0.0
Parameter	units					
Acetic Acid	mg/L	0.0	100.8	127.0	120.3	122.1
Butyric Acid	mg/L	0.0	5.2	22.6	49.2	38.4
Lactic Acid	mg/L	0.0	324.6	179.8	109.7	50.0
Propionic Acid	mg/L	0.0	138.1	155.5	241.9	235.5
Pyruvic Acid	mg/L	0.0	0.1	0.0	0.0	1.4
Parameter	units					
Carbon Dioxide	ug/L	76370	163296	161630	137037	192630
Ethane	ug/L	0.0	0.0	0.0	0.0	0.0
Ethene	ug/L	0.0	0.0	0.1	0.0	0.0
Methane	ug/L	7.0	13.0	286.7	1468.4	3124.9
Hydrogen	nM	NA	13357	7235	357	40

TTA-1, MW-101 Area						
Parameter	units	Baseline	Performance Monitoring Wells			
			EBT Quarter 1	EBT Quarter 2	EBT Quarter 3	EBT Quarter 4
Bromide	mg/L	0.2	0.1	0.0	0.1	0.1
Chloride	mg/L	17.8	17.7	18.0	18.7	18.8
Nitrate	mg/L	4.8	4.8	1.7	1.8	1.3
Nitrite	mg/L	0	0	0.0	0.0	0.0
Sulfate	mg/L	18.1	13.3	9.4	9.6	10.6
Sulfide	mg/L	0	0	0.1	0.0	0.0
Alkalinity, Total	mg/L	100.3	395.7	372.7	291.4	396.2
Total Organic Carbon	mg/L	2.8	105.3	119.8	128.5	153.2
Parameter	units					
Arsenic, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Manganese, Total	mg/L	0.0	4.3	5.3	4.0	2.0
Selenium, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Parameter	units					
Acetic Acid	mg/L	0.0	130.6	78.7	66.2	64.2
Butyric Acid	mg/L	0.0	2.5	24.0	68.3	32.0
Lactic Acid	mg/L	0.0	61.7	0.0	2.1	0.1
Propionic Acid	mg/L	0.0	159.3	125.8	127.0	161.4
Pyruvic Acid	mg/L	0.0	0.1	0.0	0.0	0.2
Parameter	units					
Carbon Dioxide	ug/L	92842	160989	118105	159053	164105
Ethane	ug/L	0.0	0.0	0.0	0.0	0.0
Ethene	ug/L	0.0	0.1	0.0	0.0	0.0
Methane	ug/L	11.1	6.6	63.6	1139.7	5335.1
Hydrogen	nM	NA	4.0	2.7	4.2	2.2

TABLE 18
 MEAN CONCENTRATIONS OF MNA PARAMETERS
 YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
 Main Installation - Defense Depot Memphis, Tennessee

TTA-2						
Parameter	units	Baseline	Injection Wells			
			EBT Quarter 1	EBT Quarter 2	EBT Quarter 3	EBT Quarter 4
Bromide	mg/L	0.1	0.0	0.0	19.3	11.0
Chloride	mg/L	15.3	17.1	20.2	21.2	18.9
Nitrate	mg/L	2.2	0.6	0.4	0.2	0.1
Nitrite	mg/L	0.0	0.0	0.0	0.0	0.0
Sulfate	mg/L	11.1	4.5	5.0	2.9	3.9
Sulfide	mg/L	0.0	0.0	0.5	0.0	0.0
Alkalinity, Total	mg/L	62.3	1966.8	1571.9	517.1	1668.2
Total Organic Carbon	mg/L	4.2	954.0	899.7	1236.1	1449.0
Parameter	units					
Arsenic, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Manganese, Total	mg/L	0.3	2.4	2.2	1.9	1.5
Selenium, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Parameter	units					
Acetic Acid	mg/L	0.0	905.9	683.9	564.3	833.8
Butyric Acid	mg/L	0.0	302.0	125.6	240.2	193.6
Lactic Acid	mg/L	1.0	102.7	268.4	47.2	2.9
Propionic Acid	mg/L	0.0	367.0	1186.2	1141.4	1358.0
Pyruvic Acid	mg/L	0.0	0.2	0.3	0.0	0.3
Parameter	units					
Carbon Dioxide	ug/L	35818	253909	370417	337909	214917
Ethane	ug/L	0.0	0.0	0.2	0.0	0.0
Ethene	ug/L	0.1	0.0	0.2	0.0	0.0
Methane	ug/L	5.8	574.7	1492.7	1390.5	1756.6
Hydrogen	nM	NA	22239	2467.1	10.6	3.4

TTA-2						
Parameter	units	Baseline	Performance Monitoring Wells			
			EBT Quarter 1	EBT Quarter 2	EBT Quarter 3	EBT Quarter 4
Bromide	mg/L	0.3	0.1	0.1	0.1	0.4
Chloride	mg/L	19.2	19.5	19.9	20.9	22.7
Nitrate	mg/L	2.9	2.0	2.0	1.8	1.2
Nitrite	mg/L	0.0	0.0	0.0	0.0	0.0
Sulfate	mg/L	11.2	9.5	8.8	8.7	7.3
Sulfide	mg/L	0.0	0.0	0.0	0.0	0.1
Alkalinity, Total	mg/L	62.0	159.5	167.2	168.3	301.8
Total Organic Carbon	mg/L	6.5	45.1	54.3	65.6	159.1
Parameter	units					
Arsenic, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Manganese, Total	mg/L	0.3	2.1	1.8	1.9	2.4
Selenium, Total	mg/L	0.0	0.0	0.0	0.0	0.0
Parameter	units					
Acetic Acid	mg/L	0.0	34.9	35.5	48.5	96.0
Butyric Acid	mg/L	0.0	0.6	3.9	6.6	5.3
Lactic Acid	mg/L	0.0	1.0	0.8	1.8	0.0
Propionic Acid	mg/L	0.0	45.2	62.5	82.3	141.5
Pyruvic Acid	mg/L	0.0	0.1	0.0	0.0	0.0
Parameter	units					
Carbon Dioxide	ug/L	88909	133545	115154	140077	160077
Ethane	ug/L	0.0	0.0	0.0	0.0	0.0
Ethene	ug/L	0.3	0.0	0.0	0.0	0.0
Methane	ug/L	423.9	442.9	391.4	632.3	2184.1
Hydrogen	nM	NA	74.9	1.7	2.0	67.2

TABLE 19
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04A DUP	IW21-04B	IW21-05A
Lab ID	L0608210-04	L0608210-05	L0608253-01	L0608210-03	L0608253-03	L0608253-04	L0608292-01	L0608292-05	L0608292-02	L0608292-08
Date	8/8/2006	8/8/2006	8/9/2006	8/8/2006	8/9/2006	8/9/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006
Analyte	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.739	0.256 J	0.3 J	<0.5	<0.5	<0.5	0.698
Acetone	ug/L	3.67 B	2.61 B	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	ug/L	3.17	1.99	1.78	0.99 J	2.71	4.13	4.27	3.57	1.55
Methyl t-butyl ether (MTBE)	ug/L	27.8	16.6	4.98 J	6.19	35.6	28.7	29.9	24.2	59.4
Tetrachloroethene	ug/L	234	144	99.7	80.2	193	276	284	286	83.6
trans-1,2-Dichloroethene	ug/L	0.463 J	<1	<1	<1	<1	1.4	1.44	1.26	<1
Trichloroethene	ug/L	55.7	30.1	17	14.8	56.1	64.5	68.2	56.4	30.8

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 19
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW21-05B	MW-115	MW-21	MW-21 DUP	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
Lab ID	L0608292-07	L0608292-03	L0608210-01	L0608210-02	L0608253-08	L0608253-02	L0608292-06	L0608253-09	L0608292-09
Date	8/10/2006	8/10/2006	8/8/2006	8/8/2006	8/9/2006	8/9/2006	8/10/2006	8/9/2006	8/10/2006
Analyte	Units								
1,2-Dichloroethane	ug/L	1.06	0.808	<0.5	0.293 J	0.499 J	0.293 J	<0.5	<0.5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	6.73 J
cis-1,2-Dichloroethene	ug/L	0.756 J	4.2	1.3	1.96	1.51	2.55	2.94	0.525 J
Methyl t-butyl ether (MTBE)	ug/L	42	9.34	33.9	24.7	35.8	35.4	63.6	<5
Tetrachloroethene	ug/L	41.5	10.1	106	156	108	185	199	6.37
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	0.291 J	<1
Trichloroethene	ug/L	16.7	4.96	16.3	40.6	37.8	58	87.7	34.4

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 20
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-01A	IW101-01B	IW101-01C	IW101-01C DUP	IW101-02A	IW101-02B	IW101-02C	IW101-03A	IW101-03B	IW101-03B DUP
	Lab ID	L0608509-01	L0608515-01	L0608515-02	L0608515-04	L0608515-03	L0608554-01	L0608554-02	L0608553-01	L0608553-02	L0608553-03
	Date	8/21/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006
	Units										
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	ug/L	0.38	0.179 J	0.243 J	0.235 J	0.219 J	0.23 J	0.237 J	<0.3	0.29 J	<0.3
cis-1,2-Dichloroethene	ug/L	<1	0.253 J	<1	<1	<1	<1	0.275 J	<1	<1	<1
Methylene chloride	ug/L	<1	<1	<1	0.26 B	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	47.5	71.8	228	229	232	221	190	3.95	89.9	75.3
Trichloroethene	ug/L	0.625 J	<1	0.91 J	0.915 J	<1	0.406 J	3.74	<1	1.08	0.779 J

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 20
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-04C DUP	IW101-05A	IW101-05B	IW101-05C	IW101-06A	IW101-06B
Lab ID	L0608582-02	L0608582-03	L0608582-04	L0608582-05	L0608582-06	L0608627-01	L0608627-02	L0608599-02	L0608650-01	L0608627-03
Date	8/24/2006	8/24/2006	8/24/2006	8/24/2006	8/24/2006	8/28/2006	8/28/2006	8/25/2006	8/29/2006	8/28/2006
Analyte	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichloroethane		0.331 J	<0.5	<0.5	<0.5	0.251 J	<0.5	<0.5	<0.5	0.362 J
1,2-Dichloropropane		0.478 J	<1	<1	0.291 J	0.367 J	<1	<1	<1	0.315 J
Benzene		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform		0.257 J	0.265 J	0.239 J	0.502	0.525	<0.3	0.294 J	<0.3	0.197 J
cis-1,2-Dichloroethene		3.03	<1	<1	1.62	1.79	<1	0.284 J	<1	2.19
Methylene chloride		0.597 B	<1	<1	0.478 B	0.298 B	<1	<1	<1	<1
Tetrachloroethene		59	190	182	169	172	202	219	6.84	47
Trichloroethene		78.5	0.312 J	0.278 J	29.7	32.4	0.319 J	3.44	<1	64.7

<: Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 20
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW101-06B DUP	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C
Lab ID	L0608627-08	L0608627-04	L0608627-05	L0608649-02	L0608649-03	L0608627-06	L0608627-07	L0608649-04	L0608649-05	L0608649-08	L0608649-09
Date	8/28/2006	8/28/2006	8/28/2006	8/29/2006	8/29/2006	8/28/2006	8/28/2006	8/29/2006	8/29/2006	8/29/2006	8/29/2006
Analyte	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichloroethane	0.328 J	1.4	<0.5	0.847	1.03	<0.5	<0.5	0.889	<0.5	<0.5	0.335 J
1,2-Dichloropropane	0.286 J	1.47	<1	0.684 J	1.49	<1	<1	1.35	<1	0.233 J	1.32
Benzene	<0.4	0.326 J	<0.4	0.15 J	0.396 J	<0.4	<0.4	0.367 J	<0.4	<0.4	0.43
Chloroform	0.205 J	0.45	<0.3	0.271 J	0.47	<0.3	<0.3	0.451	0.168 J	0.226 J	0.524
cis-1,2-Dichloroethene	2.05	11.2	<1	5.63	16.2	0.318 J	2.09	19.9	<1	5.36	22.9
Methylene chloride	<1	1.44 B	<1	0.609 B	1.24 B	<1	<1	1.34 B	<1	<1	0.812 B
Tetrachloroethene	42.7	66.2	5.16	38	60.9	0.907 J	17.5	66.6	0.572 J	45.8	101
Trichloroethene	57	204	2.61	138	207	0.983 J	51	240	0.321 J	96	316

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 20
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	MW-101B	MW-101T	MW101-T DUP	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B
Lab ID	L0608599-03	L0608599-06	L0608599-08	L0608599-01	L0608510-01	L0608510-04	L0608517-01	L0608517-02	L0608552-01	L0608552-02
Date	8/25/2006	8/25/2006	8/25/2006	8/25/2006	8/21/2006	8/21/2006	8/22/2006	8/22/2006	8/23/2006	8/23/2006
Analyte	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichloroethane		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane		<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform		0.233 J	0.261 J	<0.3	0.222 J	<0.3	0.267 J	0.202 J	0.17 J	0.186 J
cis-1,2-Dichloroethene		0.279 J	0.266 J	<1	0.257 J	0.3 J	<1	0.326 J	<1	<1
Methylene chloride		<1	<1	<1	<1	<1	<1	<1	0.28 B	<1
Tetrachloroethene		239	251	45.7	110 J	158	257	196	100	144
Trichloroethene		0.293 J	0.298 J	4.18	<1	1.19	0.322 J	4.73	<1	2.41

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 20
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	PMW101-04A	PMW101-04A DUP	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07A DUP
Lab ID	L0608517-03	L0608517-05	L0608649-10	L0608517-04	L0608552-03	L0608552-04	L0608581-01	L0608599-07	L0608599-09
Date	8/22/2006	8/22/2006	8/29/2006	8/22/2006	8/23/2006	8/23/2006	8/24/2006	8/25/2006	8/25/2006
Analyte	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichloroethane		<0.5	<0.5	<0.5	0.533	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane		<1	<1	<1	1	<1	<1	<1	<1
Benzene		<0.4	<0.4	<0.4	0.211 J	<0.4	<0.4	<0.4	<0.4
Chloroform		0.199 J	<0.3	<0.3	0.336	<0.3	0.166 J	<0.3	<0.3
cis-1,2-Dichloroethene		<1	0.971 J	<1	8.85	<1	0.687 J	<1	<1
Methylene chloride		<1	<1	0.274 B	1.04	<1	<1	<1	<1
Tetrachloroethene		199	90.4	194	38.7	4.16	23.3	0.562 J	0.62 J
Trichloroethene		0.26 J	23.2	<1	151	<1	16.2	0.782 J	0.771 J

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 20
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID		PMW101-07B	PMW101-08A	PMW101-08B
Lab ID		L0608581-04	L0608581-05	L0608581-06
Date		8/24/2006	8/24/2006	8/24/2006
Analyte	Units			
1,2-Dichloroethane	ug/L	0.529	<0.5	<0.5
1,2-Dichloropropane	ug/L	1.34	<1	0.771 J
Benzene	ug/L	0.303 J	<0.4	0.239 J
Chloroform	ug/L	0.431	0.163 J	0.343
cis-1,2-Dichloroethene	ug/L	14.6	0.288 J	12.8
Methylene chloride	ug/L	1.38	<1	0.746 J
Tetrachloroethene	ug/L	53.6	0.735 J	46.6
Trichloroethene	ug/L	187	<1	232

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 21
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	DR2-1	DR2-5	IW-01	IW85-01	IW85-02	IW85-04	IW92-01	IW92-02	IW92-03	IW92-04
Lab ID	L0609050-01	L0609050-02	L0609098-01	L0609061-01	L0609061-02	L0609061-03	L0609050-03	L0609050-04	L0609052-01	L0609052-02
Date	8/31/2006	8/31/2006	9/5/2006	9/1/2006	9/1/2006	9/1/2006	8/31/2006	8/31/2006	8/31/2006	8/31/2006
Analyte	Units									
1,2,3-Trichloropropane	ug/L	<1	28.4	0.667 J	40.1	79	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.705	0.661	0.503	0.776	0.495 J	0.34 J	0.3 J	<0.5
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	1.41	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	2.17	<1	<1	<1
Carbon tetrachloride	ug/L	32.3	142	9.79	168	71.4	2.02	13	30.5	30
Chloroform	ug/L	9.91	46.7	8.72	51.8	39.5	7.04	9.49	12.8	13.1
cis-1,2-Dichloroethene	ug/L	17	31	149	40.3	29.4	0.677 J	10.4	9.31	10.2
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.301 J	2.57	<0.5	0.276 J	0.287 J
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	ug/L	176	54.2	40.4	79.2	48.7	1.06	104	184	170
trans-1,2-Dichloroethene	ug/L	0.319 J	0.506 J	<1	0.525 J	<1	<1	<1	<1	<1
Trichloroethene	ug/L	8.51	18.3	5.85	26.3	15.5	<1	4.01	6.84	6.16

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 21
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW92-05	IW92-06	IW92-07	IW92-08	MW-85	MW-85 DUP	PMW85-01	PMW92-01	PMW92-02	PMW92-03
Lab ID	L0609052-03	L0609060-01	L0609060-02	L0609098-02	L0608682-01	L0608682-04	L0608682-02	L0608682-03	L0609052-04	L0608683-01
Date	8/31/2006	9/1/2006	9/1/2006	9/5/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	8/31/2006	8/30/2006
Analyte	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3-Trichloropropane	ug/L	<1	<1	<1	89.5	40.4	46.4	12.7	<1	<1
1,2-Dichloroethane	ug/L	0.781	<0.5	0.529	1.97	0.769	0.778	0.732	<0.5	0.701
Bromodichloromethane	ug/L	0.758	1.9	0.333 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	1.18	2.09	0.884 J	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	29.9	8.77	38.4	103	188	193	222	8.92	58.1
Chloroform	ug/L	18.5	7.63	21	68.9	43.8	45.5	58.9	5.59	19.2
cis-1,2-Dichloroethene	ug/L	5.89	3.12	13.3	57.9	26.1	27.4	28.3	4.72	19.9
Dibromochloromethane	ug/L	0.956	2.58	0.461 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	ug/L	172	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	ug/L	194	51.2	196	156	74.8	69.5	79.6	73	252
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	6.1	2.58	9.2	26.9	25.1	25.5	26.1	2.87	11.5

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 21
VOC ANALYTICAL RESULTS SUMMARY, BASELINE - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID		PMW92-04	PMW92-05	PMW92-06
Lab ID		L0608683-02	L0608683-03	L0608683-04
Date		8/30/2006	8/30/2006	8/30/2006
Analyte	Units			
1,2,3-Trichloropropane	ug/L	<1	1.43	188
1,2-Dichloroethane	ug/L	0.335 J	0.661	2.25
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1
Carbon tetrachloride	ug/L	33.1	77.5	182
Chloroform	ug/L	11.4	28.8	82.7
cis-1,2-Dichloroethene	ug/L	10.7	26.2	91.4
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5
MEK (2-Butanone)	ug/L	<10	<10	<10
Tetrachloroethene	ug/L	165	223	179
trans-1,2-Dichloroethene	ug/L	<1	<1	0.443 J
Trichloroethene	ug/L	7.8	17.1	39.7

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 22
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW21-01A	IW21-01A DUP	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03A DUP	IW21-03B	IW21-04A	IW21-04B	IW21-05A
	Lab ID	L0612275-01	L0612275-04	L0612274-01	L0612274-02	L0612275-02	L0612274-05	L0612274-07	L0612274-06	L0612275-03	L0612296-01	L0612296-02
	Date	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/12/2006	12/12/2006
	Units											
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.735	<0.5
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.256 J	<0.5	0.306 J	<0.5	<0.5	0.447 J
Acetone	ug/L	29.3	45.3	66.4	<10	<10	<10	<10	3.41 J	<10	<10	10.5
cis-1,2-Dichloroethene	ug/L	3.05	3.12	2.42	1.45	0.888 J	1.75	1.89	0.633 J	70.3	12.8	1.36
MEK (2-Butanone)	ug/L	46.3	49.8	49.7	<10	<10	<10	<10	<10	<10	<10	10.8
Methyl t-butyl ether (MTBE)	ug/L	31.1	30.4	16	21.7	40.1	47.2	48	26.6	22.6	31.7	40.1
Tetrachloroethene	ug/L	197	245	151	117 J	99.2	158	173	50.8	79	223	99.1
trans-1,2-Dichloroethene	ug/L	0.462 J	0.422 J	0.526 J	<1	<1	<1	<1	<1	0.894 J	1.77	<1
Trichloroethene	ug/L	63.8	62.8	35.2	21.4	16.3	50.9	54.1	19.1	28.8	55.6	31

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 22
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW21-05B	MW-115	MW-21	PMW21-01	PMW21-02	PMW21-03	PMW21-03 DUP	PMW21-04	PMW21-05
	Lab ID	L0612295-01	L0612161-03	L0612154-03	L0612154-01	L0612154-02	L0612161-01	L0612161-05	L0612161-02	L0612103-01
	Date	12/12/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/5/2006
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane		<0.5	<0.5	0.652	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane		0.607	0.564	<0.5	0.257 J	0.535	0.643	0.608	<0.5	<0.5
Acetone		3.21 B	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene		0.725 J	0.664 J	1.17	2.27	0.825 J	0.527 J	0.709 J	2.47	0.278 J
MEK (2-Butanone)		<10	<10	<10	<10	<10	<10	<10	<10	<5
Methyl t-butyl ether (MTBE)		38	4.58 J	48.5	31.8	24.4	16.6	19.5	73.8	<5
Tetrachloroethene		81.7	9.16	129	193	62.5	46.3	58	190	8.66
trans-1,2-Dichloroethene		<1	<1	<1	<1	<1	<1	<1	0.26 J	<1
Trichloroethene		25	2.18	19.8	46.4	22	14.6	19.2	84.5	18.3

<: Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 23
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-01A	IW101-01A DUP	IW101-01B	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A	IW101-03B	IW101-03C	IW101-04A
Lab ID	L0612077-02	L0612077-01	L0612077-03	L0612077-04	L0612077-05	L0612077-06	L0612077-06	L0612104-01	L0612104-02	L0612104-03	L0612104-04	L0612160-01
Date	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006	12/6/2006
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.982	<1	<0.5
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.22	<1	<1
Acetone	31.8	26.5	<10	7.59 J	8.55 J	9.71 J	9.71 J	4.5 J	9.2 J	3.83 J	15.8	<0.3
Chloroform	0.37	0.154 J	0.139 J	0.234 J	0.187 J	0.174 J	0.174 J	<0.3	0.19 J	0.329	<0.3	<0.3
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	1.04	<1	21.6	<1	<1
MEK (2-Butanone)	42.4	31.7	<10	<10	4.7 J	<10	<10	2.91 J	<10	<10	82.3	<1
Methylene chloride	0.27 J	<1	<1	<1	<1	<1	<1	<1	<1	1.03	0.252 J	<1
Tetrachloroethene	19.1	25.4	65.3	183	189	174	174	168	38.8	154	54.7 J	123
Trichloroethene	0.721 J	0.523 J	<1	0.972 J	<1	<1	<1	20.5	<1	1.33	141 J	0.462 J

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 23
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-04B	IW101-04C	IW101-05A	IW101-05A DUP	IW101-05B	IW101-05C	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B
Lab ID	L0612160-02	L0612160-03	L0612160-04	L0612160-08	L0612160-05	L0612160-06	L0612160-07	L0612203-01	L0612203-02	L0612203-03	L0612203-04	L0612203-04
Date	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,2-Trichloroethane	<1	0.256 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<0.5	1.08	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.557
1,2-Dichloropropane	<1	1.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.747 J
Acetone	<10	<10	<10	<10	<10	7.56 J	8.12 J	<10	5.76 J	5.75 J	<10	<10
Chloroform	<0.3	0.376	0.164 J	<0.3	0.201 J	<0.3	<0.3	0.146 J	0.52	<0.3	0.203 J	4.37
cis-1,2-Dichloroethene	94.3	39.8	<1	<1	<1	0.399 J	<1	0.433 J	16.8	0.938 J	<10	<10
MEK (2-Butanone)	2.83 J	<10	<10	<10	<10	5.08 J	10.5	<10	<10	3.31 J	<10	<10
Methylene chloride	<1	1.08	<1	<1	<1	<1	<1	<1	2.48 B	<1	0.802 B	38.2
Tetrachloroethene	4.12	102	181	171	181	194	5.34	61.1	68.6	22.2	31.1	140
Trichloroethene	1.46	113	<1	<1	<1	9.2	<1	13.2	241	31.1	140	140

<: Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 23
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-07C	IW101-08A	IW101-08A DUP	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T	DR1-3
	Lab ID	L0612229-01	L0612229-02	L0612229-05	L0612229-03	L0612229-04	L0612230-01	L0612230-04	L0612230-05	L0612203-06	L0612203-05	L0612107-04
	Date	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/7/2006	12/7/2006	12/5/2006
	Units											
1,1,2-Trichloroethane	ug/L	1.86	<1	<1	<1	1.03	<1	<1	0.286 J	<1	<1	<1
1,2-Dichloroethane	ug/L	2.89	<0.5	<0.5	<0.5	1.18	<0.5	<0.5	0.416 J	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	4.17	<1	<1	<1	1.9	<1	0.535 J	1.74	<1	<1	<1
Acetone	ug/L	3.39 B	3.71 B	3.7 B	<10	8.06 B	6.26 J	8.31 J	16.7	<10	<10	<10
Chloroform	ug/L	0.672	<0.3	<0.3	<0.3	0.485	<0.3	<0.3	0.493	0.156 J	0.155 J	<0.3
cis-1,2-Dichloroethene	ug/L	25.8	<1	<1	2.33	16.7	<1	10.2	26.1	<1	<1	<1
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	7.48 J	<10	73.3	18.6	<10	<10	<10
Methylene chloride	ug/L	3.4	<1	<1	<1	1.83	<1	0.787 B	1.32 B	<1	<1	<1
Tetrachloroethene	ug/L	102	0.944 J	0.998 J	15.3	80.2	2.55	46.4	110	192	196	54.7
Trichloroethene	ug/L	402	0.796 J	0.753 J	55.3	270	0.763 J	173	337	<1	<1	5.13

<: Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 23
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03A DUP	PMW101-03B	PMW101-04A	PMW101-04B
Lab ID	L0612076-01	L0612076-04	L0612078-03	L0612078-04	L0612078-05	L0612078-01	L0612078-06	L0612103-02	L0612103-03
Date	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006
Analyte	Units	Units	Units	Units	Units	Units	Units	Units	Units
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	1860	4.92 J	<10	<10	<10	<10	<10	<10
Chloroform	ug/L	<0.3	<0.3	0.224 J	0.153 J	0.144 J	0.182 J	0.163 J	0.172 J
cis-1,2-Dichloroethene	ug/L	<1	1.77	<1	<1	<1	<1	<1	0.394 J
MEK (2-Butanone)	ug/L	12000	11.7	<10	<10	<10	<10	<10	<10
Methylene chloride	ug/L	0.439 J	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	29.7	137	191	112	113	194	176	109
Trichloroethene	ug/L	14.2	32.1	<1	<1	<1	1.66	<1	9.06

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 23
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID		PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Lab ID		L0612076-05	L0612076-06	L0612076-07	L0612076-01	L0612107-02	L0612107-03	L0612103-04	L0612103-05
Date		12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006
Analyte	Units								
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.498 J	<0.5	<0.5	<0.5	0.468 J	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	0.924 J	<1	<1	<1	1.01	<1	0.796 J
Acetone	ug/L	<10	<10	<10	2.65 J	<10	<10	<10	<10
Chloroform	ug/L	0.134 J	0.313	<0.3	<0.3	<0.3	0.275 J	<0.3	0.314
cis-1,2-Dichloroethene	ug/L	71.3	7.84	<1	0.722 J	<1	11.8	<1	13
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	ug/L	<1	0.931 J	<1	<1	<1	0.822 B	<1	0.575 J
Tetrachloroethene	ug/L	78.8	37.5	5.66	37.6	0.65 J	46.4	0.522 J	61.4
Trichloroethene	ug/L	12	144	<1	18.6	0.532 J	154	<1	227

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 24
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW85-01	IW85-02	IW85-04	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05	IW92-06	IW92-06 DUP	IW92-07
	Lab ID	L0612386-01	L0612386-02	L0612386-03	L0612295-02	L0612296-04	L0612295-03	L0612336-01	L0612368-01	L0612368-02	L0612368-04	L0612336-02
	Date	12/14/2006	12/14/2006	12/14/2006	12/12/2006	12/12/2006	12/12/2006	12/13/2006	12/13/2006	12/13/2006	12/13/2006	12/13/2006
Units												
1,2,3-Trichloropropane	ug/L	.42	96.5	<1	<1	<1	<1	<1	<1	<1	<1	0.63 J
1,2-Dichloroethane	ug/L	0.512	1.32	1.3	<0.5	0.487 J	0.252 J	0.318 J	0.588	0.419 J	0.409 J	0.679
1,2-Dichloropropane	ug/L	0.249 J	0.43 J	0.295 J	<1	0.281 J	<1	<1	0.301 J	<1	0.232 J	0.398 J
Acetone	ug/L	10.2	12.7	114	18.2 B	481	106	143	108	54.8	60.5	36.5
Carbon tetrachloride	ug/L	68.3	39.2	96.1	23.6	38.7	5.27	2.6	1.14	3.99	4.1	39.9
Chloroform	ug/L	78.2	62.4	191	9.7	25.2	24.7	20.8	2.08	23.2	24.2	20.2
cis-1,2-Dichloroethene	ug/L	35.3	33.6	3.18	15.2	3.27	2.62	12	5.42	7.4	7.59	16.4
MEK (2-Butanone)	ug/L	<10	<10	23.5	5.89 J	78.9	49.9	25.3	57	89.4	92.4	10.2
Methylene chloride	ug/L	11.2	6.67	1.17 B	<1	<1	1.2	6.54	16.9	2.52	2.57	0.687 J
Tetrachloroethene	ug/L	67	65.6	59.6	228	228	173	241	175	133	136	213
Trichloroethene	ug/L	24.2	21.1	5.35	7.45	4.68	4.19	6.76	6.96	6.36	6.58	11.4

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 24
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW92-08	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-01 DUP	PMW85-02	PMW92-01	PMW92-02	PMW92-03
	Lab ID	L0612336-03	L0612161-04	L0612202-03	L0612202-04	L0612231-02	L0612231-01	L0612231-03	L0612231-04	L0612154-04	L0612202-01	L0612201-01
	Date	12/13/2006	12/6/2006	12/7/2006	12/7/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/6/2006	12/7/2006	12/7/2006
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3-Trichloropropane		100	<1	28.7	0.685 J	70.4	14.8	15.6	<1	<1	<1	<1
1,2-Dichloroethane		3.95	<0.5	0.503	0.566	0.989	0.656	0.658	0.705	0.278 J	<0.5	0.54
1,2-Dichloropropane		1.38	<1	<1	0.466 J	0.308 J	0.248 J	<1	<1	<1	<1	0.387 J
Acetone		199	4.45 J	<10	22.8	8.44 J	<10	<10	<10	<10	485 J	<10
Carbon tetrachloride		50	29 J	100	1.39	179	199	201	103	18.6	0.462 J	41.9
Chloroform		108	13.3	35.8	3.31	49.5	56.9	55.1	41.5	7.82	4.42	18.9
cis-1,2-Dichloroethene		38.3	34.7	27.7	154	32.2	25.8	24.3	1.92	6.02	172 J	21.3
MEK (2-Butanone)		14.5	<10	<10	12	<10	<10	<10	<10	<10	2570	<10
Methylene chloride		0.723 J	0.272 B	<1	<1	<1	<1	<1	<1	<1	6.31	<1
Tetrachloroethene		136	191	45.3	8.25	73.4	76.6	74	19.2	128	13	252
Trichloroethene		18.9	8.49	15.4	1.89	24.4	23.7	22.1	5.18	4.32	4.03	12

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 24
VOC ANALYTICAL RESULTS SUMMARY, FIRST QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

		Sample ID PMW92-04 PMW92-05 PMW92-06	
Lab ID		L0612202-02 L0612201-02 L0612201-05	
Date		12/7/2006 12/7/2006 12/7/2006	
Analyte	Units		
1,2,3-Trichloropropane	ug/L	<1	1.45 148
1,2-Dichloroethane	ug/L	0.321 J	0.439 J 2.17
1,2-Dichloropropane	ug/L	<1	0.328 J 1.14
Acetone	ug/L	<10	<10 <10
Carbon tetrachloride	ug/L	17.7	55.3 J 132
Chloroform	ug/L	10.7	22.1 68.9
cis-1,2-Dichloroethene	ug/L	10.6 J	27.6 81.1
MEK (2-Butanone)	ug/L	3.15 J	<10 <10
Methylene chloride	ug/L	0.841 J	<1 <1
Tetrachloroethene	ug/L	142	196 173
Trichloroethene	ug/L	7.21	16.6 37.8

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 25
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	MW-21	MW-115	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B DUP
Lab ID	L0703180-05	L0703180-10	L0703230-08	L0703230-09	L0703246-01	L0703246-02	L0703230-10	L0703230-11	L0703276-01	L0703246-06
Date	3/7/2007	3/7/2007	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/8/2007	3/8/2007	3/12/2007	3/9/2007
Analyte	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	0.254 J	<0.5	0.276 J	0.271 J	<0.5	<0.5
Acetone	ug/L	<10	14.7	44	3.56 J	4.18 J	4.04 J	5.2 J	<10	3.65 J
cis-1,2-Dichloroethene	ug/L	1.66	0.253 J	0.917 J	1.37	0.787 J	2.13	<1	68.8	30.7
MEK (2-Butanone)	ug/L	<10	53.8	110	<10	<10	<10	13.2	<10	6.22 J
Methyl t-butyl ether (MTBE)	ug/L	49.6	28.6	3.1 J	33.7	56	47.1	14.6	37.6 J	25.9
Tetrachloroethene	ug/L	130 J	111	90.5	119	87.4 J	167	16.3	142	101
Trichloroethene	ug/L	25	35.9	5.43	19.9	11.6	47.7	11.6	46.1	33.8

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 25
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW21-04B	IW21-05A	IW21-05B	MW-115	MW-21	PMW21-01	PMW21-01DUP	PMW21-02	PMW21-03	PMW21-04
Lab ID	L0703246-05	L0703276-02	L0703276-04	L0703180-10	L0703180-05	L0703180-02	L0703180-01	L0703180-03	L0703180-04	L0703180-08
Date	3/9/2007	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007
Analyte	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichloroethane		<0.5	0.447 J	0.629	0.591	<0.5	0.342 J	0.493 J	0.602	<0.5
Acetone		3.41 J	<10	15.6	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene		30.8	3.14	2.08	0.253 J	1.66	2.06	0.823 J	0.485 J	2.46
MEK (2-Butanone)		5.99 J	40.4	8.17 J	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)		25.7	36.3 J	38.3 J	4.23 J	49.6	26.1	23.4	12.6	70.4
Tetrachloroethene		101	52.2	64	10.4	130 J	152	45.2	32.5	148
Trichloroethene		33.6	18.4	17.7	1.85	25	37.2	17.6	9.78	64.3

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 25
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID PMW21-05	
Lab ID	L0703180-09
Date	3/7/2007
Analyte	Units
1,2-Dichloroethane	ug/L <0.5
Acetone	ug/L <10
cis-1,2-Dichloroethene	ug/L 0.346 J
MEK (2-Butanone)	ug/L <10
Methyl t-butyl ether (MTBE)	ug/L <5
Tetrachloroethene	ug/L 18.7
Trichloroethene	ug/L 14

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 26
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-01A	IW101-01B	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A	IW101-03B	IW101-03C	IW101-04A DUP	IW101-04A
Lab ID	L0703106-01	L0703106-02	L0703106-03	L0703106-04	L0703106-05	L0703140-14	L0703140-15	L0703140-16	L0703180-13	L0703230-01	L0703230-04	L0703230-04
Date	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/7/2007	3/8/2007	3/8/2007
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	5.31 J	<10	3.41 J	<10	<10	<10	<10	2.64 B	5.45 B	8.53 J	20.5	31.8
Benzene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	<0.3	<0.3	<0.3	0.125 J	<0.3	<0.3	<0.3	<0.3	<0.3	0.255 J	<0.3	<0.3
cis-1,2-Dichloroethene	5.24	1.97	<1	9.79	0.489 J	7.17	2.69	2.95	63.1	6.45 J	10.6	10.1
MEK (2-Butanone)	<10	<10	<10	<10	<10	6.7 B	<10	<10	<10	105	113	113
Methylene chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	19.8	52.5	178	176	195	157	50.2	136	36.1	71.3	67.9	67.9
Trichloroethene	1.64	0.346 J	5.26	1.72	<1	18.5	0.459 J	1.15	75.8	2.23	1.99	1.99

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 26
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW101-04B	IW101-04C	IW101-05A	IW101-05B	IW101-05C	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C
Lab ID	L0703230-05	L0703230-06	L0703246-11	L0703246-12	L0703246-13	L0703246-14	L0703246-17	L0703246-18	L0703180-14	L0703180-15	L0703180-16
Date	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/9/2007	3/9/2007	3/9/2007	3/9/2007	3/7/2007	3/7/2007	3/7/2007
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,2-Trichloroethane	<1	0.271 J	<1	<1	<1	<1	<1	0.722 J	<1	<1	1.77
1,1-Dichloroethane	<1	0.264 J	<1	<1	<1	<1	<1	0.501 J	<1	0.23 J	0.912 J
1,2-Dichloroethane	<0.5	1.32	<0.5	<0.5	<0.5	<0.5	<0.5	1.71	<0.5	0.701	2.84
1,2-Dichloropropane	<1	1.8	<1	<1	<1	<1	<1	2.1	<1	0.851 J	4.27
Acetone	<10	<10	4.14 J	<10	<10	23.1 J	6.85 J	3.83 J	4.67 J	3.42 J	4.91 J
Benzene	<0.4	0.209 J	<0.4	<0.4	<0.4	<0.4	<0.4	0.156 J	<0.4	<0.4	0.518
Chloroform	<0.3	0.331	0.133 J	0.141 J	<0.3	<0.3	0.166 J	0.438	<0.3	0.223 J	0.603
cis-1,2-Dichloroethene	82.8	182	21.1	30.6	74.3	<1	0.621 J	38.8	7.51	39.4	125
MEK (2-Butanone)	17.6	14.1	<10	<10	7.63 J	151 J	<10	6.76 J	9.32 J	15.4	4.58 J
Methylene chloride	<1	1.18	<1	<1	<1	<1	<1	2.12	0.251 J	0.953 J	2.81
Tetrachloroethene	0.622 J	6.12	89.8	89.7	63	8.14	61.8	58.8	15.7	24.6	65.7
Trichloroethene	<1	15.9	4.11	2.93	7.04	0.292 J	11.8	209	13.5	81.8	267

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 26
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-08A DUP	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T	DR1-3
Lab ID	Lab ID	L0703276-05	L0703276-06	L0703276-07	L0703276-08	L0703180-17	L0703180-18	L0703230-07	L0703140-18	L0703140-17	L0703180-11
Date	Date	3/12/2007	3/12/2007	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/8/2007	3/6/2007	3/6/2007	3/7/2007
Units	Units										
1,1,2-Trichloroethane	ug/L	<1	<1	<1	0.659 J	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	0.795 J	<1	0.406 J	0.683 J	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	1.56	<0.5	<0.5	0.445 J	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	1.93	<1	0.842 J	1.88	<1	<1	<1
Acetone	ug/L	<10	<10	5.99 J	36	29	20.9	12	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	0.439	<0.4	0.216 J	0.243 J	<0.4	<0.4	<0.4
Chloroform	ug/L	<0.3	<0.3	<0.3	0.507	0.127 J	<0.3	0.387	0.129 J	0.164 J	<0.3
cis-1,2-Dichloroethene	ug/L	0.323 J	0.271 J	4.72	240	<1	99.3	112	9.4	0.621 J	27.6
MEK (2-Butanone)	ug/L	<10	<10	2.78 J	308	<10	76.3	41.1	<10	<10	<10
Methylene chloride	ug/L	<1	<1	<1	1.83	<1	0.998 J	1.31	<1	<1	<1
Tetrachloroethene	ug/L	0.891 J	0.963 J	12.8	27.3	0.654 J	30.6	58.4	193	192	8.31
Trichloroethene	ug/L	0.7 J	0.797 J	34.1	111	<1	111	209	0.358 J	<1	2.74

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 26
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	PMW101-01A DUP	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B
Lab ID	L0703107-05	L0703107-01	L0703107-02	L0703136-01	L0703136-02	L0703136-03	L0703136-04	L0703140-01	L0703140-02
Date	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Analyte									
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	150	147	2.67 J	2.65 J	<10	<10	<10	<10	<10
Benzene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	<0.3	<0.3	<0.3	<0.3	<0.3	0.139 J	<0.3	0.144 J	<0.3
cis-1,2-Dichloroethene	5.73	5.98	56.8	6.72	7.27	<1	26.4	<1	18.8
MEK (2-Butanone)	288	284	14.1	12.2	<10	<10	<10	<10	<10
Methylene chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	27.7	28.9	45.1	176	151	99.7	134	177	104
Trichloroethene	4.48	4.3	7.05	3.22	11.1	<1	1.7	<1	3.04

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 26
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07B DUP	PMW101-07B	PMW101-08A	PMW101-08B
Lab ID	L0703107-03	L0703107-04	L0703140-07	L0703140-08	L0703140-09	L0703140-05	L0703140-12	L0703140-03	L0703140-04
Date	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007
Analyte	Units	Units	Units	Units	Units	Units	Units	Units	Units
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.69	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	0.887 J	<1	<1	<1	<1	<1	0.203 J
Acetone	ug/L	<10	4.08 J	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	ug/L	<0.3	0.341	<0.3	<0.3	<0.3	<0.3	<0.3	0.161 J
cis-1,2-Dichloroethene	ug/L	113	21	0.68 J	<1	1.25	1.9	<1	6.25
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	ug/L	<1	0.876 J	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	0.462 J	36.5	5.86	0.662 J	21.6	24.3	7.02	39.5
Trichloroethene	ug/L	<1	172	<1	0.54 J	37.1	47	<1	165

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 27
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW85-01	IW85-02	IW85-05	IW85-06	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05	IW92-06	IW92-07
	Lab ID	L0703310-04	L0703346-02	L0703346-03	L0703346-04	L07033278-09	L0703346-05	L0703310-06	L0703310-09	L0703346-06	L0703346-07	L0703346-08
	Date	3/13/2007	3/14/2007	3/14/2007	3/14/2007	3/12/2007	3/14/2007	3/13/2007	3/13/2007	3/14/2007	3/14/2007	3/14/2007
	Units											
1,2,3-Trichloropropane	ug/L	37.5	80.6	13.8	51	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.733	1.14	0.596	0.472 J	<0.5	0.254 J	<0.5	0.319 J	0.319 J	0.43 J	0.542
1,2-Dichloropropane	ug/L	0.361 J	0.402 J	0.239 J	0.221 J	<1	<1	<1	<1	<1	<1	0.379 J
Acetone	ug/L	15.9 B	80.1	40	<10	12.9	152	20.9 B	71.9 B	201	63.9	29.2
Carbon tetrachloride	ug/L	161	2.48	199	3.02	18.8	4.37	8.72	<1	<1	<1	25.7
Chloroform	ug/L	77.8	42.6	67.7	39.6	9.02	14.1	14.3	29.9	1.83	18.4	14.7
cis-1,2-Dichloroethene	ug/L	37.6	65.4	27.1	18.4	11.1	9.94	9.13	166	5.14	9.96	54.5
MEK (2-Butanone)	ug/L	3.81 B	14.8	<10	166	4.48 J	20	10.4 B	22 B	92.4	70.1	15.7
Methylene chloride	ug/L	1.05	6.75	<1	<1	0.288 J	<1	2.51	2.02	2.65	3.68	0.782 J
Tetrachloroethene	ug/L	86.4	13.1	76.4	31	170	54	181	22.9	95.1	110	118
Trichloroethene	ug/L	31.1	6.85	25.1	9.93	6.09	6.58	5.91	14.2	5.13	6.92	10.1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 27
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW92-08 DUP	IW92-08	DR2-1	DR2-5 DUP	DR2-5	IW-01	MW-85	PMW85-01	PMW85-04	PMW85-05	PMW92-01
Lab ID	L0703310-01	L0703310-03	L0703310-03	L0703230-16	L0703310-10	L0703310-14	L0703276-12	L0703276-11	L0703310-11	L0703310-12	L0703310-13	L0703230-13
Date	3/13/2007	3/13/2007	3/13/2007	3/8/2007	3/13/2007	3/13/2007	3/12/2007	3/12/2007	3/13/2007	3/13/2007	3/13/2007	3/8/2007
Units												
1,2,3-Trichloropropane	79.6	88.8	<1	23.4	23.6	1.48	47.1	12.6	89.3	141	<1	
1,2-Dichloroethane	1.92	2.54	0.253 J	0.473 J	0.495 J	0.424 J	0.705	0.524	1.02	1.14	0.254 J	
1,2-Dichloropropane	1.03	1.25	<1	<1	0.227 J	0.445 J	0.298 J	<1	0.395 J	0.785 J	<1	
Acetone	57 B	48.5 B	<10	<10	<10	8.15 J	<10	3.83 B	4.11 B	<10	<10	
Carbon tetrachloride	1.21	8.21	22.6	138	130	16.6	123	161	57.9	155	11.8	
Chloroform	68.5	97.2	10	44	43	9.98	36.2	46.4	69.8	68.9	8.34	
cis-1,2-Dichloroethene	108	142	19.3	32.3	32.9	73.2	23.8	13.4	38.9	83.3	6.08	
MEK (2-Butanone)	34.1 B	8.41 B	<10	<10	<10	<10	<10	<10	5.09 B	<10	<10	
Methylene chloride	4.01	1.14	<1	<1	<1	0.824 J	<1	<1	<1	<1	<1	
Tetrachloroethene	34.3	41.5	194	49.5	48.4	78.4	58.6	51.2	79.5	119	109	
Trichloroethene	16.9	22.4	7.91	18.5	18.5	9.04	20.3	18.1	25.6	37.9	4.02	

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 27
VOC ANALYTICAL RESULTS SUMMARY, SECOND QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW92-02	PMW92-03	PMW92-04 DUP	PMW92-04	PMW92-05	PMW92-06
Lab ID	L0703230-14	L0703230-15	L0703246-07	L0703246-08	L0703246-09	L0703276-10	
Date	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/9/2007	3/12/2007	
Units							
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	1.6	143
1,2-Dichloroethane	ug/L	<0.5	0.533	0.364 J	0.336 J	0.489 J	2.63
1,2-Dichloropropane	ug/L	<1	0.327 J	0.206 J	0.204 J	0.351 J	1 19
Acetone	ug/L	80	19.2	5.63 J	4.96 J	<10	<10
Carbon tetrachloride	ug/L	<1	19.3	5.38	4.7	57	114
Chloroform	ug/L	8.75	27.4	17.3	16.2	22.8	79.4
cis-1,2-Dichloroethene	ug/L	171	70.7	116	112	25.9	74.5
MEK (2-Butanone)	ug/L	103	3.8 J	7.58 J	6.79 J	<10	<10
Methylene chloride	ug/L	<1	1 B	0.332 J	0.262 J	<1	<1
Tetrachloroethene	ug/L	1.58	170	38.1	33.1	195	155
Trichloroethene	ug/L	0.518 J	9.92	7.35	7.15	15	34

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 28
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID Lab ID	IW21-01A L0706104-05	IW21-01B DUP L0706104-09	IW21-01B L0706104-06	IW21-02A L0706151-07	IW21-02B L0706151-08	IW21-03A L0706151-09	IW21-03B L0706151-10
	Date	6/5/2007	6/5/2007	6/5/2007	6/6/2007	6/6/2007	6/6/2007	6/6/2007
units								
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.335 J
Acetone	ug/L	11	277	262	5.86 J	<10	<10	11.6
cis-1,2-Dichloroethene	ug/L	12.6	66.8	64.8	1.32	0.799 J	2.25	2.34
MEK (2-Butanone)	ug/L	12.9	138	137	<10	<10	<10	16.1
Methyl t-butyl ether (MTBE)	ug/L	16	4.49 J	4.91 J	26.2	47.1	45.1	23.4
Tetrachloroethene	ug/L	41.5	42.5	46.9	127	94.3	189	42.3
Trichloroethene	ug/L	15.6	26.9	26.8	19.4	11.2	52.4	26.4

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 28
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW21-04A DUP	IW21-04A	IW21-04B	IW21-05A	IW21-05B	MW-115	MW-21
	Lab ID	L0706151-03	L0706151-01	L0706151-02	L0706151-14	L0706151-18	L0706104-08	L0706073-11
	Date	6/6/2007	6/6/2007	6/6/2007	6/6/2007	6/6/2007	6/5/2007	6/4/2007
	units							
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	0.296 J	0.566	0.45 J	<0.5
Acetone	ug/L	3.5 J	<10	2.89 J	16.2	<10	<10	<10
cis-1,2-Dichloroethene	ug/L	18.2	17.9	26.1	7.44	5.11	0.492 J	1.53
MEK (2-Butanone)	ug/L	6.57 J	5.92 J	5.05 J	47	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	23.2	21.2	17.2	28.6	27.5	3.05 J	88.2
Tetrachloroethene	ug/L	130	127	68	47.1	54.2	12.1	134
Trichloroethene	ug/L	38.2	38.1	29	17.7	14.5	2.14	28.3

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J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 28
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW21-01	PMW21-02	PMW21-03	PMW21-04	PMW21-05
	Lab ID	L0706073-07	L0706073-08	L0706073-09	L0706073-10	L0706104-07
	Date	6/4/2007	6/4/2007	6/4/2007	6/4/2007	6/5/2007
	units					
1,2-Dichloroethane	ug/L	0.339 J	0.428 J	0.589	<0.5	<0.5
Acetone	ug/L	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	ug/L	2.19	0.739 J	0.355 J	2.08	0.442 J
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	30	26.5	10.2	84.8	<5
Tetrachloroethene	ug/L	165	44.4	25.6	123	27.9
Trichloroethene	ug/L	39.9	18.3	6.73	60.2	17.1

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-01A	IW101-01B	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A
Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
Date	Date	Date	Date	Date	Date	Date	Date	Date
units	units	units	units	units	units	units	units	units
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	22.1 B	<10	3.98 J	<10	<10	2.62 J	7.63 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	ug/L	<0.3	<0.3	0.155 J	<0.3	0.197 J	0.156 J	<0.3
cis-1,2-Dichloroethene	ug/L	15.5	23.7	1.04	24.1	18	54.1 J	6.91
MEK (2-Butanone)	ug/L	21.2 B	<10	<10	<10	<10	17.3	5.89 J
Methylene chloride	ug/L	<1	0.319 B	0.387 B	0.311 B	1.21 B	0.279 B	<1
Tetrachloroethene	ug/L	5.02	5.85 B	136	88.1	103	82.3	37.1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.437 J	2.1	4.23	3.69	4.03	13.8	0.927 J

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TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-03B	IW101-03C DUP	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-05A
Lab ID	L0706043-05	L0706043-02	L0706043-06	L0706073-12	L0706073-13	L0706073-14	L0706104-01	L0706104-01
Date	6/1/2007	6/1/2007	6/1/2007	6/4/2007	6/4/2007	6/4/2007	6/5/2007	6/5/2007
units								
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	0.312 J	<1
1,1-Dichloroethane	ug/L	<1	<1	0.204 J	<1	<1	0.257 J	<1
1,2-Dichloroethane	ug/L	<0.5	0.601	0.684	<0.5	<0.5	1.8	<0.5
1,2-Dichloropropane	ug/L	<1	0.845 J	0.918 J	<1	<1	1.92	<1
Acetone	ug/L	9.18 B	<10	<10	19.5 J	<10	2.83 J	4.89 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.176 J	<0.4
Chloroform	ug/L	<0.3	0.152 B	0.173 B	<0.3	<0.3	0.269 J	0.182 J
cis-1,2-Dichloroethene	ug/L	0.784 J	28	30.7	30	70.9	190	30.1
MEK (2-Butanone)	ug/L	<10	<10	<10	105 J	27 J	3.61 J	19.2
Methylene chloride	ug/L	<1	0.951 B	1.16 B	<1	<1	0.954 B	<1
Tetrachloroethene	ug/L	99.7	44.5	50.6	4.21 B	0.345 B	4.78 B	73.3
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	0.746 J	1.75	<1
Trichloroethene	ug/L	<1	70	77.8	2.06	<1	18.9	8.07

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TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-05B	IW101-05C	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B
Lab ID	L0706104-02	L0706104-03	L0706104-04	L0706151-15	L0706151-16	L0706073-01	L0706073-02	
Date	6/5/2007	6/5/2007	6/5/2007	6/6/2007	6/6/2007	6/4/2007	6/4/2007	6/4/2007
units								
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	0.258 J	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	0.339 J	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	1.24	<0.5	0.562
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	1.59	<1	0.628 J
Acetone	ug/L	<10	2.89 J	4.67 J	6.08 J	3.38 J	6.66 J	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.128 J	<0.4	<0.4
Chloroform	ug/L	0.148 J	<0.3	<0.3	0.161 J	0.325	<0.3	0.202 J
cis-1,2-Dichloroethene	ug/L	28.5	85.6	2.1	1.59	134	8.18	88
MEK (2-Butanone)	ug/L	<10	14.3	19.1	2.63 J	11.5	4.19 J	5.89 J
Methylene chloride	ug/L	<1	0.418 B	<1	<1	1.33 B	<1	0.753 B
Tetrachloroethene	ug/L	95.1	47.8	17.4	55.6	18.8	5.78	8.88
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	0.344 J	<1	<1
Trichloroethene	ug/L	1.57	6.96	0.608 J	8.62	65.3	2.37	28.4

< Not detected above Reporting Limit (RL)

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TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09A	IW101-09B
Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
Date	Date	Date	Date	Date	Date	Date	Date	Date
units	units	units	units	units	units	units	units	units
1,1,2-Trichloroethane	ug/L	1.62	<1	<1	0.529 J	<1	<1	<1
1,1-Dichloroethane	ug/L	0.822 J	<1	<1	0.77 J	<1	<1	0.262 J
1,2-Dichloroethane	ug/L	3.09	<0.5	<0.5	1.27	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	4.46	<1	<1	1.96	<1	<1	0.445 J
Acetone	ug/L	3.95 J	<10	3.99 J	20.8	98.4	83.2	14.8
Benzene	ug/L	0.414	<0.4	<0.4	0.504	<0.4	<0.4	<0.4
Chloroform	ug/L	0.468	<0.3	<0.3	0.209 J	0.129 J	<0.3	<0.3
cis-1,2-Dichloroethene	ug/L	171 J	3.34	19.4	255	0.42 J	0.405 J	93.3
MEK (2-Butanone)	ug/L	3.48 J	<10	<10	165	<10	<10	66.7
Methylene chloride	ug/L	1.4 B	<1	0.438 B	0.899 B	<1	0.586 B	0.692 B
Tetrachloroethene	ug/L	38.9 J	0.86 B	10.9	13.8	0.696 B	0.895 B	18.1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	0.286 J	<1	<1	<1
Trichloroethene	ug/L	191 J	0.478 J	25.3	52.1	0.258 J	0.277 J	50.6

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-09C	MW-101B	MW-101T	DR1-3	IW101-01A DUP	PMW101-01A	PMW101-01B DUP
	Lab ID	L0706151-05	L0705683-15	L0705683-14	L0706043-09	L0706043-01	L0705683-02	L0705683-01
	Date	6/6/2007	5/30/2007	5/30/2007	6/1/2007	6/1/2007	5/30/2007	5/30/2007
units								
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	0.641 J	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.331 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	1.48	<1	<1	<1	<1	<1	<1
Acetone	ug/L	4.67 J	7.91 J	9.54 J	<10	17.1 B	44.1	2.83 J
Benzene	ug/L	0.329 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	ug/L	0.306	0.206 J	0.148 J	<0.3	<0.3	<0.3	<0.3
cis-1,2-Dichloroethene	ug/L	114	1.01	0.428 J	32.9	15.7	17.3	58.4
MEK (2-Butanone)	ug/L	56.5	<10	<10	<10	18.7 B	106	7.45 J
Methylene chloride	ug/L	0.945 B	<1	<1	0.351 B	0.483 B	0.256 B	<1
Tetrachloroethene	ug/L	62.7	135	123	2.18	5.45	9.59	20.1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	207	0.311 J	0.364 J	0.572 J	0.456 J	1.54	0.897 J

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A
	Lab ID	L0705683-03	L0705656-05	L0705656-06	L0705683-04	L0705656-07	L0706016-01
	Date	5/30/2007	5/29/2007	5/29/2007	5/30/2007	5/29/2007	5/31/2007
	units						
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
Acetone	ug/L	4.78 J	4 J	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroform	ug/L	<0.3	<0.3	<0.3	0.138 J	<0.3	<0.3
cis-1,2-Dichloroethene	ug/L	57	51.2	93.3	<1	19.9	20.9
MEK (2-Butanone)	ug/L	9.7 J	20.3	4.38 J	<10	<10	<10
Methylene chloride	ug/L	<1	0.331 B	0.349 B	<1	0.275 B	<1
Tetrachloroethene	ug/L	20.8	50.8	15.3	88	123	138
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.824 J	6.43	4.29	<1	2	1.2

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TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A
	Lab ID	L0706016-02	L0706016-11	L0706016-12	L0706016-13	L0706016-14	L0706016-03
	Date	5/31/2007	5/31/2007	5/31/2007	5/31/2007	5/31/2007	5/31/2007
	units						
1,1,2-Trichloroethane	ug/L	<1	<1	0.314 J	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	0.323 J	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.875	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	1.53	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	2.69 J	<10
Benzene	ug/L	<0.4	<0.4	0.255 J	<0.4	<0.4	<0.4
Chloroform	ug/L	<0.3	<0.3	0.366	<0.3	<0.3	<0.3
cis-1,2-Dichloroethene	ug/L	86.3	110	34.9	2.9	40.3	0.432 J
MEK (2-Butanone)	ug/L	<10	3.95 J	<10	<10	<10	<10
Methylene chloride	ug/L	<1	0.802 B	1.69 B	<1	0.269 B	<1
Tetrachloroethene	ug/L	19.1	0.632 B	43.2	4.62 B	<1	0.747 B
trans-1,2-Dichloroethene	ug/L	<1	0.264 J	0.416 J	<1	<1	<1
Trichloroethene	ug/L	1.24	<1	190	<1	<1	0.27 J

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 29
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW101-07B	PMW101-08A	PMW101-08A	PMW101-08B
	Lab ID	L0706016-04	L0706043-07	L0706043-08	L0706016-05
	Date	5/31/2007	6/1/2007	6/1/2007	5/31/2007
	units				
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	0.278 J
Acetone	ug/L	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4
Chloroform	ug/L	<0.3	<0.3	<0.3	0.17 J
cis-1,2-Dichloroethene	ug/L	1.44	<1	<1	7.17
MEK (2-Butanone)	ug/L	<10	<10	<10	<10
Methylene chloride	ug/L	<1	<1	<1	0.391 B
Tetrachloroethene	ug/L	21.4	24.5	24.4	37.7
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1
Trichloroethene	ug/L	37	0.299 J	0.324 J	144

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 30
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID Lab ID Date	IW85-01 L0706043-14 6/1/2007	IW85-02 L0706043-15 6/1/2007	IW85-05 L0706073-15 6/4/2007	IW85-06 L0706151-13 6/6/2007	IW92-01 L0706043-13 6/1/2007	IW92-02 DUP L0706201-07 6/7/2007	IW92-02 L0706201-08 6/7/2007	IW92-03 L0706151-06 6/6/2007
1,2,3-Trichloropropane	ug/L	43.5	75.2	15	84.7	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.676	1.54	0.694	0.918	<0.5	0.32 J	0.301 J	<0.5
1,2-Dichloropropane	ug/L	0.336 J	0.402 J	0.246 J	0.512 J	<1	0.22 J	<1	<1
1,4-Dichlorobenzene	ug/L	0.147 B	0.136 B	<0.5	0.137 J	0.154 B	<0.5	<0.5	<0.5
Acetone	ug/L	11.5 B	161	166 J	21.6	22 B	337	371	31.6
Carbon tetrachloride	ug/L	107	1.18	169	7.5	8.67	11.4	9.79	1.8
Chloroform	ug/L	76.3	50.8	82.4	76.9	13.9	22	23	12.2
cis-1,2-Dichloroethene	ug/L	33.4	68	15.3	121	78.6	112	113	40.2
MEK (2-Butanone)	ug/L	6.58 B	68	30.2 J	5.39 J	10.5 B	40.8	44.9	13
Methylene chloride	ug/L	1.4 B	4.26 B	<1	1.83 B	0.711 B	1.68 B	1.62 B	2.05 B
Tetrachloroethene	ug/L	56.8	8.91	67.3	1.98 B	71.4	110	90.5	146
trans-1,2-Dichloroethene	ug/L	<1	<1	0.315 J	<1	<1	<1	<1	<1
Trichloroethene	ug/L	20.9	4.65	18.5	1.67	25	14.2	14.2	14.4

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 30
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW92-04	IW92-05	IW92-06	IW92-07	IW92-08	DR2-1	DR2-5	IW-01
Lab ID	L0706201-10	L0706201-01	L0706201-02	L0706201-03	L0706201-04	L0706201-09	L0706201-10	L0706201-09	L0706201-09
Date	6/7/2007	6/7/2007	6/7/2007	6/7/2007	6/7/2007	5/29/2007	5/29/2007	5/29/2007	5/30/2007
units									
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	97.8 J	<1	25.3	1.25
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.414 J	0.483 J	2.63	<0.5	0.504	0.307 J
1,2-Dichloropropane	ug/L	<1	<1	0.232 J	0.337 J	1.44	<1	<1	0.348 J
1,4-Dichlorobenzene	ug/L	<0.5	0.554	<0.5	<0.5	0.145 J	<0.5	<0.5	<0.5
Acetone	ug/L	68.5	1550	99.3	73.6	50 J	<10	<10	3.79 J
Carbon tetrachloride	ug/L	<1	<1	<1	15.5	5.44	25.7 J	132 J	13.9
Chloroform	ug/L	19.5	0.562	4.43	13.1	89.7 J	8.76	37.6	9.16
cis-1,2-Dichloroethene	ug/L	186	16.5	38	59.1	192	15.2	25.9	65.5
MEK (2-Butanone)	ug/L	39.8	343	107	24.4	14.8	<10	<10	<10
Methylene chloride	ug/L	1.35 B	2.65 B	9.7	2.05 B	3.02 B	0.296 B	<1	1.06 B
Tetrachloroethene	ug/L	4.01 B	13	41.6	87.8	11.9	160	41.1	78.4
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.882 J	1.21	12.9	7.62	6.31	7.21	14.4	9.36

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 30
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID Lab ID Date	MW-85 L0705656-08 5/29/2007	PMW85-01 L0706043-16 6/1/2007	PMW85-04 L0706016-09 5/31/2007	PMW85-05 DUP L0706016-06 5/31/2007	PMW85-05 L0706016-10 5/31/2007	PMW92-01 L0705683-05 5/30/2007	PMW92-02 L0705683-06 5/30/2007
1,2,3-Trichloropropane	ug/L	49	16.1	90.9	152	151	<1	<1
1,2-Dichloroethane	ug/L	0.722	0.629	0.953	1.21	1.28	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	0.463 J	0.816 J	0.779 J	<1	<1
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.359 J
Acetone	ug/L	<10	3.28 B	10.7	<10	<10	<10	113
Carbon tetrachloride	ug/L	106 J	171	48.7	157	157	10.7	<1
Chloroform	ug/L	34.6	56.1	62.5	67.6	69	8.55	8.52
cis-1,2-Dichloroethene	ug/L	18.6	8.2	48.9	82.5	84.1	13.6	150
MEK (2-Butanone)	ug/L	<10	<10	3.29 J	<10	<10	<10	82.7
Methylene chloride	ug/L	<1	<1	0.394 B	0.291 B	<1	0.302 B	0.334 B
Tetrachloroethene	ug/L	37.8	57.2	62.1	122	119	123	1.47 B
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	2.49	1.93	<1	<1
Trichloroethene	ug/L	15.5	12.5	23.2	36.6	36.5	4.9	0.283 J

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TABLE 30
VOC ANALYTICAL RESULTS SUMMARY, THIRD QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW92-03	PMW92-04	PMW92-05	PMW92-06
	Lab ID	L0705683-07	L0705683-08	L0706016-07	L0706016-08
	Date	5/30/2007	5/30/2007	5/31/2007	5/31/2007
units					
1,2,3-Trichloropropane	ug/L	<1	<1	1.37	137
1,2-Dichloroethane	ug/L	0.523	0.373 J	0.539	2.73
1,2-Dichloropropane	ug/L	0.314 J	<1	0.329 J	1.3
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5
Acetone	ug/L	37.6	4.79 J	<10	<10
Carbon tetrachloride	ug/L	7.59	4.38	56.6	117
Chloroform	ug/L	31	25.1	24.2	85.8
cis-1,2-Dichloroethene	ug/L	166	148	28.3	91.5
MEK (2-Butanone)	ug/L	9.35 J	<10	<10	<10
Methylene chloride	ug/L	1.47 B	0.614 B	<1	0.419 B
Tetrachloroethene	ug/L	54.4	22	194	153
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1
Trichloroethene	ug/L	7.03	2.73	16.3	36.4

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 31
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A
	Lab ID	L0709346-09	L0709471-01	L0709530-01	L0709530-02	L0709530-07	L0709530-05	L0709471-06	L0709471-02	L0709530-08
	Date	9/14/2007	9/19/2007	9/20/2007	9/20/2007	9/20/2007	9/20/2007	9/19/2007	9/19/2007	9/20/2007
	units									
Acetone	ug/L	47 J	62.6	4.98 J	<10	<10	<10	7.17 J	<10	69.9
Carbon disulfide	ug/L	0.833 J	<1	<1	<1	<1	0.58 J	<1	<1	1.36
Chloromethane	ug/L	0.256 B	<1	0.572 B	<1	0.551 B	<1	0.412 J	<1	1.09 B
cis-1,2-Dichloroethene	ug/L	49.5	109	2.05	14.2	1.77	3.1	87.1	74.4	34.8
MEK (2-Butanone)	ug/L	99.7	134	<10	<10	<10	<10	10.3	3.9 J	219
Methyl t-butyl ether (MTBE)	ug/L	50.9	14.2	37.3	53.4	48.3	30.5	20.1	18	16.9
Tetrachloroethene	ug/L	88.6	1.32	132	75.8 J	79.4	56.4	14.8	10.2	7.7
Trichloroethene	ug/L	41.9	1.28	23.7	12.8	31.3	21	7.54	7.35	5.3

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 31
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW21-05A DUP	IW21-05B	MW-115	MW21	PMW21-01	PMW21-02	PMW21-03	PMW21-03 DUP
	Lab ID	L0709530-10	L0709530-09	L0709471-12	L0709422-05	L0709422-01	L0709422-02	L0709471-11	L0709471-09
	Date	9/20/2007	9/20/2007	9/19/2007	9/18/2007	9/18/2007	9/18/2007	9/19/2007	9/19/2007
	units								
Acetone	ug/L	127	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	ug/L	1.43	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1 B	1.29 B	0.61 J	0.316 J	0.864 J	0.487 J	0.702 J	0.506 J
cis-1,2-Dichloroethene	ug/L	33.1	21.7	10.2	1.95	2	0.782 J	0.636 J	0.814 J
MEK (2-Butanone)	ug/L	254	3.1 J	6.89 J	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	15.9	25.3	6.03	68.2	27	24.6	14.3	15.2
Tetrachloroethene	ug/L	7.39	32.2	9.62	132	122	44.7	49	56.9
Trichloroethene	ug/L	4.79	12.3	1.5	27.5	35.5	19.8	15.9	18.5

<: Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 31
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-21 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID		PMW21-04		PMW21-05	
	Lab ID		L0709422-03		L0709422-04	
	Date	units	9/18/2007	9/18/2007	9/18/2007	
Acetone		ug/L	<10	<10	<10	
Carbon disulfide		ug/L	<1	<1	<1	
Chloromethane		ug/L	0.261 J	0.261 J	0.696 J	
cis-1,2-Dichloroethene		ug/L	2.22	2.22	0.52 J	
MEK (2-Butanone)		ug/L	<10	<10	<10	
Methyl t-butyl ether (MTBE)		ug/L	77.1	77.1	<5	
Tetrachloroethene		ug/L	103	103	36.3	
Trichloroethene		ug/L	50.7	50.7	30.2	

<: Not detected above Reporting Limit (RL)
J: Estimated result based on QC data or reported below RL
B: Estimated result possibly biased high or false positive based on blank data

TABLE 32
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	IW101-01A	IW101-01B	IW101-01B DUP	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A	IW101-03B	IW101-03C	IW101-04A
Lab ID	L0709182-10	L0709182-11	L0709182-09	L0709237-01	L0709237-02	L0709280-11	L0709280-12	L0709280-13	L0709280-16	L0709280-17	L0709280-07
Date	9/10/2007	9/10/2007	9/10/2007	9/11/2007	9/11/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007
Analyte	units	units	units	units	units	units	units	units	units	units	units
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.176 J	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	0.597 J	<1	<1	0.625 J	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.488 J	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.655 J	<1
Acetone	ug/L	79	9.95 B	<10	3.58 J	2.86 J	<10	3.24 J	5.79 J	<10	86.6
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Carbon disulfide	ug/L	0.886 J	<1	<1	<1	<1	<1	<1	<1	<1	0.712 J
Chloroform	ug/L	<0.3	0.125 J	0.159 J	<0.3	0.208 J	<0.3	<0.3	0.162 J	0.202 J	<0.3
Chloromethane	ug/L	<1	0.707 B	0.506 B	<1	1.02	<1	0.555 B	<1	0.749 B	<1
cis-1,2-Dichloroethene	ug/L	16.4	24.9	14.6	45	12.8	80.1	13	3.45	37.9	27
MEK (2-Butanone)	ug/L	58	4.42 J	<10	14.7 J	<10	56.2	14.7	<10	<10	243
Tetrachloroethene	ug/L	1.11	1.06	120	40.7	127	56.3 J	25.4 J	105 J	49.8 J	0.632 J
Trichloroethene	ug/L	<1	0.513 J	7.83	3.85	1.56	9.18	3.11	0.934 J	77.2	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 32
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-04B	IW101-04C	IW101-05A	IW101-05B	IW101-05C	IW101-05C DUP	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B
Lab ID	L0709346-11	L0709346-12	L0709237-05	L0709280-08	L0709280-09	L0709280-06	L0709237-07	L0709237-08	L0709322-02	L0709322-05	L0709322-02	L0709322-05
Date	9/14/2007	9/14/2007	9/11/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/11/2007	9/11/2007	9/11/2007	9/13/2007	9/13/2007
units												
1,1,2-Trichloroethane	<1	0.568 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	<1	0.517 J	<1	<1	<1	<1	<1	<1	<1	0.296 J	<1	0.187 J
1,1-Dichloroethene	<1	1.07	<1	<1	<1	<1	<1	<1	<1	0.637 J	<1	<1
1,2-Dichloroethane	<0.5	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.06	<0.5	0.462 J
1,2-Dichloropropane	<1	4.57	<1	<1	<1	<1	<1	<1	<1	1.28	<1	0.501 J
Acetone	<10	3.15 J	<10	<10	<10	3.48 J	3.03 J	3.19 J	3.16 J	4.03 J	8.61 J	5.05 J
Benzene	<0.4	0.453	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.136 J	<0.4	<0.4
Carbon disulfide	<1	<1	0.617 J	<1	<1	<1	<1	<1	<1	<1	2.66 J	<1
Chloroform	<0.3	0.409	0.17 J	<0.3	0.131 J	<0.3	<0.3	<0.3	0.149 J	0.333	<0.3	<0.3
Chloromethane	0.487 B	0.762 B	0.396 B	0.539 B	1.04	0.66 B	0.289 B	0.845 B	0.553 B	0.845 B	0.546 J	0.447 J
cis-1,2-Dichloroethene	53	259	26.7	36.5	64.8	64	3.24	3.24	0.469 J	109	20.4	96.9
MEK (2-Butanone)	90.3	11.1	19.6 J	<10	23.1	22.9	6.4 J	6.4 J	<10	14.1 J	17.4	20.1
Tetrachloroethene	1.34	7.36	69.2	66	49.2	47.5	17.4	17.4	44.2	26	6.87	3.3
Trichloroethene	0.658 J	33.3	3.93	2.05	6.27	5.91	1.23	1.23	9.7	78.1	7.43	9.15

<: Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 32
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	IW101-07C	IW101-08A	IW101-08B	IW101-08B DUP	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T	DR1-3
Lab ID	L0709322-06	L0709182-05	L0709182-06	L0709182-04	L0709182-07	L0709182-07	L0709322-07	L0709322-08	L0709346-13	L0709237-04	L0709237-03	L0709471-05
Date	9/13/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/13/2007	9/13/2007	9/14/2007	9/11/2007	9/11/2007	9/19/2007
units												
1,1,2-Trichloroethane	ug/L	1.65	<1	<1	<1	0.461 J	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	1.07	<1	<1	<1	0.767 J	<1	0.256 J	0.658 J	<1	<1	<1
1,1-Dichloroethene	ug/L	1.19	<1	<1	<1	1.05	<1	0.532 J	1.07	<1	<1	<1
1,2-Dichloroethane	ug/L	3.37	<0.5	<0.5	<0.5	1.34	<0.5	<0.5	0.389 J	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	4.8	<1	0.292 J	0.328 J	2	<1	0.51 J	1.61	<1	<1	<1
Acetone	ug/L	4.6 J	4.61 B	3.39 B	3.19 B	9.29 B	13.8 J	16.5	18.4	<10	8.98 J	<10
Benzene	ug/L	0.613	<0.4	<0.4	<0.4	0.455	<0.4	0.152 J	0.375 J	<0.4	<0.4	<0.4
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.556	<0.3	<0.3	<0.3	0.166 J	0.149 J	<0.3	0.217 J	0.164 J	0.162 J	<0.3
Chloromethane	ug/L	1.35	<1	0.615 B	0.734 B	<1	0.91 J	0.974 J	0.39 B	<1	0.38 B	0.991 J
cis-1,2-Dichloroethene	ug/L	387	9.11	54.5	55.1	286	0.438 J	138	235	7.35	0.609 J	30.7
MEK (2-Butanone)	ug/L	18.3	16.7	9.15 J	8.47 J	145	<10	186	182	<10	<10	<10
Tetrachloroethene	ug/L	13.4	0.627 J	3.69	3.67	4.61	0.795 J	3.81	14.2	147	134	0.45 J
Trichloroethene	ug/L	57	<1	4.3	3.95	18.2	<1	11.5	55.8	0.646 J	0.46 J	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 32
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Sample ID	DR1-3 DUP	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A
Lab ID	L0709471-03	L0709322-10	L0709322-11	L0709322-12	L0709322-13	L0709399-04	L0709399-05	L0709399-06	L0709399-07	L0709399-08
Date	9/19/2007	9/13/2007	9/13/2007	9/13/2007	9/13/2007	9/17/2007	9/17/2007	9/17/2007	9/17/2007	9/17/2007
Analyte	units									
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	ug/L	0.359 J	0.682 J	0.462 J	0.529 J	0.318 B	<1	0.359 B	0.52 B	0.736 B
cis-1,2-Dichloroethene	ug/L	31.6	61.3	70.4	110	12.2	91.5	86.9	72.1	90.6
MEK (2-Butanone)	ug/L	<10	5.09 J	11.1	24.9	<10	<10	2.97 J	<10	4.61 J
Tetrachloroethene	ug/L	0.486 J	12.1	12.4	0.613 J	60.1	14.4	12.2	14.1	0.367 J
Trichloroethene	ug/L	<1	0.846 J	1.47	<1	0.471 J	1.02	1.31	1.65	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 32
VOC ANALYTICAL RESULTS SUMMARY, FOURTH QUARTER - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Sample ID	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
Lab ID	L0709399-09	L0709422-09	L0709422-10	L0709422-11	L0709422-12	L0709422-13	L0709471-04	L0709471-04
Date	9/17/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/19/2007
units								
1,1,2-Trichloroethane	0.361 J	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	0.348 J	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	0.593 J	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.837	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	1.58	<1	<1	<1	<1	<1	<1	0.293 J
Acetone	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	0.223 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.182 J
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	0.334	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.15 J
Chloromethane	0.318 B	<1	<1	<1	<1	<1	<1	0.383 J
cis-1,2-Dichloroethene	59.2 J	0.798 J	39.7	0.711 J	1.37	<1	<1	6.21
MEK (2-Butanone)	3.15 J	<10	7.03 J	0.488 J	<10	<10	<10	<10
Tetrachloroethene	34.3 J	7.26	<1	0.294 J	22.8	3.46	41.7	
Trichloroethene	161 J	<1	<1	<1	40.1	0.32 J	125	

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE 33
VOC ANALYTICAL RESULTS, FOURTH QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot, Memphis, Tennessee

Analyte	Sample ID	IW85-01	IW85-02	IW85-05	IW85-05 DUP	IW85-06	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05	IW92-06
Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
units	units	units	units	units	units	units	units	units	units	units	units	units
1,2,3-Trichloropropane	53.1	96	16.4	19.3	94.6	<1	<1	<1	<1	<1	<2	<1
1,2-Dichloroethane	0.62	1.57	0.671	0.679	0.984	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
1,2-Dichloropropane	0.38 J	0.406 J	0.273 J	0.258 J	0.51 J	<1	<1	<1	<1	<1	<2	<1
1,4-Dichlorobenzene	0.142 J	<0.5	0.177 J	0.184 J	0.211 J	0.196 J	0.157 J	0.137 J	0.369 J	0.369 J	<1	<0.5
Acetone	4.08 J	77.3 J	21.1	23.8 J	9.6 J	10.7	28.4	20	60.5	60.5	515	178 J
Carbon disulfide	0.97 J	1.01	0.844 J	0.827 J	<1	0.516 J	<1	<1	<1	<1	1.02 J	1.09
Carbon tetrachloride	83	13.9	62.2	67.2	1.02	6.33	3.17	<1	0.328 J	0.328 J	<2	<1
Chloroform	63	54.2	73.5	79.6	87.9	11	12.3	7.05	0.744	0.744	1.56	1.53
Chloromethane	0.684 J	1.77 B	<1	0.539 B	0.902 J	1.01	0.26 J	<1	<1	<1	<2	0.344 B
cis-1,2-Dichloroethene	59.4	81	40.5	45.6	105	65.4	105	105	90.9	90.9	67.4	39.9
MEK (2-Butanone)	3.33 J	127	14.2	14.1	5.39 J	7.21 J	14.4	26.7	79.8	79.8	556	336
Methylene chloride	<1	7.27	<1	0.287 B	<1	<1	1.64	2.2	<1	<1	1.43 J	6.06
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	1.91
Tetrachloroethene	34.6	4.14	21.4	24.3	2.35	42.9	13.4	9.74	0.396 J	0.396 J	2.13	17
Trichloroethene	13.9	2.39	10.3	12	2.16	14	4.55	3.21	<1	<1	0.867 J	3.07
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

<: Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 33
VOC ANALYTICAL RESULTS, FOURTH QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot, Memphis, Tennessee

Sample ID	IW92-07	IW92-08	IW92-08	IW92-08 DUP	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-04	PMW85-05	PMW92-01
Lab ID	L0709346-03	L0709399-02	L0709399-02	L0709399-12	L0709280-05	L0709322-16	L0709346-06	L0709237-13	L0709182-01	L0709182-02	L0709182-03	L0709280-02
Date	9/14/2007	9/17/2007	9/17/2007	9/17/2007	9/12/2007	9/13/2007	9/14/2007	9/11/2007	9/10/2007	9/10/2007	9/10/2007	9/12/2007
Analyte	units											
1,2,3-Trichloropropane	ug/L	<1	73.6	75.8	<1	29.1	1.6 J	36.2	13.8	83.9	171	<1
1,2-Dichloroethane	ug/L	0.505	0.967	1.19	<0.5	0.555	0.445 J	0.644	0.586	1.02	1.39	<0.5
1,2-Dichloropropane	ug/L	0.328 J	0.425 J	0.446 J	<1	0.222 J	0.342 J	<1	0.216 J	0.427 J	0.86 J	<1
1,4-Dichlorobenzene	ug/L	<0.5	0.528	0.541	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.147 J	<0.5
Acetone	ug/L	191 J	57.2	60.9	9.77 J	<10	8.02 J	6.4 J	7.31 B	14.9 B	<10	<10
Carbon disulfide	ug/L	0.761 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	10.5	0.376 J	0.415 J	13.4	123	30.6 J	75.1	102	6.41	152	9.62
Chloroform	ug/L	12.2	15.3	16.8	8.58	42.2	16.5	44.2	63.7	91.9	70.9	8.79
Chloromethane	ug/L	<1	<1	0.473 B	0.372 B	0.611 J	0.677 B	0.634 B	0.488 B	0.393 B	0.473 B	0.477 B
cis-1,2-Dichloroethene	ug/L	85	43.9	46.7	50.4	30.5	59.4 J	37.4	18	96.9	88.9	23.6
MEK (2-Butanone)	ug/L	131	100	96.8	183	<10	<10	3.51 J	3.84 J	9.14 J	<10	<10
Methylene chloride	ug/L	1.57 B	2.25	2.64	<1	<1	<1	0.59 B	<1	3.37	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	51.4	2.27	2.07	138	46.8	148 J	32.5	45.3	7.53	116	108
Trichloroethene	ug/L	4.91	0.775 J	0.806 J	4.54	16	14.8	14.3	12.7	4.11	35.4	4.09
Vinyl chloride	ug/L	<1	<1	<1	1.25	<1	0.474 J	<1	<1	<1	<1	<1

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 33
VOC ANALYTICAL RESULTS, FOURTH QUARTER - TTA-2
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot, Memphis, Tennessee

Analyte	Sample ID	PMW92-02	PMW92-03	PMW92-03 DUP	PMW92-04	PMW92-05	PMW92-06
Lab ID	L0709280-03	L0709280-04	L0709280-01	L0709237-10	L0709237-11	L0709237-12	
Date	9/12/2007	9/12/2007	9/12/2007	9/11/2007	9/11/2007	9/11/2007	
units							
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	0.951 J	133
1,2-Dichloroethane	ug/L	<0.5	0.601	0.558	0.446 J	0.525	2.3
1,2-Dichloropropane	ug/L	<1	0.423 J	0.374 J	0.224 J	<1	1.02
1,4-Dichlorobenzene	ug/L	0.172 J	<0.5	<0.5	<0.5	<0.5	<0.5
Acetone	ug/L	73	2.74 J	<10	<10	<10	6.23 J
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	2.32	2.09	9.28	70.8	53.2
Chloroform	ug/L	0.751	25.7	24.8	15.7	25	114
Chloromethane	ug/L	0.366 B	0.303 B	<1	<1	0.484 B	<1
cis-1,2-Dichloroethene	ug/L	130	182	177	139	26.9	149
MEK (2-Butanone)	ug/L	74.2	<10	<10	<10	<10	<10
Methylene chloride	ug/L	<1	<1	<1	<1	<1	0.908 B
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	0.689 J	31.8	29.5	55.5	222	69.7
Trichloroethene	ug/L	<1	5.09	4.87	5.34	18	21.5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

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B: Estimated result possibly biased high or false positive based on blank data

TABLE 34
 CVOC CONCENTRATION TRENDS - TTA-1, MW-21 AREA
 YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
 Main Installation - Defense Depot Memphis, Tennessee

Tetrachloroethene						Trichloroethene						cis 1,2-Dichloroethene					
Baseline	EBT-1	EBT-2	EBT-3	EBT-4	Change*	Baseline	EBT-1	EBT-2	EBT-3	EBT-4	Change*	Baseline	EBT-1	EBT-2	EBT-3	EBT-4	Change*
Injection Well	µg/L	µg/L	µg/L	µg/L	µg/L	Injection Well	µg/L	µg/L	µg/L	µg/L	µg/L	Injection Well	µg/L	µg/L	µg/L	µg/L	µg/L
IW21-01A	234	197	111	41.5	88.6	IW21-01A	55.7	63.8	35.9	15.6	41.9	IW21-01A	3.17	3.05	9.09	12.6	49.5
IW21-01B	144	151	90.5	46.9	132	-145.4	IW21-01B	30.1	35.2	5.43	26.8	IW21-01B	1.99	2.42	0.917	64.8	109
IW21-02A	99.7	117	119	127	132	-142.7	IW21-02A	17	21.4	19.9	19.4	IW21-02A	1.78	1.45	1.37	1.32	2.05
IW21-02B	80.2	99.2	87.4	94.3	75.8	-4.4	IW21-02B	14.8	16.3	11.6	11.2	IW21-02B	0.99	0.888	0.787	0.89	14.2
IW21-03A	193	158	167	189	79.4	-113.6	IW21-03A	56.1	50.9	47.7	52.4	IW21-03A	2.71	1.75	2.13	2.25	1.77
IW21-03B	49.4	50.8	16.3	42.3	56.4	7.0	IW21-03B	23.4	19.1	11.6	26.4	IW21-03B	0.916	0.633	<1	2.34	3.1
IW21-04A	276	79	142	127	14.8	-261.2	IW21-04A	64.5	28.8	46.1	38.1	IW21-04A	4.13	70.3	68.8	17.9	87.1
IW21-04B	286	223	101	68	10.2	-275.8	IW21-04B	56.4	55.6	33.6	29	IW21-04B	3.57	12.8	30.8	26.1	74.4
IW21-05A	83.6	99.1	52.2	47.1	7.7	-75.9	IW21-05A	30.8	31	18.4	17.7	IW21-05A	1.55	1.36	3.14	7.44	34.8
IW21-05B	41.5	81.7	64	54.2	32.2	-9.3	IW21-05B	16.7	25	17.7	14.5	IW21-05B	0.756	0.725	2.08	5.11	21.7
Monitoring Well						Monitoring Well						Monitoring Well					
MW-21	106	129	130	12.1	132	26.0	MW-21	16.3	19.8	25	2.14	MW-21	1.33	1.17	1.66	0.49	1.95
MW-115	10.1	9.16	10.4	134	9.62	-0.5	MW-115	4.96	2.18	1.85	28.3	MW-115	4.2	0.684	0.253	1.53	10.2
PMW21-01	156	193	152	165	122	-34.0	PMW21-01	40.6	46.4	37.2	39.9	PMW21-01	1.96	2.27	2.06	2.74	2
PMW21-02	108	62.5	45.2	44.4	44.7	-63.3	PMW21-02	37.8	22	17.6	18.3	PMW21-02	1.51	0.825	0.823	0.19	0.782
PMW21-03	185	46.3	32.5	25.6	49	-136.0	PMW21-03	58	14.6	9.78	6.73	PMW21-03	2.55	0.527	0.485	0.36	0.636
PMW21-04	199	190	148	123	103	-96.0	PMW21-04	87.7	84.5	64.3	60.2	PMW21-04	2.94	2.47	2.46	2.22	-0.7
PMW21-05	6.37	8.66	18.7	27.9	36.3	29.9	PMW21-05	34.4	18.3	14	17.1	PMW21-05	0.525	0.278	0.346	0.44	0.52

TABLE 35
CVOC CONCENTRATION TRENDS - TTA-1, MW-101 AREA
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Tetrachloroethene						
Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change* µg/L
IW101-01A	47.5	19.1	19.8	5.02	1.11	-46.4
IW101-01B	71.8	65.3	52.5	5.85	1.06	-70.7
IW101-01C	228	183	178	136	120	-108.0
IW101-02A	232	189	176	88.1	40.7	-191.3
IW101-02B	221	174	195	103	127	-94.0
IW101-02C	190	168	157	82.3	56.3	-133.7
IW101-03A	3.95	38.8	50.2	37.1	25.4	21.5
IW101-03B	89.9	154	136	99.7	105	15.1
IW101-03C	59	54.7	36.1	50.6	49.8	-9.2
IW101-04A	190	123	71.3	4.21	0.632	-189.4
IW101-04B	182	4.12	0.622	0.35	1.34	-180.7
IW101-04C	169	102	6.12	4.78	7.36	-161.6
IW101-05A	63.1	181	89.8	73.3	69.2	6.1
IW101-05B	202	181	89.7	95.1	66	-136.0
IW101-05C	219	194	63	47.8	49.2	-169.8
IW101-06A	6.84	5.34	8.14	17.4	17.4	10.6
IW101-06B	47	61.1	61.8	55.6	44.2	-2.8
IW101-06C	66.2	68.6	58.8	18.8	26	-40.2
IW101-07A	5.16	22.2	15.7	5.78	6.87	1.7
IW101-07B	38	38.2	24.6	8.88	3.3	-34.7
IW101-07C	60.9	102	65.7	38.9	13.4	-47.5
IW101-08A	0.907	0.944	0.963	0.86	0.627	-0.3
IW101-08B	17.5	15.3	12.8	10.9	3.69	-13.8
IW101-08C	66.6	80.2	27.3	13.8	4.61	-62.0
IW101-09A	0.572	2.55	0.654	0.9	0.795	0.2
IW101-09B	45.8	46.4	30.6	18.1	3.81	-42.0
IW101-09C	101	110	58.4	62.7	14.2	-86.8

Trichloroethene						
Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change* µg/L
IW101-01A	0.625	0.721	1.64	0.44	<1	0.6
IW101-01B	<1	<1	0.346	2.1	0.513	0.5
IW101-01C	0.91	0.972	5.26	4.23	7.83	6.9
IW101-02A	<1	<1	1.72	3.69	3.85	3.8
IW101-02B	0.406	<1	<1	4.03	1.56	1.2
IW101-02C	3.74	20.5	18.5	13.8	9.18	5.4
IW101-03A	<1	<1	0.459	0.93	3.11	3.1
IW101-03B	1.08	1.33	1.15	<1	0.934	-0.1
IW101-03C	78.5	141	75.8	77.8	77.2	-1.3
IW101-04A	0.312	0.462	2.23	2.06	<1	0.3
IW101-04B	0.278	1.46	<1	<1	0.658	0.4
IW101-04C	29.7	113	15.9	18.9	33.3	3.6
IW101-05A	<1	<1	4.11	8.07	3.93	3.9
IW101-05B	0.319	<1	2.93	1.57	2.05	1.7
IW101-05C	3.44	9.2	7.04	6.96	6.27	2.8
IW101-06A	<1	<1	0.292	0.61	1.23	1.2
IW101-06B	64.7	13.2	11.8	8.62	9.7	-55.0
IW101-06C	204	241	209	65.3	78.1	-125.9
IW101-07A	2.61	31.1	13.5	2.37	7.43	4.8
IW101-07B	138	140	81.8	28.4	9.15	-128.9
IW101-07C	207	402	267	191	57	-150.0
IW101-08A	0.983	0.796	0.797	0.48	<1	-1.0
IW101-08B	51	55.3	34.1	25.3	4.3	-46.7
IW101-08C	240	270	111	52.1	18.2	-221.8
IW101-09A	0.321	0.763	<1	0.28	<1	-0.3
IW101-09B	96	173	111	50.6	11.5	-84.5
IW101-09C	316	337	209	207	55.8	-260.2

cis-1,2-Dichloroethene						
Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change* µg/L
IW101-01A	<1	<1	5.24	15.5	16.4	16.4
IW101-01B	0.253	<1	1.97	23.7	24.9	24.6
IW101-01C	<1	<1	<1	1.04	14.6	14.6
IW101-02A	<1	<1	9.79	24.1	45	45.0
IW101-02B	<1	<1	0.489	18	12.8	12.8
IW101-02C	0.275	1.04	7.17	54.1	80.1	79.8
IW101-03A	<1	<1	2.69	6.91	13	13.0
IW101-03B	<1	<1	2.95	0.78	3.45	3.5
IW101-03C	3.03	21.6	63.1	30.7	37.9	34.9
IW101-04A	<1	<1	10.6	30	27	27.0
IW101-04B	<1	94.3	82.8	70.9	53	53.0
IW101-04C	1.62	39.8	182	190	259	257.4
IW101-05A	<1	<1	21.1	30.1	26.7	26.7
IW101-05B	<1	<1	30.6	28.5	36.5	36.5
IW101-05C	0.284	0.399	74.3	85.6	64.8	64.5
IW101-06A	<1	<1	<1	2.1	3.24	3.2
IW101-06B	2.19	0.433	0.621	1.59	0.469	-1.7
IW101-06C	11.2	16.8	38.8	134	109	97.8
IW101-07A	<1	0.938	7.51	8.18	20.4	20.4
IW101-07B	5.63	4.37	39.4	88	96.9	91.3
IW101-07C	16.2	25.8	125	171	387	370.8
IW101-08A	0.318	<1	0.323	3.34	9.11	8.8
IW101-08B	2.09	2.33	4.72	19.4	54.5	52.4
IW101-08C	19.9	16.7	240	255	286	266.1
IW101-09A	<1	<1	<1	0.41	0.438	0.4
IW101-09B	5.36	10.2	99.3	93.3	138	132.6
IW101-09C	22.9	26.1	112	114	235	212.1

Monitoring Well						
DR1-3	MW-101B	MW-101T	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B
<1	0.279	0.266	0.257	0.3	<1	0.326
<1	27.6	9.4	0.621	5.98	57	7.27
<1	32.9	1.01	0.43	17.3	61.0	93.3
<1	30.7	7.1	0.609	8.07	70.4	110
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30.7	7.1	8.07	7.8	70.4	109.7
<1	30					

Monitoring Well

Monitoring Well

Monitoring Well

Monitoring Well														Monitoring Well													
DR1-3														DR1-3													
MW-101B	239	192	193	135	147	-45.3		0.293	<1	0.358	0.31	0.646	0.4	MW-101B	0.279	<1	27.6	32.9	30.7	30.7							
MW-101T	251	196	192	123	134	-117.0		0.298	<1	<1	0.36	0.46	0.2	MW-101T	0.266	<1	9.4	1.01	7.35	7.1							
PMW101-01A	110	29.7	28.9	9.59	<1	-110.0		<1	14.2	4.48	1.54	<1	-14.2	PMW101-01A	0.257	<1	5.98	17.3	8.07	7.8							
PMW101-01B	158	137	45.1	20.8	12.1	-145.9		1.19	32.1	7.05	0.82	0.846	-0.3	PMW101-01B	0.3	1.77	56.8	57	61.3	61.0							
PMW101-02A	257	192	176	50.8	12.4	-244.6		0.322	<1	3.22	6.43	1.47	1.1	PMW101-02A	<1	<1	6.72	51.2	70.4	70.4							
PMW101-02B	196	191	151	15.3	0.613	-195.4		4.73	1.25	11.1	4.29	<1	-4.7	PMW101-02B	0.326	<1	7.27	93.3	110	109.7							
PMW101-03A	100	112	99.7	88	60.1	-39.9		<1	<1	<1	<1	0.471	0.5	PMW101-03A	<1	<1	<1	<1	12.2	12.2							
PMW101-03B	144	194	134	123	14.4	-129.6		2.41	1.66	1.7	2	1.02	-1.4	PMW101-03B	<1	<1	26.4	19.9	91.5	91.5							
PMW101-04A	199	176	177	138	12.2	-186.8		0.26	<1	<1	1.2	1.31	1.1	PMW101-04A	<1	<1	<1	20.9	86.9	86.9							
PMW101-04B	90.4	109	104	19.1	14.1	-76.3		23.2	9.06	3.04	1.24	1.65	-21.6	PMW101-04B	0.971	0.394	18.8	86.3	72.1	71.1							
PMW101-05A	194	78.8	0.462	0.63	0.367	-193.6		<1	12	<1	<1	<1	-12.0	PMW101-05A	<1	71.3	113	110	90.6	90.6							
PMW101-05B	38.7	37.5	36.5	43.2	34.3	-4.4		151	144	172	190	161	10.0	PMW101-05B	8.85	7.84	21	34.9	59.2	50.4							
PMW101-06A	4.16	5.66	5.86	4.62	7.26	3.1		<1	<1	<1	<1	<1	<1	PMW101-06A	<1	0.0	0.68	2.9	0.798	0.8							
PMW101-06B	23.3	37.6	0.294	<1	<1	-23.3		16.2	18.6	<1	<1	<1	-18.6	PMW101-06B	0.687	0.722	45	40.3	39.7	39.0							
PMW101-07A	0.562	0.65	0.662	0.75	0.294	-0.3		0.782	0.532	0.54	0.27	<1	-0.8	PMW101-07A	0.263	<1	<1	0.43	0.488	0.2							
PMW101-07B	53.6	46.4	24.3	21.4	22.8	-30.8		187	154	47	37	40.1	-146.9	PMW101-07B	14.6	11.8	1.9	1.44	1.37	-13.2							
PMW101-08A	0.735	0.522	7.02	24.4	3.46	2.7		<1	<1	<1	0.32	0.32	0.3	PMW101-08A	0.288	<1	<1	<1	<1	-0.3							
PMW101-08B	46.6	61.4	39.5	37.7	41.7	-4.9		232	227	165	144	125	-107.0	PMW101-08B	12.8	13	6.25	7.17	6.21	-6.6							

TABLE 36
CVOC CONCENTRATION TRENDS - TTA-2
YEAR ONE REMEDIAL ACTIONS OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Tetrachloroethene						Trichloroethene						cis 1,2-Dichloroethene								
Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change*	Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change*	Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change*
IW85-01	79.2	67	86.4	56.8	34.6	-44.6	IW85-01	26.3	24.2	31.1	20.9	13.9	-12.4	IW85-01	40.3	35.3	37.6	33.4	59.4	19.1
IW85-02	48.7	65.6	13.1	8.91	4.14	-44.6	IW85-02	15.5	21.1	6.85	4.65	2.39	-13.1	IW85-02	29.4	33.6	65.4	68	81	51.6
IW85-04	1.06	59.6	-	-	-	-	IW85-04	<1	5.35	-	-	-	-	IW85-04	0.677	3.18	-	-	-	-
IW85-05	-	-	76.4	67.3	21.4	-55.0	IW85-05	-	-	25.1	18.5	10.3	-14.8	IW85-05	-	-	27.1	15.3	40.5	13.4
IW85-06	-	-	31	1.98	2.35	-28.7	IW85-06	-	-	9.93	1.67	2.16	-7.8	IW85-06	-	-	18.4	121	105	86.6
IW92-01	160	228	170	71.4	42.9	-117.1	IW92-01	6.36	7.45	6.09	25	14	7.6	IW92-01	14.1	15.2	11.1	78.6	65.4	51.3
IW92-02	104	228	54	90.5	13.4	-90.6	IW92-02	4.01	4.68	6.58	14.2	4.55	0.5	IW92-02	10.4	3.27	9.94	113	105	94.6
IW92-03	184	173	181	146	9.74	-174.3	IW92-03	6.84	4.19	5.91	14.4	3.21	-3.6	IW92-03	9.31	2.62	9.13	40.2	105	95.7
IW92-04	170	241	22.9	4.01	0.396	-169.6	IW92-04	6.16	6.76	14.2	0.89	<1	-6.2	IW92-04	10.2	12	166	186	90.9	80.7
IW92-05	194	175	95.1	13	2.13	-191.9	IW92-05	6.1	6.96	5.13	1.21	0.867	-5.2	IW92-05	5.89	5.42	5.14	16.5	67.4	61.5
IW92-06	51.2	133	110	41.6	17	-34.2	IW92-06	2.58	6.36	6.92	12.9	3.07	0.5	IW92-06	3.12	7.4	9.96	38	39.9	36.8
IW92-07	196	213	118	87.8	51.4	-144.6	IW92-07	9.2	11.4	10.1	7.62	4.91	-4.3	IW92-07	13.3	16.4	54.5	59.1	85	71.7
IW92-08	156	136	41.5	11.9	2.27	-153.7	IW92-08	26.9	18.9	22.4	6.31	0.775	-26.1	IW92-08	57.9	38.3	142	192	43.9	-14.0
Monitoring Well							Monitoring Well							Monitoring Well						
DR2-1	176	191	194	160	138	-38.0	DR2-1	8.51	8.49	7.91	7.21	4.54	-4.0	DR2-1	17	34.7	19.3	15.2	50.4	33.4
DR2-5	54.2	45.3	49.5	41.1	46.8	-7.4	DR2-5	18.3	15.4	18.5	14.4	16	-2.3	DR2-5	31	27.7	32.9	25.9	30.5	-0.5
IW-01	40.4	8.25	78.4	78.4	148	107.6	IW-01	5.85	1.89	9.04	9.36	14.8	9.0	IW-01	149	154	73.2	65.5	59.4	-89.6
MW-85	74.8	73.4	58.6	37.8	32.5	-42.3	MW-85	25.1	24.4	20.3	15.5	14.3	-10.8	MW-85	26.1	32.2	23.8	18.6	37.4	11.3
PMW85-01	79.6	76.6	51.2	57.2	45.3	-34.3	PMW85-01	26.1	23.7	18.1	12.5	12.7	-13.4	PMW85-01	28.3	25.8	13.4	8.2	18	-10.3
PMW85-02	-	19.2	-	-	-	-	PMW85-02	-	5.18	-	-	-	-	PMW85-02	-	1.92	-	-	-	-
PMW85-04	-	-	79.5	62.1	7.53	-72.0	PMW85-04	-	-	25.6	23.2	4.11	-21.5	PMW85-04	-	-	38.9	48.9	96.9	58.0
PMW85-05	-	-	119	119	116	-3.0	PMW85-05	-	-	37.9	36.5	35.4	-2.5	PMW85-05	-	-	83.3	84.1	88.9	5.6
PMW92-01	73	128	109	123	108	35.0	PMW92-01	2.87	4.32	4.02	4.9	4.09	1.2	PMW92-01	4.72	6.02	6.08	13.6	23.6	18.9
PMW92-02	157	13	1.58	1.47	0.689	-156.3	PMW92-02	5.81	4.03	0.518	0.28	<1	-5.8	PMW92-02	10.9	172	171	150	130	119.1
PMW92-03	252	252	170	54.4	31.8	-220.2	PMW92-03	11.5	12	9.92	7.03	5.09	-6.4	PMW92-03	19.9	21.3	70.7	166	182	162.1
PMW92-04	165	142	38.1	22	55.5	-109.5	PMW92-04	7.8	7.21	7.35	2.73	5.34	-2.5	PMW92-04	10.7	10.6	116	148	139	128.3
PMW92-05	223	196	195	194	222	-1.0	PMW92-05	17.1	16.6	15	16.3	18	0.9	PMW92-05	26.2	27.6	25.9	28.3	26.9	0.7
PMW92-06	179	173	155	153	69.7	-109.3	PMW92-06	39.7	37.8	34	36.4	21.5	-18.2	PMW92-06	91.4	81.1	74.5	91.5	149	57.6

* Note that the change represents the overall change from the baseline through the 4th Quarter (EBT-4) except for IW85-05, IW85-06, PMW85-04, and PMW85-05 where the change is from the 2nd to 4th Quarters

Note: 1) Wells IW85-03, IW85-04, PMW85-02 and PMW85-03 were installed in a perched zone and were replaced with IW85-05, IW85-06, PMW85-04, and PMW85-5.

TABLE 36
CVOC CONCENTRATION TRENDS - TTA-2
YEAR ONE REMEDIAL ACTIONS OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Carbon Tetrachloride							Chloroform						
Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change* µg/L	Injection Well	Baseline µg/L	EBT-1 µg/L	EBT-2 µg/L	EBT-3 µg/L	EBT-4 µg/L	Change* µg/L
IW85-01	168	68.3	161	107	83	-85.0	IW85-01	51.8	78.2	77.8	76.3	63	11.2
IW85-02	71.4	39.2	2.48	1.18	13.9	-57.5	IW85-02	39.5	62.4	42.6	50.8	54.2	14.7
IW85-04	2.02	96.1	-	-	-	-	IW85-04	7.04	191	-	-	-	-
IW85-05	-	-	199	169	62.2	-136.8	IW85-05	-	-	67.7	82.4	73.5	5.8
IW85-06	-	-	3.02	7.5	1.02	-2.0	IW85-06	-	-	39.6	76.9	87.9	48.3
IW92-01	22.7	23.6	18.8	8.67	6.33	-16.4	IW92-01	7.83	9.7	9.02	13.9	11	3.2
IW92-02	13	38.7	4.37	9.79	3.17	-9.8	IW92-02	9.49	25.2	14.1	23	12.3	2.8
IW92-03	30.5	5.27	8.72	1.8	<1	-30.5	IW92-03	12.8	24.7	14.3	12.2	7.05	-5.8
IW92-04	30	2.6	<1	<1	0.328	-29.7	IW92-04	13.1	20.8	29.9	19.5	0.744	-12.4
IW92-05	29.9	1.14	<1	<1	<2	-29.9	IW92-05	18.5	2.08	1.83	0.562	1.56	-16.9
IW92-06	8.77	3.99	<1	<1	<1	-8.8	IW92-06	7.63	23.2	18.4	4.43	1.53	-6.1
IW92-07	38.4	39.9	25.7	15.5	10.5	-27.9	IW92-07	21	20.2	14.7	13.1	12.2	-8.8
IW92-08	103	50	8.21	5.44	0.376	-102.6	IW92-08	68.9	108	97.2	89.7	15.3	-53.6
Monitoring Well													
DR2-1	32.3	29	22.6	25.7	13.4	-18.9	DR2-1	9.91	13.3	10	8.76	8.58	-1.3
DR2-5	142	100	138	132	123	-19.0	DR2-5	46.7	35.8	44	37.6	42.2	-4.5
IW-01	9.79	1.39	16.6	13.9	30.6	20.8	IW-01	8.72	3.31	9.98	9.16	16.5	7.8
MW-85	188	179	123	106	75.1	-112.9	MW-85	43.8	49.5	36.2	34.6	44.2	0.4
PMW85-01	222	199	161	171	102	-120.0	PMW85-01	58.9	56.9	46.4	56.1	63.7	4.8
PMW85-02	-	103	-	-	-	-	PMW85-02	-	41.5	-	-	-	-
PMW85-04	-	-	57.9	48.7	6.41	-51.5	PMW85-04	-	-	69.8	62.5	91.9	22.1
PMW85-05	-	-	155	157	152	-3.0	PMW85-05	-	-	68.9	69	70.9	2.0
PMW92-01	8.92	18.6	11.8	10.7	9.62	0.7	PMW92-01	5.59	7.82	8.34	8.55	8.79	3.2
PMW92-02	19.8	0.462	<1	<1	<1	-19.8	PMW92-02	12.2	4.42	8.75	8.52	0.751	-11.4
PMW92-03	58.1	41.9	19.3	7.59	2.32	-55.8	PMW92-03	19.2	18.9	27.4	31	25.7	6.5
PMW92-04	33.1	17.7	5.38	4.38	9.28	-23.8	PMW92-04	11.4	10.7	17.3	25.1	15.7	4.3
PMW92-05	77.5	55.3	57	56.6	70.8	-6.7	PMW92-05	28.8	22.1	22.8	24.2	25	-3.8
PMW92-06	182	132	114	117	53.2	-128.8	PMW92-06	82.7	68.9	79.4	85.8	114	31.3

* Note that the change represents the overall change from the baseline through the 4th Quarter (EBT-4) except for IW85-05, IW85-06, PMW85-04, and PMW85-05 where the change is from the 2nd to 4th Quarters

Note 1) Wells IW85-03, IW85-04, PMW85-02 and PMW85-03 were installed in a perched zone and were replaced with IW85-05, IW85-06, PMW85-04, and PMW85-5

TABLE 37
EBT WELL CLASSIFICATION FOR REDUCTIVE DECHLORINATION
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Best		Positive	Negative
IW21-01A	IW92-05	IW21-02B	IW-01
IW21-01B	IW92-07	IW21-03A	IW101-03B
IW21-04A	IW92-08	IW21-05B	IW101-06A
IW21-04B	DR1-3	IW101-01C	IW101-06B
IW21-05A	PMW 85-04	IW101-02A	IW101-08A
IW101-01A	PMW 92-02	IW101-02B	IW101-09A
IW101-01B	PMW 92-03	IW101-03A	IW21-02A
IW101-02C	PMW 92-04	IW101-03C	IW21-03B
IW101-04A	PMW 92-06	IW101-05A	DR2-5
IW101-04B	PMW101-01A	IW101-05B	MW-115
IW101-04C	PMW101-01B	IW101-07A	MW-21
IW101-05C	PMW101-02A	IW85-01	PMW21-01
IW101-06C	PMW101-02B	IW85-05	PMW21-05
IW101-07B	PMW101-03A	IW92-06	PMW101-06A
IW101-07C	PMW101-03B	DR2-1	PMW101-07A
IW101-08B	PMW101-04A	MW-85	PMW101-08A
IW101-08C	PMW101-04B	MW-101B	PMW101-08B
IW101-09B	PMW101-05A	MW-101T	PMW85-05
IW101-09C	PMW101-06B	PMW 21-02	PMW92-01
IW85-02	PMW101-07B	PMW 21-03	PMW92-05
IW85-06		PMW 21-04	
IW92-01		PMW 85-01	
IW92-02		PMW101-05B	
IW92-03			
IW92-04			

Well classification criteria:

Best: Active reductive chlorination

Positive: Reductive chlorination or mass loss

Negative: Neither reductive chlorination nor mass loss

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

FIGURES

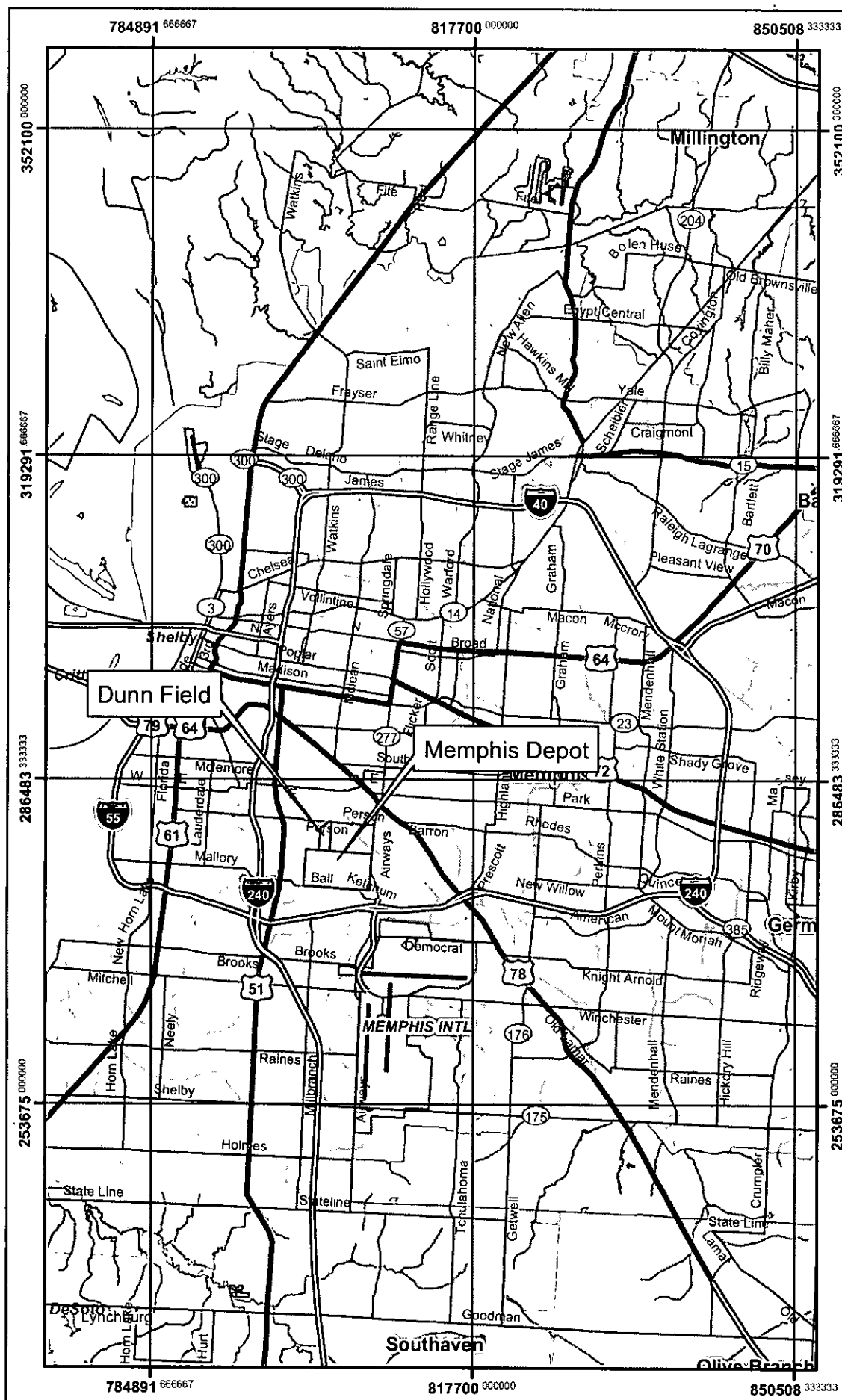


Figure 1

SITE LOCATION MAP

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

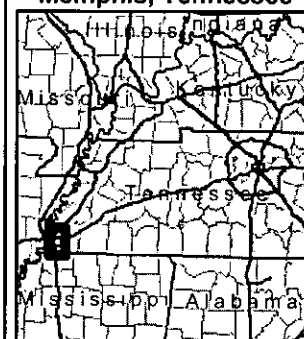
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 0.6 1.2 1.8 2.4 3 Miles

Installation Location
Memphis, Tennessee



Date: April 2008
Edition: Rev 0



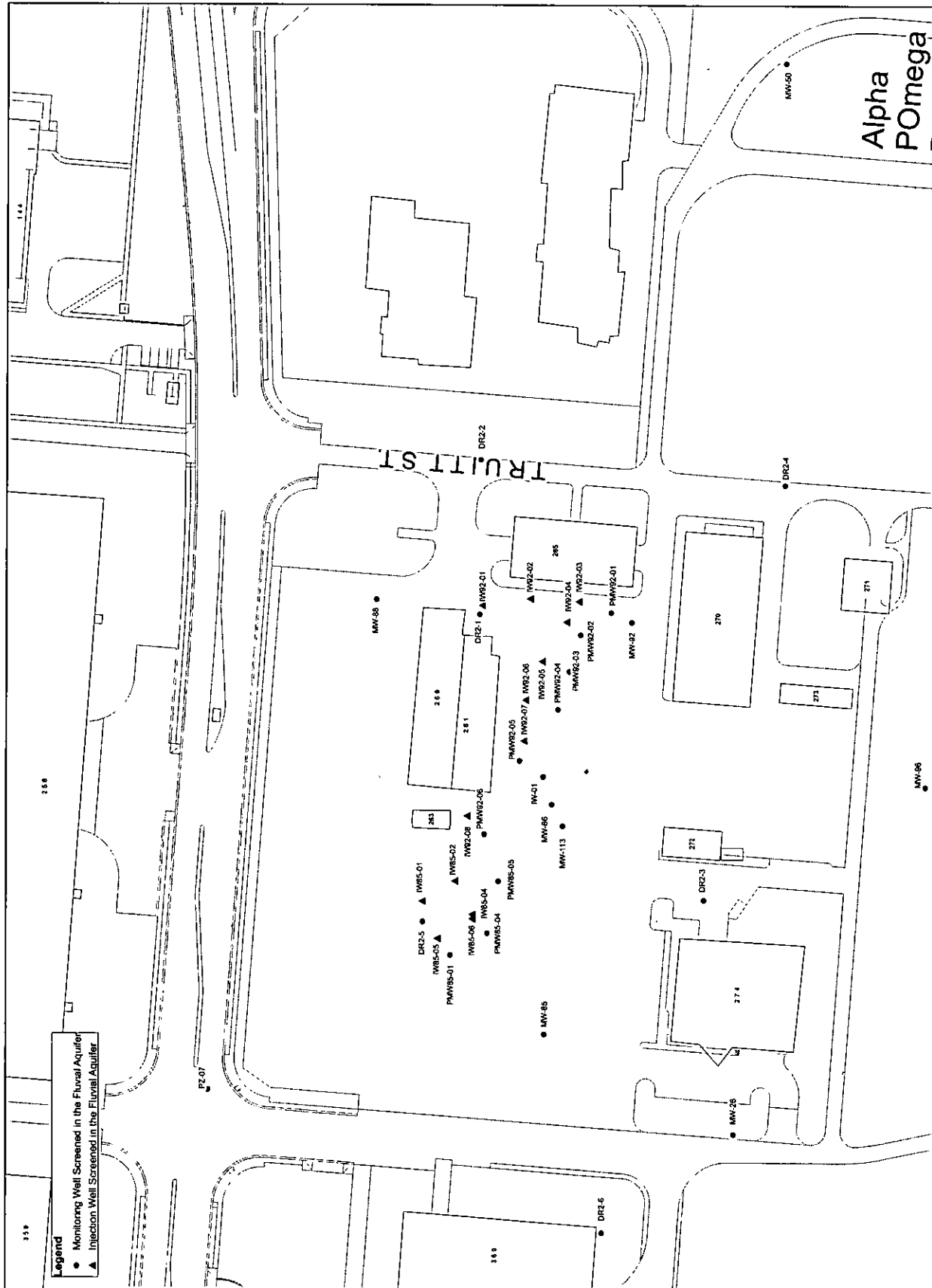


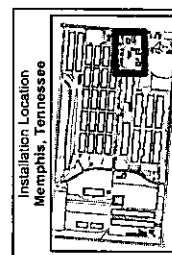
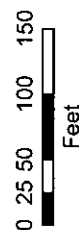
Figure 3

WELL LOCATIONS, TTA-2

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection: NAD 1927 StatePlane Tennessee
Units: Feet



Date: April 2008
Edition: Rev 0



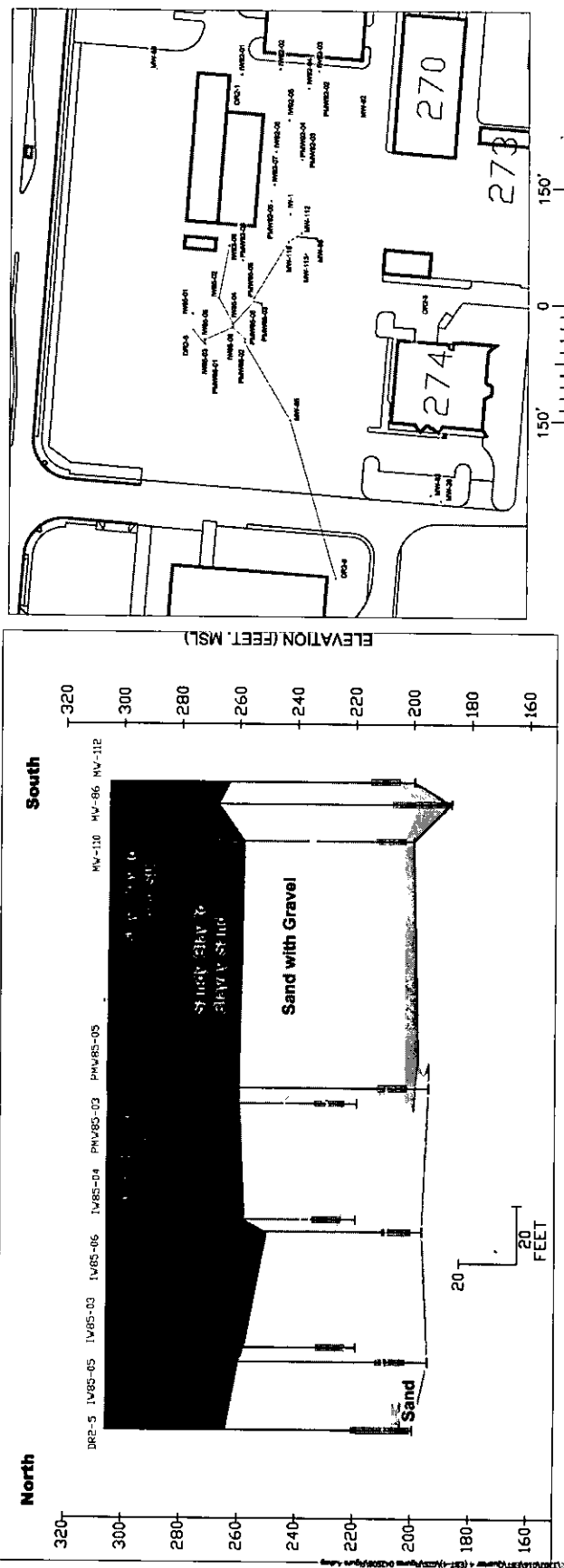


Figure 4

LITHOLOGIC
CROSS -
SECTIONS,
TTA-2

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



Installation Location
Memphis, Tennessee

Date: April 2008
Editor: Ben O.



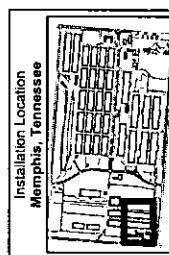
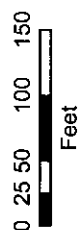
Figure 5

**GROUNDWATER
ELEVATION
CONTOUR MAP,
TTA-1 - DECEMBER 2006**

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection: NAD 1927 StatePlane Tennessee
Units: Feet



Date: April 2008
Edition: Rev 0

941 186

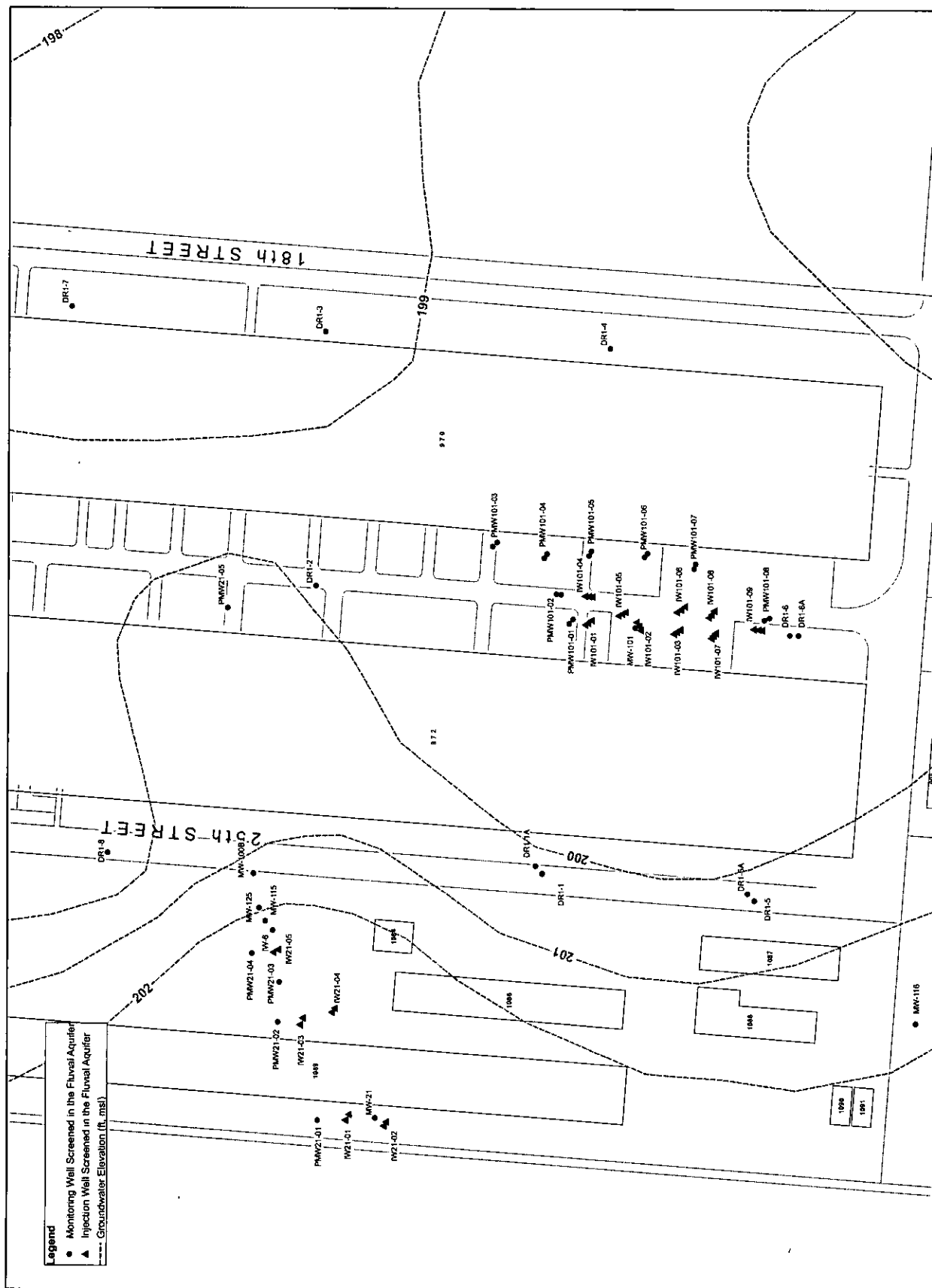




Figure 6

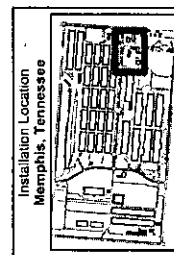
**GROUNDWATER
ELEVATION
CONTOUR MAP,
TTA-2 - DECEMBER, 2006**

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

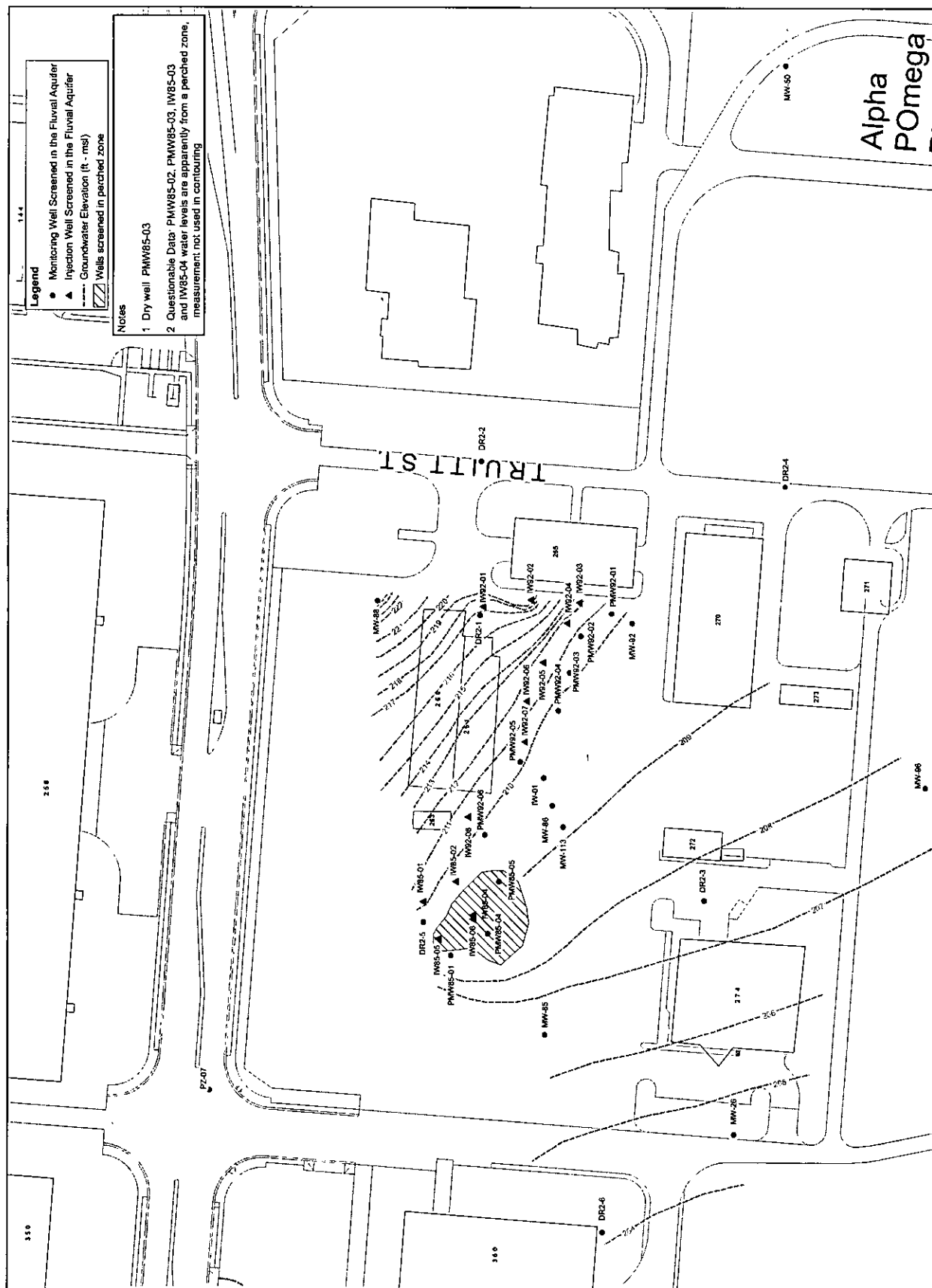
Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 25 50 100 150
Feet



DATE: April 2008
Edition: Rev 1.0

941 187



- Legend**
- Monitoring Well Screened in the Fluvial Aquifer
 - Injection Well Screened in the Fluvial Aquifer
 - Groundwater Elevation (ft. - msf)
 - Wells screened in perched zone

Notes

1. Dry well PMW85-03
2. Questionable Data: PMW85-02, PMW85-03, IW85-03 and IW85-04 water levels are apparently from a perched zone, measurement not used in contouring



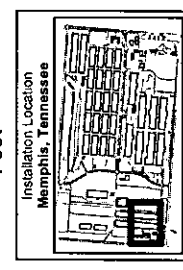
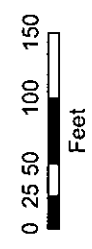
Figure 7

GROUNDWATER
ELEVATION
CONTOUR MAP, TTA-1 -
MARCH 2007

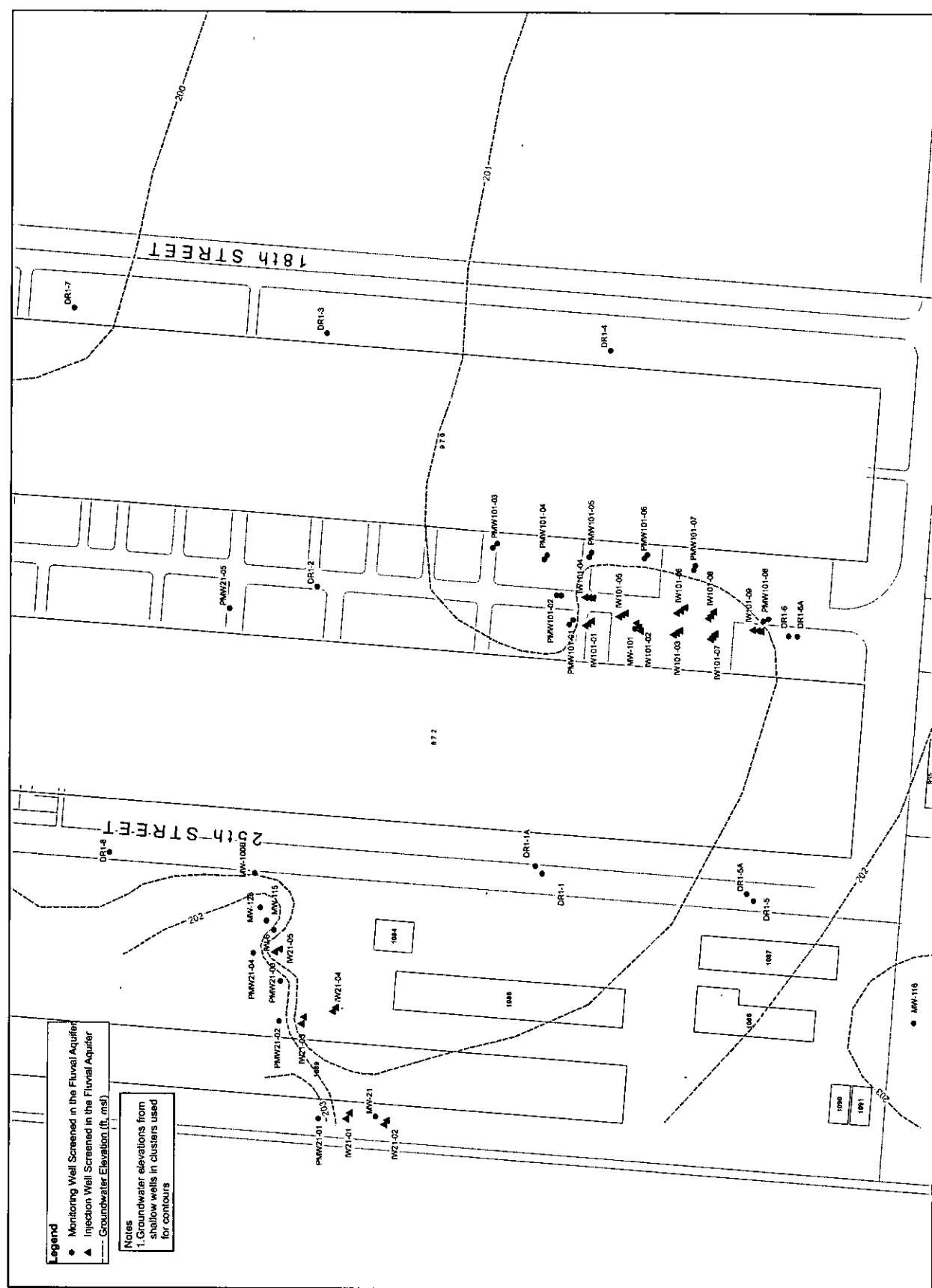
YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection: NAD 1927 StatePlane Tennessee
Units: Feet



Date: April 2008
Edition: Rev. 0

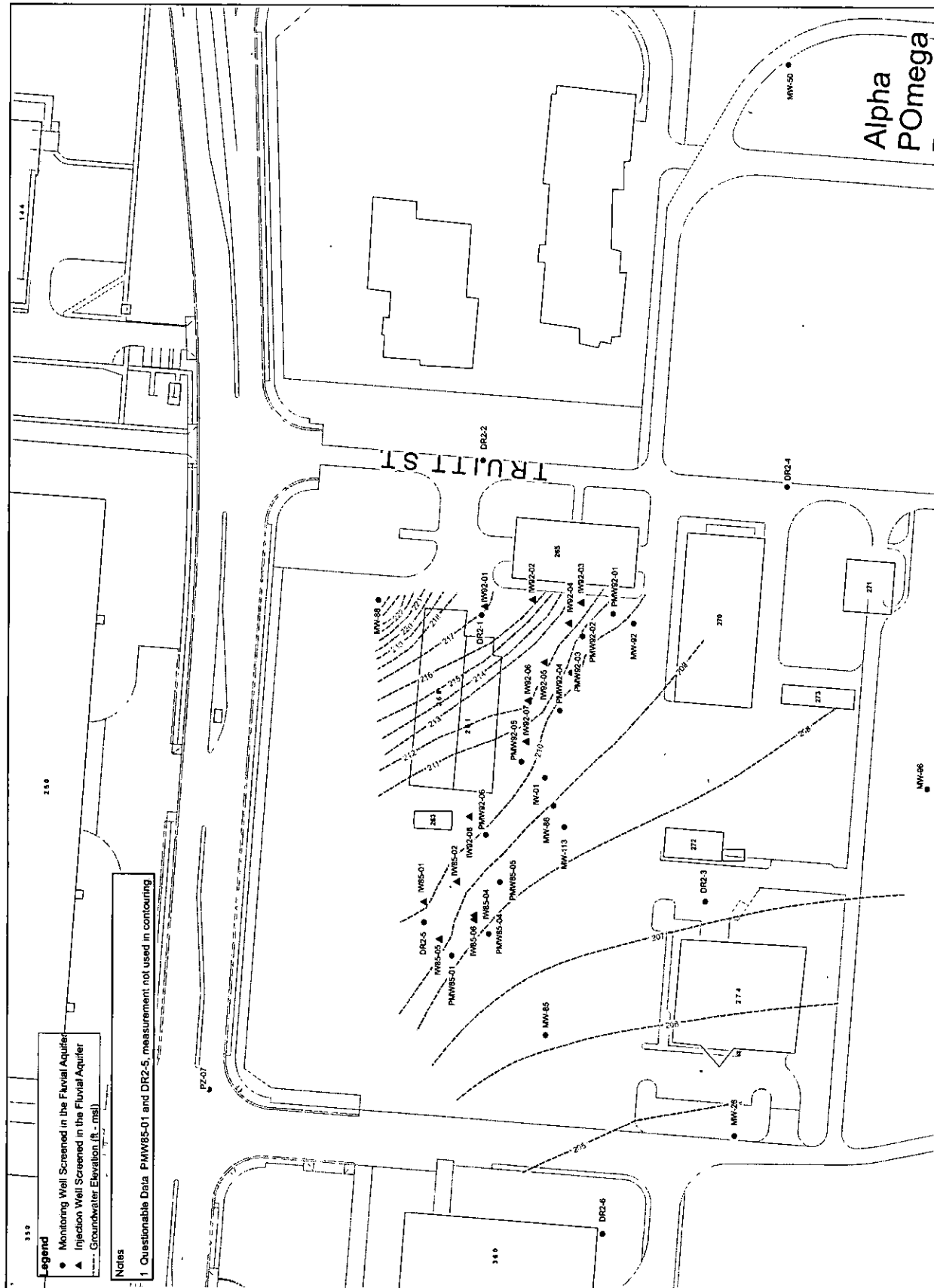


Legend

- Monitoring Well Screened in the Fluvial Aquifer
- Injection Well Screened in the Fluvial Aquifer
- Groundwater Elevation (ft. msl)

Notes

1. Groundwater elevations from shallow wells in clusters used for contours



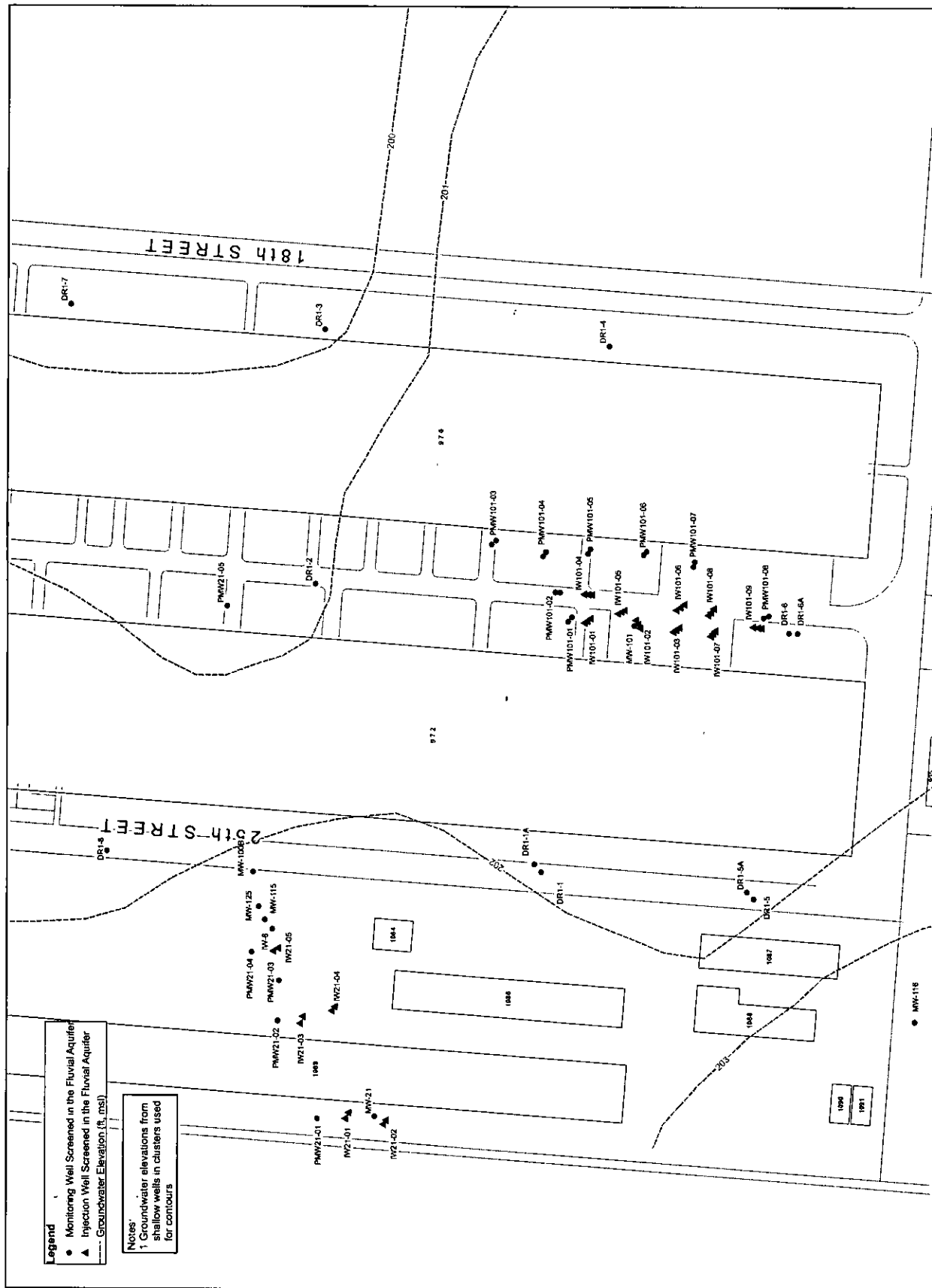


Figure 9

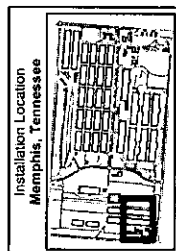
GROUNDWATER
ELEVATION
CONTOUR MAP,
TTA-1 - JUNE 2007

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 25 50 100 150
Feet



Date: April 2008
Revision: Ver 1.0

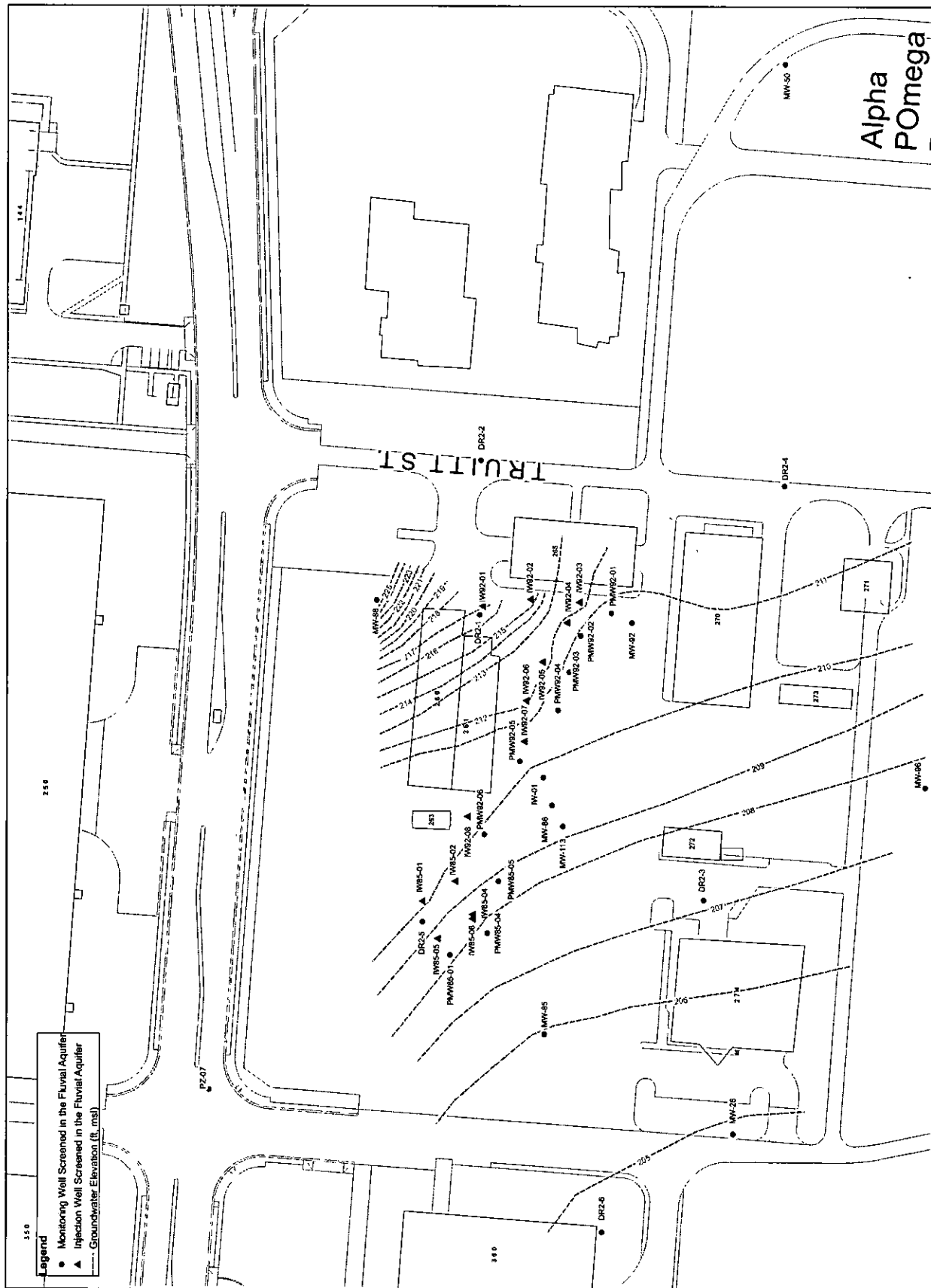


Figure 10

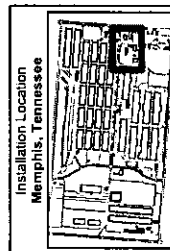
**GROUNDWATER
ELEVATION
CONTOUR MAP,
TTA-2 - JUNE 2007**

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection NAD 1927 StatePlane Tennessee
Units Feet

0 25 50 100 150
Feet



Date: April 2008
Edition: Rev 1.0



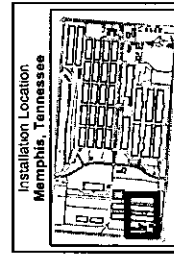
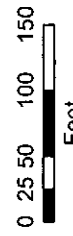
Figure 11

**GROUNDWATER
ELEVATION
CONTOUR MAP, TTA-1 -
SEPTEMBER 2007**

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

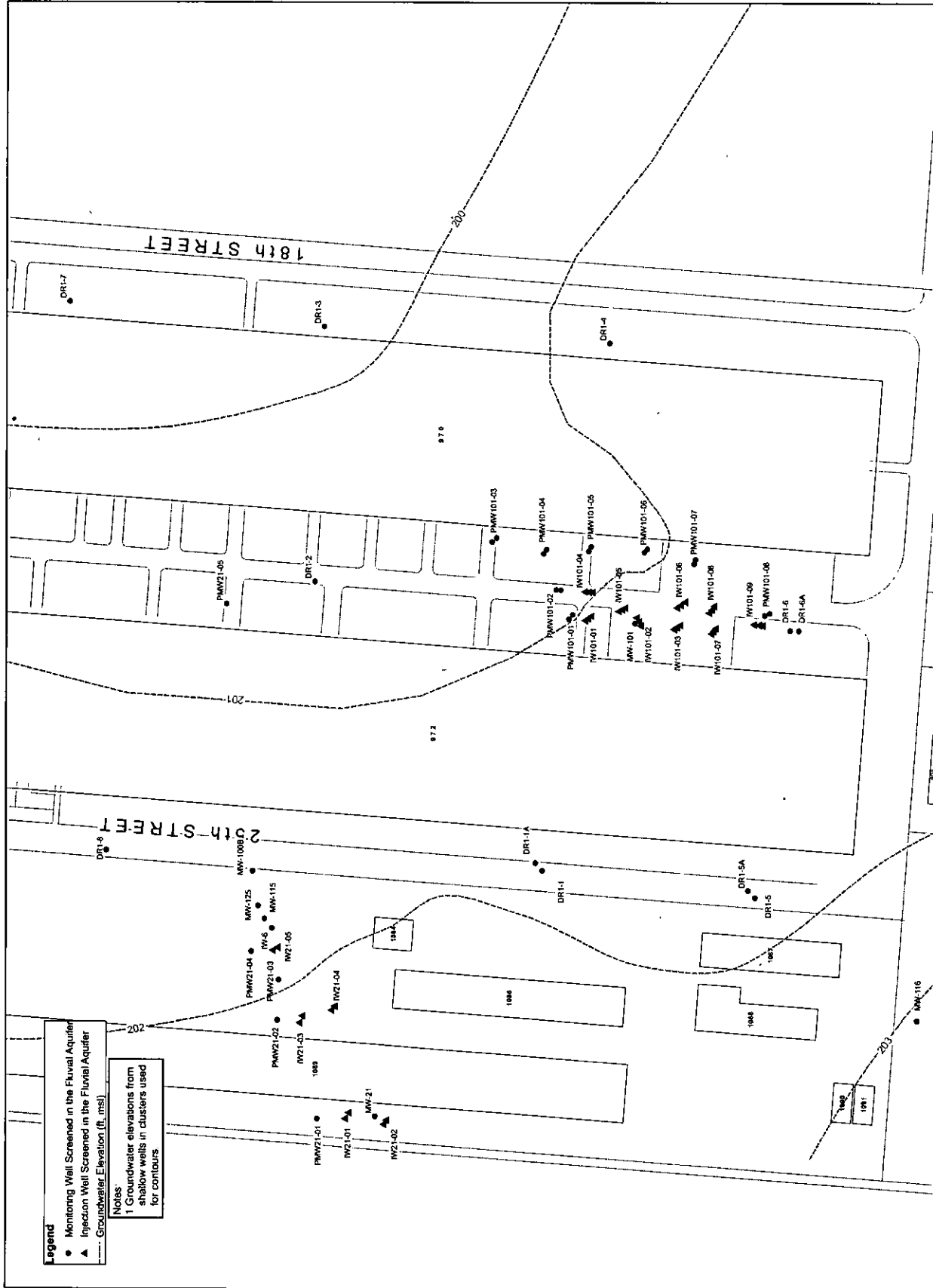
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

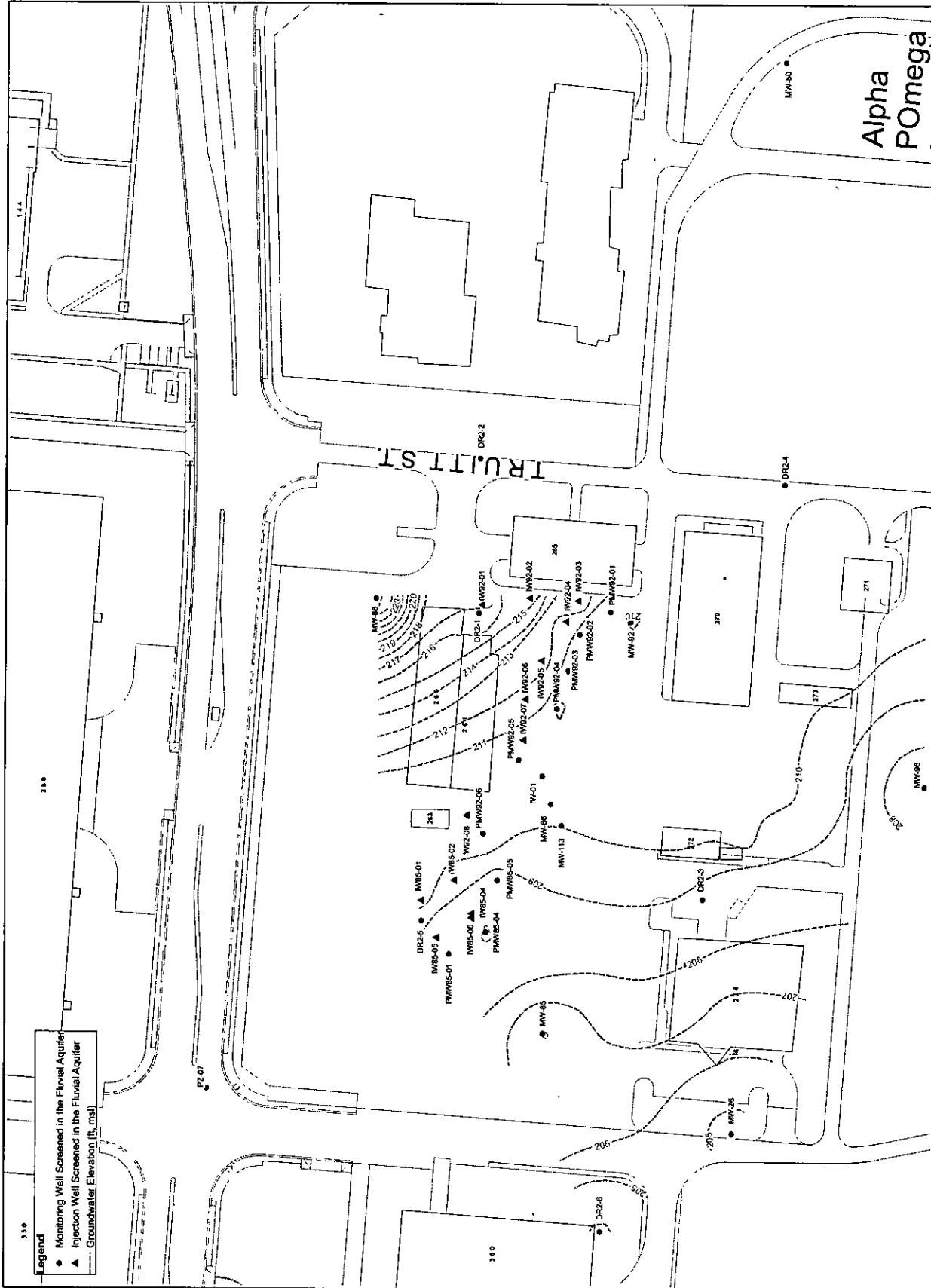
Projection NAD 1927 StatePlane Tennessee
Units Feet



Date: April 2008
Edition: Rev 0

941 192





Legend

- Monitoring Well Screened in the Fluvial Aquifer
- Injection Well Screened in the Fluvial Aquifer
- Groundwater Elevation (ft. msl)

Figure 12

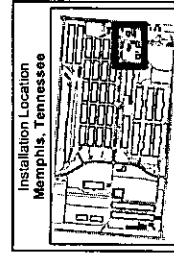
**GROUNDWATER
ELEVATION
CONTOUR MAP,
TTA-2 - SEPTEMBER 2007**

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection NAD 1927 StatePlane Tennessee
Units Feet

0 25 50 100 150
Feet



Date: April 2008
Edition: Rev 0



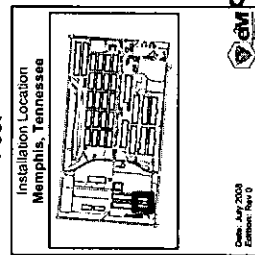
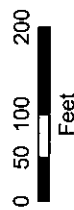
Figure 14

PCE TIME SERIES -
TTA-1, MW-101 AREA

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

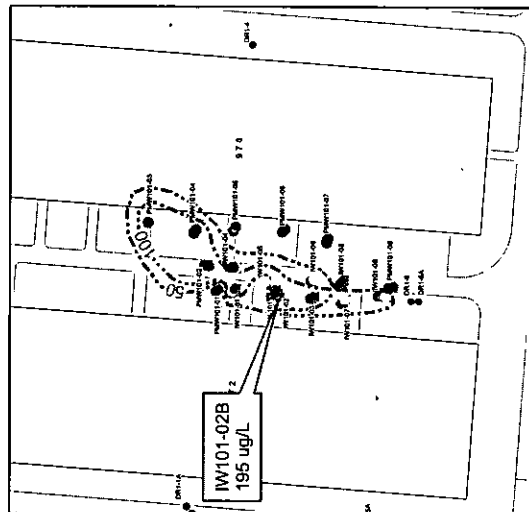
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection NAD 1983 StatePlane Tennessee
Units Feet

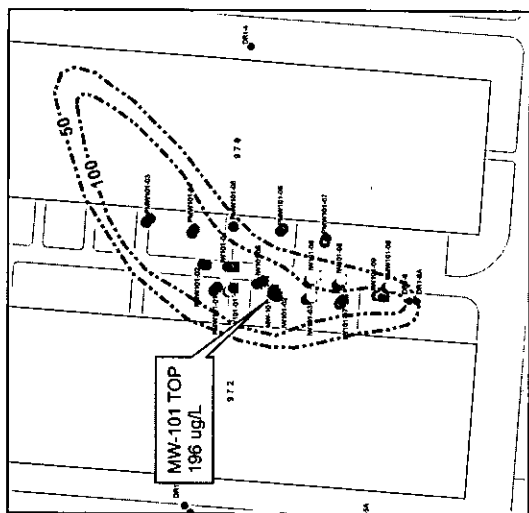


Date: July 2008
Edition: Rev 2

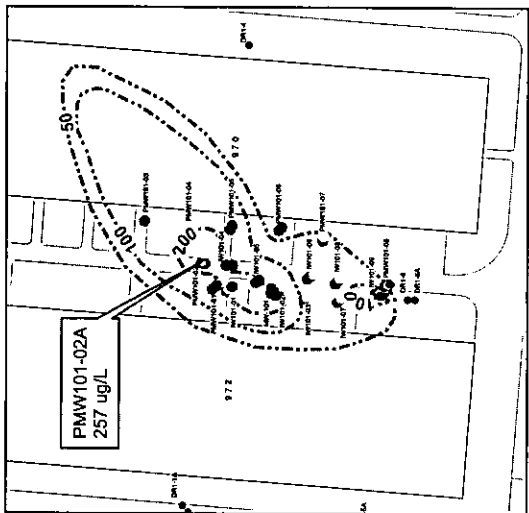
941 195



EBT-2

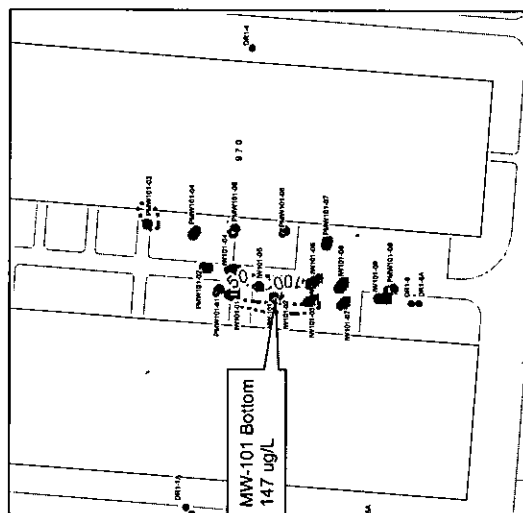


EBT-1

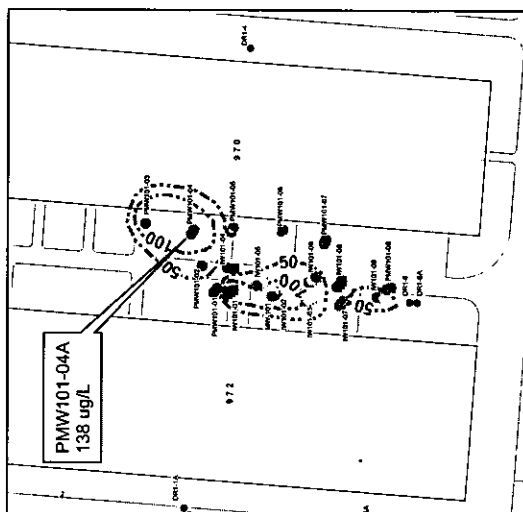


BASELINE

- Notes:
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box.



EBT-4



EBT-3

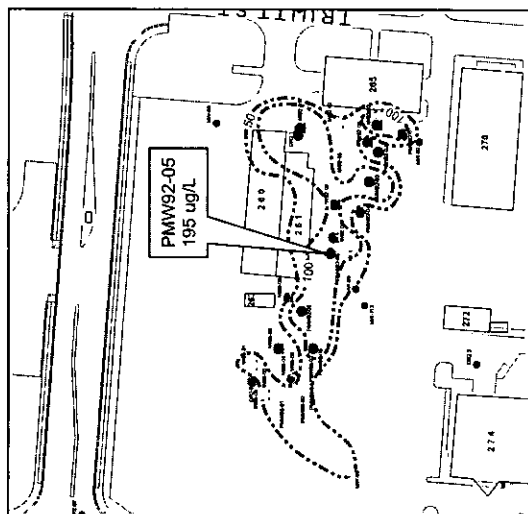


Figure 15

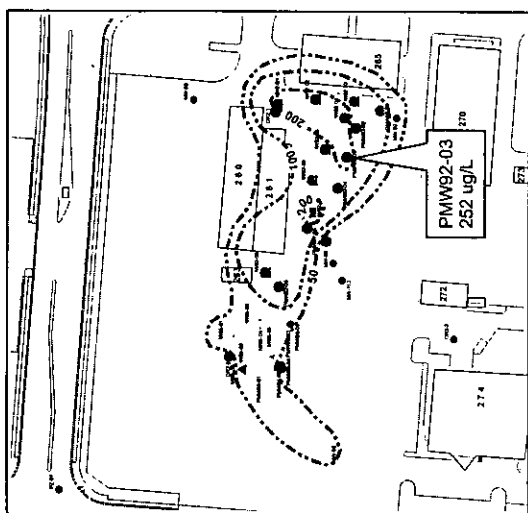
PCE TIME SERIES -
TTA-2

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

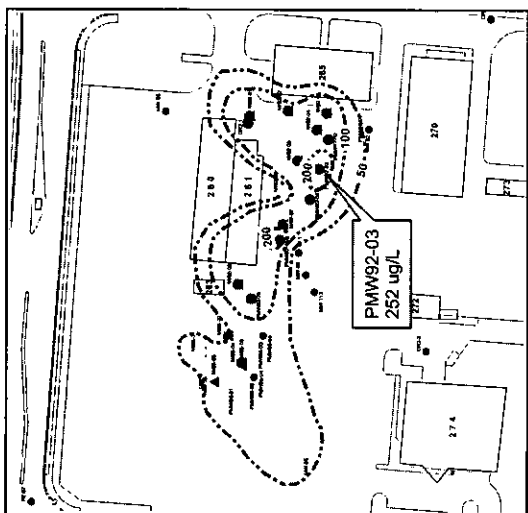
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



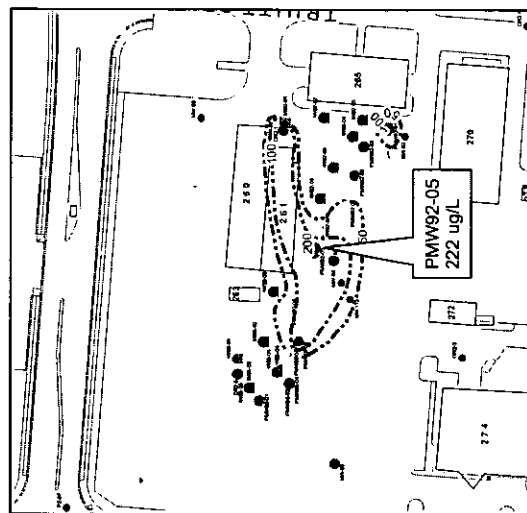
EBT-2



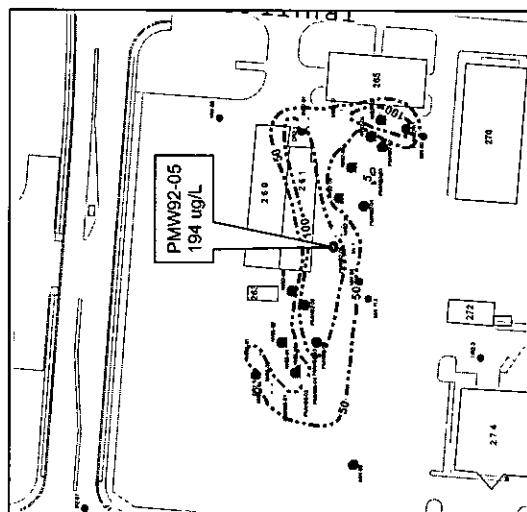
EBT-1



BASELINE

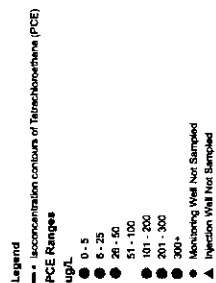


EBT-4

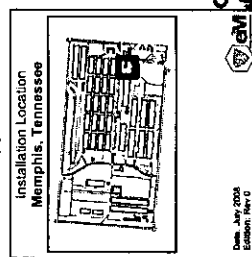
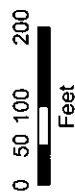


EBT-3

- Notes:
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box.



Projection NAD 1927 StatePlane Tennessee
Units Feet



Date: July 2003
Editor: Hery G



Figure 16

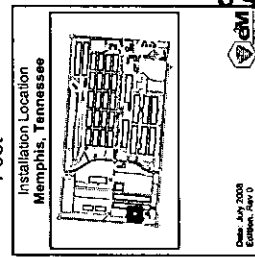
TCE TIME SERIES -
TTA-1, MW-21 AREA

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE

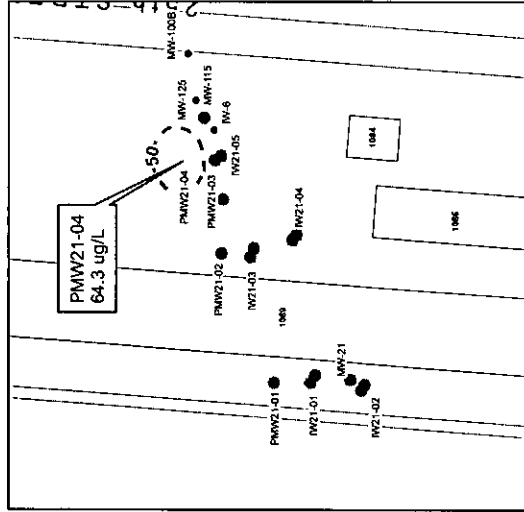
Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 25 50 100
Feet

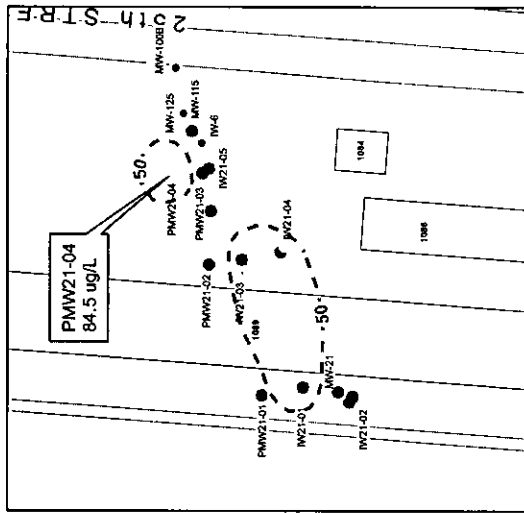


Date: July 2003
Edition: Rev 0

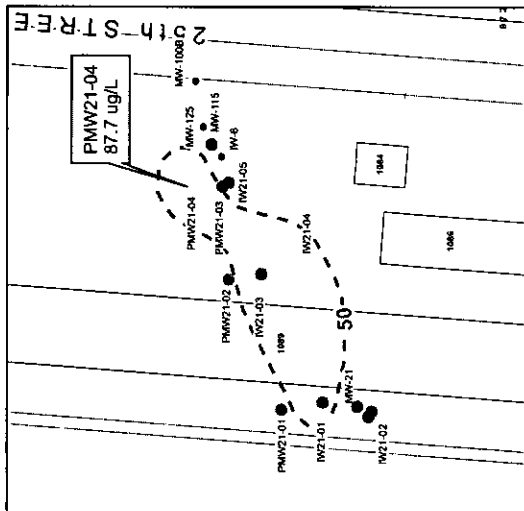
941 197



EBT-2



EBT-1



BASELINE

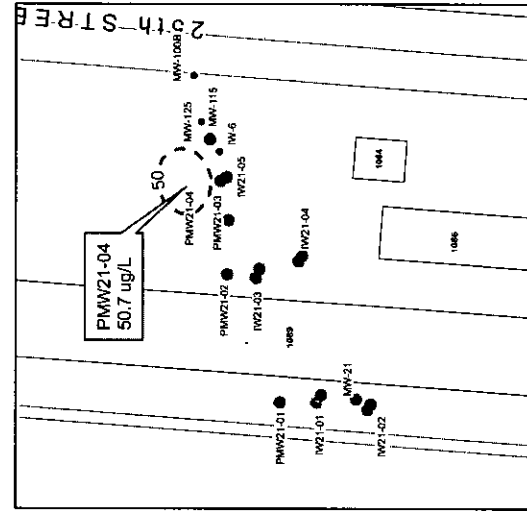
- Notes
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box.

Legend

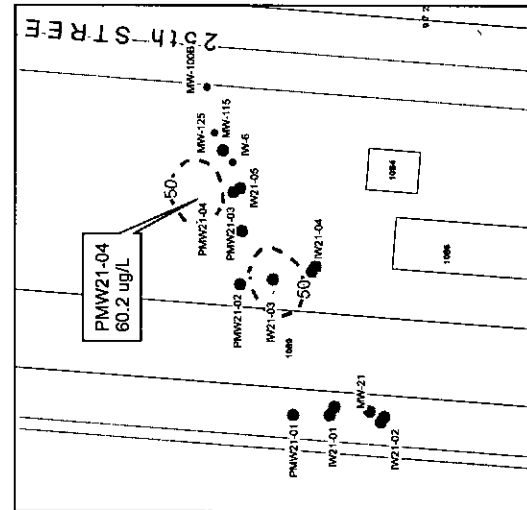
- - - Isoc concentration contours of Trichloroethene (TCE)

TCE Ranges

- 0 - 5
 - 6 - 25
 - 26 - 50
 - 51 - 100
 - 101 - 200
 - 201 - 300
 - 300+
- Monitoring Well Not Sampled



EBT-4



EBT-3

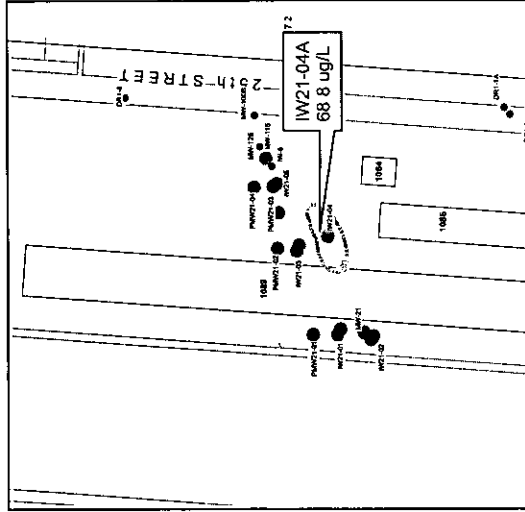


Figure 18

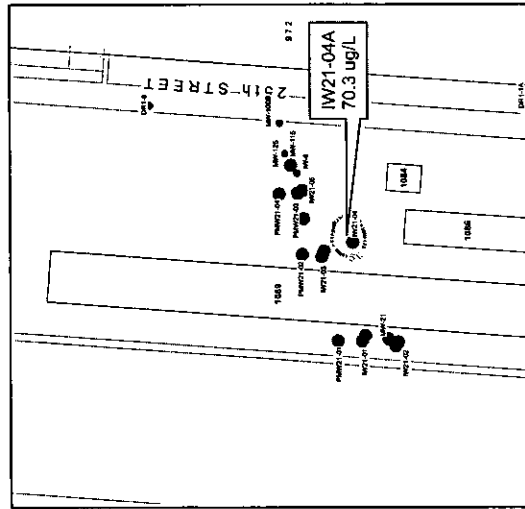
CDCE TIME SERIES -
TTA-1, MW-21 AREA

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

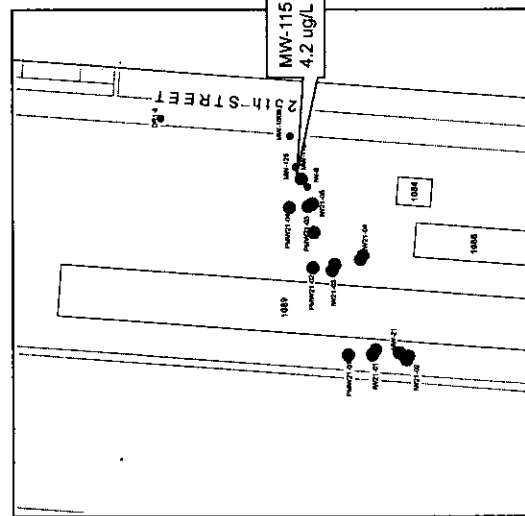
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



EBT-2



EBT-1

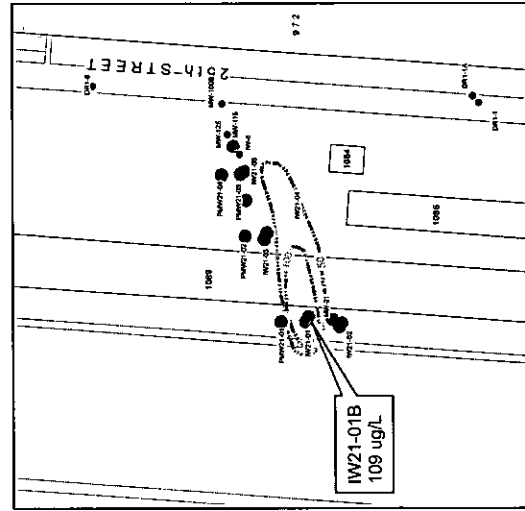


BASELINE

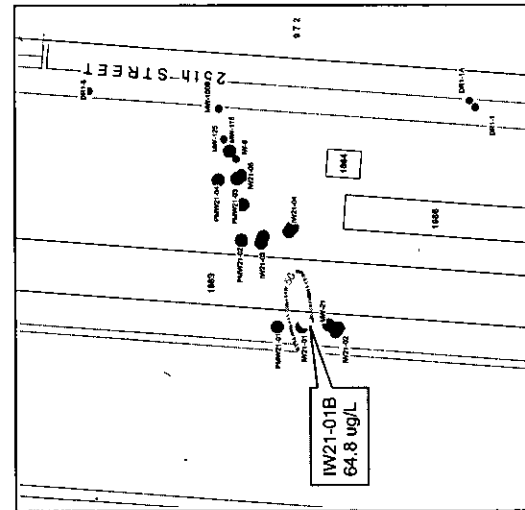
- Notes:
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box

Legend
m111 Isoconcentration contours of cln-1,2-dichloroethane (CDCE)
ug/L

- 0 - 5
- 6 - 25
- 26 - 50
- 51 - 100
- 101 - 200
- 201 - 300
- 300+
- Monitoring Well Not Sampled



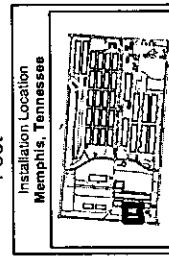
EBT-4



EBT-3

Projection NAD 1927 StatePlane Tennessee
Units Feet

0 25 50 100 150
Feet



Date: July 2003
Edition: Rev 0

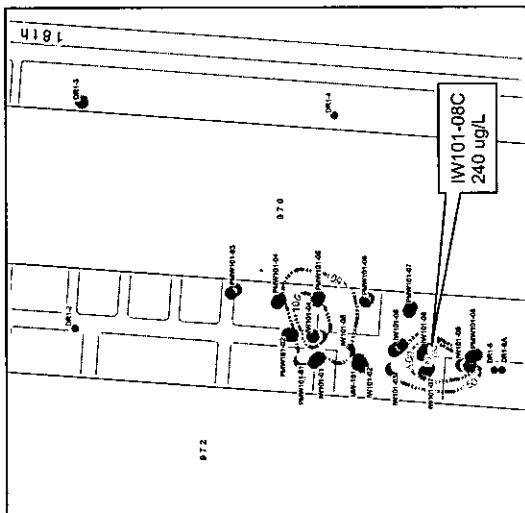


Figure 19

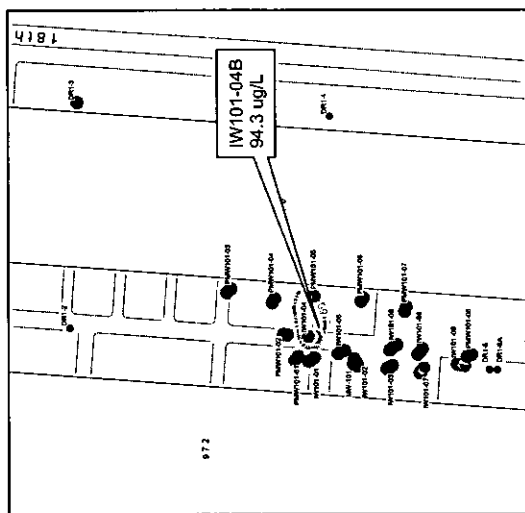
cDCE TIME SERIES -
TTA-1, MW-101 AREA

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

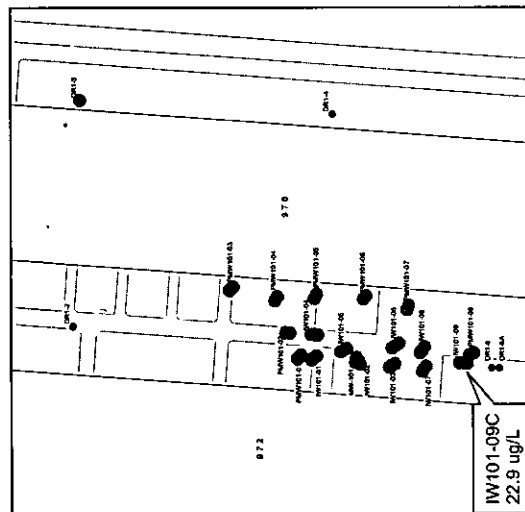
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



EBT-2



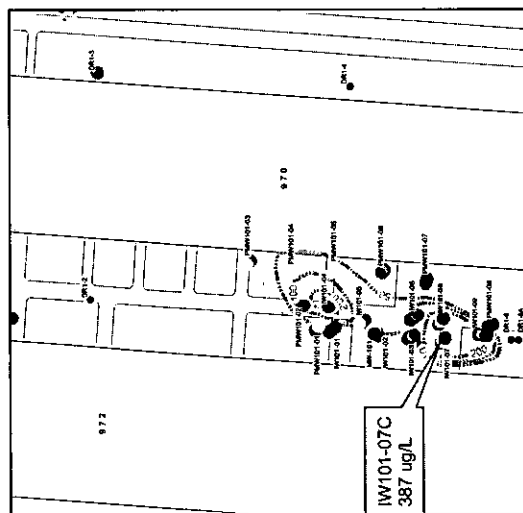
EBT-1



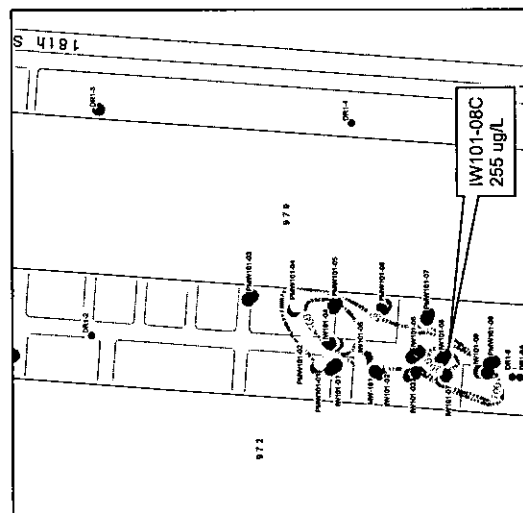
BASELINE

- Notes:
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box.

Legend
--- Isoconcentration contours of ca-1,2-Dichloroethene (cDCE)
cDCE Ranges
ug/L
● 0 - 5
● 6 - 25
● 26 - 50
● 51 - 100
● 101 - 200
● 201 - 300
● 300+
● Monitoring Well Not Sampled



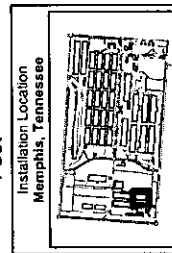
EBT-4



EBT-3

Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 2550 100 150
Feet



Date: July 2005
Edition: Rev 0

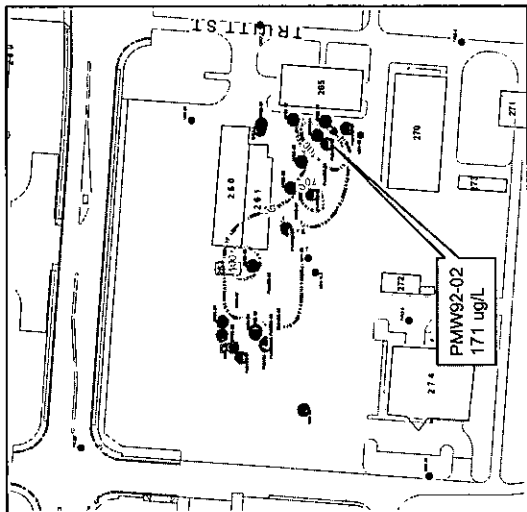


Figure 20

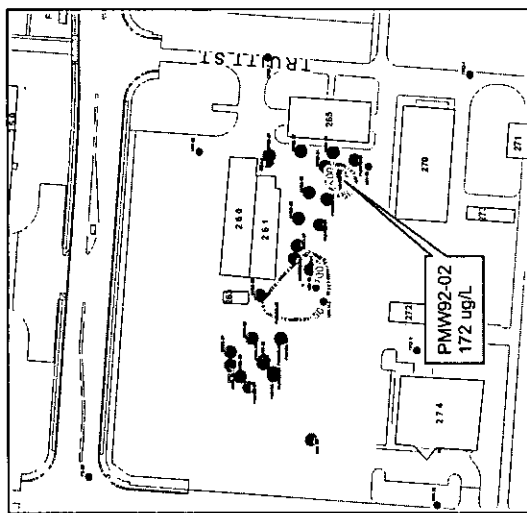
cdCE TIME SERIES -
TTA-2

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

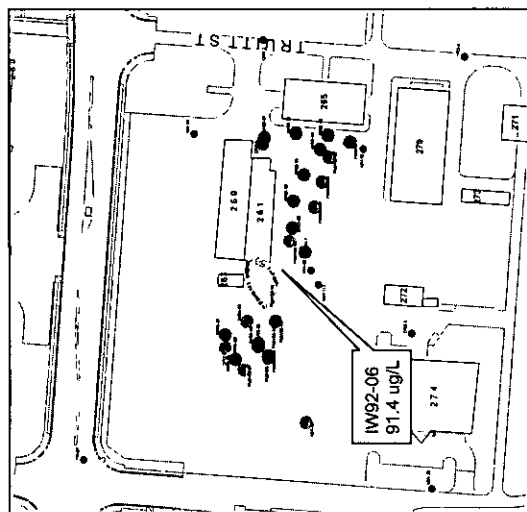
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



EBT-2

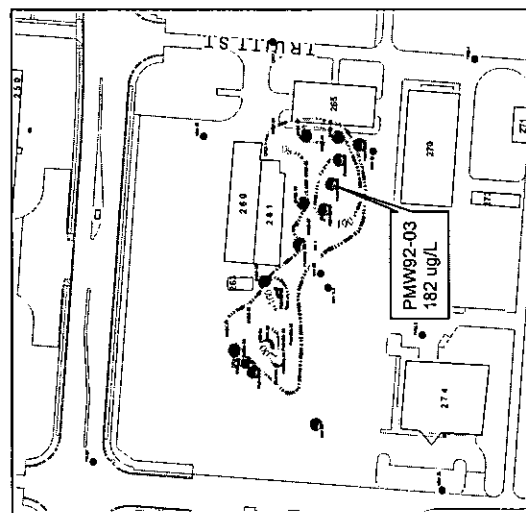
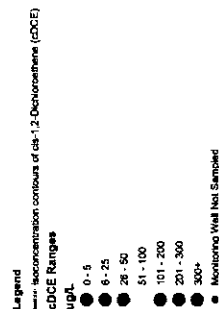


EBT-1

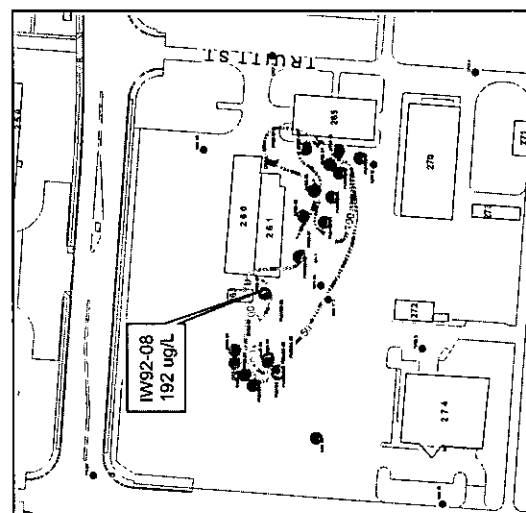


BASELINE

- Notes:
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box



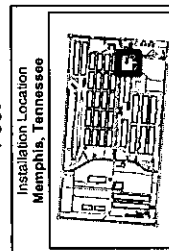
EBT-4



EBT-3

Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 75 150 300
Feet



Installation Location
Memphis, Tennessee

Date: July 2008
Edition: Rev 0

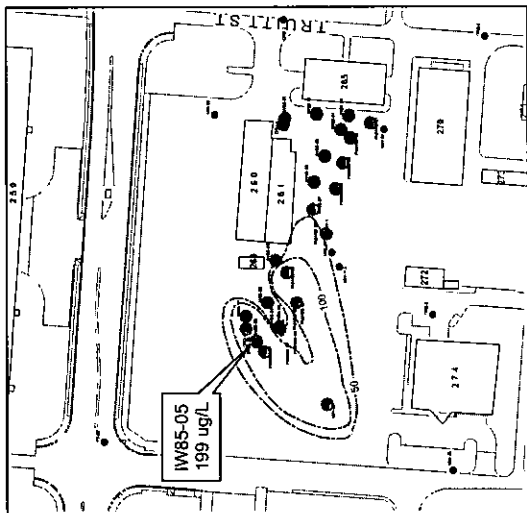


Figure 21

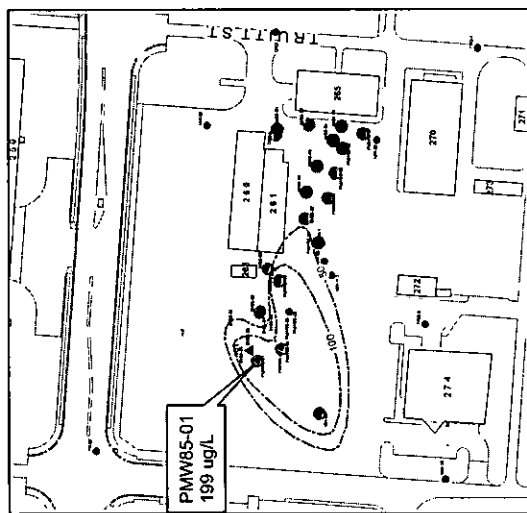
CT TIME SERIES-
TTA-2

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

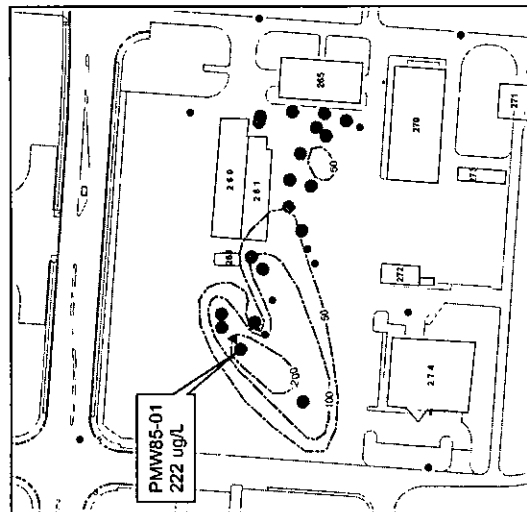
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



EBT-2

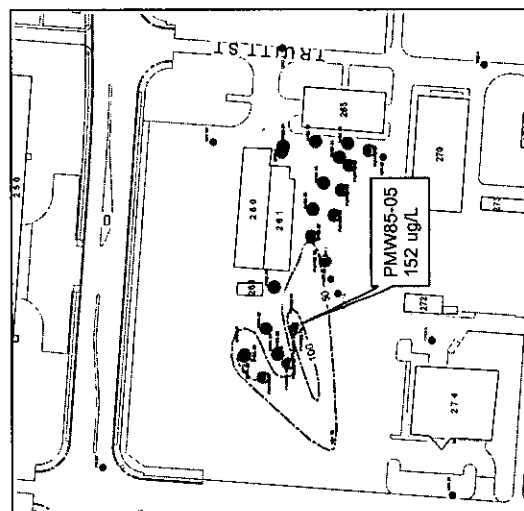
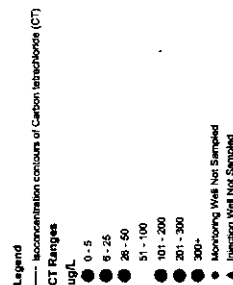


EBT-1

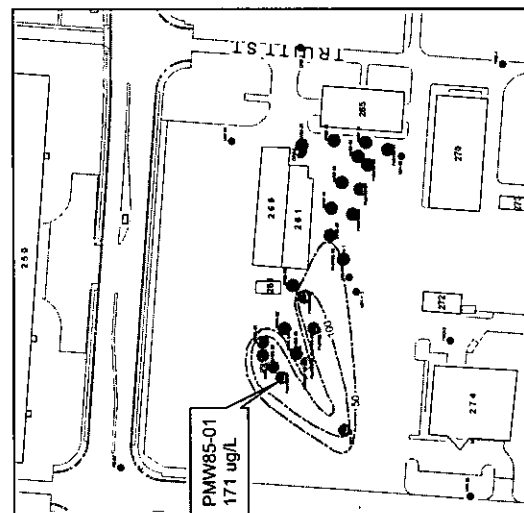


BASELINE

- Notes:
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box

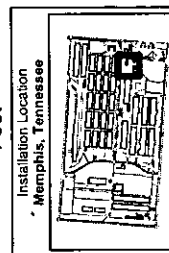
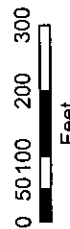


EBT-4



EBT-3

Projection: NAD 1927 StatePlane Tennessee
Units: Feet



Date: July 2008
Edition: Rev 0

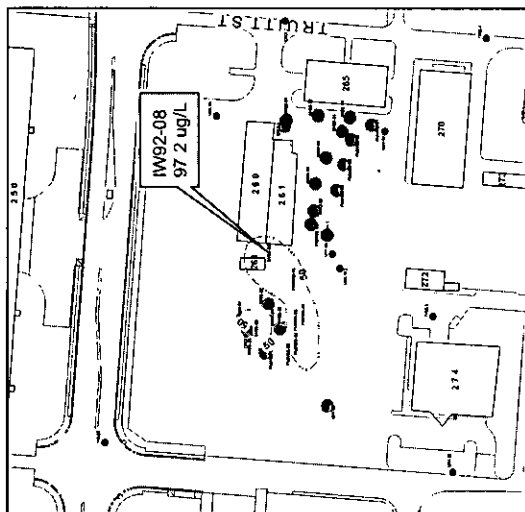


Figure 22

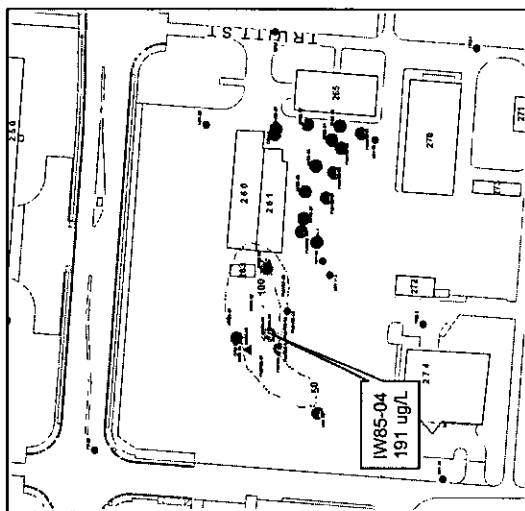
CF TIME SERIES-
TTA-2

YEAR ONE REMEDIAL
ACTION OPERATIONS
REPORT

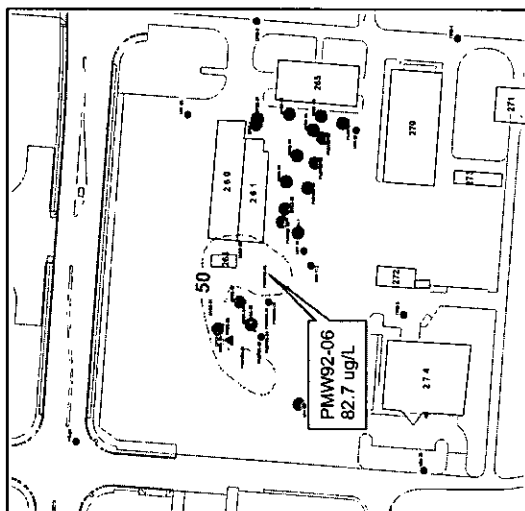
MAIN INSTALLATION -
DEFENSE DEPOT
MEMPHIS, TENNESSEE



EBT-2

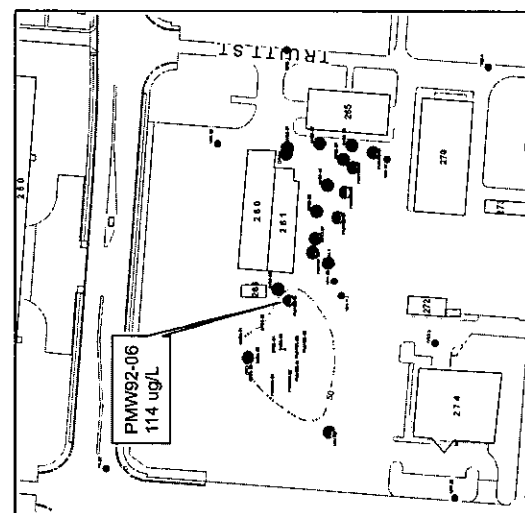
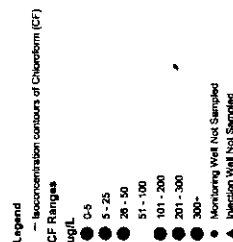


EBT-1

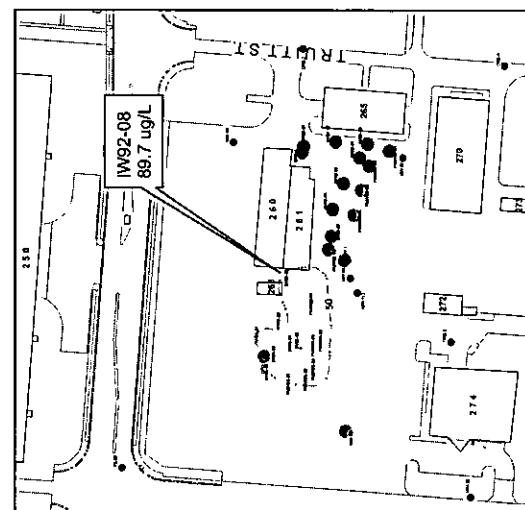


BASELINE

- Notes.
- 1) Highest concentration per cluster used for contouring.
 - 2) Maximum concentration per event in area noted in text box.

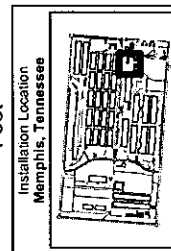
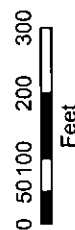


EBT-4



EBT-3

Projection, NAD 1927 StatePlane Tennessee
Units, Feet



Date: July 2008
Edition: Rev 0

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

APPENDIX A
REPLACEMENT WELL BORING LOGS



FIELD BOREHOLE LOG

BOREHOLE NO.: IW85-05

TOTAL DEPTH: 111

PROJECT INFORMATION

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NO.: 3202-016

SITE LOCATION: TTA-2

PROJECT MANAGER: T. Holmes

FIELD STAFF: K. Sedlak

BOREHOLE STARTED: 2/19/2007

BOREHOLE FINISHED: 2/22/2007

DRILLING INFORMATION

DRILLING CO.: Prosonic

DRILLER: A. Marshall

DRILLING METHOD/RIG: Sonic

BOREHOLE DIAMETER: 8-in.

GROUND SURFACE ELEVATION: 305.30-ft.

WATER DEPTH/ DATE: 95.17-ft - 3/2/2007

BOREHOLE USE: Injection Well

NOTES:

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		CH Silty clay - strong brown 7.5YR (5/6), soft, high plasticity, moist.		Grouted Annulus
10		CL Silty clay - strong brown 7.5YR (5/6), trace sand and pebbles, medium plasticity, moist.		
		CL Silty clay - strong brown 7.5YR (5/6), trace sand and pebbles, medium plasticity, hard.		
20		CL Sandy clay - red 2.5 YR (4/8), medium grained sand, moist.		
		SP Sand - reddish yellow 7.5YR (6/8), fine to medium grained, poorly graded, dry.		
		SC Sandy clay - red 10YR (7/8), medium to coarse grained sand, trace pebbles, moist.		
30		CL Sandy clay - red 10YR (4/6), low plasticity, medium to coarse grained sand, trace pebbles, moist.		

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PAGE: 1 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: IW85-05

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion		Well Description
		CL Silty clay with sand - yellow 10YR (7/8), medium plasticity, trace pebbles, red mottling, moist.			
		SC Clayey sand - reddish yellow 7.5YR (7/6), medium to fine grained sand, poorly graded, dry.			
40		SP Sand - yellowish red 5YR (5/6), fine to medium grained, poorly graded, dry.			
50		SW Sand and gravel - reddish yellow 5YR (6/8), medium to coarse grained sand, angular to well rounded gravel, trace cobbles, well graded, dry.			
60		SW Sand with gravel - reddish yellow 5YR (6/8), medium to coarse grained sand, angular to rounded gravel, well graded, dry.			

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PAGE: 2 of 4

**FIELD BOREHOLE LOG**

BOREHOLE NO.: IW85-05

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SP Sand - reddish yellow 7.7YR (7/8), fine to medium grained, poorly graded, dry.		
		SP Sand - reddish yellow 7.5YR (7/8), fine to medium grained, poorly graded, dry.		
70				
		SP Sand with some gravel - reddish yellow 7.5YR (7/8), fine to medium grained sand, sub angular to rounded gravel, poorly graded, dry.		
80		SW Sand and gravel - reddish yellow 7.5YR (7/8), medium to coarse grained sand with white coarse grained sand, sub rounded to rounded gravel with pebbles, well graded, wet.		
		SC Clayey sand - yellowish red 5YR (5/8), fine grained, moist.		
		CH Silty clay with gravel and sand - reddish yellow 7.5YR (6/8), high plasticity, moist.		
90				Bentonite Plug

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PAGE: 3 of 4

**FIELD BOREHOLE LOG**

BOREHOLE NO.: IW85-05

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SW Sand with gravel - reddish yellow 5YR (6/8), medium to coarse grained sand, well rounded gravel with pebbles, well graded with layers of white coarse sand 6-inches thick, well graded, dry.		Sand Pack
100		GW Gravel with sand - yellowish red 5YR (5/8), coarse sand, sub rounded to rounded gravel, well graded, wet.		Screened Interval
		CH Silty clay - dark gray 2.5Y (4/1), high plasticity, hard, moist.		
		SC Clayey sand - dark gray 2.5Y (4/1), fine grained sand, poorly graded, moist.		
110		SC Clayey sand - dark gray 10YR (4/1) fine grained to silty sand, poorly graded, very moist.		
120		End of Log		

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PAGE: 4 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: IW85-06

TOTAL DEPTH: 111

PROJECT INFORMATION

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NO.: 3202-016

SITE LOCATION: TTA-2

PROJECT MANAGER: T. Holmes

FIELD STAFF: K. Sedlak

BOREHOLE STARTED: 2/23/2007

BOREHOLE FINISHED: 2/27/2007

DRILLING INFORMATION

DRILLING CO.: Prosonic

DRILLER: A. Marshall

DRILLING METHOD/RIG: Sonic

BOREHOLE DIAMETER: 8-in.

GROUND SURFACE ELEVATION: 305.45

WATER DEPTH/ DATE: 96.05 - ft

BOREHOLE USE: Injection Well

NOTES:

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
10		CH Silty clay - strong brown 7.5YR (5/6), medium plasticity, trace sand, moist.		
20		CH Silty clay - strong brown 7.5YR (5/6), medium plasticity, trace sand, moist.		
		SC Clayey sand - yellowish red 5YR (5/8), fine to medium grained sand, poorly graded, moist.		
		SP Sand - reddish yellow 5YR (7/8) fine to medium grained, poorly graded, dry.		
		CL Clay with sand - yellowish red 5YR (5/8), low plasticity, moist.		
30		SC Clayey sand - red 2.5YR (5/8), fine to medium grained sand, poorly graded, moist.		
				Grouted Annulus

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PAGE: 1 of 4

**FIELD BOREHOLE LOG**

BOREHOLE NO.: IW85-06

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion		Well Description
40		SC Clayey sand - red 2.5YR (5/8), fine to medium grained sand, poorly graded, moist.			
		SP Sand - reddish yellow 5YR (6/8), fine to medium grained, poorly graded, dry.			
		SC Sand with clay - red 10R (5/8), fine to medium grained sand, poorly graded, moist.			
50		SW Sand and gravel - reddish yellow 5YR (7/8), medium to coarse grained sand, angular to rounded gravel with pebbles, well graded, dry.			
		SP Sand - yellow 10YR (8/8), medium to coarse grained, poorly graded, dry.			
		SP Sand - red 10YR (5/8), medium to coarse sand, trace gravel and pebbles, well rounded gravel, poorly graded, dry.			
60					

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PAGE: 2 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: IW85-06

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SW Sand and gravel - yellowish red 5YR (5/8), medium to coarse grained sand, rounded to well rounded gravel, well graded, dry.		
		SP Sand - reddish yellow 5YR (6/8), fine to medium grained, poorly graded, dry.		
		SP Sand - reddish yellow 7.5YR (6/8), fine to medium grained, poorly graded, dry.		
70		SW Sand and gravel - reddish yellow 7.5YR (6/8), medium to coarse grained sand, sub rounded to well rounded gravel with pebbles, well graded, dry.		
		SW Sand and gravel - white 2.5Y (8/1), coarse grained sand, angular to rounded gravel with pebbles, well graded, wet.		
80		CH Silty clay - yellow 2.5Y (7/6), high plasticity, moist.		
		CH Silty clay - yellow 2.5Y (7/6), high plasticity, moist.		
90				Bentonite Plug

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PAGE: 3 of 4

BOREHOLE NO.: IW85-06

TOTAL DEPTH: 111

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FIELD BOREHOLE LOG

BOREHOLE NO.: PMW85-04

TOTAL DEPTH: 111

PROJECT INFORMATION

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NO.: 3202-016

SITE LOCATION: TTA-2

PROJECT MANAGER: T. Holmes

FIELD STAFF: K. Sedlak

BOREHOLE STARTED: 2/21/2007

BOREHOLE FINISHED: 2/21/2007

DRILLING INFORMATION

DRILLING CO.: Prosonic

DRILLER: A. Marshall

DRILLING METHOD/RIG: Sonic

BOREHOLE DIAMETER: 6-in.

GROUND SURFACE ELEVATION: 305.33

WATER DEPTH/ DATE: 97.27-FT. - 3/2/2007

BOREHOLE USE: Monitoring Well

NOTES:

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
10	CH	Silty clay - strong brown 7.5YR(4/6), high plasticity, trace sand, moist.		Grouted Annulus
	SC	Clayey sand - yellowish red 5YR (5/8), fine to medium grained sand, poorly graded, moist.		
20	SP	Sand - reddish yellow 5YR (6/8), fine to medium grained sand, poorly graded, dry.		
	CL	Sandy clay - red 2.5YR (4/8), high plasticity, moist.		
30	CL	Sandy clay - red 2.5YR (4/8), low plasticity, medium to coarse grained sand, trace pebbles, moist.		

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PAGE: 1 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: PMW85-04

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion		Well Description
		SC Clayey sand - red 2.5YR (5/8), fine to medium grained sand, poorly graded, moist.			
		SC Sand with clay - yellowish red 5YR (5/8), fine grained sand, poorly graded, dry.			
40					
		SP Sand - reddish yellow 5YR(7/6), coarse grained sand, poorly graded, dry.			
		SP Sand - reddish yellow 7.5YR (6/8), medium to coarse grained sand, poorly graded, dry.			
50		SW Sand with gravel - reddish yellow 7.5YR (6/6), fine to coarse grained sand, sub rounded to well rounded gravel, well graded, dry.			
		SP Sand - red 2.5YR (5/8), medium to coarse grained sand, trace pebbles, poorly graded, slightly moist.			
60					

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PAGE: 2 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: PMW85-04

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion		Well Description
		SP Sand - reddish yellow 7.5YR (7/8), fine to medium grained sand, poorly graded, dry.			
		SP Sand - reddish yellow 7.5YR (7/8), fine to medium grained sand, poorly graded, dry.			
70					
		SW Sand and gravel - reddish yellow 7.5YR (6/8), medium to coarse grained sand, sub rounded to well rounded gravel with cobbles and pebbles, well graded, wet.			
		SW Sand and gravel - yellow 2.5YR (8/6), medium to coarse grained sand, angular to well rounded gravel, well graded, wet.			
80					
		CH Silty clay - pale yellow 2.5Y (7/4), high plasticity, moist.			
		CH Silty clay - pale yellow 2.5Y (7/4), high plasticity, moist.			
90					

Bentonite Plug

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PAGE: 3 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: PMW85-04

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SP Sand - white 2.5Y (8/1), fine to medium grained sand, trace pebbles, poorly graded, dry.		Sand Pack
100		SW Sand and gravel - dark red 2.5YR (3/6), fine to coarse grained sand, rounded to well rounded gravel with pebbles and cobbles, well graded, wet.		Screened Interval
		CH Silty clay - gray 5YR (6/1), with red veining, high plasticity, moist.		
110		SP Sand - light gray 5YR (7/1), fine grained, poorly graded, moist.		
		End of Log		
120				

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PAGE: 4 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: PMW85-05

TOTAL DEPTH: 111

PROJECT INFORMATION

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NO.: 3202-016

SITE LOCATION: TTA-2

PROJECT MANAGER: T. Holmes

FIELD STAFF: K. Sedlak

BOREHOLE STARTED: 2/22/2007

BOREHOLE FINISHED: 2/22/2007

DRILLING INFORMATION

DRILLING CO.: Prosonic

DRILLER: A. Marshall

DRILLING METHOD/RIG: Sonic

BOREHOLE DIAMETER: 6-in.

GROUND SURFACE ELEVATION: 305.32

WATER DEPTH/ DATE: 96.27- FT. - 3/2/2007

BOREHOLE USE: Monitoring Well

NOTES:

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
10	CH	Silty clay - strong brown 7.5YR (4/6), high plasticity, trace sand, moist.		Grouted Annulus
	CH	Silty clay - strong brown 7.5YR (4/6), high plasticity, trace sand, moist.		
20	SP	Sand - yellowish red 5YR (5/8), fine to medium grained sand, poorly graded, dry.		
	CL	Silty clay with sand - yellowish red 5YR (4/6), medium plasticity with red veining, moist.		
30	CL	Sandy clay - red 2.5YR (5/8), low plasticity, medium grained sand, trace pebbles, sand content increasing with depth, moist.		

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PAGE: 1 of 4

**FIELD BOREHOLE LOG**

BOREHOLE NO.: PMW85-05

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion		Well Description
40		CL Sandy clay - red 2.5YR (5/8), low plasticity, medium to coarse grained sand, moist.			
		SC Sand with clay - red 2.5YR (4/8), medium to coarse grained sand, poorly graded, dry.			
		SP Sand - yellowish red 5YR (5/8), fine to medium grained sand, poorly graded, dry.			
50		SP Sand with gravel - reddish yellow 7.5 YR (6/8), medium to coarse grained sand, angular to rounded gravel, poorly graded, dry.			
60		SP Sand with some gravel - red 10R (5/8), medium to coarse grained sand, angular to sub rounded gravel, poorly graded, dry.			

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PAGE: 2 of 4

**FIELD BOREHOLE LOG**

BOREHOLE NO.: PMW85-05

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SP Sand - yellow 10YR (8/6), fine to medium grained sand, poorly graded, dry.		
		SC Clayey sand - yellow 10YR (7/6), fine grained sand, poorly graded, moist.		
		CH Silty clay - yellow 5YR (5/8), high plasticity, moist.		
70		SW Sand and gravel - white 5YR (8/1), fine to medium grained sand, rounded to well rounded gravel with cobbles, well graded, dry.		
80		SW Sand and gravel - reddish yellow 5YR (6/8), medium to coarse sand, angular to rounded gravel with pebbles, well graded, dry.		
		CH Silty clay - yellowish brown 10YR (5/8), high plasticity, moist.		
90				Bentonite Plug

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PAGE: 3 of 4



FIELD BOREHOLE LOG

BOREHOLE NO.: PMW85-05

TOTAL DEPTH: 111

Depth	Soil Symbol	Soil Description	Well Completion	Well Description
		SP Sand - white 7.5YR (8/1), fine to medium grained sand, poorly graded, dry.		Sand Pack
		SW Sand and gravel - yellowish red 5YR (4/6), medium to coarse grained sand, angular to rounded gravel, well graded, wet.		Screened Interval
100				
		CH Silty clay - dark gray 5YR (4/1), high plasticity, moist.		
		CH Silty clay - dark gray 5YR (4/1), high plasticity, moist.		
110		SM Sand - gray 5YR (6/1), fine grained sand with silt, poorly graded, moist.		
		End of Log		
120				

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PAGE: 4 of 4

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

APPENDIX B

REPLACEMENT WELL INSTALLATION DIAGRAMS



WELL INSTALLATION DIAGRAM

WELL NO.: IW85-05

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NUMBER: 3202-016

SITE LOCATION: TTA-2

e2M PROJECT MANAGER: T. Holmes

e2M FIELD STAFF: K. Sedlak

DATE COMPLETED: 2/22/2007

WELL LOCATION: TTA-2

NORTHING: 276815.58

EASTING: 806162.75

GROUND SURFACE ELEVATION (ft, msl): 305.30

TOP OF CASING ELEVATION (ft, msl): 304.73

TOP OF SCREEN ELEVATION (ft, msl): 212.33

DRILLING CO.: Prosonic

DRILLING METHOD: Sonic

BOREHOLE DIAMETER (in): 8

SURFACE COMPLETION: Flush Mount

BOLLARDS: No

WELL DIAMETER (in): 4

TYPE OF SCREEN/RISER MATERIAL: PVC Schedule 80

SLOT SIZE OF SCREEN: 0.040

TYPE OF FILTER PACK: #3 Sand

GRADATION OF FILTER PACK: 4-20

QUANTITY OF FILTER PACK: 5.5-50lb. Bags

TYPE OF BENTONITE IN SEAL: 3/8" Shur Plug Chips

QUANTITY OF BENTONITE IN SEAL: 2.5 bags

TYPE OF GROUT: Portland Type I

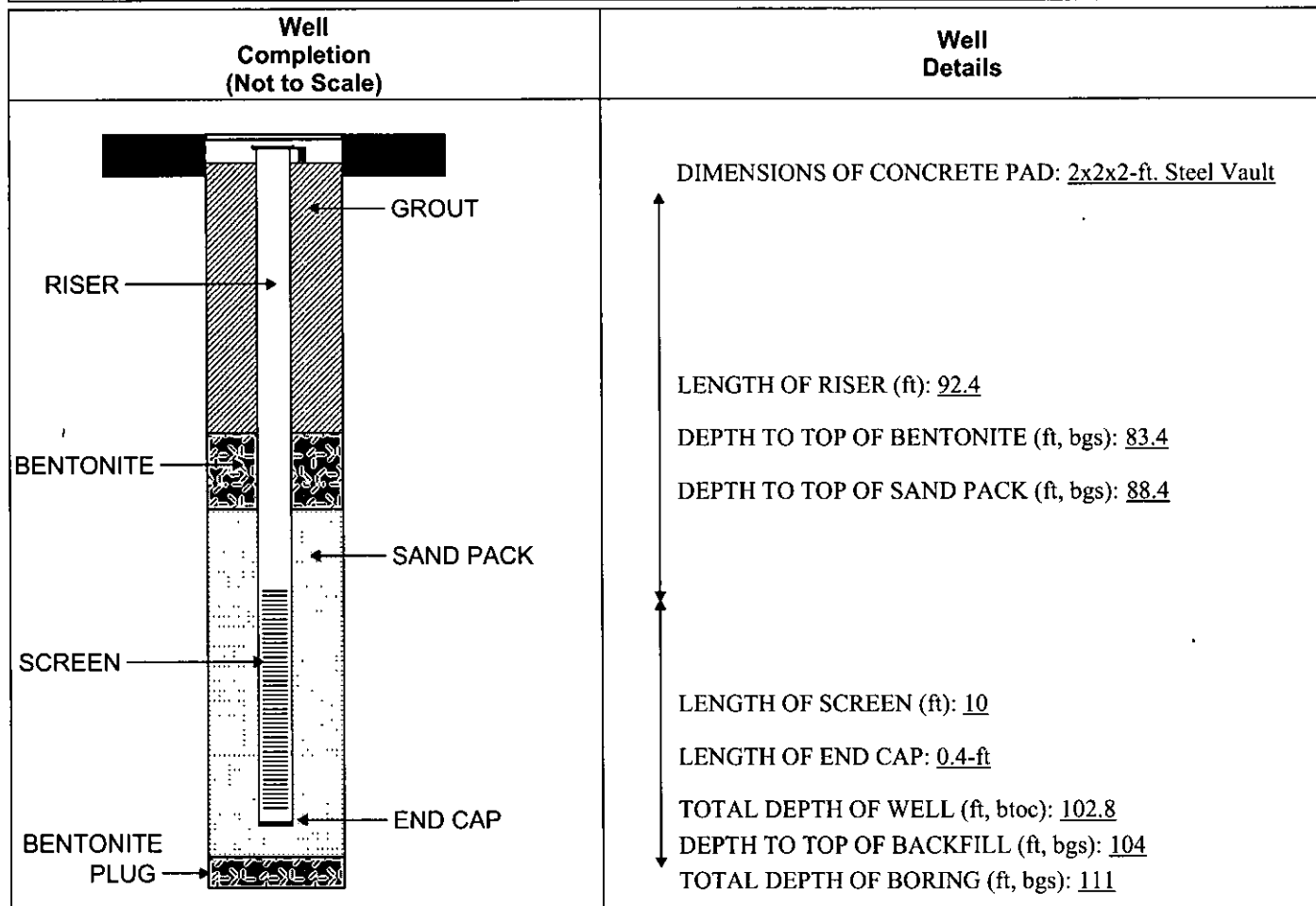
QUANTITY OF GROUT: 11-94lb. Bags

DEVELOPMENT METHOD: Bailer/Bladder pump

DATE DEVELOPED: 2/28/07 thru 3/1/07

DEPTH TO WATER (ft.btoc): 95.17

NOTES:



Prepared by: WTR

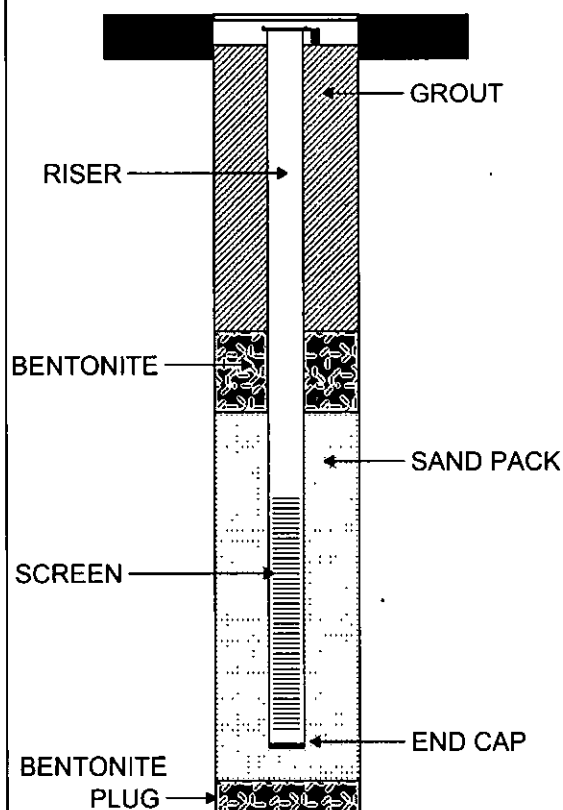
Date: 4/27/2007

Checked by: KMS

Date: 4/27/2007

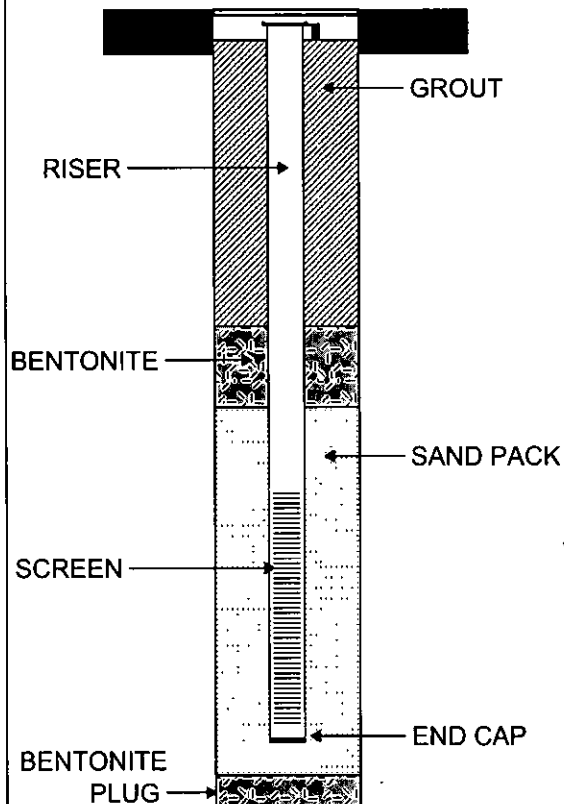
**WELL INSTALLATION DIAGRAM****WELL NO.:** IW85-06PROJECT: DDMT - Main Installation Remedial ActionPROJECT NUMBER: 3202-016SITE LOCATION: TTA-2e2M PROJECT MANAGER: T. Holmese2M FIELD STAFF: K. SedlakDATE COMPLETED: 2/27/2007WELL LOCATION: TTA-2NORTHING: 276779.47EASTING: 806183.37GROUND SURFACE ELEVATION (ft, msl): 305.45TOP OF CASING ELEVATION (ft, msl): 304.81TOP OF SCREEN ELEVATION (ft, msl): 209.31DRILLING CO.: ProsonicDRILLING METHOD: SonicBOREHOLE DIAMETER (in): 8SURFACE COMPLETION: Flush MountBOLLARDS: NoWELL DIAMETER (in): 4TYPE OF SCREEN/RISER MATERIAL: PVC Schedule 80SLOT SIZE OF SCREEN: 0.040TYPE OF FILTER PACK: #3 SandGRADATION OF FILTER PACK: 4-20QUANTITY OF FILTER PACK: 8-50lb. BagsTYPE OF BENTONITE IN SEAL: 3/8" Shur Plug ChipsQUANTITY OF BENTONITE IN SEAL: 1.5 bagsTYPE OF GROUT: Portland Type IQUANTITY OF GROUT: 12-94lb. BagsDEVELOPMENT METHOD: Grundfos/Bailer/Bladder p.DATE DEVELOPED: 2/28/07 thru 3/1/07DEPTH TO WATER (ft.btoc): 96.05

NOTES:

**Well Completion
(Not to Scale)****Well Details**DIMENSIONS OF CONCRETE PAD: 2x2x2-ft. Steel VaultLENGTH OF RISER (ft): 95.5DEPTH TO TOP OF BENTONITE (ft, bgs): 85.5DEPTH TO TOP OF SAND PACK (ft, bgs): 90.5LENGTH OF SCREEN (ft): 10LENGTH OF END CAP: 0.4-ftTOTAL DEPTH OF WELL (ft, btoc): 105.9DEPTH TO TOP OF BACKFILL (ft, bgs): 106TOTAL DEPTH OF BORING (ft, bgs): 111Prepared by: **WTR**Date: **4/27/2007**Checked by: **KMS**Date: **4/27/2007**

**WELL INSTALLATION DIAGRAM****WELL NO.:** PMW85-04PROJECT: DDMT - Main Installation Remedial ActionPROJECT NUMBER: 3202-016SITE LOCATION: TTA-2e2M PROJECT MANAGER: T. Holmese2M FIELD STAFF: K. SedlakDATE COMPLETED: 2/21/2007WELL LOCATION: TTA-2NORTHING: 276763.5EASTING: 806168.69GROUND SURFACE ELEVATION (ft, msl): 305.33TOP OF CASING ELEVATION (ft, msl): 305.18TOP OF SCREEN ELEVATION (ft, msl): 213.45DRILLING CO.: ProsonicDRILLING METHOD: SonicBOREHOLE DIAMETER (in): 6SURFACE COMPLETION: Flush MountBOLLARDS: NoWELL DIAMETER (in): 2TYPE OF SCREEN/RISER MATERIAL: PVC Schedule 40SLOT SIZE OF SCREEN: 0.010TYPE OF FILTER PACK: SandGRADATION OF FILTER PACK: 10-20QUANTITY OF FILTER PACK: 7-50lb. BagsTYPE OF BENTONITE IN SEAL: 3/8" Shur Plug ChipsQUANTITY OF BENTONITE IN SEAL: 1.25 bagsTYPE OF GROUT: Portland Type IQUANTITY OF GROUT: 6-94lb. BagsDEVELOPMENT METHOD: Grundfos / bladder pumpDATE DEVELOPED: 2/27/07 thru 2/28/07DEPTH TO WATER (ft.btoc): 97.24

NOTES:

**Well
Completion
(Not to Scale)****Well
Details**DIMENSIONS OF CONCRETE PAD: 3-ft. by 3-ft.LENGTH OF RISER (ft): 91.73DEPTH TO TOP OF BENTONITE (ft, bgs): 82DEPTH TO TOP OF SAND PACK (ft, bgs): 87LENGTH OF SCREEN (ft): 10LENGTH OF END CAP: 0.5-ftTOTAL DEPTH OF WELL (ft, btoc): 102.55DEPTH TO TOP OF BACKFILL (ft, bgs): 103TOTAL DEPTH OF BORING (ft, bgs): 111Prepared by: **WTR**Date: **4/27/2007**Checked by: **KMS**Date: **4/27/2007**



WELL INSTALLATION DIAGRAM

WELL NO.: PMW85-05

PROJECT: DDMT - Main Installation Remedial Action

PROJECT NUMBER: 3202-016

SITE LOCATION: TTA-2

e2M PROJECT MANAGER: T. Holmes

e2M FIELD STAFF: K. Sedlak

DATE COMPLETED: 2/22/2007

WELL LOCATION: TTA-2

NORTHING: 276752.08

EASTING: 806222.46

GROUND SURFACE ELEVATION (ft, msl): 305.32

TOP OF CASING ELEVATION (ft, msl): 305.12

TOP OF SCREEN ELEVATION (ft, msl): 211.96

DRILLING CO.: Prosonic

DRILLING METHOD: Sonic

BOREHOLE DIAMETER (in): 6

SURFACE COMPLETION: Flush Mount

BOLLARDS: No

WELL DIAMETER (in): 2

TYPE OF SCREEN/RISER MATERIAL: PVC Schedule 40

SLOT SIZE OF SCREEN: 0.010

TYPE OF FILTER PACK: Sand

GRADATION OF FILTER PACK: 10-20

QUANTITY OF FILTER PACK: 6-50lb. Bags

TYPE OF BENTONITE IN SEAL: 3/8" Shur Plug Chips

QUANTITY OF BENTONITE IN SEAL: 1.5 bags

TYPE OF GROUT: Portland Type I

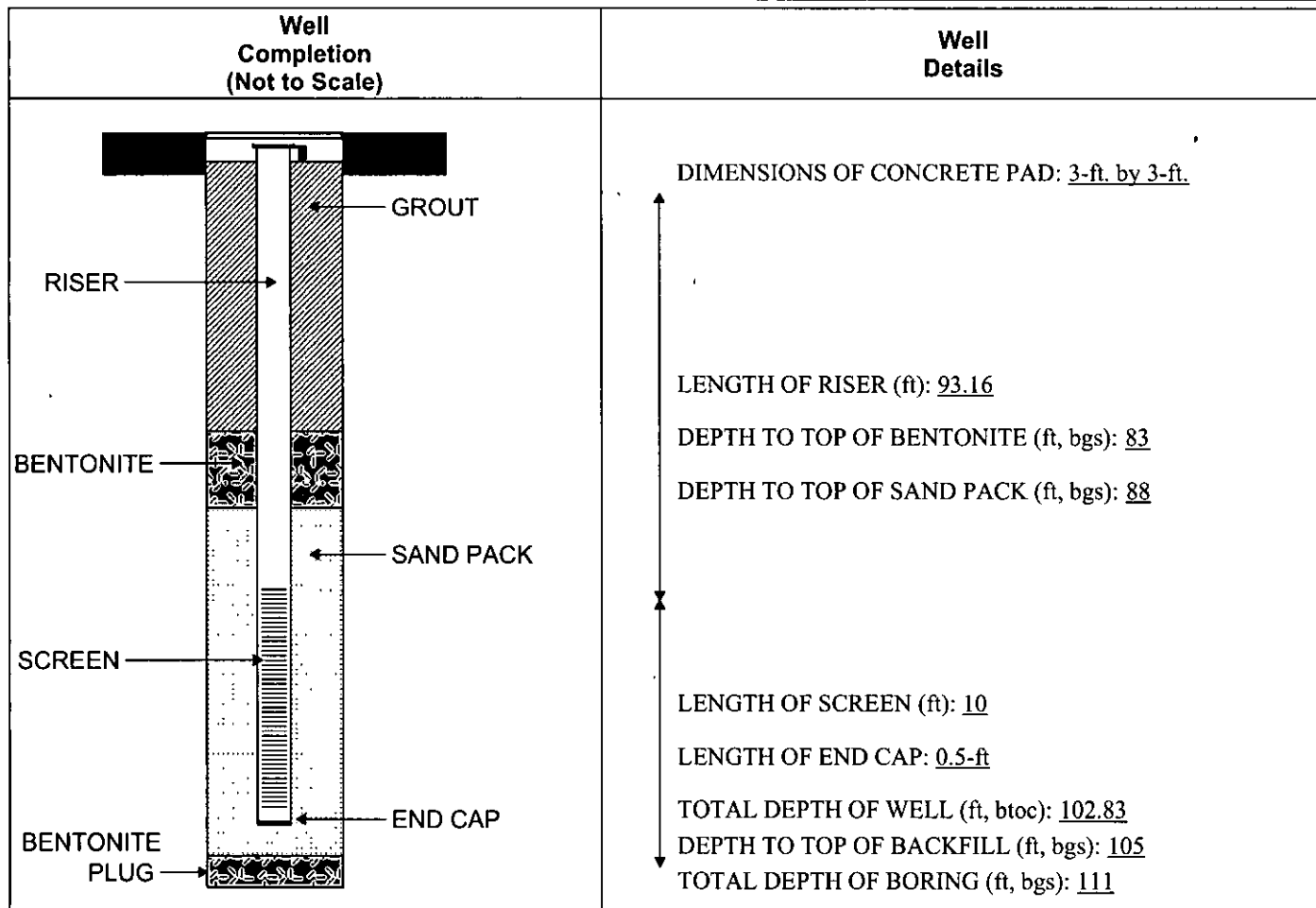
QUANTITY OF GROUT: 6-94lb. Bags

DEVELOPMENT METHOD: Bailer/bladder pump

DATE DEVELOPED: 2/28/07 thru 3/1/07

DEPTH TO WATER (ft, btoc): 96.27

NOTES:



Prepared by: WTR

Date: 4/27/2007

Checked by: KMS

Date: 4/27/2007

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

APPENDIX C
INJECTION SUMMARIES

INJECTION SUMMARY NO.1

Well I.D.	Date of Injection	Start Time	End Time	Flow Rate (gpm)	Volume injected (gallons)	Sodium Lactate Percent
IW101-01A	9/11/2006	8:35	8:51	20	250	2.16
IW101-03A	9/11/2006	8:41	8:56	19.9	250.7	2.16
IW101-01B	9/11/2006	8:53	9:07	24.5	276	2.16
IW101-03B	9/11/2006	9:00	9:13	20	213.4	2.16
IW101-01C	9/11/2006	10:16	10:35	22.5	250	2.16
IW101-02A	9/11/2006	10:43	10:56	10	240	2.16
IW101-03C	9/11/2006	11:02	11:17	19.8	250	2.16
IW101-07A	9/11/2006	11:22	11:36	20	237.5	2.16
IW101-02B	9/11/2006	12:08	12:20	22.8	250	2.16
IW101-02C	9/11/2006	12:24	12:38	21.8	250	2.16
IW101-07B	9/11/2006	12:49	13:01	20	250	2.16
IW101-07C	9/11/2006	13:02	13:16	20	250	2.16
IW101-09A	9/11/2006	13:44	13:58	22.7	250	2.16
IW101-09B	9/11/2006	14:00	14:09	22.7	250	2.16
IW101-04A	9/11/2006	14:27	14:41	20	250	2.16
IW101-04B	9/11/2006	14:42	14:54	19.9	250	2.16
IW101-09C	9/12/2006	7:16	7:29	21.8	250	2.16
IW101-04C	9/12/2006	7:26	7:44	20	251	2.16
IW101-05A	9/12/2006	7:36	7:46	22	246	2.16
IW101-06A	9/12/2006	7:52	8:05	20	244	2.16
IW101-05B	9/12/2006	8:56	9:10	22	250	2.16
IW101-05C	9/12/2006	9:11	9:22	21.9	250	2.16
IW101-06B	9/12/2006	9:43	9:57	19.6	250	2.16
IW101-06C	9/12/2006	9:58	10:12	19.3	247.8	2.16
IW101-08A	9/12/2006	11:25	11:38	20	250	2.16
IW101-08B	9/12/2006	11:39	11:52	19.8	245	2.16
IW21-01A	9/12/2006	12:13	12:58	3.3	167	2.16
IW21-01B	9/12/2006	12:55	13:25	10.1	167	2.16
IW101-08C	9/12/2006	12:59	13:12	19.8	250	2.16
IW21-03A	9/12/2006	13:24	13:40	10.1	167	2.16
IW21-02A	9/12/2006	13:30	13:43	13.5	166	2.16
IW21-03B	9/12/2006	13:45	13:55	9.9	167	2.16
IW21-02B	9/12/2006	14:52	15:06	10.9	167	2.16
IW21-04A	9/12/2006	15:12	15:25	10.1	167	2.16
IW21-04B	9/12/2006	15:28	15:40	10	166	2.16
IW21-05A	9/13/2006	7:52	8:10	9.8	167	2.16
IW21-05B	9/13/2006	8:12	8:28	9.8	167	2.16
IW92-01	9/13/2006	9:07	9:26	10	112	2.16
IW92-03	9/13/2006	9:16	9:34	7	111	2.16
IW92-02	9/13/2006	9:32	9:47	9.5	111	2.16
IW92-04	9/13/2006	9:40	10:01	4.8	111	2.16
IW92-05	9/13/2006	9:51	10:05	9	108	2.16
IW92-06	9/13/2006	10:11	10:26	6.3	111	2.16
IW92-08	9/13/2006	10:35	10:53	6.4	111	2.16
IW92-07	9/13/2006	10:59	11:12	9.6	114	2.16
IW85-01	9/13/2006	11:18	11:30	9.7	111	2.16
IW85-02	9/13/2006	11:35	11:46	10	111	2.16
IW85-03	9/13/2006	11:50	12:02	9.6	111	2.16
IW85-04	9/13/2006	12:11	12:20	9.8	89	2.16

INJECTION SUMMARY NO. 2

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	9/25/2006	9:36	9:52	2.16	21.5	250
IW101-01B	TTA-1	15	9/25/2006	9:55	10:06	2.16	21.5	236
IW101-01C	TTA-1	15	9/25/2006	11:29	11:43	2.16	20.8	250
IW101-02A	TTA-1	15	9/25/2006	11:52	12:05	2.16	20.1	250
IW101-02B	TTA-1	15	9/25/2006	13:20	13:35	2.16	20	250
IW101-02C	TTA-1	15	9/25/2006	13:36	13:49	2.16	19.9	250
IW101-03A	TTA-1	15	9/25/2006	13:13	13:26	2.16	19.6	250
IW101-03B	TTA-1	15	9/25/2006	13:28	13:40	2.16	19.6	242
IW101-03C	TTA-1	15	9/25/2006	14:53	15:07	2.16	19.5	252
IW101-04A	TTA-1	15	9/26/2006	9:21	9:33	2.16	20.9	250
IW101-04B	TTA-1	15	9/26/2006	11:00	11:12	2.16	20.1	250
IW101-04C	TTA-1	15	9/26/2006	11:13	11:26	2.16	20.4	235
IW101-05A	TTA-1	15	9/26/2006	9:51	10:06	2.16	19	274
IW101-05B	TTA-1	15	9/26/2006	10:07	10:18	2.16	19.7	213
IW101-05C	TTA-1	15	9/26/2006	11:48	12:02	2.16	18.8	251
IW101-06A	TTA-1	15	9/26/2006	12:07	12:20	2.16	13	247
IW101-06B	TTA-1	15	9/26/2006	13:25	13:38	2.16	19.4	250
IW101-06C	TTA-1	15	9/26/2006	13:40	13:52	2.16	19.3	243
IW101-07A	TTA-1	15	9/25/2006	15:22	15:34	2.16	19.9	239
IW101-07B	TTA-1	15	9/26/2006	7:41	7:54	2.16	19.2	250
IW101-07C	TTA-1	15	9/26/2006	7:56	8:09	2.16	19.4	241
IW101-08A	TTA-1	15	9/26/2006	12:32	12:44	2.16	20.7	250
IW101-08B	TTA-1	15	9/26/2006	12:46	12:59	2.16	20.1	241
IW101-08C	TTA-1	15	9/26/2006	14:07	14:20	2.16	20.5	250
IW101-09A	TTA-1	15	9/26/2006	7:21	7:37	2.16	19.1	250
IW101-09B	TTA-1	15	9/26/2006	7:38	7:50	2.16	21.2	238
IW101-09C	TTA-1	15	9/26/2006	9:03	9:15	2.16	21.1	250
IW21-01A	TTA-1	10	9/27/2006	7:43	7:59	2.16	10	167
IW21-01B	TTA-1	10	9/26/2006	8:01	8:17	2.16	10.1	167
IW21-02A	TTA-1	10	9/27/2006	8:25	8:29	2.16	20	167
IW21-02B	TTA-1	10	9/27/2006	8:12	8:23	2.16	19.5	167
IW21-03A	TTA-1	10	9/27/2006	8:25	8:42	2.16	10.1	164
IW21-03B	TTA-1	10	9/27/2006	10:22	10:40	2.16	9.8	167
IW21-04A	TTA-1	10	9/27/2006	9:52	10:01	2.16	19.7	167
IW21-04B	TTA-1	10	9/27/2006	10:02	10:11	2.16	20.2	167
IW21-05A	TTA-1	10	9/27/2006	10:45	11:02	2.16	9.9	167
IW21-05B	TTA-1	10	9/27/2006	11:03	11:19	2.16	10	160
IW85-01	TTA-2	10	9/28/2006	14:49	15:00	2.16	14.6	111
IW85-02	TTA-2	10	9/28/2006	15:05	15:15	2.16	13.3	111
IW85-03	TTA-2	10	9/28/2006	15:20	15:29	2.16	12	111
IW85-04	TTA-2	10	9/28/2006	15:32	15:44	2.16	15	105
IW92-01	TTA-2	10	9/28/2006	9:18	9:38	2.16	5.2	111
IW92-02	TTA-2	10	9/28/2006	9:21	9:33	2.16	7.6	111
IW92-03	TTA-2	10	9/28/2006	9:39	9:51	2.16	9.3	111
IW92-04	TTA-2	10	9/28/2006	9:48	10:02	2.16	4.8	111
IW92-05	TTA-2	10	9/28/2006	9:54	10:06	2.16	9.6	111
IW92-06	TTA-2	10	9/28/2006	10:10	10:22	2.16	9.5	111
IW92-07	TTA-2	10	9/28/2006	10:11	10:23	2.16	10.7	110
IW92-08	TTA-2	10	9/28/2006	10:27	10:32	2.16	9.6	111

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION SUMMARY NO. 3

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	10/11/2006	12:19	12:32	2.16	19	253
IW101-01B	TTA-1	15	10/11/2006	12:33	12:47	2.16	19.1	237
IW101-01C	TTA-1	15	10/11/2006	13:19	13:31	2.16	20	251
IW101-02A	TTA-1	15	10/11/2006	13:35	13:47	2.16	19.5	237
IW101-02B	TTA-1	15	10/11/2006	14:17	14:29	2.16	19.8	251
IW101-02C	TTA-1	15	10/11/2006	14:31	14:43	2.16	19.8	239
IW101-03A	TTA-1	15	10/12/2006	7:26	7:39	2.16	18.6	251
IW101-03B	TTA-1	15	10/12/2006	7:41	7:54	2.16	17.9	230
IW101-03C	TTA-1	15	10/12/2006	8:19	8:31	2.16	19.9	251
IW101-04A	TTA-1	15	10/12/2006	11:33	11:45	2.16	20	242
IW101-04B	TTA-1	15	10/12/2006	12:13	12:26	2.16	19.8	250
IW101-04C	TTA-1	15	10/12/2006	12:27	12:40	2.16	18.9	244
IW101-05A	TTA-1	15	10/12/2006	13:51	14:04	2.16	19.2	250
IW101-05B	TTA-1	15	10/12/2006	14:05	14:16	2.16	19.8	241
IW101-05C	TTA-1	15	10/12/2006	14:51	15:03	2.16	19.8	251
IW101-06A	TTA-1	15	10/12/2006	15:06	15:18	2.16	19.8	241
IW101-06B	TTA-1	15	10/13/2006	7:44	7:57	2.16	19.9	250
IW101-06C	TTA-1	15	10/13/2006	7:58	8:11	2.16	20	244
IW101-07A	TTA-1	15	10/12/2006	8:35	8:47	2.16	19.9	251
IW101-07B	TTA-1	15	10/12/2006	9:18	9:33	2.16	18.1	250
IW101-07C	TTA-1	15	10/12/2006	9:34	9:47	2.16	19.1	238
IW101-08A	TTA-1	15	10/13/2006	8:42	8:56	2.16	19.4	250
IW101-08B	TTA-1	15	10/13/2006	8:57	9:09	2.16	19.9	240
IW101-08C	TTA-1	15	10/13/2006	9:49	10:03	2.16	18.5	250
IW101-09A	TTA-1	15	10/12/2006	10:21	10:35	2.16	19.2	251
IW101-09B	TTA-1	15	10/12/2006	10:35	10:47	2.16	19.1	241
IW101-09C	TTA-1	15	10/12/2006	11:16	11:29	2.16	19.8	250
IW21-01A	TTA-1	10	10/13/2006	13:06	13:24	2.16	9.3	167
IW21-01B	TTA-1	10	10/16/2006	7:37	7:46	2.16	9.6	167
IW21-02A	TTA-1	10	10/16/2006	7:54	8:11	2.16	9.8	167
IW21-02B	TTA-1	10	10/16/2006	8:13	8:30	2.16	9.8	167
IW21-03A	TTA-1	10	10/16/2006	8:03	8:14	2.16	24.1	167
IW21-03B	TTA-1	10	10/16/2006	8:24	8:34	2.16	13.8	166.4
IW21-04A	TTA-1	10	10/16/2006	8:52	9:03	2.16	22.1	161.6
IW21-04B	TTA-1	10	10/16/2006	10:28	10:35	2.16	24.8	167.2
IW21-05A	TTA-1	10	10/16/2006	10:46	10:54	2.16	24.8	166.5
IW21-05B	TTA-1	10	10/16/2006	10:55	11:02	2.16	24.2	159.4
IW85-01	TTA-2	10	10/17/2006	9:31	9:39	2.16	15.3	111.3
IW85-02	TTA-2	10	10/17/2006	9:49	9:56	2.16	25.5	111.2
IW85-03	TTA-2	10	10/17/2006	10:11	10:19	2.16	10.3	111
IW85-04	TTA-2	10	10/17/2006	10:36	11:16	2.16	13	111
IW92-01	TTA-2	10	10/16/2006	14:30	14:41	2.16	9	111.2
IW92-02	TTA-2	10	10/16/2006	14:52	15:02	2.16	12.4	110.8
IW92-03	TTA-2	10	10/17/2006	7:24	7:35	2.16	12.5	111.4
IW92-04	TTA-2	10	10/17/2006	7:28	7:40	2.16	8.5	110
IW92-05	TTA-2	10	10/17/2006	7:44	7:52	2.16	12.4	111.1
IW92-06	TTA-2	10	10/17/2006	7:52	8:03	2.16	9.7	111
IW92-07	TTA-2	10	10/17/2006	8:03	9:11	2.16	14.9	111.1
IW92-08	TTA-2	10	10/17/2006	8:09	8:25	2.16	9.6	110

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot scr
Target injection volume in TTA-2 wells is 111 gallons

INJECTION SUMMARY NO. 4

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	10/23/2006	13:53	14:06	2.16	20	250
IW101-01B	TTA-1	15	10/23/2006	14:07	14:20	2.16	20	242
IW101-01C	TTA-1	15	10/24/2006	7:19	7:32	2.16	20.1	254
IW101-02A	TTA-1	15	10/23/2006	14:01	14:13	2.16	20.7	251
IW101-02B	TTA-1	15	10/23/2006	14:16	14:29	2.16	22	238.5
IW101-02C	TTA-1	15	10/24/2006	7:24	7:26	2.16	14.7	250.1
IW101-03A	TTA-1	15	10/24/2006	7:40	7:53	2.16	22.9	244.8
IW101-03B	TTA-1	15	10/24/2006	9:46	9:57	2.16	15.6	250
IW101-03C	TTA-1	15	10/24/2006	9:58	10:09	2.16	24	240.9
IW101-04A	TTA-1	15	10/24/2006	11:36	11:48	2.16	20.5	250.5
IW101-04B	TTA-1	15	10/24/2006	11:47	11:58	2.16	23.8	246.3
IW101-04C	TTA-1	15	10/24/2006	13:26	13:38	2.16	23.6	249.9
IW101-05A	TTA-1	15	10/24/2006	12:44	12:57	2.16	20	240
IW101-05B	TTA-1	15	10/24/2006	14:15	14:27	2.16	20.2	250
IW101-05C	TTA-1	15	10/24/2006	14:28	14:40	2.16	20	238
IW101-06A	TTA-1	15	10/25/2006	7:47	7:58	2.16	24.2	246.1
IW101-06B	TTA-1	15	10/25/2006	7:28	7:44	2.16	24	250.5
IW101-06C	TTA-1	15	10/24/2006	13:43	13:54	2.16	23.6	244.7
IW101-07A	TTA-1	15	10/24/2006	7:37	7:49	2.16	20.1	235
IW101-07B	TTA-1	15	10/24/2006	9:03	9:15	2.16	19.9	250
IW101-07C	TTA-1	15	10/24/2006	9:16	9:28	2.16	20.1	237
IW101-08A	TTA-1	15	10/25/2006	7:23	7:36	2.16	20.3	250
IW101-08B	TTA-1	15	10/25/2006	7:36	7:48	2.16	19.8	240
IW101-08C	TTA-1	15	10/25/2006	8:59	9:11	2.16	20	250
IW101-09A	TTA-1	15	10/24/2006	10:34	10:40	2.16	20.1	251
IW101-09B	TTA-1	15	10/24/2006	10:47	10:59	2.16	20.1	239
IW101-09C	TTA-1	15	10/24/2006	12:27	12:40	2.16	19.6	250
IW21-01A	TTA-1	10	10/25/2006	12:00	12:10	2.16	13.6	166.9
IW21-01B	TTA-1	10	10/25/2006	12:11	12:21	2.16	19.3	167.1
IW21-02A	TTA-1	10	10/25/2006	12:14	12:30	2.16	16	167
IW21-02B	TTA-1	10	10/25/2006	12:30	12:38	2.16	10.3	162
IW21-03A	TTA-1	10	10/25/2006	12:28	12:37	2.16	23.1	159.8
IW21-03B	TTA-1	10	10/25/2006	13:38	13:46	2.16	17.5	167
IW21-04A	TTA-1	10	10/25/2006	13:49	13:57	2.16	23.3	166.7
IW21-04B	TTA-1	10	10/25/2006	13:58	14:07	2.16	23.2	159.5
IW21-05A	TTA-1	10	10/25/2006	14:41	14:57	2.16	10.2	167
IW21-05B	TTA-1	10	10/25/2006	14:59	15:26	2.16	10.2	167
IW85-01	TTA-2	10	10/26/2006	14:45	14:50	2.16	22.5	111.3
IW85-02	TTA-2	10	10/26/2006	14:53	14:59	2.16	21.7	111.2
IW85-03	TTA-2	10	10/27/2006	7:05	7:15	2.16	1.9	111
IW85-04	TTA-2	10	10/27/2006	7:23	7:38	2.16	10.9	133.2
IW92-01	TTA-2	10	10/26/2006	12:20	12:27	2.16	12.9	110.8
IW92-02	TTA-2	10	10/26/2006	12:28	12:42	2.16	12.8	110.9
IW92-03	TTA-2	10	10/26/2006	12:47	12:53	2.16	20.7	110.9
IW92-04	TTA-2	10	10/26/2006	13:00	13:07	2.16	12.3	111.1
IW92-05	TTA-2	10	10/26/2006	13:39	13:42	2.16	18.3	111
IW92-06	TTA-2	10	10/26/2006	13:49	13:55	2.16	23.8	111.2
IW92-07	TTA-2	10	10/26/2006	13:59	14:06	2.16	20	111.1
IW92-08	TTA-2	10	10/26/2006	13:34	13:35	2.16	22.3	111

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION SUMMARY NO. 5

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	11/9/2006	14:11	14:22	2.16	22.4	250
IW101-01B	TTA-1	15	11/9/2006	14:24	14:35	2.16	22.3	239
IW101-01C	TTA-1	15	11/10/2006	7:15	7:27	2.16	26.9	250
IW101-02A	TTA-1	15	11/9/2006	14:55	15:07	2.16	20.4	250
IW101-02B	TTA-1	15	11/9/2006	15:08	15:20	2.16	20.9	236
IW101-02C	TTA-1	15	11/10/2006	8:28	8:43	2.16	23.9	244
IW101-03A	TTA-1	15	11/10/2006	9:20	9:30	2.16	24.9	250
IW101-03B	TTA-1	15	11/10/2006	9:32	9:43	2.16	26.6	238
IW101-03C	TTA-1	15	11/10/2006	10:28	10:40	2.16	23.5	250
IW101-04A	TTA-1	15	11/10/2006	13:58	14:10	2.16	26.4	247
IW101-04B	TTA-1	15	11/10/2006	14:38	14:49	2.16	23.7	250
IW101-04C	TTA-1	15	11/10/2006	14:50	15:01	2.16	23.8	244
IW101-05A	TTA-1	15	11/13/2006	8:47	8:57	2.16	27.1	250
IW101-05B	TTA-1	15	11/13/2006	8:57	9:09	2.16	26.7	234
IW101-05C	TTA-1	15	11/13/2006	9:48	9:58	2.16	25.8	250
IW101-06A	TTA-1	15	11/13/2006	10:01	10:12	2.16	25.4	250
IW101-06B	TTA-1	15	11/13/2006	10:44	10:54	2.16	27.3	250
IW101-06C	TTA-1	15	11/13/2006	10:54	11:04	2.16	26.9	237
IW101-07A	TTA-1	15	11/10/2006	10:44	10:55	2.16	23.8	244
IW101-07B	TTA-1	15	11/10/2006	11:49	11:59	2.16	24.3	250
IW101-07C	TTA-1	15	11/10/2006	12:00	12:11	2.16	24.6	236
IW101-08A	TTA-1	15	11/13/2006	11:34	11:45	2.16	25.1	250
IW101-08B	TTA-1	15	11/13/2006	11:46	11:56	2.16	24.9	245
IW101-08C	TTA-1	15	11/13/2006	12:40	12:50	2.16	26.5	250
IW101-09A	TTA-1	15	11/10/2006	12:50	13:00	2.16	24.3	250
IW101-09B	TTA-1	15	11/10/2006	13:01	13:13	2.16	24.1	244
IW101-09C	TTA-1	15	11/10/2006	13:46	13:55	2.16	26.9	250
IW21-01A	TTA-1	10	11/13/2006	13:08	13:19	2.16	14.8	167
IW21-01B	TTA-1	10	11/13/2006	13:20	14:03	2.16	14.6	167
IW21-02A	TTA-1	10	11/13/2006	14:11	14:23	2.16	20.9	167
IW21-02B	TTA-1	10	11/13/2006	14:24	14:31	2.16	20.9	167
IW21-03A	TTA-1	10	11/14/2006	7:20	7:24	2.16	20.2	167
IW21-03B	TTA-1	10	11/14/2006	7:25	7:35	2.16	22.4	167
IW21-04A	TTA-1	10	11/14/2006	7:41	7:51	2.16	26.4	167
IW21-04B	TTA-1	10	11/14/2006	7:52	8:35	2.16	24.2	167
IW21-05A	TTA-1	10	11/14/2006	8:38	8:45	2.16	24	167
IW21-05B	TTA-1	10	11/14/2006	8:47	8:54	2.16	26	167
IW85-01	TTA-2	10	11/14/2006	13:41	13:48	2.16	14.5	109
IW85-02	TTA-2	10	11/14/2006	13:51	13:57	2.16	20.7	109
IW85-03	TTA-2	10	11/14/2006	14:03	14:09	2.16	14.7	111
IW85-04	TTA-2	10	11/14/2006	14:14	14:21	2.16	24.9	109
IW92-01	TTA-2	10	11/14/2006	10:11	10:24	2.16	16.5	111
IW92-02	TTA-2	10	11/14/2006	10:27	10:35	2.16	9.8	111
IW92-03	TTA-2	10	11/14/2006	10:44	10:51	2.16	15.1	91
IW92-04	TTA-2	10	11/14/2006	11:21	11:29	2.16	19.1	111
IW92-05	TTA-2	10	11/14/2006	11:40	11:49	2.16	12.9	111
IW92-06	TTA-2	10	11/14/2006	11:54	12:01	2.16	18.7	111
IW92-07	TTA-2	10	11/14/2006	12:05	12:11	2.16	20.2	111
IW92-08	TTA-2	10	11/14/2006	12:15	13:35	2.16	16.5	121

INJECTION SUMMARY NO. 6

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	11/27/2006	8:09	8:18	2.16	26.8	250
IW101-01B	TTA-1	15	11/27/2006	8:20	8:30	2.16	27	247
IW101-01C	TTA-1	15	11/27/2006	8:55	9:04	2.16	26.5	250
IW101-02A	TTA-1	15	11/27/2006	9:09	9:19	2.16	26.5	250
IW101-02B	TTA-1	15	11/27/2006	9:46	9:59	2.16	26.7	250
IW101-02C	TTA-1	15	11/27/2006	10:00	10:11	2.16	27	245
IW101-03A	TTA-1	15	11/27/2006	10:36	10:45	2.16	25	250
IW101-03B	TTA-1	15	11/27/2006	10:46	10:55	2.16	26.5	246
IW101-03C	TTA-1	15	11/27/2006	11:24	11:35	2.16	26.5	250
IW101-04A	TTA-1	15	11/27/2006	14:09	14:19	2.16	25.7	246
IW101-04B	TTA-1	15	11/27/2006	14:42	14:52	2.16	26.6	250
IW101-04C	TTA-1	15	11/27/2006	14:53	15:01	2.16	27	242
IW101-05A	TTA-1	15	11/28/2006	7:27	7:37	2.16	25.8	250
IW101-05B	TTA-1	15	11/28/2006	7:37	7:47	2.16	25.7	245
IW101-05C	TTA-1	15	11/28/2006	8:24	8:34	2.16	27	250
IW101-06A	TTA-1	15	11/28/2006	8:37	8:46	2.16	28.7	250
IW101-06B	TTA-1	15	11/28/2006	9:13	9:23	2.16	26.1	250
IW101-06C	TTA-1	15	11/28/2006	9:24	9:35	2.16	26	245
IW101-07A	TTA-1	15	11/27/2006	11:39	11:46	2.16	27.4	246
IW101-07B	TTA-1	15	11/27/2006	12:17	12:27	2.16	26.1	250
IW101-07C	TTA-1	15	11/27/2006	12:28	12:39	2.16	26.2	246
IW101-08A	TTA-1	15	11/28/2006	10:04	10:14	2.16	27.6	250
IW101-08B	TTA-1	15	11/28/2006	10:15	10:25	2.16	26.9	240
IW101-08C	TTA-1	15	11/28/2006	11:01	11:11	2.16	26.3	250
IW101-09A	TTA-1	15	11/27/2006	13:05	13:15	2.16	26.8	250
IW101-09B	TTA-1	15	11/27/2006	13:16	13:26	2.16	27	243
IW101-09C	TTA-1	15	11/27/2006	13:58	14:06	2.16	26	250
IW21-01A	TTA-1	10	11/28/2006	11:18	11:28	2.16	23.1	167
IW21-01B	TTA-1	10	11/28/2006	11:29	12:45	2.16	18.9	167
IW21-02A	TTA-1	10	11/28/2006	11:52	11:58	2.16	27	167
IW21-02B	TTA-1	10	11/28/2006	11:59	12:06	2.16	27	167
IW21-03A	TTA-1	10	11/28/2006	12:11	12:17	2.16	27	162
IW21-03B	TTA-1	10	11/28/2006	13:27	13:34	2.16	23.2	167
IW21-04A	TTA-1	10	11/28/2006	12:51	12:58	2.16	25.8	167
IW21-04B	TTA-1	10	11/28/2006	13:00	13:06	2.16	19.5	167
IW21-05A	TTA-1	10	11/28/2006	13:38	13:44	2.16	25.6	168
IW21-05B	TTA-1	10	11/28/2006	13:46	13:53	2.16	21.1	158
IW85-01	TTA-2	10	11/29/2006	7:58	8:03	2.16	26.9	111
IW85-02	TTA-2	10	11/29/2006	8:05	8:10	2.16	26.8	111
IW85-03	TTA-2	10	11/29/2006	8:12	8:18	2.16	26.1	111
IW85-04	TTA-2	10	11/29/2006	8:19	8:26	2.16	17.8	111
IW92-01	TTA-2	10	11/28/2006	13:29	14:26	2.16	20.6	111
IW92-02	TTA-2	10	11/28/2006	14:31	14:38	2.16	19.3	111
IW92-03	TTA-2	10	11/28/2006	14:43	14:46	2.16	21.7	111
IW92-04	TTA-2	10	11/28/2006	14:52	14:58	2.16	20.7	111
IW92-05	TTA-2	10	11/28/2006	15:02	15:07	2.16	6.2	111
IW92-06	TTA-2	10	11/29/2006	8:03	8:09	2.16	20	111
IW92-07	TTA-2	10	11/29/2006	8:12	8:19	2.16	18.8	111
IW92-08	TTA-2	10	11/29/2006	8:25	8:38	2.16	23.2	130

Notes: TTA-1 Target injection volumes per well. 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
Target injection volume in TTA-2 wells is 111 gallons

INJECTION SUMMARY NO. 7

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	12/11/2006	7:54	8:06	2.16	23.4	250
IW101-01B	TTA-1	15	12/11/2006	8:07	8:18	2.16	23.8	248
IW101-01C	TTA-1	15	12/11/2006	8:49	8:58	2.16	26.8	250
IW101-02A	TTA-1	15	12/11/2006	9:02	9:11	2.16	26.6	236
IW101-02B	TTA-1	15	12/11/2006	9:42	9:54	2.16	23.9	250
IW101-02C	TTA-1	15	12/11/2006	9:55	10:05	2.16	24.6	235
IW101-03A	TTA-1	15	12/11/2006	10:36	10:45	2.16	27.4	250
IW101-03B	TTA-1	15	12/11/2006	10:46	10:56	2.16	27.6	239
IW101-03C	TTA-1	15	12/11/2006	12:10	12:19	2.16	25.1	250
IW101-04A	TTA-1	15	12/11/2006	15:08	15:18	2.16	27.1	242
IW101-04B	TTA-1	15	12/11/2006	13:54	16:04	2.16	25.8	250
IW101-04C	TTA-1	15	12/11/2006	16:05	16:15	2.16	24.8	240
IW101-05A	TTA-1	15	12/12/2006	7:40	7:50	2.16	27.5	250
IW101-05B	TTA-1	15	12/12/2006	7:53	8:03	2.16	26.3	239.8
IW101-05C	TTA-1	15	12/12/2006	8:30	8:40	2.16	26	250
IW101-06A	TTA-1	15	12/12/2006	8:44	8:55	2.16	25.7	247.2
IW101-06B	TTA-1	15	12/12/2006	9:25	9:35	2.16	26.8	263.1
IW101-06C	TTA-1	15	12/12/2006	9:36	9:47	2.16	27.1	229.4
IW101-07A	TTA-1	15	12/11/2006	12:22	12:33	2.16	25.1	251
IW101-07B	TTA-1	15	12/11/2006	13:03	13:13	2.16	26.7	251
IW101-07C	TTA-1	15	12/11/2006	13:14	13:24	2.16	26.9	247.7
IW101-08A	TTA-1	15	12/12/2006	10:28	10:37	2.16	26.1	253.1
IW101-08B	TTA-1	15	12/12/2006	10:39	10:49	2.16	25.7	244.1
IW101-08C	TTA-1	15	12/12/2006	11:56	12:06	2.16	26.8	250
IW101-09A	TTA-1	15	12/11/2006	14:03	14:13	2.16	24.2	250
IW101-09B	TTA-1	15	12/11/2006	14:15	14:26	2.16	24.3	243.7
IW101-09C	TTA-1	15	12/11/2006	14:54	15:05	2.16	26.9	250
IW21-01A	TTA-1	10	12/12/2006	13:07	13:14	2.16	19.2	167
IW21-01B	TTA-1	10	12/12/2006	13:15	13:54	2.16	23.4	166.9
IW21-02A	TTA-1	10	12/12/2006	13:59	14:06	2.16	25.6	175.8
IW21-02B	TTA-1	10	12/12/2006	14:07	14:13	2.16	25.5	166.8
IW21-03A	TTA-1	10	12/12/2006	14:20	14:58	2.16	26.6	167
IW21-03B	TTA-1	10	12/12/2006	14:59	15:06	2.16	24.9	167.2
IW21-04A	TTA-1	10	12/12/2006	15:11	15:19	2.16	23.4	167.5
IW21-04B	TTA-1	10	12/12/2006	15:20	16:02	2.16	25.8	167
IW21-05A	TTA-1	10	12/12/2006	16:07	16:13	2.16	24.6	167.2
IW21-05B	TTA-1	10	12/12/2006	16:14	16:21	2.16	25.5	167.1
IW85-01	TTA-2	10	12/14/2006	15:18	15:23	2.16	26.8	111
IW85-02	TTA-2	10	12/14/2006	15:43	15:48	2.16	19.5	111
IW85-03	TTA-2	10	12/14/2006	15:30	15:34	2.16	26.5	111.2
IW85-04	TTA-2	10	12/14/2006	15:37	15:41	2.16	26.1	111
IW92-01	TTA-2	10	12/14/2006	7:30	7:35	2.16	21.6	110.5
IW92-02	TTA-2	10	12/14/2006	7:43	7:49	2.16	13.4	110.9
IW92-03	TTA-2	10	12/14/2006	7:53	7:57	2.16	23	111.3
IW92-04	TTA-2	10	12/14/2006	8:01	8:07	2.16	18.5	110.8
IW92-05	TTA-2	10	12/14/2006	8:11	10:23	2.16	16.2	110.9
IW92-06	TTA-2	10	12/14/2006	10:26	10:31	2.16	24.6	111
IW92-07	TTA-2	10	12/14/2006	10:34	10:39	2.16	25.2	111.1
IW92-08	TTA-2	10	12/14/2006	10:43	10:51	2.16	10.4	111.8

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION SUMMARY NO. 8

Well ID	Area	Screen	Date Injected	Start	End Time	Percent	Flow Rate	Volume Injected
		Length		Time		Sodium Lactate	(gpm)	(gallons)
IW101-01A	TTA-1	15	12/20/2006	8:52	9:01	2.16	27	250.2
IW101-01B	TTA-1	15	12/20/2006	9:02	9:12	2.16	27	251.6
IW101-01C	TTA-1	15	12/20/2006	9:40	9:50	2.16	26	249.6
IW101-02A	TTA-1	15	12/20/2006	9:53	10:03	2.16	25.6	235
IW101-02B	TTA-1	15	12/20/2006	11:37	11:48	2.16	26.9	250
IW101-02C	TTA-1	15	12/20/2006	11:50	11:59	2.16	26.9	249.8
IW101-03A	TTA-1	15	12/20/2006	12:28	12:38	2.16	25.3	250
IW101-03B	TTA-1	15	12/20/2006	12:39	12:50	2.16	24.9	248.2
IW101-03C	TTA-1	15	12/20/2006	13:24	13:34	2.16	26.7	250.1
IW101-04A	TTA-1	15	12/21/2006	8:47	8:57	2.16	24.9	244.7
IW101-04B	TTA-1	15	12/21/2006	9:27	9:35	2.16	26.2	250.4
IW101-04C	TTA-1	15	12/21/2006	9:36	9:46	2.16	26.9	241.1
IW101-05A	TTA-1	15	12/20/2006	10:12	10:22	2.16	25.3	250.5
IW101-05B	TTA-1	15	12/20/2006	10:24	10:33	2.16	24.9	232.2
IW101-05C	TTA-1	15	12/20/2006	11:00	11:10	2.16	27.1	250
IW101-06A	TTA-1	15	12/21/2006	11:12	11:22	2.16	27	243.4
IW101-06B	TTA-1	15	12/21/2006	11:50	12:00	2.16	25.3	250
IW101-06C	TTA-1	15	12/21/2006	12:01	12:12	2.16	25	243.2
IW101-07A	TTA-1	15	12/20/2006	13:36	13:46	2.16	26.9	249.4
IW101-07B	TTA-1	15	12/20/2006	14:12	14:22	2.16	25.2	250.1
IW101-07C	TTA-1	15	12/20/2006	14:23	14:33	2.16	25.1	240.8
IW101-08A	TTA-1	15	12/21/2006	13:23	13:31	2.16	27.4	249.9
IW101-08B	TTA-1	15	12/21/2006	13:34	13:43	2.16	25.4	235.1
IW101-08C	TTA-1	15	12/21/2006	14:46	14:57	2.16	26.4	249.4
IW101-09A	TTA-1	15	12/21/2006	7:46	7:55	2.16	27.5	251.3
IW101-09B	TTA-1	15	12/21/2006	7:57	8:06	2.16	27.1	235.8
IW101-09C	TTA-1	15	12/21/2006	8:32	8:43	2.16	25.3	250
IW21-01A	TTA-1	10	12/21/2006	13:46	13:52	2.16	25.2	167.3
IW21-01B	TTA-1	10	12/21/2006	13:53	14:01	2.16	22.7	166.6
IW21-02A	TTA-1	10	12/21/2006	14:03	14:10	2.16	25.5	157.2
IW21-02B	TTA-1	10	12/21/2006	15:38	15:44	2.16	25.7	167
IW21-03A	TTA-1	10	12/21/2006	15:02	15:08	2.16	26.9	167
IW21-03B	TTA-1	10	12/21/2006	15:10	16:26	2.16	25.6	159.2
IW21-04A	TTA-1	10	12/21/2006	15:49	15:44	2.16	25.8	167
IW21-04B	TTA-1	10	12/21/2006	15:57	16:03	2.16	25.6	161.7
IW21-05A	TTA-1	10	12/21/2006	16:30	16:37	2.16	25.7	167
IW21-05B	TTA-1	10	12/21/2006	16:37	16:44	2.16	26.5	167.1
IW85-01	TTA-2	10	12/22/2006	9:03	9:10	2.16	25.1	110.7
IW85-02	TTA-2	10	12/22/2006	9:16	9:21	2.16	25.1	111
IW85-03	TTA-2	10	12/22/2006	9:23	9:27	2.16	23.4	111.3
IW85-04	TTA-2	10	12/22/2006	9:40	10:34	2.16	25	110.8
IW92-01	TTA-2	10	12/22/2006	7:03	7:05	2.16	20	111
IW92-02	TTA-2	10	12/22/2006	7:19	7:24	2.16	18	111
IW92-03	TTA-2	10	12/22/2006	7:29	7:36	2.16	24	111.1
IW92-04	TTA-2	10	12/22/2006	7:44	7:49	2.16	21	111
IW92-05	TTA-2	10	12/22/2006	7:57	8:03	2.16	24.6	111
IW92-06	TTA-2	10	12/22/2006	8:33	8:39	2.16	24.1	111.1
IW92-07	TTA-2	10	12/22/2006	8:50	8:56	2.16	24.6	111
IW92-08	TTA-2	10	12/22/2006	9:09	9:15	2.16	24.2	111

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 9

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	1/5/2007	7:25	7:37	2.16	25.1	250
IW101-01B	TTA-1	15	1/5/2007	7:40	7:53	2.16	25	238.1
IW101-01C	TTA-1	15	1/5/2007	8:17	8:27	2.16	26.9	250
IW101-02A	TTA-1	15	1/5/2007	8:32	8:41	2.16	27	250
IW101-02B	TTA-1	15	1/5/2007	9:07	9:17	2.16	23.9	249.1
IW101-02C	TTA-1	15	1/5/2007	9:19	9:30	2.16	25.4	239.2
IW101-03A	TTA-1	15	1/5/2007	9:58	10:09	2.16	26.9	249.9
IW101-03B	TTA-1	15	1/5/2007	10:11	10:20	2.16	26.9	247.6
IW101-03C	TTA-1	15	1/5/2007	10:42	10:53	2.16	25.6	250
IW101-04A	TTA-1	15	1/5/2007	13:16	13:28	2.16	27.1	245.7
IW101-04B	TTA-1	15	1/5/2007	13:50	14:00	2.16	24.7	249.4
IW101-04C	TTA-1	15	1/5/2007	14:03	14:15	2.16	25	240.8
IW101-05A	TTA-1	15	1/5/2007	14:36	14:48	2.16	27	249.3
IW101-05B	TTA-1	15	1/5/2007	14:49	14:59	2.16	27	236.1
IW101-05C	TTA-1	15	1/8/2007	7:26	7:36	2.16	27	250
IW101-06A	TTA-1	15	1/8/2007	7:40	7:50	2.16	29.2	250
IW101-06B	TTA-1	15	1/8/2007	8:15	8:25	2.16	25.5	250
IW101-06C	TTA-1	15	1/8/2007	8:26	8:37	2.16	25.3	240
IW101-07A	TTA-1	15	1/5/2007	10:54	11:05	2.16	25.7	244.6
IW101-07B	TTA-1	15	1/5/2007	11:28	11:39	2.16	26.9	250
IW101-07C	TTA-1	15	1/5/2007	11:40	11:50	2.16	27	238.8
IW101-08A	TTA-1	15	1/8/2007	9:06	9:16	2.16	27.5	249.9
IW101-08B	TTA-1	15	1/8/2007	9:17	9:27	2.16	27.1	234.2
IW101-08C	TTA-1	15	1/8/2007	9:53	10:04	2.16	25.7	250
IW101-09A	TTA-1	15	1/5/2007	12:14	12:25	2.16	26	249.8
IW101-09B	TTA-1	15	1/5/2007	12:26	12:38	2.16	25.9	242.8
IW101-09C	TTA-1	15	1/5/2007	13:00	13:13	2.16	26.9	249.7
IW21-01A	TTA-1	10	1/8/2007	10:09	10:19	2.16	25.5	167.3
IW21-01B	TTA-1	10	1/8/2007	10:20	10:58	2.16	25.3	167.1
IW21-02A	TTA-1	10	1/8/2007	11:03	11:11	2.16	25.1	167.7
IW21-02B	TTA-1	10	1/8/2007	11:12	11:19	2.16	24.9	166.4
IW21-03A	TTA-1	10	1/8/2007	11:23	12:30	2.16	25.6	166.9
IW21-03B	TTA-1	10	1/8/2007	12:31	12:38	2.16	25.4	167
IW21-04A	TTA-1	10	1/8/2007	12:43	12:50	2.16	25.3	166.9
IW21-04B	TTA-1	10	1/8/2007	12:51	13:44	2.16	25.2	166.9
IW21-05A	TTA-1	10	1/8/2007	13:48	13:56	2.16	26.2	166.9
IW21-05B	TTA-1	10	1/8/2007	13:57	14:04	2.16	26.9	167.4
IW85-01	TTA-2	10	1/9/2007	13:27	13:31	2.16	25.5	111
IW85-02	TTA-2	10	1/9/2007	13:34	13:39	2.16	25.2	110.9
IW85-03	TTA-2	10	1/9/2007	13:42	13:49	2.16	25	110.8
IW85-04	TTA-2	10	1/9/2007	13:52	14:15	2.16	25.6	108.6
IW92-01	TTA-2	10	1/9/2007	10:57	11:03	2.16	19.5	111
IW92-02	TTA-2	10	1/9/2007	11:06	11:11	2.16	24.5	110.3
IW92-03	TTA-2	10	1/9/2007	11:14	11:19	2.16	24.5	110.2
IW92-04	TTA-2	10	1/9/2007	11:23	11:30	2.16	25.1	111.6
IW92-05	TTA-2	10	1/9/2007	11:34	11:57	2.16	25.3	102.9
IW92-06	TTA-2	10	1/9/2007	12:00	12:05	2.16	25.7	110
IW92-07	TTA-2	10	1/9/2007	12:11	12:17	2.16	25.8	104
IW92-08	TTA-2	10	1/9/2007	13:16	13:21	2.16	25.7	110.6

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 10

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	1/18/2007	7:33	7:43	2.16	25.6	249.8
IW101-01B	TTA-1	15	1/18/2007	7:45	7:54	2.16	25.2	227.1
IW101-01C	TTA-1	15	1/18/2007	8:19	8:29	2.16	27.4	250.5
IW101-02A	TTA-1	15	1/18/2007	8:32	8:41	2.16	27.2	237.7
IW101-02B	TTA-1	15	1/18/2007	9:05	9:15	2.16	25.7	249.7
IW101-02C	TTA-1	15	1/18/2007	9:17	9:26	2.16	25.6	243.5
IW101-03A	TTA-1	15	1/18/2007	9:56	10:06	2.16	27.6	250.1
IW101-03B	TTA-1	15	1/18/2007	10:06	10:16	2.16	27.4	236.1
IW101-03C	TTA-1	15	1/18/2007	11:09	11:19	2.16	25.4	250.2
IW101-04A	TTA-1	15	1/18/2007	13:12	13:21	2.16	25.6	250
IW101-04B	TTA-1	15	1/18/2007	13:22	13:32	2.16	25.2	240.5
IW101-04C	TTA-1	15	1/18/2007	13:55	14:05	2.16	27.2	249.4
IW101-05A	TTA-1	15	1/19/2007	8:03	8:13	2.16	25.1	246.1
IW101-05B	TTA-1	15	1/19/2007	8:14	8:24	2.16	27	230.4
IW101-05C	TTA-1	15	1/19/2007	8:51	9:01	2.16	25.2	244.6
IW101-06A	TTA-1	15	1/19/2007	9:04	9:14	2.16	25.2	244
IW101-06B	TTA-1	15	1/19/2007	9:50	10:00	2.16	27.3	250.1
IW101-06C	TTA-1	15	1/19/2007	10:01	10:11	2.16	27.3	241.2
IW101-07A	TTA-1	15	1/18/2007	11:21	11:32	2.16	25.6	246.6
IW101-07B	TTA-1	15	1/18/2007	12:00	12:09	2.16	25.4	250
IW101-07C	TTA-1	15	1/18/2007	12:10	12:20	2.16	25.4	245.9
IW101-08A	TTA-1	15	1/19/2007	10:49	11:00	2.16	23.9	245.8
IW101-08B	TTA-1	15	1/19/2007	11:01	11:14	2.16	23.6	247
IW101-08C	TTA-1	15	1/19/2007	11:36	11:46	2.16	26.7	250
IW101-09A	TTA-1	15	1/18/2007	14:08	14:18	2.16	27.6	241.8
IW101-09B	TTA-1	15	1/19/2007	7:09	7:20	2.16	25.5	249.1
IW101-09C	TTA-1	15	1/19/2007	7:23	7:35	2.16	25.2	240.7
IW21-01A	TTA-1	10	1/19/2007	11:50	11:58	2.16	27	167
IW21-01B	TTA-1	10	1/19/2007	11:58	13:11	2.16	22.7	167.1
IW21-02A	TTA-1	10	1/19/2007	13:13	13:21	2.16	27.1	167.1
IW21-02B	TTA-1	10	1/19/2007	13:22	13:29	2.16	26.8	166.7
IW21-03A	TTA-1	10	1/19/2007	12:29	12:36	2.16	23.9	167.1
IW21-03B	TTA-1	10	1/19/2007	12:38	12:45	2.16	23.8	166.4
IW21-04A	TTA-1	10	1/19/2007	12:49	12:56	2.16	23.5	157.1
IW21-04B	TTA-1	10	1/19/2007	14:00	14:08	2.16	23.7	167.1
IW21-05A	TTA-1	10	1/19/2007	14:11	14:18	2.16	23.7	167
IW21-05B	TTA-1	10	1/19/2007	14:19	14:27	2.16	23.5	166.4
IW85-01	TTA-2	10	1/22/2007	7:57	8:02	2.16	23.7	111.2
IW85-02	TTA-2	10	1/22/2007	8:05	8:10	2.16	23.7	110.7
IW85-03	TTA-2	10	1/22/2007	8:16	8:21	2.16	23.7	111.2
IW85-04	TTA-2	10	1/22/2007	8:24	8:30	2.16	23.4	108.9
IW92-01	TTA-2	10	1/19/2007	13:44	14:42	2.16	22.7	110.5
IW92-02	TTA-2	10	1/19/2007	14:44	14:52	2.16	20.5	110.5
IW92-03	TTA-2	10	1/19/2007	14:52	14:57	2.16	26	110.1
IW92-04	TTA-2	10	1/19/2007	14:59	15:05	2.16	22.8	111
IW92-05	TTA-2	10	1/19/2007	15:07	15:13	2.16	20.5	111.6
IW92-06	TTA-2	10	1/22/2007	7:17	7:25	2.16	25.4	110.8
IW92-07	TTA-2	10	1/22/2007	7:28	7:33	2.16	26.1	111.2
IW92-08	TTA-2	10	1/22/2007	7:37	8:59	2.16	19.3	111.4

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 11

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	1/31/2007	8:24	8:34	2.16	25	250
IW101-01B	TTA-1	15	1/31/2007	8:35	8:44	2.16	27	227
IW101-01C	TTA-1	15	1/31/2007	9:12	9:22	2.16	24	250
IW101-02A	TTA-1	15	1/31/2007	9:26	9:37	2.16	23	237
IW101-02B	TTA-1	15	1/31/2007	10:08	10:18	2.16	27	250
IW101-02C	TTA-1	15	1/31/2007	10:19	10:29	2.16	27	245
IW101-03A	TTA-1	15	1/31/2007	10:56	11:06	2.16	24	250
IW101-03B	TTA-1	15	1/31/2007	11:09	11:20	2.16	23	242
IW101-03C	TTA-1	15	1/31/2007	11:51	12:01	2.16	27	250
IW101-04A	TTA-1	15	1/31/2007	15:05	15:16	2.16	24	246
IW101-04B	TTA-1	15	1/31/2007	15:52	16:01	2.16	27	250
IW101-04C	TTA-1	15	1/31/2007	16:01	16:11	2.16	27	250
IW101-05A	TTA-1	15	1/31/2007	16:46	16:57	2.16	24	250
IW101-05B	TTA-1	15	1/31/2007	16:57	17:08	2.16	24	235
IW101-05C	TTA-1	15	2/1/2007	7:54	8:06	2.16	25	250
IW101-06A	TTA-1	15	2/1/2007	8:08	8:21	2.16	24	248
IW101-06B	TTA-1	15	2/1/2007	8:45	8:56	2.16	27	250
IW101-06C	TTA-1	15	2/1/2007	8:56	9:06	2.16	27	250
IW101-07A	TTA-1	15	1/31/2007	12:04	12:13	2.16	27	243
IW101-07B	TTA-1	15	1/31/2007	12:44	12:56	2.16	24	250
IW101-07C	TTA-1	15	1/31/2007	12:56	13:08	2.16	23	249
IW101-08A	TTA-1	15	2/1/2007	9:35	9:47	2.16	24	249
IW101-08B	TTA-1	15	2/1/2007	9:48	9:59	2.16	23	243
IW101-08C	TTA-1	15	2/1/2007	11:20	11:31	2.16	24	251
IW101-09A	TTA-1	15	1/31/2007	13:49	13:58	2.16	27	250
IW101-09B	TTA-1	15	1/31/2007	13:59	14:09	2.16	27	238
IW101-09C	TTA-1	15	1/31/2007	14:52	15:03	2.16	24	250
IW21-01A	TTA-1	10	2/1/2007	10:24	10:30	2.16	27	167
IW21-01B	TTA-1	10	2/1/2007	10:31	10:38	2.16	25	167
IW21-02A	TTA-1	10	2/1/2007	10:40	10:47	2.16	27	160
IW21-02B	TTA-1	10	2/1/2007	12:04	12:11	2.16	27	167
IW21-03A	TTA-1	10	2/1/2007	11:35	11:43	2.16	24	167
IW21-03B	TTA-1	10	2/1/2007	11:44	12:54	2.16	24	167
IW21-04A	TTA-1	10	2/1/2007	12:55	13:03	2.16	24	167
IW21-04B	TTA-1	10	2/1/2007	13:04	13:12	2.16	24	167
IW21-05A	TTA-1	10	2/1/2007	12:23	12:29	2.16	27	159
IW21-05B	TTA-1	10	2/1/2007	12:15	12:22	2.16	27	167
IW85-01	TTA-2	10	2/1/2007	14:57	15:01	2.16	27	108
IW85-02	TTA-2	10	2/1/2007	15:03	15:07	2.16	26	105
IW85-03	TTA-2	10	2/1/2007	15:09	15:13	2.16	25	105
IW85-04	TTA-2	10	2/1/2007	15:14	15:18	2.16	25	105
IW92-01	TTA-2	10	2/1/2007	13:30	13:36	2.16	24	111
IW92-02	TTA-2	10	2/1/2007	13:38	13:43	2.16	20	111
IW92-03	TTA-2	10	2/1/2007	13:45	13:50	2.16	25	112
IW92-04	TTA-2	10	2/1/2007	13:52	13:56	2.16	19	110
IW92-05	TTA-2	10	2/1/2007	14:02	15:25	2.16	26	109
IW92-06	TTA-2	10	2/1/2007	13:57	14:03	2.16	24	110
IW92-07	TTA-2	10	2/1/2007	14:08	14:13	2.16	24	109
IW92-08	TTA-2	10	2/1/2007	14:18	14:26	2.16	24	101

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 12

Well ID	Area	Screen	Date Injected	Start Time	End Time	Percent	Flow Rate (gpm)	Volume Injected (gallons)
		Length				Sodium Lactate		
IW101-01A	TTA-1	15	2/13/2007	13:26	13:38	2.16	24	250
IW101-01B	TTA-1	15	2/13/2007	13:38	13:51	2.16	24	242
IW101-01C	TTA-1	15	2/13/2007	14:17	14:29	2.16	27	250
IW101-02A	TTA-1	15	2/13/2007	14:30	14:41	2.16	27	243
IW101-02B	TTA-1	15	2/13/2007	15:03	15:15	2.16	24	249
IW101-02C	TTA-1	15	2/13/2007	15:16	15:28	2.16	24	241
IW101-03A	TTA-1	15	2/14/2007	7:12	7:23	2.16	24	250
IW101-03B	TTA-1	15	2/14/2007	7:24	7:35	2.16	24	250
IW101-03C	TTA-1	15	2/14/2007	8:10	8:19	2.16	27	250
IW101-04A	TTA-1	15	2/14/2007	11:01	11:12	2.16	24	248
IW101-04B	TTA-1	15	2/14/2007	12:15	12:25	2.16	24	250
IW101-04C	TTA-1	15	2/14/2007	12:26	12:37	2.16	24	241
IW101-05A	TTA-1	15	2/14/2007	11:31	11:41	2.16	27	250
IW101-05B	TTA-1	15	2/14/2007	11:42	11:51	2.16	27	230
IW101-05C	TTA-1	15	2/14/2007	13:02	13:12	2.16	27	250
IW101-06A	TTA-1	15	2/14/2007	13:15	13:24	2.16	29	238
IW101-06B	TTA-1	15	2/14/2007	14:30	14:40	2.16	28	250
IW101-06C	TTA-1	15	2/14/2007	14:41	14:50	2.16	27	237
IW101-07A	TTA-1	15	2/14/2007	8:21	8:35	2.16	27	237
IW101-07B	TTA-1	15	2/14/2007	9:04	9:14	2.16	24	249
IW101-07C	TTA-1	15	2/14/2007	9:15	9:27	2.16	24	238
IW101-08A	TTA-1	15	2/14/2007	13:48	13:59	2.16	24	250
IW101-08B	TTA-1	15	2/14/2007	14:00	14:11	2.16	24	240
IW101-08C	TTA-1	15	2/14/2007	7:11	7:18	2.16	25	423.5*
IW101-09A	TTA-1	15	2/14/2007	9:55	10:05	2.16	27	250
IW101-09B	TTA-1	15	2/14/2007	10:06	10:16	2.16	27	242
IW101-09C	TTA-1	15	2/14/2007	10:45	10:56	2.16	24	250
IW21-01A	TTA-1	10	2/14/2007	15:40	15:47	2.16	25	167
IW21-01B	TTA-1	10	2/15/2007	7:26	7:30	2.16	25	167
IW21-02A	TTA-1	10	2/15/2007	7:33	7:40	2.16	27	167
IW21-02B	TTA-1	10	2/15/2007	7:41	7:47	2.16	27	167
IW21-03A	TTA-1	10	2/15/2007	7:29	7:35	2.16	25	167
IW21-03B	TTA-1	10	2/15/2007	7:39	7:46	2.16	25	160
IW21-04A	TTA-1	10	2/15/2007	8:52	8:59	2.16	24	167
IW21-04B	TTA-1	10	2/15/2007	9:01	9:09	2.16	24	165
IW21-05A	TTA-1	10	2/15/2007	9:15	9:23	2.16	24	157
IW21-05B	TTA-1	10	2/15/2007	10:28	10:35	2.16	24	167
IW85-01	TTA-2	10	2/15/2007	11:16	11:20	2.16	27	111
IW85-02	TTA-2	10	2/15/2007	11:23	11:28	2.16	26	111
IW85-03	TTA-2	10	2/15/2007	11:44	11:50	2.16	22	112
IW85-04	TTA-2	10	2/15/2007	11:53	11:58	2.16	22	112
IW92-01	TTA-2	10	2/15/2007	9:12	9:17	2.16	18	111
IW92-02	TTA-2	10	2/15/2007	9:21	9:26	2.16	25	110
IW92-03	TTA-2	10	2/15/2007	9:29	9:32	2.16	26	123
IW92-04	TTA-2	10	2/15/2007	10:48	10:55	2.16	24	106
IW92-05	TTA-2	10	2/15/2007	10:57	11:02	2.16	25	111
IW92-06	TTA-2	10	2/15/2007	11:05	12:06	2.16	19	121
IW92-07	TTA-2	10	2/15/2007	11:30	11:34	2.16	27	112
IW92-08	TTA-2	10	2/15/2007	11:09	11:13	2.16	25	111

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

* This one got injected twice due to communication error this situation has been corrected

INJECTION NO. 13

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	2/28/2007	7:15	7:26	2.16	25	250
IW101-01B	TTA-1	15	2/28/2007	7:27	7:39	2.16	24	241
IW101-01C	TTA-1	15	2/28/2007	8:12	8:22	2.16	27	250
IW101-02A	TTA-1	15	2/28/2007	8:26	8:35	2.16	27	240
IW101-02B	TTA-1	15	2/28/2007	9:04	9:16	2.16	23	250
IW101-02C	TTA-1	15	2/28/2007	9:16	9:27	2.16	23	235
IW101-03A	TTA-1	15	2/28/2007	9:55	10:04	2.16	27	250
IW101-03B	TTA-1	15	2/28/2007	10:05	10:15	2.16	27	237
IW101-03C	TTA-1	15	2/28/2007	10:44	10:55	2.16	24	250
IW101-04A	TTA-1	15	2/28/2007	13:22	13:32	2.16	27	242
IW101-04B	TTA-1	15	2/28/2007	13:58	14:08	2.16	24	250
IW101-04C	TTA-1	15	2/28/2007	14:10	14:20	2.16	24	242
IW101-05A	TTA-1	15	2/28/2007	14:39	14:48	2.16	27	250
IW101-05B	TTA-1	15	2/28/2007	14:50	14:59	2.16	27	234
IW101-05C	TTA-1	15	3/1/2007	7:07	7:20	2.16	27	250
IW101-06A	TTA-1	15	3/1/2007	7:23	7:36	2.16	27	243
IW101-06B	TTA-1	15	3/1/2007	8:42	8:51	2.16	27	250
IW101-06C	TTA-1	15	3/1/2007	8:54	9:03	2.16	27	236
IW101-07A	TTA-1	15	2/28/2007	10:57	11:09	2.16	24	247
IW101-07B	TTA-1	15	2/28/2007	11:35	11:45	2.16	27	250
IW101-07C	TTA-1	15	2/28/2007	11:46	11:55	2.16	27	243
IW101-08A	TTA-1	15	3/1/2007	10:14	10:24	2.16	27	250
IW101-08B	TTA-1	15	3/1/2007	10:25	10:36	2.16	27	236
IW101-08C	TTA-1	15	3/1/2007	11:49	12:00	2.16	27	250
IW101-09A	TTA-1	15	2/28/2007	12:21	12:32	2.16	24	250
IW101-09B	TTA-1	15	2/28/2007	12:33	12:43	2.16	24	243
IW101-09C	TTA-1	15	2/28/2007	13:09	13:19	2.16	27	250
IW21-01A	TTA-1	10	3/1/2007	7:19	7:29	2.16	24	252
IW21-01B	TTA-1	10	3/1/2007	7:30	7:41	2.16	23	236
IW21-02A	TTA-1	10	3/1/2007	9:27	9:37	2.16	24	249
IW21-02B	TTA-1	10	3/1/2007	9:38	9:48	2.16	24	240
IW21-03A	TTA-1	10	3/1/2007	11:00	11:17	2.16	23	250
IW21-03B	TTA-1	10	3/1/2007	11:18	11:29	2.16	22	242
IW21-04A	TTA-1	10	3/1/2007	12:42	12:53	2.16	22	242
IW21-04B	TTA-1	10	3/1/2007	12:30	12:41	2.16	23	250
IW21-05A	TTA-1	10	3/1/2007	13:57	14:08	2.16	23	250
IW21-05B	TTA-1	10	3/1/2007	14:09	14:21	2.16	22	250
IW85-01	TTA-2	10	3/1/2007	15:23	15:28	2.16	22	111
IW85-02	TTA-2	10	3/1/2007	15:29	15:34	2.16	23	111
IW85-05	TTA-2	10	3/1/2007	15:38	15:43	2.16	23	111
IW85-06	TTA-2	10	3/1/2007	15:46	15:52	2.16	15	111
IW92-01	TTA-2	10	3/1/2007	12:53	12:59	2.16	12	111
IW92-02	TTA-2	10	3/1/2007	13:03	13:11	2.16	11	111
IW92-03	TTA-2	10	3/1/2007	13:14	15:11	2.16	27	111
IW92-04	TTA-2	10	3/1/2007	14:35	14:42	2.16	20	111
IW92-05	TTA-2	10	3/1/2007	14:46	14:51	2.16	24	111
IW92-06	TTA-2	10	3/1/2007	14:53	14:58	2.16	25	111
IW92-07	TTA-2	10	3/1/2007	15:00	15:05	2.16	27	111
IW92-08	TTA-2	10	3/1/2007	15:13	15:15	2.16	18	122

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 14

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	3/14/2007	7:12	7:21	2.16	27	252
IW101-01B	TTA-1	15	3/14/2007	7:22	7:32	2.16	27	232
IW101-01C	TTA-1	15	3/14/2007	7:57	8:07	2.16	26	250
IW101-02A	TTA-1	15	3/14/2007	8:10	8:21	2.16	25	237
IW101-02B	TTA-1	15	3/14/2007	8:47	8:57	2.16	27	250
IW101-02C	TTA-1	15	3/14/2007	8:58	9:08	2.16	28	230
IW101-03A	TTA-1	15	3/14/2007	9:35	9:46	2.16	25	250
IW101-03B	TTA-1	15	3/14/2007	9:46	9:58	2.16	25	251
IW101-03C	TTA-1	15	3/14/2007	10:23	10:34	2.16	27	250
IW101-04A	TTA-1	15	3/14/2007	13:11	13:21	2.16	26	246
IW101-04B	TTA-1	15	3/14/2007	13:47	13:57	2.16	27	250
IW101-04C	TTA-1	15	3/14/2007	13:57	14:06	2.16	27	239
IW101-05A	TTA-1	15	3/14/2007	14:33	14:44	2.16	25	250
IW101-05B	TTA-1	15	3/14/2007	14:44	14:54	2.16	25	235
IW101-05C	TTA-1	15	3/14/2007	15:35	15:45	2.16	27	250
IW101-06A	TTA-1	15	3/14/2007	15:47	15:56	2.16	27	245
IW101-06B	TTA-1	15	3/14/2007	16:19	16:29	2.16	25	250
IW101-06C	TTA-1	15	3/14/2007	16:30	16:41	2.16	25	243
IW101-07A	TTA-1	15	3/14/2007	10:35	10:45	2.16	27	247
IW101-07B	TTA-1	15	3/14/2007	11:15	11:27	2.16	25	250
IW101-07C	TTA-1	15	3/14/2007	11:27	11:39	2.16	25	242
IW101-08A	TTA-1	15	3/15/2007	7:21	7:30	2.16	29	250
IW101-08B	TTA-1	15	3/15/2007	7:31	7:40	2.16	28	237
IW101-08C	TTA-1	15	3/15/2007	8:43	8:53	2.16	27	250
IW101-09A	TTA-1	15	3/14/2007	12:04	12:13	2.16	29	251
IW101-09B	TTA-1	15	3/14/2007	12:13	12:23	2.16	28	239
IW101-09C	TTA-1	15	3/14/2007	12:56	13:08	2.16	25	250
IW21-01A	TTA-1	10	3/15/2007	7:21	7:32	2.16	25	250
IW21-01B	TTA-1	10	3/15/2007	7:33	7:43	2.16	25	245
IW21-02A	TTA-1	10	3/15/2007	9:30	9:40	2.16	25	250
IW21-02B	TTA-1	10	3/15/2007	9:41	9:52	2.16	25	242
IW21-03A	TTA-1	10	3/15/2007	11:05	11:16	2.16	25	250
IW21-03B	TTA-1	10	3/15/2007	11:17	11:27	2.16	25	242
IW21-04A	TTA-1	10	3/15/2007	12:47	12:57	2.16	25	241
IW21-04B	TTA-1	10	3/15/2007	12:33	12:46	2.16	25	250
IW21-05A	TTA-1	10	3/15/2007	13:53	14:02	2.16	27	250
IW21-05B	TTA-1	10	3/15/2007	14:03	14:13	2.16	28.8	250
IW85-01	TTA-2	10	3/15/2007	11:52	11:56	2.16	26	111
IW85-02	TTA-2	10	3/15/2007	11:58	12:02	2.16	26	111
IW85-05	TTA-2	10	3/15/2007	12:06	12:11	2.16	26	109
IW85-06	TTA-2	10	3/15/2007	12:42	12:49	2.16	21	134
IW92-01	TTA-2	10	3/15/2007	9:03	9:08	2.16	21	111
IW92-02	TTA-2	10	3/15/2007	9:10	9:15	2.16	22	111
IW92-03	TTA-2	10	3/15/2007	9:17	10:12	2.16	27	111
IW92-04	TTA-2	10	3/15/2007	10:16	10:21	2.16	22	111
IW92-05	TTA-2	10	3/15/2007	10:24	10:28	2.16	26	111
IW92-06	TTA-2	10	3/15/2007	10:30	10:34	2.16	25	111
IW92-07	TTA-2	10	3/15/2007	10:38	11:42	2.16	24	111
IW92-08	TTA-2	10	3/15/2007	11:44	11:49	2.16	25	111

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 250 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 15

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	3/28/2007	7:15	7:24	2.16	28	250
IW101-01B	TTA-1	15	3/28/2007	7:25	7:34	2.16	28	233
IW101-01C	TTA-1	15	3/28/2007	8:13	8:23	2.16	25	250
IW101-02A	TTA-1	15	3/28/2007	8:27	8:37	2.16	25	238
IW101-02B	TTA-1	15	3/28/2007	9:06	9:16	2.16	28	250
IW101-02C	TTA-1	15	3/28/2007	9:18	9:29	2.16	28	235
IW101-03A	TTA-1	15	3/28/2007	9:56	10:07	2.16	25	250
IW101-03B	TTA-1	15	3/28/2007	10:07	10:17	2.16	24	238
IW101-03C	TTA-1	15	3/28/2007	10:45	10:55	2.16	27	250
IW101-04A	TTA-1	15	3/28/2007	13:06	13:17	2.16	25	250
IW101-04B	TTA-1	15	3/28/2007	13:17	13:28	2.16	25	243
IW101-04C	TTA-1	15	3/28/2007	14:38	14:48	2.16	25	250
IW101-05A	TTA-1	15	3/28/2007	14:05	14:15	2.16	29	242
IW101-05B	TTA-1	15	3/28/2007	15:22	15:31	2.16	28	249
IW101-05C	TTA-1	15	3/28/2007	15:32	15:41	2.16	28	237
IW101-06A	TTA-1	15	3/28/2007	14:51	15:01	2.16	25	249
IW101-06B	TTA-1	15	3/28/2007	16:06	16:16	2.16	25	250
IW101-06C	TTA-1	15	3/28/2007	16:17	16:27	2.16	25	243
IW101-07A	TTA-1	15	3/28/2007	10:57	11:07	2.16	27	243
IW101-07B	TTA-1	15	3/28/2007	11:43	11:53	2.16	25	250
IW101-07C	TTA-1	15	3/28/2007	11:54	12:05	2.16	25	250
IW101-08A	TTA-1	15	3/28/2007	16:50	16:59	2.16	29	250
IW101-08B	TTA-1	15	3/28/2007	17:00	17:09	2.16	28	239
IW101-08C	TTA-1	15	3/29/2007	7:21	7:31	2.16	27	250
IW101-09A	TTA-1	15	3/28/2007	12:21	12:30	2.16	29	250
IW101-09B	TTA-1	15	3/28/2007	12:30	12:40	2.16	29	240
IW101-09C	TTA-1	15	3/28/2007	13:52	14:02	2.16	27	250
IW21-01A	TTA-1	10	3/29/2007	7:22	7:32	2.16	25	255
IW21-01B	TTA-1	10	3/29/2007	7:36	7:47	2.16	24	238
IW21-02A	TTA-1	10	3/29/2007	8:49	8:59	2.16	25	250
IW21-02B	TTA-1	10	3/29/2007	9:00	9:11	2.16	25	239
IW21-03A	TTA-1	10	3/29/2007	10:19	10:29	2.16	25	250
IW21-03B	TTA-1	10	3/29/2007	10:30	10:40	2.16	25	244
IW21-04A	TTA-1	10	3/29/2007	11:49	11:59	2.16	25	250
IW21-04B	TTA-1	10	3/29/2007	12:00	12:10	2.16	25	242
IW21-05A	TTA-1	10	3/29/2007	13:25	13:35	2.16	27	250
IW21-05B	TTA-1	10	3/29/2007	13:36	13:46	2.16	28	250
IW85-01	TTA-2	10	3/29/2007	11:14	11:19	2.16	27	110
IW85-02	TTA-2	10	3/29/2007	11:21	11:26	2.16	27	111
IW85-05	TTA-2	10	3/29/2007	11:29	11:34	2.16	27	110
IW85-06	TTA-2	10	3/29/2007	11:57	12:17	2.16	25	123
IW92-01	TTA-2	10	3/29/2007	7:44	7:51	2.16	23	110
IW92-02	TTA-2	10	3/29/2007	7:53	7:58	2.16	24	110
IW92-03	TTA-2	10	3/29/2007	8:01	9:34	2.16	26	110
IW92-04	TTA-2	10	3/29/2007	9:36	9:40	2.16	23	111
IW92-05	TTA-2	10	3/29/2007	9:44	9:49	2.16	26	111
IW92-06	TTA-2	10	3/29/2007	9:51	9:56	2.16	26	111
IW92-07	TTA-2	10	3/29/2007	9:58	11:03	2.16	26	108
IW92-08	TTA-2	10	3/29/2007	11:06	11:11	2.16	26	110

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 167 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons
 Sugar is added at 1 pound per 500 gallon of sodium lactate and water.

INJECTION NO. 16

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	4/11/2007	7:16	7:26	2.16	28	250
IW101-01B	TTA-1	15	4/11/2007	7:27	7:36	2.16	27	237
IW101-01C	TTA-1	15	4/11/2007	8:10	8:21	2.16	25	250
IW101-02A	TTA-1	15	4/11/2007	8:23	8:35	2.16	25	251
IW101-02B	TTA-1	15	4/11/2007	9:01	9:10	2.16	27	250
IW101-02C	TTA-1	15	4/11/2007	9:12	9:21	2.16	27	236
IW101-03A	TTA-1	15	4/11/2007	9:44	9:54	2.16	24	250
IW101-03B	TTA-1	15	4/11/2007	9:55	10:05	2.16	23	240
IW101-03C	TTA-1	15	4/11/2007	10:30	10:40	2.16	27	250
IW101-04A	TTA-1	15	4/11/2007	13:21	13:31	2.16	23	244
IW101-04B	TTA-1	15	4/11/2007	13:58	14:08	2.16	27	250
IW101-04C	TTA-1	15	4/11/2007	14:09	14:18	2.16	27	238
IW101-05A	TTA-1	15	4/11/2007	14:57	15:09	2.16	24	250
IW101-05B	TTA-1	15	4/11/2007	15:09	15:19	2.16	23	239
IW101-05C	TTA-1	15	4/11/2007	15:48	15:58	2.16	27	250
IW101-06A	TTA-1	15	4/11/2007	16:00	16:08	2.16	29	239
IW101-06B	TTA-1	15	4/11/2007	16:34	16:45	2.16	25	250
IW101-06C	TTA-1	15	4/11/2007	16:45	16:56	2.16	22	243
IW101-07A	TTA-1	15	4/11/2007	10:42	10:51	2.16	28	240
IW101-07B	TTA-1	15	4/11/2007	11:15	11:26	2.16	23	250
IW101-07C	TTA-1	15	4/11/2007	11:27	11:38	2.16	23	247
IW101-08A	TTA-1	15	4/12/2007	7:12	7:23	2.16	23	250
IW101-08B	TTA-1	15	4/12/2007	7:24	7:35	2.16	24	239
IW101-08C	TTA-1	15	4/12/2007	11:50	12:03	2.16	23	249
IW101-09A	TTA-1	15	4/11/2007	12:24	12:33	2.16	29	250
IW101-09B	TTA-1	15	4/11/2007	12:33	12:43	2.16	27	240
IW101-09C	TTA-1	15	4/11/2007	13:07	13:18	2.16	24	250
IW21-01A	TTA-1	10	4/12/2007	7:56	8:07	2.16	27	250
IW21-01B	TTA-1	10	4/12/2007	8:08	8:17	2.16	26	237
IW21-02A	TTA-1	10	4/12/2007	8:40	8:51	2.16	24	250
IW21-02B	TTA-1	10	4/12/2007	8:51	9:02	2.16	23	243
IW21-03A	TTA-1	10	4/12/2007	9:30	9:40	2.16	27	249
IW21-03B	TTA-1	10	4/12/2007	9:40	9:51	2.16	27	240
IW21-04A	TTA-1	10	4/12/2007	10:19	10:30	2.16	23	250
IW21-04B	TTA-1	10	4/12/2007	10:30	10:42	2.16	23	248
IW21-05A	TTA-1	10	4/12/2007	11:06	11:16	2.16	28	251
IW21-05B	TTA-1	10	4/12/2007	11:17	11:27	2.16	27	246
IW85-01	TTA-2	10	4/12/2007	14:01	14:06	2.16	26	110
IW85-02	TTA-2	10	4/12/2007	14:08	14:13	2.16	26	109
IW85-05	TTA-2	10	4/12/2007	14:15	14:20	2.16	27	110
IW85-06	TTA-2	10	4/12/2007	14:22	14:26	2.16	23	109
IW92-01	TTA-2	10	4/12/2007	12:29	12:34	2.16	25	110
IW92-02	TTA-2	10	4/12/2007	12:39	12:44	2.16	25	111
IW92-03	TTA-2	10	4/12/2007	12:47	12:53	2.16	26	111
IW92-04	TTA-2	10	4/12/2007	12:55	13:00	2.16	24	111
IW92-05	TTA-2	10	4/12/2007	13:06	13:43	2.16	23	109
IW92-06	TTA-2	10	4/12/2007	13:21	13:26	2.16	23	111
IW92-07	TTA-2	10	4/12/2007	13:28	13:34	2.16	23	111
IW92-08	TTA-2	10	4/12/2007	13:46	14:52	2.16	26	114

Notes: TTA-1 Target injection volumes per well: 250 gallons for 15-foot screen, 250 gallons for 10-foot screen
 Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 17

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	4/30/2007	7:17	7:27	2.16	27	251
IW101-01B	TTA-1	15	4/30/2007	7:27	7:40	2.16	27	228
IW101-01C	TTA-1	15	4/30/2007	8:02	8:14	2.16	23	249
IW101-02A	TTA-1	15	4/30/2007	9:37	9:48	2.16	23	249
IW101-02B	TTA-1	15	4/30/2007	9:49	10:00	2.16	23	243
IW101-02C	TTA-1	15	4/30/2007	10:35	10:36	2.16	28	239
IW101-03A	TTA-1	15	4/30/2007	10:24	10:33	2.16	29	250
IW101-03B	TTA-1	15	4/30/2007	11:09	11:20	2.16	23	249
IW101-03C	TTA-1	15	4/30/2007	11:21	11:33	2.16	23	243
IW101-04A	TTA-1	15	4/30/2007	14:21	14:32	2.16	23	249
IW101-04B	TTA-1	15	4/30/2007	14:33	14:45	2.16	21	241
IW101-04C	TTA-1	15	4/30/2007	15:10	15:20	2.16	27	250
IW101-05A	TTA-1	15	4/30/2007	8:16	8:28	2.16	23	242
IW101-05B	TTA-1	15	4/30/2007	8:53	9:03	2.16	27	250
IW101-05C	TTA-1	15	4/30/2007	9:04	9:13	2.16	27	241
IW101-06A	TTA-1	15	4/30/2007	15:22	15:32	2.16	28	247
IW101-06B	TTA-1	15	4/30/2007	15:53	16:06	2.16	21	250
IW101-06C	TTA-1	15	4/30/2007	16:06	16:19	2.16	21	245
IW101-07A	TTA-1	15	4/30/2007	11:57	12:06	2.16	27	250
IW101-07B	TTA-1	15	4/30/2007	12:07	12:17	2.16	27	241
IW101-07C	TTA-1	15	4/30/2007	12:42	12:53	2.16	23	250
IW101-08A	TTA-1	15	4/30/2007	16:40	16:50	2.16	29	250
IW101-08B	TTA-1	15	4/30/2007	16:51	17:00	2.16	27	237
IW101-08C	TTA-1	15	5/1/2007	7:44	7:54	2.16	28	250
IW101-09A	TTA-1	15	4/30/2007	12:55	13:07	2.16	23	247
IW101-09B	TTA-1	15	4/30/2007	13:38	13:47	2.16	27	250
IW101-09C	TTA-1	15	4/30/2007	13:48	13:58	2.16	27	237
IW21-01A	TTA-1	10	5/1/2007	7:57	8:06	2.16	28	246
IW21-01B	TTA-1	10	5/1/2007	8:29	8:41	2.16	21	250
IW21-02A	TTA-1	10	5/1/2007	8:43	8:55	2.16	21	245
IW21-02B	TTA-1	10	5/1/2007	9:18	9:27	2.16	28	250
IW21-03A	TTA-1	10	5/1/2007	9:31	9:40	2.16	27	236
IW21-03B	TTA-1	10	5/1/2007	10:05	10:17	2.16	22	250
IW21-04A	TTA-1	10	5/1/2007	10:19	10:31	2.16	22	245
IW21-04B	TTA-1	10	5/1/2007	10:56	11:06	2.16	27	250
IW21-05A	TTA-1	10	5/1/2007	11:09	11:19	2.16	27	244
IW21-05B	TTA-1	10	5/1/2007	11:43	11:55	2.16	22	250
IW85-01	TTA-2	10	5/1/2007	13:45	13:50	2.16	27	111
IW85-02	TTA-2	10	5/1/2007	13:52	13:57	2.16	27	111
IW85-05	TTA-2	10	5/1/2007	13:59	14:03	2.16	26	111
IW85-06	TTA-2	10	5/1/2007	14:06	14:27	2.16	26	121
IW92-01	TTA-2	10	5/1/2007	12:07	12:13	2.16	22	111
IW92-02	TTA-2	10	5/1/2007	12:40	12:45	2.16	22	110
IW92-03	TTA-2	10	5/1/2007	12:48	12:53	2.16	20	103
IW92-04	TTA-2	10	5/1/2007	12:16	12:21	2.16	22	112
IW92-05	TTA-2	10	5/1/2007	12:24	12:29	2.16	27	115
IW92-06	TTA-2	10	5/1/2007	12:31	12:36	2.16	26	111
IW92-07	TTA-2	10	5/1/2007	12:39	12:44	2.16	27	111
IW92-08	TTA-2	10	5/1/2007	12:45	13:42	2.16	26	111

Notes: TTA-1 Target injection volumes per well. 250 gallons.
Target injection volume in TTA-2 wells is 111 gallons

INJECTION NO. 18

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	5/9/2007	7:13	7:23	2.16	27.70	249.90
IW101-01B	TTA-1	15	5/9/2007	7:23	7:33	2.16	27.00	234.70
IW101-01C	TTA-1	15	5/9/2007	7:56	8:07	2.16	24.50	249.60
IW101-02A	TTA-1	15	5/9/2007	9:28	9:39	2.16	24.70	249.60
IW101-02B	TTA-1	15	5/9/2007	9:39	9:51	2.16	23.10	241.30
IW101-02C	TTA-1	15	5/9/2007	10:13	10:22	2.16	26.10	249.90
IW101-03A	TTA-1	15	5/9/2007	10:24	10:34	2.16	27.50	243.90
IW101-03B	TTA-1	15	5/9/2007	11:03	11:13	2.16	24.60	249.60
IW101-03C	TTA-1	15	5/9/2007	11:13	11:24	2.16	24.40	248.20
IW101-04A	TTA-1	15	5/9/2007	15:22	15:33	2.16	23.50	245.00
IW101-04B	TTA-1	15	5/9/2007	15:33	15:44	2.16	23.60	240.00
IW101-04C	TTA-1	15	5/10/2007	7:22	7:33	2.16	28.20	249.80
IW101-05A	TTA-1	15	5/9/2007	8:10	8:22	2.16	24.50	241.40
IW101-05B	TTA-1	15	5/9/2007	8:43	8:53	2.16	27.00	249.30
IW101-05C	TTA-1	15	5/9/2007	8:53	9:03	2.16	26.90	237.70
IW101-06A	TTA-1	15	5/10/2007	7:36	7:45	2.16	27.70	239.50
IW101-06B	TTA-1	15	5/10/2007	8:46	8:55	2.16	27.80	250.40
IW101-06C	TTA-1	15	5/10/2007	8:55	9:05	2.16	26.90	236.80
IW101-07A	TTA-1	15	5/10/2007	11:46	11:55	2.16	27.20	250.20
IW101-07B	TTA-1	15	5/10/2007	11:56	12:06	2.16	26.60	240.80
IW101-07C	TTA-1	15	5/10/2007	12:28	12:38	2.16	25.10	249.50
IW101-08A	TTA-1	15	5/10/2007	10:16	10:25	2.16	28.60	249.90
IW101-08B	TTA-1	15	5/10/2007	10:26	10:35	2.16	26.70	238.50
IW101-08C	TTA-1	15	5/10/2007	11:48	11:58	2.16	27.80	255.20
IW101-09A	TTA-1	15	5/10/2007	12:40	12:51	2.16	24.20	249.50
IW101-09B	TTA-1	15	5/10/2007	13:53	14:03	2.16	24.40	249.80
IW101-09C	TTA-1	15	5/10/2007	14:03	14:14	2.16	24.40	243.50
IW21-01A	TTA-1	10	5/9/2007	13:08	13:18	2.16	27.20	249.90
IW21-01B	TTA-1	10	5/9/2007	13:19	13:29	2.16	25.10	241.90
IW21-02A	TTA-1	10	5/9/2007	14:36	14:45	2.16	28.40	249.90
IW21-02B	TTA-1	10	5/9/2007	14:47	14:56	2.16	26.80	236.80
IW21-03A	TTA-1	10	5/9/2007	16:06	16:16	2.16	27.00	249.70
IW21-03B	TTA-1	10	5/9/2007	16:16	16:25	2.16	26.80	239.50
IW21-04A	TTA-1	10	5/10/2007	7:45	7:55	2.16	23.80	251.20
IW21-04B	TTA-1	10	5/10/2007	7:57	8:10	2.16	23.60	245.90
IW21-05A	TTA-1	10	5/10/2007	9:33	9:44	2.16	23.60	250.70
IW21-05B	TTA-1	10	5/10/2007	9:45	9:59	2.16	23.10	248.60
IW85-01	TTA-2	10	5/10/2007	12:44	12:50	2.16	23.80	111.80
IW85-02	TTA-2	10	5/10/2007	12:52	12:58	2.16	23.20	111.60
IW85-05	TTA-2	10	5/10/2007	13:00	13:07	2.16	24.20	108.00
IW85-06	TTA-2	10	5/10/2007	13:28	13:36	2.16	25.00	131.10
IW92-01	TTA-2	10	5/10/2007	10:58	11:05	2.16	16.30	110.90
IW92-02	TTA-2	10	5/10/2007	11:08	11:14	2.16	18.80	111.30
IW92-03	TTA-2	10	5/10/2007	11:18	11:24	2.16	23.80	110.90
IW92-04	TTA-2	10	5/10/2007	11:26	11:31	2.16	18.80	110.80
IW92-05	TTA-2	10	5/10/2007	11:37	11:41	2.16	23.50	111.50
IW92-06	TTA-2	10	5/10/2007	12:08	12:12	2.16	26.20	111.40
IW92-07	TTA-2	10	5/10/2007	12:14	12:19	2.16	26.80	110.80
IW92-08	TTA-2	10	5/10/2007	12:20	12:21	2.16	26.50	111.40

Notes: TTA-1 Target injection volumes per well: 250 gallons.

Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO 19

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	5/23/2007	7:13	7:32	2.16	23.6	249.9
IW101-01B	TTA-1	15	5/23/2007	7:24	7:35	2.16	23.6	244.9
IW101-01C	TTA-1	15	5/23/2007	7:59	8:09	2.16	26.8	248.8
IW101-02A	TTA-1	15	5/23/2007	8:11	8:21	2.16	27.3	242.0
IW101-02B	TTA-1	15	5/23/2007	8:46	8:57	2.16	22.9	249.4
IW101-02C	TTA-1	15	5/23/2007	8:58	9:09	2.16	22.4	241.4
IW101-03A	TTA-1	15	5/23/2007	9:33	9:43	2.16	27.8	250.5
IW101-03B	TTA-1	15	5/23/2007	9:44	9:54	2.16	27.3	243.3
IW101-03C	TTA-1	15	5/23/2007	10:21	10:33	2.16	23.0	250.0
IW101-04A	TTA-1	15	5/23/2007	13:02	13:12	2.16	27.0	240.0
IW101-04B	TTA-1	15	5/23/2007	13:40	13:51	2.16	22.8	249.8
IW101-04C	TTA-1	15	5/23/2007	13:52	14:03	2.16	23.2	244.6
IW101-05A	TTA-1	15	5/23/2007	15:08	15:19	2.16	23.5	249.9
IW101-05B	TTA-1	15	5/23/2007	15:19	15:30	2.16	24.4	237.5
IW101-05C	TTA-1	15	5/23/2007	16:38	16:49	2.16	23.8	249.4
IW101-06A	TTA-1	15	5/23/2007	16:51	17:03	2.16	23.3	251.0
IW101-06B	TTA-1	15	5/24/2007	6:46	6:58	2.16	23.0	249.6
IW101-06C	TTA-1	15	5/24/2007	6:58	7:10	2.16	22.4	244.2
IW101-07A	TTA-1	15	5/23/2007	10:34	10:46	2.16	22.7	246.6
IW101-07B	TTA-1	15	5/23/2007	11:09	11:18	2.16	28.1	250.2
IW101-07C	TTA-1	15	5/23/2007	11:19	11:28	2.16	28.0	238.5
IW101-08A	TTA-1	15	5/24/2007	8:12	8:23	2.16	22.4	249.7
IW101-08B	TTA-1	15	5/24/2007	8:24	8:36	2.16	22.0	244.0
IW101-08C	TTA-1	15	5/24/2007	9:49	10:00	2.16	22.3	250.2
IW101-09A	TTA-1	15	5/23/2007	11:59	12:10	2.16	23.0	250.0
IW101-09B	TTA-1	15	5/23/2007	12:11	12:25	2.16	23.0	245.0
IW101-09C	TTA-1	15	5/23/2007	12:51	13:00	2.16	28.0	250.0
IW21-01A	TTA-1	10	5/23/2007	14:26	14:44	2.16	27.6	490.9
IW21-01B	TTA-1	10	5/23/2007	15:51	16:11	2.16	25.4	488.0
IW21-02A	TTA-1	10	5/24/2007	7:13	7:31	2.16	27.1	485.8
IW21-02B	TTA-1	10	5/24/2007	8:58	9:18	2.16	28.3	488.9
IW21-03A	TTA-1	10	5/24/2007	10:32	10:52	2.16	25.7	488.4
IW21-03B	TTA-1	10	5/24/2007	12:11	12:30	2.16	26.8	488.1
IW21-04A	TTA-1	10	5/24/2007	13:41	13:58	2.16	28.1	485.0
IW21-04B	TTA-1	10	5/24/2007	14:54	15:17	2.16	23.1	497.9
IW21-05A	TTA-1	10	5/24/2007	15:37	15:56	2.16	26.9	490.9
IW21-05B	TTA-1	10	5/24/2007	16:17	16:40	2.16	23.2	500.0
IW85-01	TTA-2	10	5/24/2007	13:09	13:14	2.16	21.0	110.6
IW85-02	TTA-2	10	5/24/2007	13:17	13:22	2.16	22.0	110.5
IW85-05	TTA-2	10	5/24/2007	13:25	13:30	2.16	24.0	110.9
IW85-06	TTA-2	10	5/24/2007	13:50	13:59	2.16	22.6	123.2
IW92-01	TTA-2	10	5/24/2007	10:10	10:16	2.16	21.9	110.7
IW92-02	TTA-2	10	5/24/2007	10:20	10:26	2.16	22.4	111.0
IW92-03	TTA-2	10	5/24/2007	10:29	10:31	2.16	22.4	111.0
IW92-04	TTA-2	10	5/24/2007	11:27	11:33	2.16	20.1	110.6
IW92-05	TTA-2	10	5/24/2007	11:38	11:44	2.16	21.6	110.4
IW92-06	TTA-2	10	5/24/2007	11:47	11:53	2.16	21.3	110.2
IW92-07	TTA-2	10	5/24/2007	11:55	11:59	2.16	22.4	110.0
IW92-08	TTA-2	10	5/24/2007	13:00	13:06	2.16	20.0	110.4

Notes: TTA-1 Target injection volumes per well: 250 gallons.
Target injection volume in TTA-2 wells is 111 gallons.

INJECTION 20

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	6/11/2007	7:10	7:19	2.16	29	245
IW101-01B	TTA-1	15	6/11/2007	7:21	7:31	2.16	27	232
IW101-01C	TTA-1	15	6/11/2007	7:55	8:06	2.16	23	249
IW101-02A	TTA-1	15	6/11/2007	8:08	8:20	2.16	23	245
IW101-02B	TTA-1	15	6/11/2007	8:42	8:51	2.16	27	250
IW101-02C	TTA-1	15	6/11/2007	8:52	9:01	2.16	27	238
IW101-03A	TTA-1	15	6/11/2007	9:25	9:36	2.16	23	249
IW101-03B	TTA-1	15	6/11/2007	9:38	9:47	2.16	23	238
IW101-03C	TTA-1	15	6/11/2007	10:23	10:33	2.16	27	249
IW101-04A	TTA-1	15	6/11/2007	12:54	13:06	2.16	23	244
IW101-04B	TTA-1	15	6/11/2007	13:31	13:40	2.16	27	249
IW101-04C	TTA-1	15	6/11/2007	13:41	13:50	2.16	28	237
IW101-05A	TTA-1	15	6/11/2007	14:12	14:24	2.16	23	250
IW101-05B	TTA-1	15	6/11/2007	14:24	14:36	2.16	23	238
IW101-05C	TTA-1	15	6/11/2007	15:00	15:09	2.16	27	250
IW101-06A	TTA-1	15	6/11/2007	15:11	15:21	2.16	28	249
IW101-06B	TTA-1	15	6/11/2007	15:42	15:54	2.16	23	250
IW101-06C	TTA-1	15	6/11/2007	15:54	16:06	2.16	24	244
IW101-07A	TTA-1	15	6/11/2007	10:36	10:45	2.16	27	248
IW101-07B	TTA-1	15	6/11/2007	11:06	11:17	2.16	23	250
IW101-07C	TTA-1	15	6/11/2007	11:18	11:30	2.16	23	242
IW101-08A	TTA-1	15	6/11/2007	16:27	16:36	2.16	29	250
IW101-08B	TTA-1	15	6/11/2007	16:37	16:47	2.16	27	236
IW101-08C	TTA-1	15	6/12/2007	7:10	7:21	2.16	25	250
IW101-09A	TTA-1	15	6/11/2007	11:55	12:05	2.16	28	250
IW101-09B	TTA-1	15	6/11/2007	12:05	12:16	2.16	27	244
IW101-09C	TTA-1	15	6/11/2007	12:40	12:51	2.16	23	249
IW21-01A	TTA-1	10	6/12/2007	7:40	8:02	2.16	23	498
IW21-01B	TTA-1	10	6/12/2007	7:40	8:02	2.16	23	498
IW21-02A	TTA-1	10	6/12/2007	8:32	8:53	2.16	26	521
IW21-02B	TTA-1	10	6/12/2007	9:19	9:42	2.16	23	495
IW21-03A	TTA-1	10	6/12/2007	10:08	10:27	2.16	27	486
IW21-03B	TTA-1	10	6/12/2007	10:57	11:19	2.16	23	494
IW21-04A	TTA-1	10	6/12/2007	11:42	12:00	2.16	18	492
IW21-04B	TTA-1	10	6/12/2007	12:31	12:53	2.16	23	495
IW21-05A	TTA-1	10	6/12/2007	14:11	14:32	2.16	23	494
IW21-05B	TTA-1	10	6/12/2007	15:01	15:19	2.16	29	500
IW85-01	TTA-2	10	6/13/2007	7:20	7:25	2.16	27	112
IW85-02	TTA-2	10	6/13/2007	7:49	7:55	2.16	23	111
IW85-05	TTA-2	10	6/13/2007	8:02	8:07	2.16	24	111
IW85-06	TTA-2	10	6/13/2007	8:10	8:15	2.16	21	116
IW92-01	TTA-2	10	6/12/2007	15:40	15:45	2.16	19	111
IW92-02	TTA-2	10	6/12/2007	15:49	15:54	2.16	22	111
IW92-03	TTA-2	10	6/12/2007	15:58	16:03	2.16	24	111
IW92-04	TTA-2	10	6/12/2007	16:06	16:12	2.16	20	111
IW92-05	TTA-2	10	6/12/2007	16:16	16:20	2.16	20	110
IW92-06	TTA-2	10	6/12/2007	16:47	16:52	2.16	25	111
IW92-07	TTA-2	10	6/13/2007	7:03	7:08	2.16	27	111
IW92-08	TTA-2	10	6/13/2007	7:11	7:16	2.16	26	111

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.
Target injection volume in the TTA-1 21 area is 500 gallons
Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO. 21

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	6/19/2007	7:24	7:35	2.16	25	250
IW101-01B	TTA-1	15	6/19/2007	7:40	7:51	2.16	24	237
IW101-01C	TTA-1	15	6/19/2007	8:18	8:27	2.16	27	250
IW101-02A	TTA-1	15	6/19/2007	8:29	8:39	2.16	27	226
IW101-02B	TTA-1	15	6/19/2007	9:02	9:13	2.16	23	250
IW101-02C	TTA-1	15	6/19/2007	9:14	9:24	2.16	24	243
IW101-03A	TTA-1	15	6/19/2007	9:47	9:57	2.16	27	250
IW101-03B	TTA-1	15	6/19/2007	9:57	10:07	2.16	28	244
IW101-03C	TTA-1	15	6/19/2007	10:30	10:41	2.16	24	250
IW101-04A	TTA-1	15	6/19/2007	13:08	13:18	2.16	27	240
IW101-04B	TTA-1	15	6/19/2007	13:43	13:54	2.16	24	250
IW101-04C	TTA-1	15	6/19/2007	13:54	14:05	2.16	24	240
IW101-05A	TTA-1	15	6/19/2007	14:32	14:41	2.16	29	250
IW101-05B	TTA-1	15	6/19/2007	14:42	14:51	2.16	27	230
IW101-05C	TTA-1	15	6/19/2007	15:20	15:31	2.16	24	250
IW101-06A	TTA-1	15	6/19/2007	15:33	15:44	2.16	24	247
IW101-06B	TTA-1	15	6/19/2007	16:04	16:13	2.16	29	249
IW101-06C	TTA-1	15	6/19/2007	16:13	16:23	2.16	28	240
IW101-07A	TTA-1	15	6/19/2007	10:43	10:55	2.16	24	244
IW101-07B	TTA-1	15	6/19/2007	11:20	11:30	2.16	27	250
IW101-07C	TTA-1	15	6/19/2007	11:31	11:40	2.16	27	237
IW101-08A	TTA-1	15	6/19/2007	16:48	16:59	2.16	25	250
IW101-08B	TTA-1	15	6/19/2007	17:00	17:11	2.16	24	240
IW101-08C	TTA-1	15	6/20/2007	7:20	7:29	2.16	28	244
IW101-09A	TTA-1	15	6/19/2007	12:09	12:21	2.16	24	250
IW101-09B	TTA-1	15	6/19/2007	12:21	12:33	2.16	24	244
IW101-09C	TTA-1	15	6/19/2007	12:55	13:04	2.16	28	250
IW21-01A	TTA-1	10	6/20/2007	7:55	8:17	2.16	24	495
IW21-01B	TTA-1	10	6/20/2007	8:40	9:01	2.16	26	488
IW21-02A	TTA-1	10	6/20/2007	9:32	9:54	2.16	24	495
IW21-02B	TTA-1	10	6/20/2007	10:14	10:33	2.16	28	487
IW21-03A	TTA-1	10	6/20/2007	11:06	11:27	2.16	24	491
IW21-03B	TTA-1	10	6/20/2007	11:52	12:11	2.16	27	490
IW21-04A	TTA-1	10	6/20/2007	12:42	13:02	2.16	24	493
IW21-04B	TTA-1	10	6/20/2007	13:26	13:44	2.16	29	494
IW21-05A	TTA-1	10	6/20/2007	14:13	14:35	2.16	24	476
IW21-05B	TTA-1	10	6/20/2007	14:58	15:17	2.16	28	499
IW85-01	TTA-2	10	6/21/2007	7:32	7:37	2.16	26	111
IW85-02	TTA-2	10	6/21/2007	8:07	8:12	2.16	22	112
IW85-05	TTA-2	10	6/21/2007	8:16	8:20	2.16	24	111
IW85-06	TTA-2	10	6/21/2007	8:23	8:29	2.16	20	114
IW92-01	TTA-2	10	6/20/2007	15:40	15:46	2.16	21	111
IW92-02	TTA-2	10	6/20/2007	15:51	15:57	2.16	22	111
IW92-03	TTA-2	10	6/20/2007	16:02	16:07	2.16	24	111
IW92-04	TTA-2	10	6/20/2007	16:13	16:19	2.16	22	111
IW92-05	TTA-2	10	6/20/2007	16:21	16:24	2.16	25	111
IW92-06	TTA-2	10	6/20/2007	16:44	16:49	2.16	26	111
IW92-07	TTA-2	10	6/21/2007	7:15	7:20	2.16	27	111
IW92-08	TTA-2	10	6/21/2007	7:24	7:29	2.16	26	111

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.

Target injection volume in the TTA-1 21 area is 500 gallons

Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO. 22

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	7/3/2007	8:48	8:58	2.16	23	250
IW101-01B	TTA-1	15	7/3/2007	8:59	9:09	2.16	24	238
IW101-01C	TTA-1	15	7/3/2007	9:46	9:56	2.16	27	250
IW101-02A	TTA-1	15	7/3/2007	9:58	10:08	2.16	27	234
IW101-02B	TTA-1	15	7/3/2007	10:32	10:43	2.16	24	249
IW101-02C	TTA-1	15	7/3/2007	10:44	10:55	2.16	24	242
IW101-03A	TTA-1	15	7/3/2007	11:15	11:25	2.16	27	250
IW101-03B	TTA-1	15	7/3/2007	11:25	11:35	2.16	27	246
IW101-03C	TTA-1	15	7/3/2007	12:01	12:12	2.16	24	250
IW101-04A	TTA-1	15	7/3/2007	14:34	14:44	2.16	27	241
IW101-04B	TTA-1	15	7/3/2007	15:04	15:16	2.16	24	250
IW101-04C	TTA-1	15	7/3/2007	15:17	15:39	2.16	24	242
IW101-05A	TTA-1	15	7/3/2007	15:49	15:58	2.16	29	250
IW101-05B	TTA-1	15	7/3/2007	15:58	16:08	2.16	27	238
IW101-05C	TTA-1	15	7/5/2007	7:07	7:17	2.16	29	250
IW101-06A	TTA-1	15	7/5/2007	7:18	7:28	2.16	27	250
IW101-06B	TTA-1	15	7/5/2007	7:58	8:09	2.16	24	250
IW101-06C	TTA-1	15	7/5/2007	8:09	8:21	2.16	24	240
IW101-07A	TTA-1	15	7/3/2007	12:14	12:25	2.16	24	244
IW101-07B	TTA-1	15	7/3/2007	12:48	12:57	2.16	28	250
IW101-07C	TTA-1	15	7/3/2007	12:58	13:07	2.16	27	239
IW101-08A	TTA-1	15	7/5/2007	8:44	8:53	2.16	29	250
IW101-08B	TTA-1	15	7/5/2007	8:54	9:03	2.16	28	238
IW101-08C	TTA-1	15	7/5/2007	9:24	9:35	2.16	24	245
IW101-09A	TTA-1	15	7/3/2007	13:36	13:47	2.16	24	250
IW101-09B	TTA-1	15	7/3/2007	13:47	13:59	2.16	24	242
IW101-09C	TTA-1	15	7/3/2007	14:21	14:31	2.16	26	250
IW21-01A	TTA-1	10	7/5/2007	10:12	10:31	2.16	27	499
IW21-01B	TTA-1	10	7/5/2007	10:56	11:20	2.16	23	495
IW21-02A	TTA-1	10	7/5/2007	11:46	12:06	2.16	27	493
IW21-02B	TTA-1	10	7/5/2007	12:32	12:54	2.16	24	492
IW21-03A	TTA-1	10	7/5/2007	13:22	13:41	2.16	29	495
IW21-03B	TTA-1	10	7/5/2007	14:13	14:35	2.16	24	497
IW21-04A	TTA-1	10	7/5/2007	15:00	15:18	2.16	28	495
IW21-04B	TTA-1	10	7/5/2007	15:48	16:09	2.16	24	496
IW21-05A	TTA-1	10	7/5/2007	16:33	16:52	2.16	27	495
IW21-05B	TTA-1	10	7/6/2007	7:22	7:41	2.16	28	500
IW85-01	TTA-2	10	7/6/2007	9:36	9:41	2.16	26	105
IW85-02	TTA-2	10	7/6/2007	9:54	10:00	2.16	23	111
IW85-05	TTA-2	10	7/6/2007	10:05	10:10	2.16	24	113
IW85-06	TTA-2	10	7/6/2007	10:13	10:19	2.16	21	128
IW92-01	TTA-2	10	7/6/2007	8:02	8:10	2.16	21	111
IW92-02	TTA-2	10	7/6/2007	8:15	8:20	2.16	21	111
IW92-03	TTA-2	10	7/6/2007	8:24	8:30	2.16	23	111
IW92-04	TTA-2	10	7/6/2007	8:32	8:38	2.16	22	111
IW92-05	TTA-2	10	7/6/2007	8:41	8:45	2.16	21	111
IW92-06	TTA-2	10	7/6/2007	9:07	9:11	2.16	24	110
IW92-07	TTA-2	10	7/6/2007	9:17	9:22	2.16	25	111
IW92-08	TTA-2	10	7/6/2007	9:27	9:31	2.16	26	110

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.
Target injection volume in the TTA-1 21 area is 500 gallons
Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO. 23

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	7/17/2007	8:15	8:24	2.16	29	250
IW101-01B	TTA-1	15	7/17/2007	8:25	8:34	2.16	27	244
IW101-01C	TTA-1	15	7/17/2007	8:58	9:09	2.16	22	250
IW101-02A	TTA-1	15	7/17/2007	9:12	9:23	2.16	23	239
IW101-02B	TTA-1	15	7/17/2007	9:45	9:54	2.16	28	250
IW101-02C	TTA-1	15	7/17/2007	9:55	10:04	2.16	28	242
IW101-03A	TTA-1	15	7/17/2007	10:30	10:42	2.16	23	250
IW101-03B	TTA-1	15	7/17/2007	10:42	10:54	2.16	24	248
IW101-03C	TTA-1	15	7/17/2007	11:16	11:25	2.16	28	250
IW101-04A	TTA-1	15	7/17/2007	13:45	13:57	2.16	24	245
IW101-04B	TTA-1	15	7/17/2007	14:16	14:27	2.16	27	250
IW101-04C	TTA-1	15	7/17/2007	14:28	14:37	2.16	27	242
IW101-05A	TTA-1	15	7/17/2007	15:00	15:11	2.16	23	250
IW101-05B	TTA-1	15	7/17/2007	15:12	15:22	2.16	23	239
IW101-05C	TTA-1	15	7/17/2007	15:45	15:54	2.16	28	250
IW101-06A	TTA-1	15	7/17/2007	15:56	16:06	2.16	27	248
IW101-06B	TTA-1	15	7/17/2007	16:25	16:36	2.16	22	250
IW101-06C	TTA-1	15	7/17/2007	16:37	16:48	2.16	22	244
IW101-07A	TTA-1	15	7/17/2007	11:28	11:37	2.16	27	244
IW101-07B	TTA-1	15	7/17/2007	12:03	12:14	2.16	23	250
IW101-07C	TTA-1	15	7/17/2007	12:15	12:26	2.16	23	239
IW101-08A	TTA-1	15	7/18/2007	7:09	7:21	2.16	22	250
IW101-08B	TTA-1	15	7/18/2007	7:22	7:34	2.16	22	240
IW101-08C	TTA-1	15	7/18/2007	7:56	8:05	2.16	28	250
IW101-09A	TTA-1	15	7/17/2007	12:46	12:55	2.16	28	249
IW101-09B	TTA-1	15	7/17/2007	12:55	13:05	2.16	27	244
IW101-09C	TTA-1	15	7/17/2007	13:30	13:43	2.16	24	250
IW21-01A	TTA-1	10	7/18/2007	8:41	9:05	2.16	22	494
IW21-01B	TTA-1	10	7/18/2007	9:28	9:49	2.16	26	491
IW21-02A	TTA-1	10	7/18/2007	10:13	10:37	2.16	22	492
IW21-02B	TTA-1	10	7/18/2007	10:58	11:18	2.16	27	493
IW21-03A	TTA-1	10	7/18/2007	11:49	12:12	2.16	22	492
IW21-03B	TTA-1	10	7/18/2007	12:35	12:54	2.16	27	495
IW21-04A	TTA-1	10	7/18/2007	13:25	13:48	2.16	22	493
IW21-04B	TTA-1	10	7/18/2007	14:09	14:27	2.16	27	498
IW21-05A	TTA-1	10	7/18/2007	14:56	15:18	2.16	22	493
IW21-05B	TTA-1	10	7/18/2007	15:41	15:59	2.16	28	499
IW85-01	TTA-2	10	7/19/2007	8:24	9:11	2.16	19	122
IW85-02	TTA-2	10	7/19/2007	8:43	8:48	2.16	27	111
IW85-05	TTA-2	10	7/19/2007	8:51	8:56	2.16	26	111
IW85-06	TTA-2	10	7/19/2007	8:58	9:04	2.16	25	112
IW92-01	TTA-2	10	7/19/2007	6:58	7:02	2.16	26	111
IW92-02	TTA-2	10	7/19/2007	7:07	7:11	2.16	24	111
IW92-03	TTA-2	10	7/19/2007	7:14	7:19	2.16	26	112
IW92-04	TTA-2	10	7/19/2007	7:20	7:25	2.16	25	110
IW92-05	TTA-2	10	7/19/2007	7:30	7:56	2.16	20	111
IW92-06	TTA-2	10	7/19/2007	7:57	8:03	2.16	23	111
IW92-07	TTA-2	10	7/19/2007	8:06	8:11	2.16	25	111
IW92-08	TTA-2	10	7/19/2007	8:14	8:17	2.16	24	105

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.

Target injection volume in the TTA-1 21 area is 500 gallons

Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO. 24

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	7/31/2007	10:54	11:04	2.16	24	249
IW101-01B	TTA-1	15	7/31/2007	11:06	11:16	2.16	24	240
IW101-01C	TTA-1	15	7/31/2007	11:39	11:48	2.16	27	250
IW101-02A	TTA-1	15	7/31/2007	11:51	12:00	2.16	27	244
IW101-02B	TTA-1	15	7/31/2007	12:22	12:33	2.16	24	250
IW101-02C	TTA-1	15	7/31/2007	12:34	12:44	2.16	24	241
IW101-03A	TTA-1	15	7/31/2007	13:11	13:20	2.16	27	250
IW101-03B	TTA-1	15	7/31/2007	13:22	13:31	2.16	27	249
IW101-03C	TTA-1	15	7/31/2007	13:55	14:06	2.16	23	250
IW101-04A	TTA-1	15	7/31/2007	16:31	16:40	2.16	27	245
IW101-04B	TTA-1	15	8/1/2007	7:07	7:16	2.16	28	250
IW101-04C	TTA-1	15	8/1/2007	7:17	7:25	2.16	28	243
IW101-05A	TTA-1	15	8/1/2007	7:47	7:57	2.16	24	250
IW101-05B	TTA-1	15	8/1/2007	7:58	8:09	2.16	23	244
IW101-05C	TTA-1	15	8/1/2007	8:32	8:42	2.16	27	250
IW101-06A	TTA-1	15	8/1/2007	8:45	8:54	2.16	28	243
IW101-06B	TTA-1	15	8/1/2007	9:27	9:38	2.16	23	250
IW101-06C	TTA-1	15	8/1/2007	9:36	9:49	2.16	23	246
IW101-07A	TTA-1	15	7/31/2007	14:08	14:18	2.16	24	249
IW101-07B	TTA-1	15	7/31/2007	14:44	14:53	2.16	28	250
IW101-07C	TTA-1	15	7/31/2007	14:54	15:03	2.16	27	242
IW101-08A	TTA-1	15	8/1/2007	10:17	10:26	2.16	28	250
IW101-08B	TTA-1	15	8/1/2007	10:27	10:37	2.16	28	243
IW101-08C	TTA-1	15	8/1/2007	10:59	11:10	2.16	23	246
IW101-09A	TTA-1	15	7/31/2007	15:30	15:40	2.16	24	250
IW101-09B	TTA-1	15	7/31/2007	15:41	15:52	2.16	23	254
IW101-09C	TTA-1	15	7/31/2007	16:18	16:18	2.16	29	250
IW21-01A	TTA-1	10	8/1/2007	11:48	12:06	2.16	28	500
IW21-01B	TTA-1	10	8/1/2007	12:37	12:59	2.16	23	496
IW21-02A	TTA-1	10	8/1/2007	13:19	13:38	2.16	27	493
IW21-02B	TTA-1	10	8/1/2007	14:08	14:30	2.16	23	492
IW21-03A	TTA-1	10	8/1/2007	15:04	15:24	2.16	27	495
IW21-03B	TTA-1	10	8/1/2007	15:42	16:07	2.16	23	494
IW21-04A	TTA-1	10	8/2/2007	7:13	7:35	2.16	23	493
IW21-04B	TTA-1	10	8/2/2007	8:43	9:06	2.16	23	500
IW21-05A	TTA-1	10	8/2/2007	10:26	10:47	2.16	24	492
IW21-05B	TTA-1	10	8/2/2007	12:14	12:36	2.16	24	497
IW85-01	TTA-2	10	8/2/2007	10:04	11:14	2.16	28	111
IW85-02	TTA-2	10	8/2/2007	11:19	11:23	2.16	27	111
IW85-05	TTA-2	10	8/2/2007	11:28	11:32	2.16	27	112
IW85-06	TTA-2	10	8/2/2007	11:35	11:40	2.16	25	125
IW92-01	TTA-2	10	8/2/2007	7:07	7:12	2.16	25	111
IW92-02	TTA-2	10	8/2/2007	7:16	7:21	2.16	24	111
IW92-03	TTA-2	10	8/2/2007	7:24	7:29	2.16	27	111
IW92-04	TTA-2	10	8/2/2007	7:34	7:39	2.16	24	111
IW92-05	TTA-2	10	8/2/2007	7:42	9:32	2.16	26	110
IW92-06	TTA-2	10	8/2/2007	9:38	9:43	2.16	26	111
IW92-07	TTA-2	10	8/2/2007	9:47	9:51	2.16	27	110
IW92-08	TTA-2	10	8/2/2007	9:55	10:00	2.16	26	111

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.
Target injection volume in the TTA-1 21 area is 500 gallons
Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO. 25

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	8/14/2007	9:26	9:36	2.16	27	250
IW101-01B	TTA-1	15	8/14/2007	9:37	9:46	2.16	27	244
IW101-01C	TTA-1	15	8/14/2007	10:22	10:33	2.16	23	250
IW101-02A	TTA-1	15	8/14/2007	10:36	10:47	2.16	23	240
IW101-02B	TTA-1	15	8/14/2007	11:17	11:26	2.16	27	250
IW101-02C	TTA-1	15	8/14/2007	11:28	11:37	2.16	27	243
IW101-03A	TTA-1	15	8/14/2007	12:04	12:16	2.16	23	250
IW101-03B	TTA-1	15	8/14/2007	12:17	12:28	2.16	23	245
IW101-03C	TTA-1	15	8/14/2007	12:59	13:09	2.16	26	250
IW101-04A	TTA-1	15	8/14/2007	15:58	16:10	2.16	25	256
IW101-04B	TTA-1	15	8/15/2007	7:32	7:44	2.16	24	250
IW101-04C	TTA-1	15	8/15/2007	7:45	7:55	2.16	23	243
IW101-05A	TTA-1	15	8/15/2007	8:15	8:24	2.16	28	250
IW101-05B	TTA-1	15	8/15/2007	8:25	8:34	2.16	27	239
IW101-05C	TTA-1	15	8/15/2007	9:04	9:15	2.16	23	250
IW101-06A	TTA-1	15	8/15/2007	9:18	9:30	2.16	23	245
IW101-06B	TTA-1	15	8/15/2007	9:53	10:02	2.16	28	250
IW101-06C	TTA-1	15	8/15/2007	10:03	10:13	2.16	27	249
IW101-07A	TTA-1	15	8/14/2007	13:11	13:21	2.16	27	244
IW101-07B	TTA-1	15	8/14/2007	13:57	14:09	2.16	23	250
IW101-07C	TTA-1	15	8/14/2007	14:10	14:21	2.16	23	242
IW101-08A	TTA-1	15	8/15/2007	10:49	11:00	2.16	23	250
IW101-08B	TTA-1	15	8/15/2007	11:00	11:11	2.16	23	241
IW101-08C	TTA-1	15	8/15/2007	11:36	11:46	2.16	26	245
IW101-09A	TTA-1	15	8/14/2007	14:50	14:59	2.16	27	250
IW101-09B	TTA-1	15	8/14/2007	15:00	15:09	2.16	27	241
IW101-09C	TTA-1	15	8/14/2007	15:45	15:55	2.16	23	250
IW21-01A	TTA-1	10	8/15/2007	12:27	12:49	2.16	23	499
IW21-01B	TTA-1	10	8/15/2007	13:22	13:42	2.16	26	489
IW21-02A	TTA-1	10	8/15/2007	14:16	14:38	2.16	23	493
IW21-02B	TTA-1	10	8/15/2007	15:07	15:27	2.16	27	492
IW21-03A	TTA-1	10	8/15/2007	15:56	16:19	2.16	22	494
IW21-03B	TTA-1	10	8/17/2007	7:25	7:47	2.16	23	494
IW21-04A	TTA-1	10	8/17/2007	8:08	8:26	2.16	28	497
IW21-04B	TTA-1	10	8/17/2007	13:58	14:18	2.16	27	487
IW21-05A	TTA-1	10	8/17/2007	14:42	15:03	2.16	24	493
IW21-05B	TTA-1	10	8/17/2007	15:38	15:56	2.16	29	507
IW85-01	TTA-2	10	8/20/2007	9:06	9:11	2.16	24	105
IW85-02	TTA-2	10	8/20/2007	9:25	9:33	2.16	26	111
IW85-05	TTA-2	10	8/20/2007	9:35	9:40	2.16	27	112
IW85-06	TTA-2	10	8/20/2007	9:42	9:48	2.16	25	119
IW92-01	TTA-2	10	8/20/2007	7:28	7:35	2.16	24	110
IW92-02	TTA-2	10	8/20/2007	7:35	7:40	2.16	24	110
IW92-03	TTA-2	10	8/20/2007	7:45	7:50	2.16	24	110
IW92-04	TTA-2	10	8/20/2007	7:53	7:58	2.16	25	110
IW92-05	TTA-2	10	8/20/2007	8:02	8:04	2.16	28	109
IW92-06	TTA-2	10	8/20/2007	8:43	8:48	2.16	24	110
IW92-07	TTA-2	10	8/20/2007	8:51	8:56	2.16	24	110
IW92-08	TTA-2	10	8/20/2007	8:58	9:04	2.16	23	110

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.
Target injection volume in the TTA-1 21 area is 500 gallons
Target injection volume in TTA-2 wells is 111 gallons.

INJECTION NO. 26

Well ID	Area	Screen Length	Date Injected	Start Time	End Time	Percent Sodium Lactate	Flow Rate (gpm)	Volume Injected (gallons)
IW101-01A	TTA-1	15	8/28/2007	11:02	11:13	2.16	24	250
IW101-01B	TTA-1	15	8/28/2007	11:14	11:24	2.16	24	241
IW101-01C	TTA-1	15	8/28/2007	12:02	12:11	2.16	28	250
IW101-02A	TTA-1	15	8/28/2007	12:14	12:23	2.16	28	250
IW101-02B	TTA-1	15	8/28/2007	12:54	13:05	2.16	24	250
IW101-02C	TTA-1	15	8/28/2007	13:08	13:19	2.16	24	242
IW101-03A	TTA-1	15	8/28/2007	14:11	14:21	2.16	27	250
IW101-03B	TTA-1	15	8/28/2007	14:22	14:32	2.16	27	243
IW101-03C	TTA-1	15	8/28/2007	15:13	15:24	2.16	24	250
IW101-04A	TTA-1	15	8/29/2007	9:03	9:14	2.16	24	240
IW101-04B	TTA-1	15	8/29/2007	9:44	9:55	2.16	26	250
IW101-04C	TTA-1	15	8/29/2007	9:55	10:04	2.16	27	241
IW101-05A	TTA-1	15	8/29/2007	10:32	10:43	2.16	24	250
IW101-05B	TTA-1	15	8/29/2007	10:43	10:54	2.16	24	237
IW101-05C	TTA-1	15	8/29/2007	11:45	11:56	2.16	29	250
IW101-06A	TTA-1	15	8/29/2007	11:57	12:07	2.16	28	252
IW101-06B	TTA-1	15	8/29/2007	12:30	12:40	2.16	24	250
IW101-06C	TTA-1	15	8/29/2007	12:40	12:52	2.16	24	246
IW101-07A	TTA-1	15	8/28/2007	15:27	15:38	2.16	24	242
IW101-07B	TTA-1	15	8/28/2007	16:17	16:27	2.16	27	250
IW101-07C	TTA-1	15	8/28/2007	16:28	16:38	2.16	27	241
IW101-08A	TTA-1	15	8/29/2007	13:24	13:34	2.16	29	250
IW101-08B	TTA-1	15	8/29/2007	13:34	13:44	2.16	27	239
IW101-08C	TTA-1	15	8/29/2007	14:08	14:22	2.16	24	245
IW101-09A	TTA-1	15	8/29/2007	7:26	7:35	2.16	29	250
IW101-09B	TTA-1	15	8/29/2007	7:38	7:46	2.16	27	242
IW101-09C	TTA-1	15	8/29/2007	8:49	9:00	2.16	24	250
IW21-01A	TTA-1	10	8/29/2007	14:59	15:17	2.16	28	500
IW21-01B	TTA-1	10	8/29/2007	15:52	16:14	2.16	24	494
IW21-02A	TTA-1	10	8/30/2007	7:19	7:40	2.16	24	490
IW21-02B	TTA-1	10	8/30/2007	8:05	8:23	2.16	28	489
IW21-03A	TTA-1	10	8/30/2007	8:51	9:14	2.16	24	490
IW21-03B	TTA-1	10	8/30/2007	9:45	10:04	2.16	27	496
IW21-04A	TTA-1	10	8/30/2007	10:51	11:13	2.16	24	494
IW21-04B	TTA-1	10	8/30/2007	11:36	11:55	2.16	28	504
IW21-05A	TTA-1	10	8/30/2007	12:22	12:44	2.16	24	493
IW21-05B	TTA-1	10	8/30/2007	13:18	13:37	2.16	28	503
IW85-01	TTA-2	10	8/30/2007	15:23	16:09	2.16	23	108
IW85-02	TTA-2	10	8/30/2007	15:42	15:50	2.16	24	108
IW85-05	TTA-2	10	8/30/2007	15:52	15:57	2.16	24	108
IW85-06	TTA-2	10	8/30/2007	15:59	16:04	2.16	24	102
IW92-01	TTA-2	10	8/30/2007	13:57	14:04	2.16	22	111
IW92-02	TTA-2	10	8/30/2007	14:06	14:12	2.16	23	111
IW92-03	TTA-2	10	8/30/2007	14:13	14:18	2.16	24	111
IW92-04	TTA-2	10	8/30/2007	14:24	14:29	2.16	23	111
IW92-05	TTA-2	10	8/30/2007	14:32	14:57	2.16	24	110
IW92-06	TTA-2	10	8/30/2007	15:01	15:06	2.16	24	110
IW92-07	TTA-2	10	8/30/2007	15:09	15:14	2.16	26	110
IW92-08	TTA-2	10	8/30/2007	15:16	15:20	2.16	26	110

Notes: TTA-1 Target injection volumes per well in the 101 area: 250 gallons.

Target injection volume in the TTA-1 21 area is 500 gallons

Target injection volume in TTA-2 wells is 111 gallons.

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

APPENDIX D

PRE-INJECTION FIELD MEASUREMENTS

Rnd 1 Pre-Injection Measurements

START: 8-Aug-06

END: 5-Sep-06

Well ID	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs
DR1-3	5.9	21.4	33.2	1.4	287	6
DR2-1	4.7	22.5	28.0	6.6	293	14
DR2-5	5.0	24.6	19.0	5.9	160	0
IW-01	5.5	23.9	46.1	0.0	-39	10
IW101-01A	5.6	22.9	39.0	7.0	42	108
IW101-01B	4.6	22.0	43.0	6.5	140	0
IW101-01C	5.2	23.0	38.0	6.0	75	10
IW101-02A	5.3	25.0	39.0	5.9	136	8
IW101-02B	5.4	22.2	38.0	5.8	130	9
IW101-02C	6.2	22.1	37.0	3.2	67	4
IW101-03A	5.9	26.1	35.0	5.8	84	9
IW101-03B	4.9	24.6	42.0	7.1	171	39
IW101-03C	4.8	21.9	22.0	5.7	160	9
IW101-04A	5.6	24.7	42.0	5.9	95	12
IW101-04B	5.5	23.5	41.0	6.1	114	9
IW101-04C	5.8	22.2	43.0	4.2	128	10
IW101-05A	5.9	25.9	41.0	8.9	126	120
IW101-05B	5.0	23.0	41.0	8.1	246	10
IW101-05C	4.4	22.2	35.0	3.3	223	15
IW101-06A	5.9	23.3	35.5	3.0	150	10
IW101-06B	5.9	24.4	24.6	0.0	146	10
IW101-06C	5.9	24.0	18.6	0.0	143	7
IW101-07A	6.1	24.2	43.4	0.0	185	19
IW101-07B	5.9	22.3	22.9	0.0	68	8
IW101-07C	5.8	23.2	16.1	0.0	113	10
IW101-08A	5.1	24.1	51.0	9.3	262	10
IW101-08B	5.1	23.6	20.0	7.2	113	10
IW101-08C	5.3	22.2	19.0	5.1	71	10
IW101-09A	4.5	22.6	55.0	7.1	256	9
IW101-09B	5.3	22.9	20.0	6.2	71	10
IW101-09C	5.6	23.0	17.0	4.2	77	10
IW21-01A	8.0	22.0	37.0	2.1	-21	0
IW21-01B	9.3	21.5	55.0	1.2	-130	78
IW21-02A	5.9	20.8	27.3	0.0	119	10
IW21-02B	5.5	21.5	27.2	0.0	161	0
IW21-03A	5.9	22.4	28.7	1.5	94	7
IW21-03B	5.8	24.6	37.5	0.0	45	0
IW21-04A	5.8	20.9	32.4	2.2	150	5
IW21-04B	5.9	21.0	29.6	0.2	94	10
IW21-05A	6.8	22.1	30.0	2.2	9	29
IW21-05B	6.4	22.1	28.0	3.8	61	40
IW85-01	4.8	24.7	21.0	5.2	147	0
IW85-02	5.2	23.1	24.0	6.1	105	34
IW85-03	5.9	23.7	26.0	7.9	-15	328
IW85-04 ¹	5.8	32.1	20.0	7.1	66	41
IW92-01	5.2	23.0	28.0	7.3	167	2
IW92-02	5.8	22.6	22.0	8.3	121	OR
IW92-03	5.9	23.7	19.5	0.0	21	14

Rnd 1 Pre-Injection Measurements

Well ID	pH	Temp °C	Specific Conductivity mS/cm	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Turbidity NTUs
IW92-04	6.2	24.6	231.0	1.3	-1	10
IW92-05	6.2	25.6	29.5	0.5	-59	12
IW92-06	6.9	23.7	29.4	0.0	138	376
IW92-07	6.0	23.9	26.7	0.0	-4	48
IW92-08	5.9	26.4	22.0	0.0	72	44
MW101B	3.5	21.5	40.0	6.1	302	18
MW101T	3.8	26.7	41.0	5.9	301	9
MW-115	5.6	21.4	24.3	0.6	94	3
MW-21	5.9	21.4	24.1	0.0	219	11
MW-85	4.6	22.7	20.0	5.9	239	9
PMW101-01A	6.0	23.9	425.0	0.0	17	7
PMW101-01B	6.0	23.2	39.1	6.5	86	10
PMW101-02A	6.0	22.7	41.9	13.0	68	49
PMW101-02B	5.9	22.9	40.1	10.5	99	6
PMW101-03A	6.0	21.3	32.6	0.0	46	8
PMW101-03B	5.6	21.8	32.2	0.0	203	9
PMW101-04A	5.9	23.3	49.4	9.7	156	2
PMW101-04B	5.8	22.8	27.8	0.9	189	10
PMW101-05A	5.8	23.3	42.9	8.5	225	0
PMW101-05B	5.8	21.2	17.5	0.0	264	6
PMW101-06A	6.1	22.3	39.8	0.0	83	9
PMW101-06B	5.8	21.1	27.4	0.0	240	5
PMW101-07A	5.9	22.7	50.0	2.3	200	9
PMW101-07B	5.7	23.2	17.3	0.0	228	10
PMW101-08A	5.9	24.1	58.5	0.0	241	8
PMW101-08B	5.8	25.6	19.2	0.0	84	8
PMW21-01	5.6	21.6	29.0	4.3	131	0
PMW21-02	5.9	21.6	30.1	1.7	28	7
PMW21-03	6.0	21.2	32.0	5.5	119	41
PMW21-04	5.8	26.2	33.0	2.2	105	28
PMW21-05	6.1	26.9	24.0	9.4	82	16
PMW85-01	4.8	22.3	21.0	5.5	138	7
PMW85-02	6.1	23.4	20.9	1.7	-55	113
PMW85-03	5.6	25.2	0.0	9.5	42	OR
PMW92-01	6.1	25.0	31.7	1.9	88	145
PMW92-02	5.9	23.2	20.0	0.6	220	16
PMW92-03	4.7	24.1	27.0	4.7	232	3
PMW92-04	5.0	23.0	29.0	2.8	145	10
PMW92-05	4.8	24.4	23.0	4.0	201	9
PMW92-06	4.8	23.1	21.0	4.6	182	9

Rnd 2 Pre-injection Measurements

Injection Start Date:		9/25/2006		Injection End Date:		9/28/2006
Well ID	DO(g/L)	ORP(mV)	pH	Temp (Celsius)	Cond (mS/m)	Water Depth Preinjection
DR2-1	13.67*	80	6.07	25.91	28.5	87.89
DR2-5	7.88	-64	3.08	24.2	18.4	95.54
IW101-01A	199.9*	-292	6.32	19.11	0.226	89.03
IW101-01B	193.2*	-110	6.4	19.19	42.5	88.96
IW101-01C	112.5*	7	6.1	19.33	0.134	88.96
IW101-02A	186.4*	95	6.19	19.59	42.4	89.26
IW101-02B	13.8*	135	5.36	19.45	43.2	89.33
IW101-02C	12.3*	116	5.88	19.56	24.6	89.8
IW101-03A	3.53	161	5.77	19.5	17	90.05
IW101-03B	5.18	115	6.42	19.7	37	89.9
IW101-03C	8.76	-120	8.6	19.8	25	90
IW101-04A	10*	45	5.33	19.01	51.2	89.93
IW101-04B	18.8*	-289	5.39	19.03	58.6	89.93
IW101-04C	16.4*	-254	8.92	18.99	50.5	89.86
IW101-05A	4.6	88	6.91	19.1	48	89.69
IW101-05B	4.82	90	6.81	19.1	41	89.51
IW101-05C	3.46	-171	9.34	18.9	40	89.43
IW101-06A	9.6*	36	6.19	19.7	79.3	90.32
IW101-06B	9.5*	70	5.43	19.57	31.7	90.36
IW101-06C	11*	-50	5.43	19.52	22.7	90.34
IW101-07A	1.31	66	6.57	19.7	60	90.83
IW101-07B	5.82	55	7.26	19.7	27	90.72
IW101-07C	1.82	29	7.04	19.5	21	90.75
IW101-08A	9.8*	-11	6.04	19.82	73.6	90.38
IW101-08B	10.4*	16	5.63	19.85	21.9	90.49
IW101-08C	11.5*	-85	5.47	19.77	18.8	90.97
IW101-09A	10*	115	5.24	19.86	61.8	90.78
IW101-09B	12.1*	-255	5.18	19.85	26	90.67
IW101-09C	9.7*	-149	5.27	19.79	26.8	92.72
IW21-01A	0.68	-222	9.7	18	1.2	91
IW21-01B	4.37	-225	9.9	18.4	47	91.08
IW21-02A	6.32	158	6.64	18.9	29	91.21
IW21-02B	6.49	142	6.69	18.4	28	91.29
IW21-03A	5.21	102	6.83	18.4	28	89.84
IW21-03B	4.64	35	7.37	18.1	30	89.6
IW21-04A	9.11	34	7.6	18.5	22	89.79
IW21-04B	3.65	55	7.29	18.3	26	89.92
IW21-05A	5.19	-28	7.92	18.3	20	89.33
IW21-05B	5.25	50	6.98	18.6	29	89.33
IW85-01	10.74*	-275	6.32	21.25	1.11	93.98
IW85-02	96.5*	-275	5.78	20.75	1.07	94.72
IW85-03	17.41*	-121	6.19	22.25	4.6	83.57
IW85-04	11.88*	-276	6.31	21.53	1.07	79.43
IW92-01	11.04*	-64	5.79	20.73	68.1	85.71
IW92-02	9.1*	116	5.75	20.56	23.8	79.27
IW92-03	9.42*	122	5.59	20.47	19.5	91.56
IW92-04	15.15*	147	5.66	22.78	0	90.91
IW92-05	8.27*	-187	5.85	21.3	0.284	91.89

Rnd 2 Pre-injection Measurements

Injection Start Date:		9/25/2006		Injection End Date:		9/28/2006
Well ID	DO(g/L)	ORP(mV)	pH	Temp (Celsius)	Cond (mS/m)	Water Depth Preinjection
IW92-06	11.62*	125	5.84	25.55	0	91.84
IW92-07	12.6*	119	5.95	25.16	0	92.9
IW92-08	15.26*	-104	5.34	23.64	0	92.61
MW21	11.4*	106	5.22	21.18	26.9	91.33
PMW101-01A	5.76	79	5.77	20.5	42	89.15
PMW101-01B	8.55	109	5.9	21.7	40	89.28
PMW101-02A	7.66	146	5.63	21.9	40	89.94
PMW101-02B	5.94	150	5.65	22.4	36	89.09
PMW101-03A	4.79	108	5.92	20.2	33	90.26
PMW101-03B	8.07	146	5.79	20.6	32	90.22
PMW101-04A	4.8	158	5.71	20.4	36	89.54
PMW101-04B	8.55	164	5.77	20.9	29	90.04
PMW101-05A	2.65	-66	7.6	20.5	40	89.82
PMW101-05B	10.78	98	6.31	20.3	20	90.14
PMW101-06A	9.8	130	6.2	20.7	39	90.43
PMW101-06B	5.49	152	5.88	21.9	28	90.46
PMW101-07A	6.21	121	6.29	22.3	49	90.4
PMW101-07B	9.34	162	5.95	23.3	19	90.62
PMW101-08A	7.19	166	5.87	23.2	57	91.18
PMW101-08B	10.61	150	6.26	24.9	15	91.12
PMW21-01A	10.6*	119	5.21	22.07	32.8	91.06
PMW21-02	10.5*	116	5.28	22.36	33.2	90.13
PMW21-03	10.42*	153	5.84	20.24	25.3	89.43
PMW21-04	8.95*	134	5.91	19.93	32.7	89.33
PMW85-01A	19*	87	6.05	22.44	21.9	96.58
PMW85-02	7.43	-39	4.86	23.1	14.7	81.57
PMW92-01	12.44*	118	5.9	24.91	27.5	93.62
PMW92-02	13.1	124	6.4	25.69	20.5	93.14
PMW92-03	12.05*	132	5.73	26.1	25.4	92.88
PMW92-04	11.09	-2	4.23	22.6	29.4	93.17
PMW92-05	3	-93	2.94	22.9	22.1	93.49
PMW92-06	6.4	-31	4.33	23.2	19.8	94.4

NOTES:

* = Dissolved Oxygen (DO) sensor malfunction, Do Not Use Data

Rnd 3 Pre-injection Measurements

INJECTION START DATE: 10/11/2006

INJECTION END DATE: 10/17/2006

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
IW101-01A	0.15	-195	6.3	23.46	0.525	88.86
IW101-01B	2.63	50	6.1	22.26	38.5	88.82
IW101-01C	2.52	39	6.12	19.03	25	88.95
IW101-02A	1.91	-135	10.32	18.92	47.1	88.76
IW101-02B	10.47	109	6.25	19.01	42.6	88.86
IW101-02C	6.51	-158	10.6	19.07	33.3	89.33
IW101-03A	4.88	-90	6.04	22.29	64.9	90.09
IW101-03B	2.74	57	5.97	22.11	22.2	89.94
IW101-03C	7.73	-55	6.34	22.51	22.7	89.98
IW101-04A	7.3	-93	6.27	22.25	0.118	89.68
IW101-04B	1.15	-124	6.38	21.84	60.7	89.75
IW101-04C	0.4	-127	6.47	21.53	51.2	89.64
IW101-05A	8.49	-132	9.99	18.88	48.9	89.38
IW101-05B	10.39	73	6.45	19.21	41.6	89.19
IW101-05C	9.75	-84	9.21	18.91	58.2	89.14
IW101-06A	6.87	87	9.23	19.33	80.9	89.85
IW101-06B	10.7	68	6.48	19.27	37.6	89.95
IW101-06C	11.38	-2	7.91	19.32	20.6	89.92
IW101-07A	8.03	-107	9.65	19.43	63	90.49
IW101-07B	11.31	-7	7.73	19.43	24.2	90.58
IW101-07C	10.7	-3	7.75	19.57	18.6	90.5
IW101-08A	6.84	104	6.1	21.3	46.7	90.07
IW101-08B	6.27	87	5.93	22.3	18.7	90.19
IW101-08C	1.38	-95	5.92	22.44	37	90.61
IW101-09A	11.38	97	5.75	19.52	60.9	90.35
IW101-09B	11.35	-51	8.6	19.59	31.9	90.21
IW101-09C	11.41	23	7.01	19.42	27.1	90.3
PMW101-01A	8.27	123	6.18	22.51	40.6	88.8
PMW101-01B	7.25	-99	9.25	22.12	89.1	88.84
PMW101-02A	6.13	144	6.99	22.65	42.9	89.81
PMW101-02B	4.73	202	6.2	21.79	38.6	89.99
PMW101-03A	8.06	127	5.99	20.5	33.6	89.84
PMW101-03B	12.11	158	5.57	20.98	32	89.8
PMW101-04A	6.88	161	6.81	19.34	38.1	89.53
PMW101-04B	7.64	224	5.76	19.56	31	90.07
PMW101-05A	2.45	-82	10.52	20.19	48	89.8
PMW101-05B	8.52	263	4.88	18.98	20.4	89.97
PMW101-06A	8.83	153	5.57	20.98	40.1	89.99
PMW101-06B	10.62	153	5.65	21.17	28.1	90.04
PMW101-07A	2.11	88	7.16	20.74	51.9	90.33
PMW101-07B	8.59	228	5.11	22.05	18.1	90.47
PMW101-08A	6.95	186	5.68	22.63	56.5	91.02
PMW101-08B	6.28	176	5.87	21.05	14.2	90.94
MW-101T	9.76	105	5.99	19.1	40.4	89.03
MW-101B	9.76	105	5.99	19.1	40.4	89.03
DR1-3	7.31	196	4.94	21.38	33.1	90.38

Rnd 3 Pre-injection Measurements

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
IW21-01A	0.44	-161	6.07	20.59	0.34	90.8
IW21-01B	3.39	-77	6.38	19.04	0.255	90.83
IW21-02A	12.07	212	4.38	18.08	28.9	91.35
IW21-02B	13.45	187	4.94	18.22	27.8	91.48
IW21-03A	2.4	144	5.92	19.59	26	89.74
IW21-03B	5.56	-62	6.27	20.45	35.5	89.48
IW21-04A	4.24	123	6.34	18.08	43.4	90.1
IW21-04B	7.44	1	7.82	17.99	29.2	90.26
IW21-05A	11.4	-115	9.56	18.05	77.5	89.61
IW21-05B	14.42	71	6.29	18.07	26.8	89.62
PMW21-01	9.66	180	5.02	19.36	32.5	91.29
PMW21-02	9.78	149	5.56	19.66	28.8	90.38
PMW21-03	7.08	214	5.51	21.29	27.1	89.48
PMW21-04	12.23	170	5.19	20.06	35.7	89.6
PMW21-05	12.59	159	5.36	21.41	25	94.5
MW-21	6.05	228	5.23	19.51	24.7	91.35
MW-115	14.11	149	5.65	20.03	25.2	89.32
IW92-01	2.55	64	5.81	8.4	25.3	85.15
IW92-02	5.2	-23	9.66	20.24	24.4	79.06
IW92-03	1.76	11	5.81	18.75	0.227	91.69
IW92-04	3.31	-134	11.24	19.91	0.927	92
IW92-05*	0.64	-48	5.92	17.27	4.95	91.99
IW92-06	2.92	-138	11.16	20	0.942	92
IW92-07	0.85	-62	5.96	20.73	9.2	93.04
IW92-08	4.98	-98	10.56	20.11	33.9	93.41
IW85-01	4.19	38	7.96	20.22	23.4	94.06
IW85-02	4.15	-86	10.03	20.23	40.4	94.8
IW85-03	3.45	-155	11.18	20.35	1.45	82.69
IW85-04	1.01	-101	6.06	17.89	7.47	79.3
PMW92-01	1.51	145	5.82	22.03	0.238	93.71
PMW92-02	8.88	-73	9.85	21.04	39.8	
PMW92-03	5.33	150	5.81	21.01	26.1	
PMW92-04	3.17	131	5.64	22.17	0.275	93.94
PMW92-05	4.48	214	5.53	22.89	0.215	93.65
PMW92-06	5.44	176	5.72	21.49	21.1	94.26
PMW85-01	6.62	174	5.56	21.77	0.194	96.85
PMW85-02	7.8	179	6.09	21.48	14.4	80.55
PMW85-03	DRY WELL					
MW-85	6.39	208	5.77	20.91	21.3	97.49
DR2-1	7.41	60	6.02	19.08	0.276	88.13
DR2-5	4.83	28	8.32	20.92	22.7	95.2
IW-01	15.2	-30	8.94	20.77	42.6	94.3

Rnd 4 Pre-injection Measurements

INJECTION START DATE: 10/23/2006				INJECTION END DATE: 10/26/2006		Water Depth Preinjection (ft)
Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	
IW101-01A	0.07	-87	9.4	18.59	0.222	90.92
IW101-01B	0.26	43	6.94	18.66	43.4	90.83
IW101-01C	1.26	61	6.64	18.54	36.4	90.86
IW101-02A	0.11	-44	8.28	18.68	52.1	91.12
IW101-02B	Not recorded	58	6.53	18.78	43.6	91.22
IW101-02C		16	7.24	18.78	36.8	91.64
IW101-03A	0.03	-13	7.58	18.92	71.8	91.97
IW101-03B	0.15	39	6.72	18.94	43.7	91.9
IW101-03C	0.04	-77	8.53	19.1	62	91.89
IW101-04A	9.1	120	5.48	18.53	27.2	91.72
IW101-04B	0.76	-91	9.02	18.7	75.3	91.74
IW101-04C	0	-209	11.39	18.75	43	91.69
IW101-05A	0	-157	10.34	18.94	99.9	91.62
IW101-05B	0	-75	8.66	18.91	42.5	91.41
IW101-05C	0.14	-74	8.5	18.83	67.9	91.32
IW101-06A	0.46	-121	9.28	19.08	98.5	Not Recorded
IW101-06B	0	-97	8.77	19.19	34.4	
IW101-06C	1.05	-69	8.26	19.02	25.3	92.59
IW101-07A	0.14	-70	8.2	18.95	58	91.89
IW101-07B	0	-53	8.11	19.19	28.2	91.91
IW101-07C	0.02	19	6.87	19.18	22.6	92.74
IW101-08A	0.18	-116	9.07	19.2	76.1	92.11
IW101-08B	0	-126	9.2	19.41	22.7	92.21
IW101-08C	1.92	12	6.7	19.39	16.9	92.67
IW101-09A	0	-51	8.09	19.27	83.3	92.62
IW101-09B	0.14	-70	8.31	19.4	40.9	92.51
IW101-09C	0	-26	7.58	19.35	31	92.54
IW21-01A	0.09	-151	11.27	17.89	0.554	92.99
IW21-01B	0.23	-121	10.56	18.08	0.18	92.97
IW21-02A	2.42	163	5.59	17.79	27.8	92.18
IW21-02B	1.03	87	6.89	18.08	27.4	93.3
IW21-03A	1.45	135	6.2	17.81	28.4	91.92
IW21-03B	0.54	-115	10.49	18.04	86	91.67
IW21-04A	0.52	-75	10.19	18.01	21	91.76
IW21-04B	2.88	-113	10.64	17.37	45.3	91.89
IW21-05A	0.04	-107	5.94	18.18	1.93	91.24
IW21-05B	0.99	-44	5.84	17.76	0.296	91.22
IW85-01	0.89	-386	5.73	20.55	12.4	94.05
IW85-02	0.74	-213	5.81	20.46	1.34	94.87
IW85-03	0.88	-296	5.82	20.71	14.3	82.68
IW85-04	0.64	-385	5.99	20.96	16.8	79.23
IW92-01	0.96	-145	5.96	20.11	11.8	86.01
IW92-02	0.5	-250	6.74	20.01	1.3	79.57
IW92-03	0.79	-93	5.69	19.86	9.17	91.56
IW92-04	0.77	-120	5.64	19.86	14	91.95
IW92-05	0.69	-186	6.19	20.17	13.3	91.98
IW92-06	0.67	-174	5.92	20.22	14	91.96
IW92-07	0.6	-183	5.85	20.52	3.6	93.02
IW92-08	1.06	-257	5.96	20.18	7.94	93.19
DR1-3	4.3	195	6.08	18.09	33.9	90.8
DR2-1	7.9	86	7.13	19.31	27.7	87.85
DR2-5	6.96	-74	9.74	19.96	26.9	95.44
IW-01	4.33	-31	8.97	20.35	31.3	94.33
MW-101B	2.84	99	5.54	18.8	40	91.31
MW-101T	2.44	93	5.63	18.91	39.7	91.31
MW-115	7.59	205	5.93	18.42	24.3	89.24
MW-21	8.34	238	5.82	16.86	0.243	93.21
MW-85	5.95	193	5.47	20.85	20.9	97.61
PMW101-01A	0.75	-149	6.39	19.18	4.98	89.3

Rnd 4 Pre-injection Measurements

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
PMW101-01B	1.16	-93	6.24	19.77	1.03	89.41
PMW101-02A	5.72	40	6.12	19.45	40	90.9
PMW101-02B	4.04	69	6.02	19.01	34.7	92.4
PMW101-03A	4.55	34	6	18.01	32.2	93.1
PMW101-03B	5.97	92	6.06	19.43	31	90.38
PMW101-04A	5.08	141	6.03	19.11	34.7	89.68
PMW101-04B	5.23	177	5.87	19.62	27.5	90.1
PMW101-05A	1.99	-66	6.21	19.75	44	89.91
PMW101-05B	7	155	5.77	19.15	11.5	90.23
PMW101-06A	4.47	73	6.06	19.65	38	90.5
PMW101-06B	1.89	-41	6.19	19.39	42.4	90.58
PMW101-07A	1.18	-41	6.18	20.35	50	90.5
PMW101-07B	6.82	118	6	20.12	18.1	90.69
PMW101-08A	4.85	169	6.24	21.44	52.8	91.25
PMW101-08B	5.44	117	5.85	21.32	13.8	91.2
PMW21-01	4.51	143	5.92	17.15	0.303	93.95
PMW21-02	6.75	104	5.89	18.5	0.273	92
PMW21-03	11.03	207	6.01	18.08	26.1	89.63
PMW21-04	2.37	202	6.01	18.42	32.7	89.51
PMW21-05	12.39	196	6.03	18.85	25.5	87.79
PMW85-01	6.19	156	6.01	19.85	22.5	96.59
PMW85-02	6.62	174	5.68	19.59	13.6	81.3
PMW85-03	DRY WELL					
PMW92-01	4.68	196	5.41	19.26	21.9	93.6
PMW92-02	3.15	-96	10.49	19.28	67	93.36
PMW92-03	4.25	159	5.59	19.2	26.1	92.96
PMW92-04	1.91	90	6.97	19.41	31.1	93.84
PMW92-05	4.34	193	5.25	19.27	22.9	93.51
PMW92-06	4.17	137	5.89	20.17	21.2	94.38

Rnd 5 Pre-injection Measurements

INJECTION START DATE:09NOV2006

INJECTION END DATE:15NOV2006

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
IW101-01A	2.4	-150	5.34	18.42	0.361	89.29
IW101-01B	2.09	26	4.16	18.7	36.2	89.24
IW101-01C	1.65	-32	4.56	18.35	34.8	89.27
IW101-02A	1.12	-143	6.09	18.71	41.5	89.07
IW101-02B	2.79	32	6.11	18.79	25	89.18
IW101-02C	2.23	-107	6.15	18.93	23.6	89.6
IW101-03A	2.78	-102	4.81	19.56	0.113	90.28
IW101-03B	2.37	31	4.36	19.73	30.3	90.14
IW101-03C	0.48	-37	5.45	19.18	32.5	89.83
IW101-04A	3.44	-139	5.85	17.85	0.277	89.63
IW101-04B	1.72	-156	5.9	18.9	84.4	89.59
IW101-04C	0.65	-63	5.23	18.96	65.7	89.55
IW101-05A	2.09	-209	6.19	19.01	33.8	89.65
IW101-05B	1.66	-5	6.09	19.05	23.8	89.35
IW101-05C	1.6	-113	6.16	18.96	35.1	89.4
IW101-06A	0.85	-150	6.47	19.34	63	90.14
IW101-06B	1.23	-108	6.18	19.47	22.7	90.1
IW101-06C	1.05	-64	6.06	19.42	12.1	90.13
IW101-07A	1.77	-164	6.37	19.3	26.7	90.7
IW101-07B	0.89	-82	6.27	19.47	17.3	90.71
IW101-07C	0.68	-29	6	19.48	10.9	90.73
IW101-08A	3.99	-67	5.28	20.15	59.3	89.94
IW101-08B	4.52	24	4.72	20.11	24.3	90.09
IW101-08C	0	31	4.36	19.45	45.6	90.65
IW101-09A	1.02	-146	6.16	19.57	63	90.61
IW101-09B	0.93	-107	6	19.49	21.5	90.42
IW101-09C	0.85	-68	6.18	19.59	16.9	90.51
PMW101-01A	0.49	-153	6.3	21.92	0.361	89
PMW101-01B	1.49	-127	5.98	21.18	78.4	89.1
PMW101-02A	4.95	119	6.11	18.28	40.3	90.2
PMW101-02B	3.26	108	6.04	18.99	36.5	90.33
PMW101-03A	5.53	65	5.85	20.52	20	89.99
PMW101-03B	5.56	164	5.85	20.4	19.2	90
PMW101-04A	5.03	196	6.02	19.85	36.9	89.74
PMW101-04B	4.82	198	5.9	19.02	29.5	90.21
PMW101-05A	1.17	-135	6.38	19.22	52	89.9
PMW101-05B	6.21	188	5.92	17.93	20.7	89.87
PMW101-06A	4.25	166	5.99	20.59	22.9	90.2
PMW101-06B	1.44	-77	6.3	20.95	35	90.25
PMW101-07A	0.8	-18	6.31	18.88	51.2	90.17
PMW101-07B	7.2	-37	11.49	17.68	111	90.29
PMW101-08A	6.41	136	6.07	22.8	32.5	91
PMW101-08B	6.62	128	5.84	22.85	7.7	90.95
MW-101T	0.71	0	6.08	19.08	23.3	89.32
MW-101B	0.82	9	6.06	18.84	23.3	89.32
DR1-3	2.92	147	5.97	20.44	20.9	90.64
IW21-01A	4.69	15	4	17.14	0.305	90.96
IW21-01B	2.37	1	4.38	18.04	0.17	91.02
IW21-02A	3.01	155	5.81	17.94	30.3	91.31
IW21-02B	5.88	166	5.8	17.79	29.5	91.46
IW21-03A	6.35	183	4.45	17.3	25.5	89.88
IW21-03B	0.88	-150	6.93	22.2	68.5	89.66
IW21-04A	1.77	112	7.29	17.77	24.7	90
IW21-04B	1.53	5	5.96	17.95	30.5	90.1
IW21-05A	1.06	-185	6.14	17.99	68	89.5
IW21-05B	3.1	118	5.77	17.46	27.5	89.54
PMW21-01	2.8	154	6.13	21.59	35.5	91.21
PMW21-02	4.28	137	6.34	20.43	30.7	90.3
PMW21-03	5.59	260	5.89	17.58	25.9	89.43
PMW21-04	0.91	163	6.4	20.92	38.5	89.57
PMW21-05	8.75	130	5.88	19.76	26	87.78
MW-21	4.46	243	5.82	17.52	26	91.27
MW-115	2.55	135	6.29	21.17	28.9	89.26

Rnd 5 Pre-injection Measurements

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
IW92-01	2.2	24	6.54	24.15	42.4	85.76
IW92-02	0.89	-210	6.85	20.28	79.6	79.45
IW92-03	2.71	-111	6.22	24.4	40	91.6
IW92-04	0.78	-181	5.92	20.23	1.43	91.9
IW92-05	2.34	-112	7.06	24.35	0.405	91.79
IW92-06	0.86	-172	6.24	20.69	1.09	91.9
IW92-07	3.33	-69	7.36	24.8	1.21	92.94
IW92-08	0.85	-159	6.11	20.68	0.269	93.69
IW85-01	0	-156	5.99	20.55	0.107	94.02
IW85-02	0	-175	6.12	19.88	79.5	94.57
IW85-03	0	-142	6.47	20.23	2.6	82.61
IW85-04	0.8	-153	6.8	25.76	1.15	79.09
PMW92-01	4.59	219	5.9	19.11	27.9	93.6
PMW92-02	1.42	-128	6.3	19.52	89.8	93.51
PMW92-03	3.36	124	5.82	19.51	27.9	92.9
PMW92-04	1.13	-8	5.95	22.3	33.5	93.79
PMW92-05	2.89	196	5.66	23.37	24.7	93.41
PMW92-06	2.64	110	5.62	19.37	22.2	94.31
PMW85-01	4.73	173	5.66	22.91	20.7	96.51
PMW85-02	6.84	179	5.89	20.13	15.8	81
PMW85-03	dry					
MW-85	6.58	191	5.71	21.57	22.7	97.32
DR2-1	5.82	111	6	20.33	34.1	87.91
DR2-5	8.84	84	6.27	20.21	24	95.49
IW-01	0	-151	5.7	20.29	45.8	94.2

Rnd 6 Pre-injection Measurements

INJECTION START DATE:20NOV2006

INJECTION END DATE:29NOV2006

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
IW101-01A	0	-281	6.44	18.52	0.149	91.02
IW101-01B	0	51	6.36	18.61	33.5	89.99
IW101-01C	0	-10	6.23	18.55	30.4	91.01
IW101-02A	0	-298	6.31	18.68	70.5	91.26
IW101-02B	0	-249	6.5	18.68	36.8	91.36
IW101-02C	0	-254	6.2	18.74	42.4	91.75
IW101-03A	3.59	129	6.48	18.87	9.3	92.1
IW101-03B	0	-56	6.29	18.93	36.5	92.02
IW101-03C	0	-152	6.2	18.96	29.8	92.04
IW101-04A	0	-236	6.49	18.66	56.6	91.81
IW101-04B	0	-253	6.72	18.69	63.3	91.8
IW101-04C	0	-171	7.65	18.61	30.7	91.73
IW101-05A	0	-278	6.55	18.73	0.111	91.71
IW101-05B	0	-255	6.48	18.75	37.7	91.52
IW101-05C	0	-216	6.35	18.69	67.4	91.46
IW101-06A	0	-280	6.53	19	94.4	92.21
IW101-06B	0.32	-9	6.16	19.15	31.2	92.25
IW101-06C	0	-225	6.1	19.19	28.5	92.25
IW101-07A	0	-228	6.45	19.05	39.5	92.58
IW101-07B	0	-265	6.42	19.15	27	92.87
IW101-07C	0	-253	6.23	19.19	29.9	92.8
IW101-08A	0	-258	6.42	19.27	80.1	92.3
IW101-08B	0	-264	6.17	19.28	21.7	92.38
IW101-08C	0	-326	6.03	19.3	35.3	92.83
IW101-09A	0	-227	6.46	19.21	0.135	92.71
IW101-09B	0	-262	6.23	19.26	36.4	92.74
IW101-09C	0	-171	6.26	19.2	31.2	92.57
PMW101-01A	0	-102	6.43	18.97	0.64	89.45
PMW101-01B	0	-123	6.16	18.63	0.113	89.56
PMW101-02A	5.24	124	6.12	18.91	42.5	90.24
PMW101-02B	3.98	233	6.05	18.54	38.6	90.4
PMW101-03A	5.39	134	5.99	18.31	34.6	90.49
PMW101-03B	5.7	197	5.97	18.26	33.8	90.48
PMW101-04A	5.74	210	6.04	8.72	37.1	89.82
PMW101-04B	3.92	181	5.96	18.81	32.4	90.3
PMW101-05A	0	-99	6.48	17.95	61.5	89.96
PMW101-05B	8.14	228	6	17.4	19.4	90.3
PMW101-06A	0.08	86	5.73	17.11	40.8	90.59
PMW101-06B	0	-74	6.01	17.39	59.6	90.64
PMW101-07A	0	-116	6.18	17.83	60.7	90.67
PMW101-07B	8.25	163	5.91	17.8	22.8	90.81
PMW101-08A	5.95	172	5.86	19.75	57.9	91.41
PMW101-08B	7.02	168	5.76	19.99	14.3	91.35
MW-101T	0	-55	6.27	18.99	33.2	91.37
MW-101B	0	-44	6.02	18.7	32.8	91.37
DR1-3	3.01	202	5.86	20.07	39	91
IW21-01A	0	-456	5.91	18.01	0.378	92.88
IW21-01B	0	-414	6.11	17.99	0.587	93.04
IW21-02A	0.82	95	5.95	18.08	22.2	93.12
IW21-02B	0.66	72	5.97	18.07	23.3	93.23

Rnd 6 Pre-injection Measurements

Well I.D.	DO (mg/L)	ORP (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Water Depth Preinjection (ft)
IW21-03A	1.09	94	5.95	17.91	22.5	91.87
IW21-03B	0	-256	6.23	18.04	77.1	91.61
IW21-04A	0	-108	7.55	17.94	15	91.81
IW21-04B	0	-241	6.18	18.02	42.4	91.89
IW21-05A	0	-354	6.54	18.11	22.7	91.27
IW21-05B	0	-214	6.08	18.02	30.5	91.26
PMW21-01	2.19	192	5.8	18.03	31.6	91.31
PMW21-02	3.84	167	5.8	17.61	28.6	90.4
PMW21-03	5.9	227	5.86	18.08	27.1	89.74
PMW21-04	0.58	198	5.95	17.81	34.8	89.62
PMW21-05	8.01	181	5.72	19.25	26.1	88.07
MW-21	4.46	216	5.68	18.83	25.8	91.62
MW-115	3.06	150	5.78	19.1	26.3	89.31
IW92-01	0.84	847	6.02	20.4	23.6	85.51
IW92-02	0	-91	6.04	20.21	35.4	83.1
IW92-03	0	-335	5.93	20.14	0.9	91.7
IW92-04	0.15	-227	5.97	20.16	0.225	92
IW92-05	0.16	-269	6.2	20.56	0.819	91.86
IW92-06	0	-342	6.26	20.52	0.92	92
IW92-07	0.1	-123	6.14	20.44	0.999	93.16
IW92-08	0.11	-106	5.9	20.55	0.125	93.77
IW85-01	0.02	-179	6.09	20.56	0.171	94.08
IW85-02	0.01	-203	6.19	20.69	0.163	94.95
IW85-03	0	-261	6.21	21.27	0.96	82.6
IW85-04	0	-351	6.43	21.34	0.999	79.2
PMW92-01	4.6	179	5.9	20.66	17.3	95.4
PMW92-02	8.4	-121	6.28	21.32	84.1	95
PMW92-03	4.37	181	5.85	22.09	26.7	94.79
PMW92-04	2.97	-100	6.16	22.5	35.7	95.64
PMW92-05	dry					
PMW92-06	2.29	176	5.69	22.98	21.9	96.15
PMW85-01	4.97	49	5.95	20.33	35.1	96.74
PMW85-02	7.48	154	5.97	20.26	14.1	81.21
PMW85-03	dry					
MW-85	6.3	212	5.69	23.28	21.3	97.74
DR2-1	6.46	105	5.97	19.72	21.7	89.69
DR2-5	5.04	16	6.23	19.48	27.9	95.6
IW-01	9.76	-48	5.79	22.69	0.147	96.15

Rnd 7 Pre-injection Measurements

START: 26-Mar-07

END: 28-Mar-07

Well I.D.	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp C	ORP (mV)
PMW 101-01A	5.8	6.48	4.79	5.7	16.71	-127.4
PMW 101-01B	5.88	1.3	1.11	9.5	17.14	-132.1
PMW 101-02A	6.07	0.425	11.4	3.26	16.74	110
PMW 101-02B	6.07	0.384	2.4	0.05	17.85	72
PMW 101-03A	5.96	0.341	4.8	4.86	18.24	148
PMW 101-03B	5.94	0.335	7.5	3.29	17.79	224
PMW 101-04A	5.99	0.395	0.9	4.45	15.98	248
PMW 101-04B	5.96	0.34	0	1.76	18.42	255
PMW 101-05A	6.32	0.568	0.43	1.14	16.42	-81.7
PMW 101-05B	5.7	0.167	1.44	7.83	16.75	150.8
PMW 101-06A	5.84	0.368	4.04	1.69	16.08	114.1
PMW 101-06B	10.33	0.631	0.48	0.91	16.04	-204.5
PMW 101-07A	8.55	5.15	1.25	0.78	18.97	-195
PMW 101-07B	8.78	4.489	5.64	7.16	19.06	-115.8
PMW 101-08A	6.13	0.597	0	4.81	19.47	267
PMW 101-08B	5.87	0.145	0	7.07	19.68	224
IW 101-01A	5.95	0.632	0	0	17.75	-144
IW 101-01B	6.25	0.347	14.9	0	17.49	-25
IW 101-01C	6.17	0.364	0	0	16.99	-133
IW 101-02A	6.15	0.45	0	0	17.48	-149
IW 101-02B	6.15	0.301	0	1.06	17.85	89
IW 101-02C	6.15	0.479	18.6	0	17.94	-163
IW 101-03A	5.96	0.734	18.3	0	18.00	-125
IW 101-03B	6	0.315	0	0	19.11	-13
IW 101-03C	5.94	0.403	16.3	0	18.70	-176
IW 101-04A	5.93	0.341	16.5	0	16.93	-213
IW 101-04B	6.45	0.644	0	0	18.18	-142
IW 101-04C	6.31	0.417	3.2	0	18.41	-130
IW 101-05A	6.23	0.442	0	0	18.92	-64
IW 101-05B	6.11	0.339	11.4	0	19.04	-8
IW 101-05C	6.03	0.902	1.9	0	19.75	-73
IW 101-06A	6	0.91	0	0.25	19.03	-128
IW 101-06B	6.11	0.262	11.9	0	15.95	-32
IW 101-06C	6.12	0.259	0	0	16.38	-32
IW 101-07A	6.2	0.296	18.3	0	14.74	-89
IW 101-07B	6.23	0.201	0	0	17.24	-104
IW 101-07C	6.11	0.266	0	0.31	15.93	-114
IW 101-08A	6.21	0.388	0	3.2	18.61	-102
IW 101-08B	6.03	0.155	0	2.22	19.04	62
IW 101-08C	5.78	0.494	0	0.5	19.15	-144
IW101-09A	6.15	0.094	17.2	1.16	19.23	-128
IW101-09B	5.93	0.221	3.7	0.87	17.71	-76
IW101-09C	6.01	0.359	0	0.38	19.17	-49
PMW21-01	5.98	0.329	0	0.33	17.83	193
PMW 21-02	5.86	0.293	0	3.19	18.29	182
PMW 21-03	8.24	4.247	1.96	5.49	17.85	-34.5
PMW 21-04	7.76	4.465	4.3	1.63	17.70	-84.8
PMW 21-05	5.89	0.289	0	8.92	18.10	234
IW 21-01A	5.95	1.585	13	0.42	16.66	-91.7
IW 21-01B	6.00	2.02	0	0.29	17.60	-175

Rnd 7 Pre-injection Measurements

Well I.D.	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp C	ORP (mV)
IW 21-02A	5.92	0.276	0	4.12	18.01	120
IW 21-02B	5.74	0.301	1.46	2.04	17.90	38
IW 21-03A	5.96	0.297	0	2.81	18.20	120
IW 21-03B	6.25	0.497	0	0.77	18.16	-171
IW 21-04A	6.65	0.76	29.2	0.75	17.93	-129.5
IW 21-04B	6.09	0.409	6.9	5.7	18.00	-76
IW 21-05A	5.93	1.18	90.2	0.5	18.32	-126
IW 21-05B	6.04	0.288	0	0.6	18.08	-123
PMW 92-01	5.89	0.235	1.9	4.61	20.45	201
PMW 92-02	6.35	0.149	7.4	1.45	15.65	-82
PMW 92-03	6.32	2.185	1.1	2.5	16.90	-30.1
PMW 92-04	6.2	0.403	10.2	0.77	14.77	-60
PMW 92-05	7.2	4.13	11.7	3.57	14.24	-12.2
PMW 92-06	6.05	2.004	0.71	1.61	16.49	-33.2
IW 92-01	5.97	0.345	0	2.16	20.64	-19
IW 92-02	6.06	0.485	17.5	0.58	20.52	-26
IW 92-03	5.83	0.705	1.2	0.72	20.20	-140
IW 92-04	6.28	0.96	4.2	0.22	17.97	-115
IW 92-05	6.31	4.52	10.7	0	17.94	-91
IW 92-06	6.24	2.37	953	0.37	21.82	-129
IW 92-07	6.08	1.19	18.1	0.5	21.28	-62
IW 92-08	5.8	0.691	6	2.8	22.13	-48
PMW 85-01	5.56	0.188	15.5	62.2	17.34	241.4
PMW 85-02	5.62	0.13	576	57.1	14.03	380.7
PMW 85-03						
IW 85-01	6.29	0.9	6.9	2.15	21.89	-90
IW 85-02	6.29	1.65	14	0	18.56	-150
IW 85-03						
IW 85-04	6.74	8.09	106	0.84	20.03	-130
DR1-3	9.57	4.319	0.49	1.77	17.00	-143
MW-115	8.57	4.297	2.89	2.94	17.40	-48.4
DR 2-1	7.49	4.267	20	4.63	19.35	-111.4
MW-85	5.55	0.19	6.4	58.6	15.77	321.1
DR 2-5	6	0.212	5.1	8	11.81	155
IW-01	5.76	0.807	7.8	0	16.11	1
MW-101T	6.24	0.316	2.7	0	12.89	91
MW-101B	6.17	0.317	9.6	0	16.93	-18
MW-21	5.79	0.273	0	3.17	12.51	199

Rnd 8 Pre-injection Measurements

START:	18-Dec-06			END:	22-Dec-06	
		Oxidation				
	Dissolved	Reduction				Preinjection
	Oxygen	Potential	pH	Temperature	Conductivity	Water Depth
Well I.D.	(mg/L)	(mv)		(Celsius)	(mS/m)	(ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.3	-261	6.1	18.6	2.22	89.3
IW101-01B	0.5	-217	6.2	18.5	0.557	89.3
IW101-01C	0.1	-68	6.1	18.5	0.5	89.3
IW101-02A	0.0	-245	6.1	18.6	0.9	89.5
IW101-02B	0.0	-205	6.2	18.7	0.514	89.6
IW101-02C	0.0	-227	6.1	18.9	0.524	90.0
IW101-03A	0.0	-249	6.0	18.8	0.999	90.4
IW101-03B	0.0	-251	6.0	18.9	0.637	90.3
IW101-03C	0.0	-262	5.9	19.0	0.748	90.3
IW101-04A	0.0	-85	6.2	18.7	0.9	90.3
IW101-04B	0.0	-118	6.4	18.7	0.9	90.3
IW101-04C	0.0	-82	6.7	18.6	0.611	90.2
IW101-05A	0.0	-268	6.3	18.7	1.02	90.1
IW101-05B	0.0	-251	6.2	18.7	0.576	89.9
IW101-05C	0.0	-116	6.1	18.7	0.999	89.9
IW101-06A	0.0	-121	6.2	19.1	0.9	90.6
IW101-06B	0.0	-80	6.1	19.2	0.776	90.7
IW101-06C	0.0	0.92	6.1	19.2	0.688	90.6
IW101-07A	0.0	-214	6.1	19.1	0.765	91.1
IW101-07B	0.0	-233	6.1	19.0	0.518	91.1
IW101-07C	0.0	-187	5.9	19.0	0.548	91.1
IW101-08A	0.7	-152	6.3	19.3	0.9	90.7
IW101-08B	0.0	-126	6.1	19.3	0.611	90.7
IW101-08C	0.2	-95	5.9	19.3	0.991	91.2
IW101-09A	0.0	-247	6.2	19.2	1.06	90.9
IW101-09B	0.0	-215	6.0	19.1	0.89	90.8
IW101-09C	0.0	-170	6.0	19.2	0.626	90.9
PMW101-01A	0.6	-83	6.1	19.4	3.24	89.4
PMW101-01B	0.5	-74	6.0	19.4	0.999	89.6
PMW101-02A	3.6	97	6.0	19.4	0.0457	90.2
PMW101-02B	0.5	-70	6.0	19.4	0.463	90.4
PMW101-03A	6.0	81	5.9	19.5	0.356	90.5
PMW101-03B	4.6	153	5.9	19.2	0.35	90.5
PMW101-04A	6.2	171	5.9	19.2	0.381	89.9
PMW101-04B	3.5	128	5.9	19.2	0.336	90.4
PMW101-05A	1.0	-92	6.4	19.3	0.635	90.1
PMW101-05B	7.6	146	5.8	19.0	0.469	90.4
PMW101-06A	0.9	79	6.0	19.4	0.763	90.6
PMW101-06B	0.6	-81	6.4	19.4	0.999	90.7
PMW101-07A	0.6	-105	6.3	20.0	0.9	90.7
PMW101-07B	7.8	156	5.8	20.0	0.368	90.8
PMW101-08A	5.0	155	6.1	20.6	0.996	91.4
PMW101-08B	7.0	176	5.8	20.4	0.236	91.4
MW-101T	3.4	100	6.1	18.8	0.457	89.8
MW-101B	4.2	150	5.9	18.4	0.477	89.8
DR1-3	1.8	162	6.1	16.2	0.649	91.2

Rnd 8 Pre-injection Measurements

START: 18-Dec-06

END: 22-Dec-06

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
		Reduction Potential (mv)				
TTA-1, MW-21 Area						
IW21-01A	0.0	-370	5.9	18.0	2.48	91.3
IW21-01B	0.0	-236	6.2	18.1	6.24	91.4
IW21-02A	0.6	98	5.9	18.1	0.336	91.5
IW21-02B	1.2	29	5.9	17.9	0.799	91.5
IW21-03A	0.8	39	5.9	18.1	0.76	90.2
IW21-03B	0.1	-174	6.3	18.0	0.9	89.9
IW21-04A	0.0	-138	6.2	18.1	0.9	90.1
IW21-04B	0.4	-144	6.0	18.1	0.999	90.2
IW21-05A	3.6	-182	5.9	18.1	1.94	89.6
IW21-05B	0.0	-89	6.0	18.1	0.9	89.5
PMW21-01	3.8	116	5.9	16.8	0.502	91.5
PMW21-02	4.9	160	5.9	17.8	0.324	89.5
PMW21-03	5.7	189	5.9	17.4	0.311	89.7
PMW21-04	1.9	170	6.0	18.0	0.396	89.6
PMW21-05	7.7	172	5.9	19.5	0.338	87.7
MW-21	6.1	153	5.8	17.6	0.42	91.7
MW-115	3.2	151	5.9	18.7	0.303	89.3
TTA-2						
IW92-01	0.0	-116	6.2	20.2	0.44	86.9
IW92-02	0.0	-243	6.7	20.1	2.43	83.8
IW92-03	0.0	-171	6.1	20.1	2.22	91.4
IW92-04	0.0	-248	6.3	20.2	12.8	91.9
IW92-05	0.0	-352	6.3	20.5	13	91.7
IW92-06	0.0	-375	6.2	20.5	12.9	91.9
IW92-07	0.0	-262	6.1	20.5	1.56	93.1
IW92-08	0.0	-356	6.1	20.7	11	93.7
IW85-01	0.0	-291	6.1	20.5	4.28	94.1
IW85-02	0.0	-244	6.1	20.7	4.74	95.0
IW85-03	0.0	-195	6.7	21.1	0.008	81.8
IW85-04	dry	dry	dry	dry	dry	81.1
PMW92-01	9.0	169	5.9	20.9	0.198	94.0
PMW92-02	1.6	-113	6.2	20.9	1.11	93.6
PMW92-03	4.5	79	6.0	19.9	0.271	93.3
PMW92-04	0.8	-180	6.3	20.5	0.493	94.2
PMW92-05	3.6	137	5.8	20.9	2.92	93.6
PMW92-06	1.8	195	5.7	20.1	0.251	94.6
PMW85-01	7.8	154	6.2	19.4	0.239	96.8
PMW85-02	7.4	180	6.1	17.7	0.143	82.9
PMW85-03	dry					
MW-85	6.8	176	5.8	20.3	0.249	97.9
DR2-1	4.8	-16	6.2	20.7	0.437	88.2
DR2-5	7.4	108	6.0	19.3	0.227	95.8
IW-01	1.2	171	5.4	20.4	0.302	94.4

Rnd 9 Pre-injection Measurements

START: 2-Jan-07

END: 10-Jan-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.0	-281	6.2	18.3	2.29	89.4
IW101-01B	0.3	-103	6.3	18.6	0.516	89.4
IW101-01C	0.3	-86	6.3	18.7	0.467	89.4
IW101-02A	0.1	-267	6.2	18.6	0.627	89.7
IW101-02B	0.0	-254	6.2	18.7	0.468	89.8
IW101-02C	0.2	-191	6.3	18.9	0.473	90.2
IW101-03A	0.5	-253	6.1	18.8	0.333	90.5
IW101-03B	0.1	-69	6.1	18.9	0.409	90.4
IW101-03C	0.0	-124	6.1	18.9	0.349	90.4
IW101-04A	0.0	-240	6.4	18.8	0.698	90.2
IW101-04B	0.0	-189	6.6	18.7	0.876	90.2
IW101-04C	0.0	-290	8.9	18.7	0.421	90.2
IW101-05A	0.0	-292	6.4	18.9	0.73	90.1
IW101-05B	7.1	105	6.4	18.8	0.062	89.9
IW101-05C	0.0	-263	6.3	18.7	0.791	89.8
IW101-06A	0.0	-316	6.4	19.1	0.91	90.5
IW101-06B	0.0	-124	6.1	19.0	0.338	90.6
IW101-06C	0.0	-215	6.2	19.1	0.309	90.6
IW101-07A	0.1	-231	6.3	19.0	0.498	91.3
IW101-07B	0.0	-186	6.2	19.0	0.324	91.3
IW101-07C	0.1	-173	6.2	19.2	0.327	91.2
IW101-08A	0.0	-38	6.3	19.1	0.748	90.6
IW101-08B	0.0	-235	6.3	19.1	0.324	90.7
IW101-08C	0.0	-136	6.1	19.0	0.239	91.2
IW101-09A	0.0	-290	6.3	18.8	1.02	91.0
IW101-09B	0.0	-244	6.1	19.0	0.498	90.9
IW101-09C	0.0	-149	6.1	18.9	0.387	90.9
PMW101-01A	0.0	-105	6.0	18.1	5.31	89.5
PMW101-01B	0.0	-111	6.1	18.2	1.35	89.6
PMW101-02A	1.9	44	6.2	17.7	0.9	90.3
PMW101-02B	0.7	-128	6.2	18.4	0.9	90.5
PMW101-03A	6.0	145	5.8	17.3	0.917	90.5
PMW101-03B	4.2	173	5.9	17.6	0.947	90.5
PMW101-04A	5.9	172	5.9	17.8	0.968	89.8
PMW101-04B	2.0	104	5.9	17.5	0.874	90.3
PMW101-05A	0.0	-105	6.4	17.7	0.9	90.0
PMW101-05B	6.1	69	5.9	17.5	0.501	90.4
PMW101-06A	2.3	46	6.0	18.3	0.996	90.5
PMW101-06B	0.3	-80	6.4	18.1	0.999	90.6
PMW101-07A	0.6	-76	6.2	18.7	0.9	90.6
PMW101-07B	7.6	158	5.9	18.6	0.549	90.8
PMW101-08A	4.9	188	6.1	19.0	0.9	91.4
PMW101-08B	7.1	189	5.8	19.3	0.345	91.3
MW-101T	4.9	76	6.2	18.9	0.443	89.9
MW-101B	5.1	109	6.0	18.5	0.439	89.9
DR1-3	0.9	152	6.2	16.5	0.9	91.0

Rnd 9 Pre-injection Measurements

START: 2-Jan-07

END: 10-Jan-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.0	-243	6.1	18.0	0.672	91.4
IW21-01B	0.0	-218	6.4	17.9	2.65	91.5
IW21-02A	0.6	-157	6.2	18.1	0.208	91.6
IW21-02B	0.0	-32	5.9	18.0	0.313	91.7
IW21-03A	0.0	-34	6.0	17.9	0.314	90.3
IW21-03B	0.0	-275	6.3	18.0	0.567	90.0
IW21-04A	7.0	28	7.6	18.0	0.146	90.2
IW21-04B	0.0	-247	6.2	18.0	0.445	90.4
IW21-05A	6.3	-4	8.0	18.0	0.12	89.7
IW21-05B	0.0	19	6.1	17.9	0.334	89.5
PMW21-01	2.6	175	5.9	17.8	0.804	91.3
PMW21-02	5.4	133	5.9	16.4	0.299	90.3
PMW21-03	7.4	144	5.9	15.6	0.277	90.7
PMW21-04	1.7	139	6.0	16.1	0.363	90.5
PMW21-05	9.6	152	5.9	16.6	0.294	87.7
MW-21	4.7	181	5.8	18.0	0.65	91.6
MW-115	3.0	132	5.9	16.3	0.276	89.3
TTA-2						
IW92-01	0.0	-129	6.3	20.1	32.1	87.0
IW92-02	0.9	-195	6.8	20.2	1.14	86.5
IW92-03	1.3	-178	6.2	20.1	29.6	91.7
IW92-04	0.0	-168	6.2	20.2	35.2	91.8
IW92-05	0.0	-191	6.4	20.5	37	91.7
IW92-06	0.0	-197	6.4	20.5	38.1	91.9
IW92-07	1.7	-80	6.0	20.5	0.9	93.1
IW92-08	0.2	-153	6.0	20.6	0.9	93.8
IW85-01	0.7	-179	6.3	20.5	0.9	94.4
IW85-02	0.7	-174	6.2	20.7	0.9	95.2
IW85-03	4.7	-270	6.7	21.2	38.5	82.7
IW85-04						dry
PMW92-01	7.0	132	6.0	16.6	0.223	93.9
PMW92-02	0.6	-144	6.4	17.7	1.06	93.5
PMW92-03	1.3	-6	6.0	18.6	0.369	93.3
PMW92-04	0.5	-173	6.3	19.4	0.496	94.2
PMW92-05	3.3	88	5.8	19.3	0.268	93.7
PMW92-06	2.4	134	5.8	17.9	0.246	94.7
PMW85-01	7.4	145	5.9	18.6	0.224	97.1
PMW85-02	8.7	148	6.2	10.3	0.126	81.99 pumped dry
PMW85-03						dry
MW-85	8.1	147	5.9	16.7	0.503	98.2
DR2-1	4.3	-16	6.2	20.7	0.437	88.1
DR2-5	7.7	106	6.0	17.6	0.213	95.8
IW-01	1.2	154	5.2	19.2	0.251	94.7

Rnd 10 Pre-injection Measurements

START: 15-Jan-07

END: 22-Jan-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	1.6	-246	6.1	18.9	3.18	89.1
IW101-01B	0.0	-231	6.3	18.5	0.999	89.0
IW101-01C	0.1	-123	6.2	18.8	0.999	89.0
IW101-02A	0.4	-291	6.4	18.9	0.9	89.3
IW101-02B	0.4	-248	6.3	19.0	0.9	89.5
IW101-02C	0.0	-174	6.3	18.9	0.9	89.9
IW101-03A	0.5	20	6.1	19.1	0.2	90.2
IW101-03B	0.4	-56	6.2	19.0	0.9	90.1
IW101-03C	0.0	-177	6.2	19.0	0.9	90.2
IW101-04A	0.1	-301	6.2	18.7	0.9	90.4
IW101-04B	0.0	-203	6.2	18.7	0.9	90.4
IW101-04C	0.0	-237	6.9	18.8	0.9	90.3
IW101-05A	0.0	-317	6.3	18.8	0.9	90.3
IW101-05B	0.0	-220	6.2	18.9	0.303	90.1
IW101-05C	0.3	-238	6.2	18.8	0.9	90.0
IW101-06A	0.0	-289	6.3	19.1	0.9	90.7
IW101-06B	0.0	-205	6.1	19.1	0.9	90.8
IW101-06C	0.0	-256	6.2	19.1	0.9	90.8
IW101-07A	0.0	-273	6.2	19.2	0.999	91.4
IW101-07B	0.0	-235	6.2	19.0	0.9	91.4
IW101-07C	0.0	-204	6.1	19.0	0.9	91.4
IW101-08A	0.0	-278	6.3	19.3	0.9	90.8
IW101-08B	0.0	-193	6.2	19.3	0.9	90.9
IW101-08C	0.0	-166	6.2	19.2	0.9	91.3
IW101-09A	0.0	-304	6.3	19.3	0.9	91.3
IW101-09B	0.0	-201	6.0	19.0	0.9	91.1
IW101-09C	0.0	-172	6.2	19.0	0.9	91.2
PMW101-01	0.4	-156	6.0	17.8	5.12	89.3
PMW101-01	0.4	-142	6.1	18.1	1.11	89.4
PMW101-02	1.4	-13	6.3	16.6	0.5	90.0
PMW101-02	1.5	-142	6.4	16.4	0.507	90.3
PMW101-03	5.4	115	6.0	16.3	0.361	90.4
PMW101-03	2.7	-66	6.1	16.6	0.396	90.4
PMW101-04	5.4	132	6.0	16.7	0.393	89.8
PMW101-04	0.6	48	6.1	17.7	0.392	90.3
PMW101-05	0.4	-112	6.5	13.6	0.59	90.0
PMW101-05	5.8	-19	6.0	16.5	0.212	90.3
PMW101-06	2.7	82	6.1	16.1	0.411	90.9
PMW101-06	0.8	-92	6.4	15.7	0.734	91.0
PMW101-07	1.5	-134	6.4	13.4	0.568	91.0
PMW101-07	10.7	-50	11.0	14.6	0.467	91.2
PMW101-08	4.6	149	6.1	16.8	0.61	91.8
PMW101-08	7.8	171	5.9	16.0	0.163	91.7
MW-101T	3.1	25	6.2	19.0	0.9	89.6
MW-101B	3.4	40	6.2	18.7	0.9	89.6
DR1-3	1.4	150	6.2	16.0	0.432	91.3

Rnd 10 Pre-injection Measurements

START: 15-Jan-07

END: 22-Jan-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	1.9	-242	6.0	18.0	1.11	91.5
IW21-01B	5.6	-234	6.4	18.0	2.97	91.5
IW21-02A	1.2	49	5.9	18.1	0.9	91.8
IW21-02B	1.0	32	6.0	18.1	0.9	91.8
IW21-03A	0.6	61	5.9	18.0	0.9	90.5
IW21-03B	0.4	-273	6.3	18.1	0.9	90.1
IW21-04A	1.7	-37	8.2	18.1	0.603	91.2
IW21-04B	0.4	-242	6.2	18.1	0.9	90.4
IW21-05A	4.2	112	6.9	18.0	0.133	89.9
IW21-05B	0.9	-64	6.0	17.8	0.388	89.9
PMW21-01	5.4	152	6.0	14.4	0.281	91.7
PMW21-02	5.3	116	6.5	14.0	0.459	90.8
PMW21-03	6.1	173	5.8	15.7	0.269	90.1
PMW21-04	1.5	164	5.9	16.0	0.34	90.0
PMW21-05	7.5	168	6.0	16.0	0.271	88.3
MW-21	5.0	159	5.8	15.2	0.268	92.0
MW-115	2.5	109	5.8	17.4	0.264	89.7
TTA-2						
IW92-01	0.4	-153	6.3	20.0	0.9	87.1
IW92-02	0.0	-253	6.7	20.2	1.6	87.4
IW92-03	1.7	-208	5.8	20.0	0.9	91.7
IW92-04	5.1	-141	6.1	19.0	1.82	91.9
IW92-05	2.2	-206	6.4	20.5	76	91.8
IW92-06	0.0	-246	6.2	20.6	65.2	92.0
IW92-07	0.4	-68	5.9	20.6	0.9	93.2
IW92-08	0.0	-182	6.1	20.6	1.56	93.9
IW85-01	0.3	-252	6.3	20.5	0.9	94.1
IW85-02	1.6	-223	6.3	20.6	12.5	94.7
IW85-03	4.1	-279	6.7	20.4	95.8	82.6
IW85-04	dry	dry	dry	dry	dry	dry
PMW92-01	6.6	161	6.0	15.8	0.219	94.0
PMW92-02	1.5	-105	5.3	15.7	1.15	93.5
PMW92-03	2.5	6	6.1	17.2	0.37	93.3
PMW92-04	0.8	-133	6.3	17.7	0.398	94.3
PMW92-05	4.1	150	5.8	17.3	0.251	93.5
PMW92-06	2.1	85	5.7	16.2	0.231	94.7
PMW85-01	7.4	106	6.0	18.6	0.239	96.9
PMW85-02	7.6	107	6.6	17.1	0.304	79.1
PMW85-03	dry	dry	dry	dry	dry	dry
MW-85	6.2	156	5.8	18.3	0.233	98.1
DR2-1	6.8	87	5.9	17.1	0.284	88.1
DR2-5	7.4	108	5.9	17.7	0.207	95.9
IW-01	5.0	48	5.4	12.8	0.199	94.8

Rnd 11 Pre-injection Measurements

START: 29-Jan-07

END: 1-Feb-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.30	-189	6.10	18.46	3.54	89.25
IW101-01B	0.85	-150	6.36	18.43	0.507	89.20
IW101-01C	0.40	-16	6.24	18.32	0.457	89.20
IW101-02A	0.00	-275	6.31	18.54	0.736	89.43
IW101-02B	0.00	-181	6.27	18.73	0.413	89.51
IW101-02C	0.07	-187	6.29	18.56	0.566	89.91
IW101-03A	2.98	31	6.11	18.80	0.058	90.24
IW101-03B	0.17	-35	6.12	18.75	0.42	90.13
IW101-03C	0.00	-157	6.18	18.79	0.491	90.19
IW101-04A	0.00	-299	6.26	18.55	1.22	89.95
IW101-04B	0.00	-239	6.54	18.56	0.935	89.93
IW101-04C	0.00	-254	7.30	18.60	0.428	89.89
IW101-05A	0.21	-270	6.34	18.61	0.86	90.01
IW101-05B	0.12	-152	6.32	18.59	0.485	89.83
IW101-05C	0.00	-220	6.27	18.60	0.945	89.75
IW101-06A	0.05	-290	6.15	19.02	0.999	90.31
IW101-06B	0.09	-151	6.11	18.98	0.387	90.32
IW101-06C	0.24	-206	6.13	18.94	0.366	90.47
IW101-07A	0.00	-260	6.24	18.93	0.556	91.01
IW101-07B	0.00	-253	6.33	19.01	0.398	91.00
IW101-07C	0.05	-158	6.17	18.90	0.359	90.95
IW101-08A	0.01	-299	6.27	19.03	0.819	90.51
IW101-08B	0.00	-192	6.21	19.00	0.33	90.62
IW101-08C	0.00	-181	6.13	19.09	0.246	91.05
IW101-09A	0.01	-311	6.37	18.98	1.05	90.85
IW101-09B	0.00	-236	6.16	19.04	0.549	90.65
IW101-09C	0.00	-150	6.16	19.03	0.476	90.70
PMW101-01A	3.90	-75	6.09	14.63	4.61	89.37
PMW101-01B	3.55	-74	6.12	15.14	1.05	89.45
PMW101-02A	3.42	36	6.19	13.85	0.326	90.21
PMW101-02B	3.49	-108	6.36	16.05	0.459	90.27
PMW101-03A	5.47	167	5.92	15.84	0.259	90.31
PMW101-03B	5.32	190	5.92	16.06	0.271	90.31
PMW101-04A	5.65	229	5.98	17.12	0.288	89.74
PMW101-04B	4.04	-39	6.07	16.68	0.32	90.15
PMW101-05A	3.65	-103	6.47	15.39	0.453	89.87
PMW101-05B	5.50	20	5.94	17.00	0.154	90.91
PMW101-06A	4.05	145	5.99	16.44	0.302	90.41
PMW101-06B	3.78	-88	6.42	16.54	0.605	90.48
PMW101-07A	4.11	-88	6.09	14.79	0.365	90.59
PMW101-07B	7.56	179	5.82	14.72	0.132	90.74
PMW101-08A	5.15	132	6.05	16.69	0.388	91.37
PMW101-08B	7.29	188	5.82	16.88	0.088	91.34
MW-101T	4.27	-24	6.16	18.69	0.432	89.67
MW-101B	4.42	18	6.17	18.21	0.427	89.67
DR1-3	5.07	130	6.15	17.31	0.318	90.94

Rnd 11 Pre-injection Measurements

START: 29-Jan-07

END: 1-Feb-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-235	6.04	17.88	0.762	91.38
IW21-01B	0.00	-222	6.32	17.74	2.96	91.40
IW21-02A	0.55	43	5.90	18.00	0.321	91.64
IW21-02B	0.00	-3	5.94	18.02	0.307	91.71
IW21-03A	0.05	36	5.91	17.89	0.305	90.37
IW21-03B	0.00	-242	6.32	17.85	0.814	89.95
IW21-04A	0.15	-151	6.56	17.91	0.161	90.22
IW21-04B	0.08	-251	6.14	17.96	0.474	90.29
IW21-05A	0.00	-254	6.15	17.92	0.454	89.75
IW21-05B	0.00	-105	6.07	17.95	0.331	89.76
PMW21-01	5.14	190	5.72	15.10	0.193	91.48
PMW21-02	5.89	189	5.74	16.71	0.183	90.53
PMW21-03	6.58	241	5.72	15.67	0.172	89.92
PMW21-04	4.17	224	5.83	15.83	0.221	89.75
PMW21-05	7.59	216	5.76	16.83	0.187	88.00
MW-21	5.63	234	5.57	15.89	0.162	91.72
MW-115	5.64	152	5.68	15.86	0.268	89.47
TTA-2						
IW92-01	0.15	-259	6.22	19.95	9.66	87.24
IW92-02	0.00	-257	6.59	19.70	1.33	88.29
IW92-03	0.26	-282	6.08	19.88	3.48	91.64
IW92-04	0.35	-184	6.09	19.60	0.99	91.89
IW92-05	0.65	-185	6.44	19.83	6.35	91.78
IW92-06	0.23	-159	6.17	20.26	4.78	91.97
IW92-07	0.27	-172	6.09	20.32	4.26	93.28
IW92-08	0.00	-164	6.02	20.05	0.988	93.90
IW85-01	0.00	-192	6.10	20.26	0.371	94.29
IW85-02	0.00	-188	6.22	20.41	0.98	95.02
IW85-03	dry	dry	dry	dry	dry	82.69
IW85-04	dry	dry	dry	dry	dry	dry
PMW92-01	7.48	169	5.97	15.70	0.237	94.16
PMW92-02	7.15	-116	6.69	13.08	0.97	93.50
PMW92-03	6.23	36	5.93	16.51	0.409	93.46
PMW92-04	5.11	-101	6.27	17.62	0.554	95.37
PMW92-05	5.65	173	5.60	17.53	0.259	93.55
PMW92-06	5.39	93	5.50	17.43	0.239	95.41
PMW85-01	7.05	145	5.95	18.19	0.245	95.94
PMW85-02	7.21	152	6.32	16.79	0.196	80.14
PMW85-03	dry	dry	dry	dry	dry	dry
MW-85	5.29	180	5.80	18.48	0.241	97.53
DR2-1	8.90	120	5.81	16.64	0.29	88.36
DR2-5	6.86	165	6.05	18.25	0.22	95.73
IW-01	4.21	15	5.45	19.09	0.439	94.93

Rnd 12 Pre-injection Measurements

START: 12-Feb-07

END: 14-Feb-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-280	6.10	18.54	3.3	88.90
IW101-01B	0.00	-199	6.47	18.49	0.535	88.89
IW101-01C	0.00	-46	6.22	18.49	0.471	88.90
IW101-02A	0.00	-236	6.27	18.61	0.671	89.15
IW101-02B	0.00	-83	6.25	18.75	0.441	89.21
IW101-02C	0.00	-208	6.32	18.74	0.474	89.61
IW101-03A	2.20	21	6.30	18.89	0.114	89.90
IW101-03B	0.00	-8	6.11	18.77	0.391	89.85
IW101-03C	0.00	-128	6.15	18.90	0.427	89.88
IW101-04A	0.00	-263	6.21	18.59	1.17	89.84
IW101-04B	0.00	-213	6.48	18.67	0.914	89.81
IW101-04C	0.00	-208	7.11	18.61	0.49	89.78
IW101-05A	0.00	-264	6.31	18.68	0.688	89.73
IW101-05B	0.00	-80	6.30	18.64	0.485	89.54
IW101-05C	0.00	-219	6.27	18.60	0.832	89.47
IW101-06A	0.00	-261	6.33	18.88	0.9	90.14
IW101-06B	0.00	-69	6.18	18.92	0.379	90.22
IW101-06C	0.00	-200	6.23	19.02	0.37	90.22
IW101-07A	0.00	-231	6.20	18.88	0.502	90.79
IW101-07B	0.00	-217	6.27	18.93	0.344	90.82
IW101-07C	0.00	-140	6.17	19.00	0.407	90.70
IW101-08A	0.00	-276	6.31	19.12	0.885	90.25
IW101-08B	0.00	-170	6.29	19.09	0.358	90.37
IW101-08C	0.00	-127	6.17	19.02	0.255	90.78
IW101-09A	0.00	-306	6.44	19.04	0.967	90.53
IW101-09B	0.00	-225	6.24	19.06	0.512	90.47
IW101-09C	0.00	-150	6.17	19.12	0.447	90.41
PMW101-01A	2.90	-88	6.16	17.12	5.07	89.06
PMW101-01B	0.53	-76	6.27	17.38	1.22	89.18
PMW101-02A	0.80	-92	6.60	17.16	0.986	89.81
PMW101-02B	0.49	-79	6.48	16.36	0.559	90.01
PMW101-03A	5.53	204	6.00	17.40	0.286	90.08
PMW101-03B	3.20	254	6.06	17.19	0.292	90.08
PMW101-04A	5.03	263	6.09	17.18	0.309	89.45
PMW101-04B	0.66	-37	6.22	17.28	0.375	89.94
PMW101-05A	0.71	-91	6.62	17.50	0.489	89.64
PMW101-05B	5.21	25	6.04	17.68	0.166	89.96
PMW101-06A	1.53	155	6.13	17.63	0.324	90.21
PMW101-06B	0.53	-78	6.51	18.26	0.668	90.25
PMW101-07A	0.80	-91	6.45	18.95	0.491	90.20
PMW101-07B	7.60	244	5.96	19.01	0.177	90.25
PMW101-08A	3.20	246	6.27	19.69	0.503	90.95
PMW101-08B	7.80	290	6.00	19.65	0.119	89.89
MW-101T	4.07	27	6.15	18.70	0.426	89.40
MW-101B	4.26	46	6.14	18.28	0.418	89.40
DR1-3	0.78	209	6.31	17.31	0.435	90.23

Rnd 12 Pre-injection Measurements

START: 12-Feb-07

END: 14-Feb-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-228	6.08	17.93	0.905	91.03
IW21-01B	0.00	-214	6.39	18.00	0.97	91.15
IW21-02A	0.17	38	5.99	18.03	0.307	91.30
IW21-02B	1.05	60	5.96	18.08	0.289	91.38
IW21-03A	0.00	82	5.96	17.92	0.301	89.90
IW21-03B	0.00	-262	6.40	17.98	0.873	89.66
IW21-04A	0.00	-262	6.85	17.98	0.299	89.81
IW21-04B	0.00	-234	6.19	18.04	0.464	89.95
IW21-05A	0.00	-243	6.11	17.99	0.9	89.36
IW21-05B	0.00	-133	6.10	18.00	0.356	89.33
PMW21-01	2.80	236	5.98	17.36	0.278	90.96
PMW21-02	5.50	292	5.94	17.50	0.239	89.99
PMW21-03	6.84	337	5.93	17.32	0.227	89.31
PMW21-04	1.52	305	5.98	17.66	0.293	89.20
PMW21-05	7.94	289	5.91	18.06	0.252	87.32
MW-21	4.60	317	5.85	17.49	0.225	91.18
MW-115	0.32	225	5.89	17.05	0.219	88.89
TTA-2						
IW92-01	0.00	-260	6.31	20.17	8.05	86.89
IW92-02	0.00	-207	6.64	19.80	1.13	88.15
IW92-03	0.00	-244	6.12	20.08	8.98	91.68
IW92-04	0.00	-236	6.06	20.21	13.6	91.84
IW92-05	0.00	-196	6.29	20.46	16	91.71
IW92-06	0.00	-173	6.24	20.45	15.3	91.98
IW92-07	0.00	-197	6.11	20.45	5.91	93.22
IW92-08	0.00	-201	6.23	20.59	3.66	93.86
IW85-01	0.00	-198	6.19	20.39	0.666	94.03
IW85-02	0.00	-170	6.19	20.50	0.9	94.82
IW85-03	dry					dry
IW85-04	0.12	-246	6.45	21.09	16.8	79.90
PMW92-01	4.26	134	6.00	18.90	0.269	93.54
PMW92-02	0.00	-180	6.87	17.77	1.74	93.28
PMW92-03	1.66	16	6.17	19.36	0.464	92.92
PMW92-04	1.46	-113	6.46	18.70	0.696	94.00
PMW92-05	2.95	146	5.84	14.93	0.256	93.58
PMW92-06	1.22	76	5.90	12.08	0.231	94.57
PMW85-01	8.22	120	6.28	11.41	0.177	97.16
PMW85-02	6.79	134	6.25	12.30	0.159	82.01
PMW85-03	dry					dry
MW-85	6.40	147	5.94	9.51	0.179	98.20
DR2-1	6.08	13	6.13	18.35	0.368	89.92
DR2-5	7.03	141	6.04	12.26	0.179	96.00
IW-01	0.24	94	5.87	13.10	0.347	94.50

Rnd 13 Preinjection Measurements

START: 26-Feb-07

END: 28-Feb-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-147	6.11	18.38	2.62	89.06
IW101-01B	0.00	-145	6.40	18.35	0.526	88.98
IW101-01C	0.00	-59	6.16	18.20	0.471	89.01
IW101-02A	0.00	-225	6.29	18.58	0.658	89.28
IW101-02B	0.00	-66	6.21	18.65	0.442	89.38
IW101-02C	0.00	-185	6.25	18.54	0.576	89.79
IW101-03A	0.00	-214	6.13	18.59	0.735	90.11
IW101-03B	0.00	-39	6.06	18.80	0.398	90.01
IW101-03C	0.00	-97	6.10	18.73	0.431	90.08
IW101-04A	0.00	-262	6.06	18.61	1.26	89.89
IW101-04B	0.00	-240	6.43	18.72	0.913	89.85
IW101-04C	0.00	-242	7.20	18.60	0.594	89.80
IW101-05A	0.00	-210	6.34	18.32	0.682	89.79
IW101-05B	0.00	-78	6.23	18.51	0.466	89.65
IW101-05C	0.00	-179	6.23	18.46	0.789	89.59
IW101-06A	0.00	-278	6.47	19.03	0.9	90.21
IW101-06B	0.00	-57	6.14	19.06	0.411	90.25
IW101-06C	0.00	-201	6.16	19.04	0.382	90.22
IW101-07A	0.00	-227	6.20	18.98	0.504	90.91
IW101-07B	0.00	-218	6.27	19.00	0.374	90.89
IW101-07C	0.00	-180	6.15	18.98	0.362	90.87
IW101-08A	0.00	-287	6.30	19.10	0.779	90.25
IW101-08B	0.00	-220	6.23	19.08	0.378	90.34
IW101-08C	0.00	-100	6.13	19.02	0.272	90.75
IW101-09A	0.00	-291	6.39	19.11	0.93	90.71
IW101-09B	0.00	-192	6.15	19.13	0.562	90.57
IW101-09C	0.00	-140	6.07	19.14	0.423	90.61
PMW101-01A	1.91	-33	6.20	16.73	5.15	89.22
PMW101-01B	0.22	-73	6.22	18.17	1.21	89.30
PMW101-02A	0.87	-107	6.56	17.82	0.9	89.94
PMW101-02B	0.09	-91	6.44	18.40	0.706	90.03
PMW101-03A	6.95	242	5.88	18.30	0.313	90.21
PMW101-03B	1.14	110	6.02	19.03	0.425	90.16
PMW101-04A	5.27	287	5.98	18.68	0.359	89.51
PMW101-04B	0.21	-53	6.13	18.55	1.64	89.99
PMW101-05A	0.37	-102	6.46	18.52	0.583	89.71
PMW101-05B	7.09	15	5.89	18.95	0.201	90.03
PMW101-06A	0.00	-84	6.52	17.11	0.84	90.72
PMW101-06B	0.82	118	6.13	16.76	0.417	90.67
PMW101-07A	0.24	-90	6.43	18.18	0.495	90.72
PMW101-07B	8.41	256	5.97	18.49	0.189	90.89
PMW101-08A	2.74	172	6.27	19.15	0.52	91.47
PMW101-08B	8.91	324	5.94	19.71	0.147	91.40
MW-101T	4.15	33	6.07	18.54	4.29	89.53
MW-101B	4.46	48	6.05	18.39	0.421	89.53
DR1-3	0.30	262	6.33	18.01	0.456	91.02
TTA-1, MW-21 Area						
IW21-01A	0.00	-225	6.10	18.00	0.823	91.16

Rnd 13 Preinjection Measurements

START: 26-Feb-07

END: 28-Feb-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
IW21-01B	0.00	-236	6.42	18.00	1.81	91.27
IW21-02A	0.20	76	5.99	17.99	0.336	91.77
IW21-02B	0.65	68	5.95	18.01	0.327	91.87
IW21-03A	0.00	91	5.98	17.84	0.317	90.50
IW21-03B	0.00	-261	6.31	17.88	0.795	90.24
IW21-04A	1.25	9	6.63	18.01	0.338	90.40
IW21-04B	0.00	-204	6.31	17.92	0.442	90.55
IW21-05A	0.00	-184	6.95	17.94	0.337	89.93
IW21-05B	0.00	-148	6.06	17.91	0.398	89.92
PMW21-01	2.91	194	5.96	15.10	0.321	91.62
PMW21-02	5.24	210	5.96	17.43	0.281	90.69
PMW21-03	6.69	236	5.93	18.04	0.267	90.05
PMW21-04	1.31	134	6.08	18.53	0.391	90.00
PMW21-05	8.63	142	6.02	19.29	0.333	88.09
MW-21	4.19	237	5.88	16.51	0.27	91.91
MW-115	0.00	129	6.02	18.53	0.299	89.63
TTA-2						
IW92-01	0.00	-154	6.29	20.03	1.45	87.15
IW92-02	0.23	-152	6.16	19.86	0.571	88.15
IW92-03	1.66	-159	6.01	19.90	2.63	91.79
IW92-04	2.61	-159	6.04	19.94	2.41	92.02
IW92-05	0.26	-120	6.20	20.28	7.96	91.86
IW92-06	1.07	-106	6.16	20.39	7.95	92.15
IW92-07	0.33	-78	5.81	20.43	0.96	93.36
IW92-08	0.00	-138	6.13	20.64	0.9	94.02
IW85-01	0.00	-140	6.24	20.43	0.9	94.30
IW85-02	0.00	-153	6.29	20.66	0.9	95.15
IW85-05	5.23	91	6.29	20.46	0.469	96.95
IW85-06	6.41	80	7.88	20.83	0.495	94.90
PMW92-01	5.28	130	5.94	21.21	0.262	94.16
PMW92-02	0.00	-172	6.84	20.74	1.96	93.81
PMW92-03	0.68	-4	6.29	19.72	0.519	93.43
PMW92-04	0.07	-91	6.50	19.32	0.58	94.18
PMW92-05	3.94	251	5.82	20.04	0.219	93.46
PMW92-06	1.35	62	5.77	20.89	0.215	94.78
PMW85-01	8.40	262	5.92	21.30	0.241	97.13
PMW85-04	1.83	-85	6.20	21.17	0.411	97.21
PMW85-05	NC	NC	6.04	21.35	0.395	96.27
MW-85	6.17	305	5.73	21.14	0.191	98.03
DR2-1	6.13	-23	6.02	19.89	0.364	88.21
DR2-5	8.32	244	5.94	21.30	0.179	95.89
IW-01	1.39	52	5.43	20.71	0.368	94.73

IW85-03, IW85-04, PMW85-02, and PMW 85-03 were abandoned due to low water levels.

IW85-05, IW85-06, PMW85-04, and PMW85-05 were added to replace abandoned wells.

The new wells were being developed during the taking of performance measurements.

Any lack of information on the new wells was due to the development process.

NC=Not collected

Rnd 14 Pre-injection Measurements

START: 5-Mar-07

END: 14-Mar-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0	-113	6.07	17.94	3.46	91.21
IW101-01B	0.34	-118	6.34	18.10	0.563	91.06
IW101-01C	0.21	-138	6.11	19.05	0.716	91.07
IW101-02A	0.48	-116	6.12	18.91	0.581	91.27
IW101-02B	1.66	38	6.09	19.10	0.489	91.32
IW101-02C	0	-115	6.1	19.94	2.06	91.7
IW101-03A	3.31	-137	6.08	20.63	0.9	91.96
IW101-03B	0.48	-137	6.02	19.73	0.739	91.82
IW101-03C	0.2	-111	6.07	18.80	0.9	91.83
IW101-04A	2.88	-81	6.17	19.52	3.14	91.65
IW101-04B	0.34	-112	6.42	19.56	0.926	91.56
IW101-04C	0.15	-147	6.52	19.62	0.665	91.56
IW101-05A	2.95	-71	6.27	19.00	0.628	91.4
IW101-05B	0.16	-8	6.21	19.24	3.38	91.35
IW101-05C	0	-110	6.14	19.45	0.9	91.28
IW101-06A	0.08	-119	6.24	20.75	43	91.6
IW101-06B	0	39	5.94	20.39	OR*	91.98
IW101-06C	0	-73	5.99	20.03	OR*	91.97
IW101-07A	0.79	-19	6.17	19.17	0.655	92.65
IW101-07B	10.33	-58	6.36	20.20	0.572	92.65
IW101-07C	0.4	-80	6.04	20.27	0.61	92.61
IW101-08A	0	-17	6.23	19.36	OR*	92.28
IW101-08B	0.45	7	6.17	20.53	0.9	92.28
IW101-08C	0	-108	6.19	20.59	54.8	92.75
IW101-09A	3.57	-107	6.2	20.35	0.753	92.41
IW101-09B	4.1	-48	6.16	20.38	3.16	92.28
IW101-09C	3.94	-13	6.1	18.82	0.885	92.44
PMW101-01A	0.32	-38	6.06	17.87	4.37	89.6
PMW101-01B	0.11	-95	5.84	20.03	1.56	89.64
PMW101-02A	0	-125	6.54	17.86	.997*	90.29
PMW101-02B	0	-149	6.4	18.57	.90*	90.49
PMW101-03A	6.04	125	5.93	19.74	0.521	90.54
PMW101-03B	0.68	-97	6.25	18.73	0.572	90.48
PMW101-04A	4.33	202	6.15	17.19	.999*	89.87
PMW101-04B	0.27	-61	6.31	19.23	.999*	90.32
PMW101-05A	0.52	-94	6.19	18.39	1.23	90.1
PMW101-05B	6.4	8	5.77	18.31	0.9	90.38
PMW101-06A	0.35	-92	6.12	17.44	0.561	90.69
PMW101-06B	0.08	-108	6.46	18.50	0.9	90.7
PMW101-07A	0	-159	6.4	19.64	0.909	90.66
PMW101-07B	7.12	183	5.51	19.32	0.292	90.75
PMW101-08A	1.62	-36	6.35	20.78	2.04	91.36
PMW101-08B	9.03	202	5.9	20.39	.999*	91.29
MW-101T	3.07	104	6.2	17.36	0.439	91.47
MW-101B	0.31	-82	6.21	19.15	0.489	91.47
DR1-3	0.71	124	6.24	17.77	0.794	90.76

Rnd 14 Pre-injection Measurements

START: 5-Mar-07

END: 14-Mar-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0	-185	6.31	22.78	5.26	91.24
IW21-01B	0	-111	6.26	20.57	4.88	91.35
IW21-02A	0.32	-112	5.81	22.42	0.313	91.48
IW21-02B	0	-100	6.03	19.52	0.296	91.6
IW21-03A	0	24	6.43	16.35	0.443	90.29
IW21-03B	1.61	-210	6.6	19.55	1.8	89.9
IW21-04A	0	-200	6.24	20.37	0.518	91.31
IW21-04B	1.01	-130	6.15	19.71	0.824	90.12
IW21-05A	0	-153	5.95	23.00	3.92	89.8
IW21-05B	0	-89	6.18	23.59	0.411	90.66
PMW21-01	3.81	198	6.12	12.34	0.385	91.33
PMW21-02	3.77	244	6.31	22.21	0.473	90.35
PMW21-03	5.65	298	6.37	20.16	0.569	89.73
PMW21-04	1.43	151	5.91	18.74	0.511	89.55
PMW21-05	8.66	156	5.85	19.08	0.444	88.02
MW-21	3.78	257	6.32	20.01	0.409	91.6
MW-115	0	158	5.77	18.91	0.401	89.31
TTA-2						
IW92-01	0	-41	6.07	22.99	OR*	88.86
IW92-02	1.06	-75	6.37	18.71	0.999*	88.42
IW92-03	1.17	-51	5.8	20.25	0.9	91.9
IW92-04	3.23	-55	6.26	21.01	1.8	92.07
IW92-05	0	-105	6.27	20.07	17.5	91.95
IW92-06	0.55	-79	6.2	22.79	6.03	92.09
IW92-07	0.52	-86	6.05	21.61	2.57	93.32
IW92-08	0	-98	6.18	16.84	1.07	93.93
IW85-01	0	-74	6.1	19.91	0.613	94.23
IW85-02	0	-110	6.1	17.45	3.35	95.15
IW85-05	0	81	5.88	23.15	0.298	95.58
IW85-06	0	-127	6.17	25.68	5.72	96.08
PMW92-01	7.12	162	5.96	20.17	0.329	93.91
PMW92-02	0.86	-125	6.42	22.36	2.15	93.6
PMW92-03	1.41	-32	6.38	20.80	0.73	93.18
PMW92-04	0	-111	6.42	21.47	0.942	94.14
PMW92-05	3.71	180	5.78	21.62	0.366	93.63
PMW92-06	1.5	-26	5.74	22.54	0.437	94.79
PMW85-01	4.31	130	6.04	21.20	0.41	95.53
PMW85-04	0.34	-113	6.24	21.66	0.852	97.21
PMW85-05	4.44	139	5.75	22.22	0.408	96.15
MW-85	6.78	185	5.48	23.14	0.372	98.01
DR2-1	9.45	50	6.11	18.07	0.401	88.14
DR2-5	8.17	149	6.05	19.98	0.361	95.88
IW-01	1.42	69	5.41	20.69	0.557	94.75

Rnd 15 Pre-injection Measurements

START: 26-Mar-07

END: 28-Mar-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-107	5.88	18.50	7.97	89.19
IW101-01B	0.00	-107	6.30	18.57	94.4	89.09
IW101-01C	0.00	-36	6.11	18.52	80.6	89.10
IW101-02A	0.00	-119	6.21	18.68	0.999	89.35
IW101-02B	0.00	-77	6.23	18.68	0.999	89.45
IW101-02C	0.00	-111	6.14	18.67	0.9	89.87
IW101-03A	0.00	-108	6.03	18.85	0.9	90.21
IW101-03B	0.00	-36	6.06	18.92	0.999	90.13
IW101-03C	0.00	-57	6.10	18.89	0.999	90.18
IW101-04A	0.00	-245	6.11	18.66	0.92	89.96
IW101-04B	0.00	-226	6.47	18.72	0.9	89.94
IW101-04C	0.00	-225	7.11	18.70	0.9	89.90
IW101-05A	0.00	-245	6.28	18.75	0.9	89.95
IW101-05B	0.00	-115	6.28	18.68	0.9	89.65
IW101-05C	0.00	-181	6.22	18.65	0.9	89.59
IW101-06A	0.00	-240	6.28	19.06	0.9	90.31
IW101-06B	0.00	-172	6.11	19.03	0.906	90.34
IW101-06C	0.00	-141	6.07	19.05	0.9	90.25
IW101-07A	0.00	-122	6.11	19.05	0.999	91.03
IW101-07B	0.00	-131	6.20	19.05	0.92	91.02
IW101-07C	0.00	-96	6.02	19.03	0.9	90.97
IW101-08A	0.00	-266	6.27	19.10	0.9	90.28
IW101-08B	0.00	-187	6.19	19.09	0.793	90.43
IW101-08C	0.00	-129	6.11	19.05	0.645	90.91
IW101-09A	0.00	-265	6.34	19.13	0.9	90.82
IW101-09B	0.00	-225	6.09	19.14	0.9	90.71
IW101-09C	0.00	-194	6.03	19.11	0.9	90.87
PMW101-01A	0.00	-110	6.36	19.20	5	89.20
PMW101-01B	0.00	-90	6.30	19.46	1.07	89.31
PMW101-02A	0.00	-143	6.70	19.47	0.999	89.92
PMW101-02B	0.00	-116	6.59	19.48	0.999	90.14
PMW101-03A	5.19	113	6.00	19.11	0.595	90.24
PMW101-03B	0.00	97	6.06	19.05	0.626	90.23
PMW101-04A	1.70	118	6.19	19.11	0.834	89.63
PMW101-04B	0.00	-79	6.40	19.09	0.9	90.12
PMW101-05A	0.00	-118	6.47	20.10	0.9	89.88
PMW101-05B	3.44	-30	6.07	19.71	0.403	90.20
PMW101-06A	0.00	-17	6.40	20.65	0.717	90.48
PMW101-06B	0.00	-108	6.52	19.95	0.9	90.55
PMW101-07A	0.00	-106	6.44	21.40	0.9	90.49
PMW101-07B	8.59	144	5.93	21.17	0.364	90.65
PMW101-08A	0.00	18	6.27	20.98	0.9	91.20
PMW101-08B	8.84	153	5.97	22.02	0.27	91.15
MW-101T	2.22	109	6.02	18.82	0.981	89.61
MW-101B	2.71	157	6.06	18.44	0.978	89.61
DR1-3	0.00	132	6.29	19.74	0.9	90.72

Rnd 15 Pre-injection Measurements

START: 26-Mar-07

END: 28-Mar-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-191	5.99	18.03	1.69	91.21
IW21-01B	0.00	-188	6.40	18.06	3.04	91.35
IW21-02A	0.00	40	5.97	18.05	0.76	91.42
IW21-02B	0.65	-1	5.94	18.09	0.654	91.50
IW21-03A	0.00	57	5.97	17.98	0.71	90.14
IW21-03B	0.00	-202	6.36	18.00	1	89.91
IW21-04A	0.00	-213	6.09	18.06	0.9	90.05
IW21-04B	0.00	-192	6.09	18.06	0.9	90.22
IW21-05A	0.00	-236	5.93	18.06	1.82	89.50
IW21-05B	0.00	-85	6.07	18.04	0.816	89.54
PMW21-01	2.91	194	5.96	15.10	0.321	91.62
PMW21-02	5.24	210	5.96	17.43	0.281	90.69
PMW21-03	6.15	186	6.11	19.87	0.465	89.77
PMW21-04	0.00	178	6.09	18.53	0.585	89.62
PMW21-05	8.76	168	5.97	20.08	0.509	87.78
MW-21	3.58	182	5.93	19.54	0.466	91.59
MW-115	0.00	177	6.06	18.78	0.441	89.37
TTA-2						
IW92-01	0.00	-229	6.35	20.03	3.28	87.07
IW92-02	0.00	-198	6.05	20.27	2.61	88.14
IW92-03	0.00	-200	6.10	20.13	4.81	91.79
IW92-04	1.67	-172	6.19	20.13	2.01	91.90
IW92-05	0.63	-131	6.21	20.60	22.5	91.75
IW92-06	7.69	-184	6.30	20.61	9.56	92.10
IW92-07	0.36	-120	6.15	20.52	8.49	93.31
IW92-08	4.83	-153	6.28	20.71	6.05	94.04
IW85-01	0.35	-125	6.24	20.57	1.03	94.21
IW85-02	2.39	-148	6.34	20.65	6.05	95.12
IW85-05	0.40	39	5.89	20.70	0.461	95.60
IW85-06	1.12	-149	6.37	20.77	4.59	94.90
PMW92-01	4.36	156	5.96	22.54	0.442	93.93
PMW92-02	3.81	-151	6.55	20.08	42.3	93.48
PMW92-03	0.00	-86	6.18	22.03	0.9	93.29
PMW92-04	0.00	-104	6.37	21.65	0.9	94.18
PMW92-05	2.16	162	5.86	22.76	0.46	93.66
PMW92-06	0.00	33	5.90	22.32	0.449	94.78
PMW85-01	0.00	59	6.10	21.93	0.418	96.70
PMW85-04	0.00	-68	6.28	23.23	0.9	97.29
PMW85-05	2.49	170	5.78	22.69	0.393	96.20
MW-85	4.34	166	5.85	21.87	0.373	98.00
DR2-1	6.46	61	6.07	21.71	0.537	88.12
DR2-5	6.60	137	6.02	22.30	0.356	95.77
IW-01	0.00	37	5.50	22.38	0.664	94.75

IW85-03, IW85-04, PMW85-02, and PMW 85-03 were abandoned due to low water levels.
 IW85-05, IW85-06, PMW85-04, and PMW85-05 were added to replace abandoned wells.

Rnd 16 Preinjection Measurements

START: 9-Apr-07

END: 11-Apr-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-118	6.32	18.48	2.93	89.17
IW101-01B	0.00	-150	6.67	18.51	0.88	89.09
IW101-01C	0.14	-55	6.19	18.47	0.748	89.10
IW101-02A	0.00	-150	6.30	18.62	0.999	89.38
IW101-02B	0.00	-31	6.35	18.66	0.759	89.47
IW101-02C	0.12	-139	6.26	18.69	0.9	89.88
IW101-03A	0.22	-159	6.15	18.77	0.999	90.17
IW101-03B	0.32	-59	6.21	18.86	0.724	90.07
IW101-03C	0.00	-73	6.16	18.78	0.58	90.10
IW101-04A	0.00	-277	6.50	18.59	1.08	89.90
IW101-04B	0.00	-249	6.56	18.64	0.999	89.88
IW101-04C	0.00	-260	7.12	18.68	0.954	89.85
IW101-05A	0.00	-144	6.38	18.60	0.999	89.94
IW101-05B	0.41	-82	6.40	18.64	0.755	89.74
IW101-05C	0.00	-136	6.19	18.60	0.999	89.67
IW101-06A	0.00	-278	6.29	18.98	0.999	90.27
IW101-06B	0.00	-223	6.22	18.99	0.607	90.30
IW101-06C	0.00	-198	6.19	18.98	0.559	90.28
IW101-07A	0.00	-182	6.30	18.93	0.938	90.92
IW101-07B	0.00	-165	6.34	18.96	0.673	90.94
IW101-07C	0.00	-110	6.12	18.96	0.798	90.87
IW101-08A	0.00	-306	6.32	19.04	0.999	90.28
IW101-08B	0.00	-244	6.56	19.02	0.569	90.38
IW101-08C	0.00	-192	6.20	19.03	0.455	90.86
IW101-09A	0.00	-290	6.50	19.02	0.999	90.75
IW101-09B	0.00	-255	6.31	18.99	0.86	90.62
IW101-09C	0.00	-244	6.45	19.03	0.774	90.63
PMW101-01A	9.20	-94	6.37	17.64	4.71	89.18
PMW101-01B	1.14	-82	6.20	17.98	1.22	89.31
PMW101-02A	0.36	-147	6.75	17.96	0.95	89.94
PMW101-02B	0.55	-135	6.44	18.77	0.999	90.15
PMW101-03A	7.01	107	5.91	18.02	0.595	90.25
PMW101-03B	0.80	30	6.06	17.85	0.999	90.25
PMW101-04A	3.54	71	6.17	18.27	0.993	89.51
PMW101-04B	0.80	-99	6.34	18.46	0.9	90.13
PMW101-05A	0.76	-116	6.48	18.41	0.999	89.83
PMW101-05B	5.34	-28	5.95	18.32	0.49	90.14
PMW101-06A	2.15	35	5.98	18.29	0.829	90.39
PMW101-06B	0.15	-114	6.41	18.57	0.999	90.42
PMW101-07A	1.05	-98	6.29	19.01	0.913	90.36
PMW101-07B	8.88	239	5.95	17.60	0.367	90.52
PMW101-08A	1.64	63	6.51	18.14	0.9	91.11
PMW101-08B	8.81	224	6.27	18.41	0.268	91.09
MW-101T	2.50	43	6.13	18.82	0.688	89.59
MW-101B	3.31	78	6.06	18.49	0.682	89.59
DR1-3	1.48	103	6.72	17.59	0.999	90.59

Rnd 16 Preinjection Measurements

START: 9-Apr-07

END: 11-Apr-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-250	6.09	17.98	1.5	91.21
IW21-01B	0.00	-234	6.23	18.11	2.74	91.31
IW21-02A	0.00	-61	6.08	18.05	0.504	91.36
IW21-02B	0.00	-168	6.06	18.12	0.569	91.44
IW21-03A	0.00	-59	6.04	17.96	0.49	90.01
IW21-03B	0.00	-241	6.32	18.05	0.999	89.78
IW21-04A	0.00	-250	6.13	18.04	0.857	89.90
IW21-04B	0.00	-258	6.26	18.07	0.626	90.04
IW21-05A	0.00	-275	6.22	18.09	0.999	89.35
IW21-05B	0.00	-173	6.14	18.08	0.677	89.34
PMW21-01	4.43	197	6.37	18.75	0.547	91.23
PMW21-02	6.75	245	6.38	17.87	0.472	90.24
PMW21-03	6.83	220	6.39	18.04	0.448	89.53
PMW21-04	1.85	214	6.46	17.93	0.588	89.36
PMW21-05	10.14	232	6.32	18.28	0.488	87.65
MW-21	5.80	238	6.26	18.00	0.442	91.45
MW-115	0.24	211	6.38	18.38	0.545	89.08
TTA-2						
IW92-01	1.76	-308	6.24	20.13	20.4	86.99
IW92-02	0.00	-290	6.20	20.18	21.6	88.05
IW92-03	0.00	-205	5.77	20.08	0.58	91.71
IW92-04	0.00	-126	6.18	20.10	1.17	91.74
IW92-05	0.11	-217	6.32	20.56	23.7	91.77
IW92-06	0.00	-131	6.27	20.58	5.74	91.97
IW92-07	0.00	-91	5.90	20.64	0.747	93.29
IW92-08	0.00	-95	6.68	20.75	1.15	93.90
IW85-01	0.00	-190	6.05	20.53	3.7	94.14
IW85-02	4.11	-185	6.31	20.68	2.11	95.01
IW85-05	0.84	-11	5.88	20.78	0.473	95.60
IW85-06	0.00	-235	6.49	20.77	3.81	96.25
PMW92-01	4.93	220	6.34	20.32	0.419	92.70
PMW92-02	0.00	-117	6.97	20.12	2.23	93.23
PMW92-03	0.00	-103	6.91	20.26	0.999	93.35
PMW92-04	0.00	-108	6.98	20.60	0.999	94.43
PMW92-05	2.34	177	6.23	20.16	0.424	93.62
PMW92-06	0.16	12	6.12	21.58	0.419	94.65
PMW85-01	2.62	76	6.44	21.27	0.412	96.84
PMW85-04	8.00	-81	6.78	22.08	0.742	97.28
PMW85-05	3.01	188	6.14	22.46	0.392	96.24
MW-85	4.47	201	6.26	21.23	0.374	97.99
DR2-1	6.33	113	6.46	20.28	0.493	88.05
DR2-5	7.21	184	6.54	21.42	0.358	95.76
IW-01	0.00	57	5.99	21.48	0.565	94.80

Rnd 17 Pre-injection Measurements

START: 23-Apr-07

END: 30-Apr-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-95	5.93	18.70	3.74	90.90
IW101-01B	0.00	-119	6.40	18.65	0.999	90.81
IW101-01C	0.00	-29	5.97	18.61	0.999	90.84
IW101-02A	0.00	-122	6.09	18.70	0.999	90.97
IW101-02B	0.00	117	6.20	18.89	0.9	91.08
IW101-02C	0.00	-118	6.13	18.85	0.9	91.61
IW101-03A	0.00	-102	5.98	18.94	0.9	91.84
IW101-03B	0.00	-40	6.01	19.03	0.9	91.77
IW101-03C	0.00	-44	5.96	18.89	0.9	91.81
IW101-04A	0.00	-103	5.87	18.67	2.23	91.78
IW101-04B	0.00	-136	6.34	18.75	0.9	91.76
IW101-04C	0.00	-152	6.85	18.70	0.9	91.71
IW101-05A	0.00	-124	6.16	18.77	0.9	91.68
IW101-05B	0.00	-36	6.07	18.73	0.9	91.49
IW101-05C	0.00	-94	6.08	18.66	0.9	91.41
IW101-06A	0.00	-150	6.19	19.02	0.9	92.06
IW101-06B	0.00	-78	6.05	19.02	0.9	92.09
IW101-06C	0.00	-96	6.08	19.13	0.749	92.08
IW101-07A	0.00	-127	6.12	19.08	0.9	92.67
IW101-07B	0.00	-124	6.18	19.06	0.9	92.70
IW101-07C	0.00	-75	6.07	19.06	0.9	92.65
IW101-08A	0.00	-173	6.22	19.11	0.9	92.12
IW101-08B	0.00	-117	6.12	19.07	0.915	92.21
IW101-08C	0.00	-57	6.02	19.18	0.644	92.70
IW101-09A	0.00	-219	6.31	19.14	0.9	92.55
IW101-09B	0.00	-157	6.17	19.14	0.9	92.42
IW101-09C	0.00	-49	6.01	19.10	0.9	92.40
PMW101-01A	1.83	-111	6.41	22.58	5.06	90.83
PMW101-01B	0.34	-102	6.26	19.95	1.42	90.90
PMW101-02A	1.09	-148	6.73	21.10	0.91	91.50
PMW101-02B	0.00	-143	6.33	19.24	0.999	91.74
PMW101-03A	5.52	88	5.86	18.82	0.737	91.82
PMW101-03B	0.68	33	6.08	18.89	0.9	91.82
PMW101-04A	2.10	9	6.27	18.95	0.9	91.14
PMW101-04B	0.27	-106	6.43	18.77	0.999	91.70
PMW101-05A	0.00	-129	6.49	18.36	0.9	91.53
PMW101-05B	3.52	-25	6.06	18.67	0.644	91.85
PMW101-06A	1.13	-50	6.11	19.82	0.98	92.08
PMW101-06B	0.00	-133	6.53	19.51	0.9	92.14
PMW101-07A	0.40	-114	6.32	21.06	0.9	92.02
PMW101-07B	7.36	118	5.86	20.28	0.444	92.17
PMW101-08A	1.66	6	6.14	20.79	0.9	92.76
PMW101-08B	8.11	142	5.89	20.74	0.311	92.73
MW-101T	3.76	36	6.00	18.62	0.832	91.35
MW-101B	3.94	62	6.00	18.38	0.838	91.35
DR1-3	0.60	-37	6.39	18.58	0.9	92.27

Rnd 17 Pre-injection Measurements

START: 23-Apr-07

END: 30-Apr-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	2.86	-122	6.00	18.04	1.58	93.04
IW21-01B	2.23	-136	6.27	18.22	2.1	93.07
IW21-02A	0.00	10	5.98	18.07	0.9	93.21
IW21-02B	0.00	17	5.90	18.10	0.999	93.36
IW21-03A	0.00	81	5.95	18.01	0.999	91.97
IW21-03B	0.54	-143	6.34	18.06	0.98	91.70
IW21-04A	0.00	-60	5.99	18.22	0.999	91.81
IW21-04B	0.00	-104	6.06	18.12	0.952	91.94
IW21-05A	0.00	-124	6.32	18.14	0.9	91.25
IW21-05B	0.00	-58	6.03	18.08	0.9	91.33
PMW21-01	4.68	156	6.14	18.16	0.566	91.25
PMW21-02	5.19	193	6.14	18.41	0.523	90.28
PMW21-03	6.00	200	6.15	18.68	0.498	89.62
PMW21-04	1.97	173	6.19	19.29	0.72	89.52
PMW21-05	7.51	162	6.16	20.05	0.558	87.69
MW-21	4.38	188	6.02	18.05	0.473	91.50
MW-115	0.60	173	6.13	19.74	0.545	89.21
TTA-2						
IW92-01	0.05	-149	6.14	20.20	0.9	87.34
IW92-02	1.03	-75	5.82	20.15	0.9	88.11
IW92-03	6.06	-107	5.83	20.07	3.37	91.81
IW92-04	O/R	-155	6.28	20.23	8.19	91.98
IW92-05	1.38	-181	6.37	20.53	29.7	91.81
IW92-06	0.80	-154	6.30	20.54	28	92.12
IW92-07	2.33	-176	6.12	20.54	15.1	93.35
IW92-08	1.79	-142	6.05	20.99	0.9	93.93
IW85-01	1.44	-169	6.15	20.52	9.24	94.22
IW85-02	0.75	-165	6.18	20.65	2.78	95.18
IW85-05	0.71	12	5.77	20.69	0.9	95.66
IW85-06	1.44	-180	6.31	20.70	3.54	96.20
PMW92-01	4.44	156	6.08	20.89	0.46	94.05
PMW92-02	0.40	-130	6.53	21.58	2.53	93.56
PMW92-03	0.43	-128	6.41	23.42	0.9	93.27
PMW92-04	0.35	-129	6.62	24.26	0.9	94.28
PMW92-05	3.38	179	5.89	23.17	0.63	93.65
PMW92-06	3.55	33	5.85	25.39	0.738	94.88
PMW85-01	3.56	80	5.88	23.83	0.554	96.80
PMW85-04	3.43	-126	6.39	25.48	0.999	97.20
PMW85-05	4.88	177	5.76	26.12	0.555	96.26
MW-85	2.65	88	5.74	21.32	0.418	98.03
DR2-1	2.90	89	6.17	21.35	0.689	88.32
DR2-5	5.69	133	6.13	24.33	0.462	95.87
IW-01	4.14	88	5.53	25.12	0.9	94.83

Rnd 18 Pre-injection Measurements

START: 7-May-07

END: 9-May-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.50	-133	6.11	18.64	5.5	89.26
IW101-01B	0.00	-200	6.42	18.62	0.999	89.19
IW101-01C	0.00	-86	6.32	18.66	0.999	89.21
IW101-02A	0.00	-221	6.37	18.59	0.999	89.43
IW101-02B	0.00	-203	6.45	18.73	0.999	89.54
IW101-02C	0.80	-164	6.29	18.75	0.775	89.98
IW101-03A	4.06	-220	6.15	18.85	0.999	90.31
IW101-03B	3.83	-234	6.16	19.00	0.999	90.23
IW101-03C	1.50	-158	6.16	18.91	0.999	90.29
IW101-04A	6.91	-230	6.15	18.64	2.94	90.05
IW101-04B	5.79	-156	6.65	18.74	0.999	89.99
IW101-04C	2.87	-179	6.86	18.84	0.78	89.93
IW101-05A	0.00	-199	6.35	18.68	0.97	90.06
IW101-05B	0.00	-197	6.42	18.74	0.9	89.85
IW101-05C	0.00	-149	6.29	18.73	0.999	89.78
IW101-06A	3.32	-226	6.64	18.93	0.999	90.43
IW101-06B	3.35	-171	6.50	19.08	0.999	90.45
IW101-06C	4.88	-150	6.52	19.10	0.97	90.44
IW101-07A	1.22	-248	6.35	19.05	0.999	91.14
IW101-07B	1.61	-201	6.35	19.11	0.999	91.08
IW101-07C	5.50	-169	6.19	19.18	0.999	91.08
IW101-08A	4.15	-270	6.74	19.02	0.999	90.47
IW101-08B	3.79	-214	6.65	19.13	0.996	90.58
IW101-08C	1.56	-175	6.64	19.22	0.999	91.05
IW101-09A	0.98	-80	6.34	19.05	0.999	90.94
IW101-09B	1.74	-205	6.30	19.15	0.999	90.83
IW101-09C	0.00	-64	6.10	19.18	0.999	90.80
PMW101-01A	0.00	-132	6.27	19.84	24.9	89.45
PMW101-01B	0.00	-91	6.12	20.20	5.32	89.47
PMW101-02A	0.19	-136	6.44	20.37	2.08	90.40
PMW101-02B	0.23	-169	6.78	20.39	2.56	90.18
PMW101-03A	4.33	131	5.92	19.50	0.9	90.49
PMW101-03B	0.40	-5	6.10	19.81	1.06	90.47
PMW101-04A	1.77	39	6.23	19.82	0.9	89.77
PMW101-04B	0.25	-99	6.40	20.26	1.07	90.34
PMW101-05A	0.36	-130	6.47	21.36	1.73	90.09
PMW101-05B	3.36	-17	6.05	20.38	0.9	90.41
PMW101-06A	1.05	-66	6.12	22.36	0.9	90.69
PMW101-06B	0.32	-141	6.47	20.90	1.69	90.75
PMW101-07A	1.04	-114	6.33	23.31	1.11	90.71
PMW101-07B	6.79	114	5.84	21.32	0.9	90.94
PMW101-08A	2.60	83	6.19	23.51	0.9	91.41
PMW101-08B	6.93	149	5.86	22.71	0.999	91.38
MW-101T	0.00	28	6.28	19.36	0.851	89.71
MW-101B	7.87	63	6.26	18.50	0.738	89.71
DR1-3	0.81	-55	6.32	20.58	1.26	90.93

Rnd 18 Pre-injection Measurements

START: 7-May-07

END: 9-May-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	3.07	-200	6.41	18.22	5.41	91.30
IW21-01B	1.03	-183	6.59	18.41	4.97	91.49
IW21-02A	2.55	-84	6.56	18.15	0.778	91.58
IW21-02B	0.80	-180	6.55	18.29	0.969	91.67
IW21-03A	0.32	-30	6.58	18.10	0.657	90.29
IW21-03B	0.09	-215	6.67	18.26	1.68	90.01
IW21-04A	0.00	-234	6.65	18.22	0.999	90.09
IW21-04B	0.00	-268	6.69	18.32	0.999	90.28
IW21-05A	0.29	-225	6.52	18.29	4.57	89.61
IW21-05B	0.13	-241	6.60	18.25	0.9	89.65
PMW21-01	3.30	184	5.76	18.75	0.9	91.56
PMW21-02	5.24	202	5.86	18.95	1.12	90.64
PMW21-03	6.76	205	5.87	20.25	0.999	89.93
PMW21-04	2.18	192	5.89	19.96	0.9	89.83
PMW21-05	8.59	187	5.82	20.61	0.999	88.00
MW-21	5.37	208	5.73	19.05	0.543	91.85
MW-115	0.46	118	5.84	20.13	0.9	89.51
TTA-2						
IW92-01	0.00	-236	6.74	20.42	3.24	87.27
IW92-02	0.00	-238	6.45	20.43	8.79	88.38
IW92-03	0.00	-164	6.44	20.48	2.63	91.61
IW92-04	3.81	-235	6.18	20.61	29.9	91.81
IW92-05	3.72	-224	6.45	20.79	31.2	92.00
IW92-06	0.00	-147	6.21	20.80	30.2	92.18
IW92-07	6.91	-162	6.14	20.77	19	93.51
IW92-08	3.88	-96	6.19	21.00	1.87	94.06
IW85-01	0.00	-77	6.04	20.79	2.81	94.38
IW85-02	0.00	-108	6.26	20.81	3.1	95.32
IW85-05	0.00	-8	6.07	20.83	0.936	95.91
IW85-06	1.84	-120	6.29	20.88	4	96.46
PMW92-01	4.93	180	5.81	22.40	0.9	94.00
PMW92-02	1.38	-129	6.40	23.01	4.43	94.66
PMW92-03	0.82	-115	6.35	23.08	1.04	93.35
PMW92-04	0.20	-129	6.38	23.12	1.08	94.38
PMW92-05	4.15	163	5.68	23.11	0.9	93.50
PMW92-06	1.70	-2	5.54	22.43	0.999	96.53
PMW85-01	1.96	24	5.89	23.08	0.999	98.55
PMW85-04	0.74	-110	6.21	23.59	0.999	98.45
PMW85-05	5.84	144	5.60	23.53	0.999	97.98
MW-85	7.14	176	5.68	22.34	0.9	99.77
DR2-1	4.81	89	5.87	23.23	0.97	88.20
DR2-5	10.64	151	5.95	23.74	0.9	97.05
IW-01	1.49	75	5.33	22.77	0.999	94.81

Rnd 19 Pre-injection Measurements

START: 7-May-07

END: 21-May-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	2.40	-97	5.99	18.61	3.25	89.04
IW101-01B	0.00	-131	6.17	18.67	0.999	89.01
IW101-01C	0.00	-56	6.15	18.62	0.999	89.02
IW101-02A	0.00	-172	6.22	18.68	0.999	89.25
IW101-02B	0.15	-160	6.25	18.88	0.949	89.34
IW101-02C	0.00	-137	6.18	18.82	0.999	89.77
IW101-03A	0.00	-133	5.99	19.00	0.999	90.10
IW101-03B	0.00	-84	6.01	19.07	0.999	90.01
IW101-03C	0.32	-81	6.00	18.96	0.926	90.05
IW101-04A	0.36	-304	5.99	18.71	1.58	89.90
IW101-04B	0.09	-266	6.40	18.74	0.999	89.91
IW101-04C	0.00	-195	6.72	18.85	0.999	89.89
IW101-05A	0.00	-145	6.12	18.74	0.999	89.86
IW101-05B	0.00	-112	6.21	18.79	0.999	89.65
IW101-05C	0.00	-163	6.24	18.85	0.999	89.59
IW101-06A	0.00	-212	6.15	19.01	0.999	90.33
IW101-06B	0.00	-162	5.99	19.12	0.866	90.38
IW101-06C	0.00	-143	6.02	19.08	0.888	90.38
IW101-07A	0.28	-152	6.13	19.17	0.999	90.90
IW101-07B	0.35	-147	6.20	19.10	0.865	90.83
IW101-07C	0.13	-107	6.19	19.15	0.999	90.85
IW101-08A	0.00	-232	6.26	19.16	0.999	90.40
IW101-08B	0.07	-185	6.12	19.16	0.777	90.51
IW101-08C	0.00	-127	6.06	19.15	0.581	90.97
IW101-09A	0.74	-300	6.40	19.19	0.999	90.72
IW101-09B	0.26	-258	6.16	19.19	0.999	90.61
IW101-09C	0.09	-243	5.97	19.24	0.999	90.61
PMW101-01A	0.00	-135	6.41	19.68	5.95	89.15
PMW101-01B	0.00	-115	6.42	21.52	0.97	89.28
PMW101-02A	0.00	-174	6.72	20.07	0.9	89.91
PMW101-02B	0.00	-112	6.63	20.05	0.9	90.10
PMW101-03A	5.51	166	6.12	21.16	0.999	90.17
PMW101-03B	0.16	36	6.37	20.93	0.9	90.17
PMW101-04A	2.58	36	6.51	26.51	0.999	89.49
PMW101-04B	0.00	-99	6.57	20.59	0.9	90.03
PMW101-05A	0.00	-141	6.78	22.45	0.9	89.77
PMW101-05B	7.30	60	6.30	23.37	0.528	90.10
PMW101-06A	0.71	-85	6.40	19.71	0.9	90.45
PMW101-06B	0.00	-146	6.58	19.29	0.9	90.53
PMW101-07A	0.00	-133	6.56	21.04	0.999	90.49
PMW101-07B	7.53	112	6.19	20.67	0.631	90.67
PMW101-08A	0.82	99	6.34	22.69	0.9	91.23
PMW101-08B	7.33	149	6.18	22.06	0.362	91.23
MW-101T	1.45	24	6.06	19.01	0.992	89.51
MW-101B	2.62	59	6.06	18.62	0.804	89.51
DR1-3	0.20	-86	6.54	20.80	0.9	90.77

Rnd 19 Pre-injection Measurements

START: 7-May-07

END: 21-May-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	2.64	-207	6.08	18.12	1.3	91.34
IW21-01B	2.75	-194	6.27	18.28	2.09	91.34
IW21-02A	0.66	-105	6.00	18.19	0.793	91.54
IW21-02B	0.21	-39	5.89	18.20	0.655	91.64
IW21-03A	0.37	18	5.92	18.02	0.795	90.24
IW21-03B	0.79	-221	6.41	18.16	1.05	89.92
IW21-04A	1.42	-200	6.01	18.18	0.999	90.02
IW21-04B	0.74	-211	6.11	18.24	0.999	90.25
IW21-05A	8.33	-210	5.98	18.24	2.39	89.59
IW21-05B	1.13	-161	6.05	18.18	0.798	89.63
PMW21-01	2.38	149	6.20	19.93	0.9	91.40
PMW21-02	4.67	178	6.15	19.96	0.999	90.49
PMW21-03	5.81	170	6.19	21.63	0.999	89.80
PMW21-04	1.36	165	6.18	21.86	0.999	89.62
PMW21-05	7.69	169	6.18	20.65	0.999	97.85
MW-21'	3.39	181	6.16	20.54	0.9	91.62
MW-115'	0.00	163	6.21	20.75	0.9	89.40
TTA-2						
IW92-01	0.00	-186	6.15	20.71	0.98	87.30
IW92-02	0.00	-157	6.09	20.20	6.79	88.43
IW92-03	3.82	-112	5.75	20.18	1.1	91.78
IW92-04	8.56	-107	6.16	20.36	2.47	92.04
IW92-05	0.61	-135	7.78*	21.04	30	91.85
IW92-06	0.00	-89	7.7*	20.82	28.4	93.35
IW92-07	0.00	-60	8.19*	20.74	27.6	93.40
IW92-08	0.00	-54	9.22*	20.97	2.13	94.05
IW85-01	0.00	-6	9.07*	20.69	0.9	94.30
IW85-02	0.00	-50	9.71*	20.99	1.41	95.27
IW85-05	0.00	63	8.02*	20.86	0.9	95.90
IW85-06	0.00	-58.00	10.11*	20.89	1.3	96.41
PMW92-01	3.90	146	6.12	23.27	0.9	93.93
PMW92-02	0.00	-150	6.53	23.44	4.7	93.56
PMW92-03	0.00	-123	6.57	22.63	0.999	93.27
PMW92-04	0.00	-119	6.58	22.53	0.999	94.20
PMW92-05	3.00	190	6.11	22.31	0.999	93.60
PMW92-06	0.69	-35	6.31	22.84	0.9	94.92
PMW85-01	0.67	-3	6.24	23.17	0.999	96.90
PMW85-04	0.36	-110	6.58	24.65	1.08	97.30
PMW85-05	3.79	177	6.09	23.87	0.999	96.38
MW-85	5.96	155	6.17	25.71	0.697	98.15
DR2-1	5.39	38	6.26	23.30	0.999	88.06
DR2-5	7.62	124	6.36	24.55	0.659	95.91
IW-01	0.30	40	5.87	22.26	0.999	94.85

*pH Meter was not functioning properly

START: 29-May-07

END: 7-Jun-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperat ure (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.34	-130.2	6.01	20.89	3.944	89.08
IW101-01B	4.64	-148	6.11	21.40	0.591	89.04
IW101-01C	4.05	-103	5.85	22.26	0.859	89.05
IW101-02A	3.47	-92	5.93	23.45	0.522	89.28
IW101-02B	2.69	-48	5.91	21.25	0.493	89.36
IW101-02C	0.7	-105.9	6.06	20.21	0.714	89.88
IW101-03A	1.09	-167.7	5.98	21.75	0.978	90.18
IW101-03B	1.04	31.8	5.96	22.61	0.355	90.10
IW101-03C	1.05	-107.7	5.92	22.04	0.597	90.15
IW101-04A	0.45	-116.5	6.12	22.95	5.048	90.01
IW101-04B	1.18	-107.4	6.61	22.50	0.709	89.93
IW101-04C	0.82	-118.5	6.71	22.94	0.638	89.89
IW101-05A	4	-221.9	6.12	22.87	1.022	90.01
IW101-05B	0.89	-38.3	6.11	22.23	0.385	89.77
IW101-05C	0.6	-195.6	6.22	21.14	0.704	89.76
IW101-06A	6.39	-123.8	6.3	22.91	0.729	90.40
IW101-06B	0.78	-82.6	5.72	21.44	0.59	90.60
IW101-06C	0.53	-107.4	5.75	22.20	0.583	90.58
IW101-07A	0	-33	7.77	21.40	0.371	90.93
IW101-07B	1.44	-40	7.65	21.35	0.225	90.88
IW101-07C	7.35	-40	7.7	22.68	0.337	90.90
IW101-08A	0.81	-1	7.68	24.15	0.368	90.31
IW101-08B	0	-36	7.52	21.18	0.369	90.58
IW101-08C	0	-61	8.26	22.04	1.24	91.08
IW101-09A	13.49	-112	6.47	21.96	0.737	90.90
IW101-09B	2.45	-62	6.16	21.64	1.96	90.85
IW101-09C	5.76	7	5.87	22.18	0.681	90.86
PMW101-01A	0	0.102	9.03	20.94	4.96	89.34
PMW101-01B	0	-85	8.83	20.32	0.843	89.34
PMW101-02A	0.6	-124	8.86	24.26	0.571	89.89
PMW101-02B	0.29	-92	8.75	22.13	0.983	90.15
PMW101-03A	7.82	164	5.43	19.44	0.201	90.30
PMW101-03B	0.94	26	7.09	20.31	0.255	90.18
PMW101-04A	0.63	-7	7.25	19.90	0.405	89.57
PMW101-04B	0	-68	8.42	19.98	0.383	90.11
PMW101-05A	0	-109	6.48	19.29	1.7	98.90
PMW101-05B	4.01	-3	6.12	19.40	1.85	90.22
PMW101-06A	0.09	-30	6.23	21.79	33.1	90.48
PMW101-06B	0	-123	6.57	20.96	2.89	90.54
PMW101-07A	0	-107	8.44	23.07	0.386	90.49
PMW101-07B	7.95	155	5.33	21.99	0.13	90.64
PMW101-08A	3.18	0	7.6	21.93	0.373	91.27
PMW101-08B	8.53	158	5.71	22.55	0.102	91.15
MW101B	2.96	78.2	6.09	20.54	0.376	89.62
MW101T	3.75	70	6.1	23.73	0.375	89.60
DR1-3	0.75	-53	8.33	21.03	0.518	90.75

Rnd 20 Pre-injection Measurements

START: 29-May-07

END: 7-Jun-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperat ure (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.18	-170	6.35	21.21	9.691	91.47
IW21-01B	0.46	-132	6.13	21.91	1.645	91.46
IW21-02A	0.88	-22.4	5.74	19.28	0.289	91.56
IW21-02B	0.91	-77.7	5.95	19.90	0.26	91.80
IW21-03A	0.61	2.6	6.16	20.56	0.303	90.50
IW21-03B	0.65	-163.4	6.06	22.21	1.154	90.10
IW21-04A	0.61	-157.8	6.18	20.61	0.643	90.20
IW21-04B	2.33	-78	6.12	20.50	0.841	90.34
IW21-05A	0.7	-143.4	5.68	22.22	9.521	90.00
IW21-05B	0.52	-100	5.78	21.27	1.108	89.85
PMW21-01	5.01	138.7	5.12	18.89	0.259	91.42
PMW21-02	6.52	89.9	6.02	20.63	0.225	90.42
PMW21-03	7.51	97.7	5.94	22.14	0.214	89.74
PMW21-04	2.87	104.4	6.05	22.70	0.281	89.59
PMW21-05	7.46	104.7	5.93	20.18	0.251	87.92
MW-115	0.75	59.4	6.02	20.40	0.227	89.46
MW-21	5.68	126.6	5.88	19.82	0.214	91.55
TTA-2						
IW85-01	0.93	-152.9	5.78	25.63	1.296	93.89
IW85-02	1.28	-52.6	6.06	24.60	3.821	95.21
IW85-05	1.91	-36.2	6.32	23.80	0.456	95.99
IW85-06	0.6	-90.7	6.23	26.65	1.129	96.26
IW92-01	1.35	-139.6	6.12	24.75	0.589	87.55
IW92-02	0.23	-74.8	6	24.42	1.05	87.82
IW92-03	1.68	-75	5.81	24.97	0.942	91.71
IW92-04	0.78	-92.2	6.2	24.71	4.196	92.40
IW92-05	0.1	-131	6.46	24.52	13.4	91.76
IW92-06	0.29	-79.6	6.32	23.84	9.307	91.97
IW92-07	0.82	-108.9	6.05	23.10	4.32	93.33
IW92-08	2.04	-77.3	6.18	26.40	0.701	93.92
PMW85-01	0.98	-25.7	5.81	23.52	0.222	96.89
PMW85-04	0.93	-114.4	6.36	26.15	0.429	97.73
PMW85-05	4.02	167.6	5.61	24.40	0.184	96.32
PMW92-01	4.74	156.7	5.86	21.94	0.227	95.12
PMW92-02	0.36	-125	6.52	23.99	2.586	93.84
PMW92-03	0.58	-124	6.44	23.46	0.627	93.48
PMW92-04	0.15	-134.9	6.44	23.22	0.545	94.46
PMW92-05	3.77	172.3	5.71	23.10	0.215	T.O.P.
PMW92-06	1.07	-42.7	5.73	24.33	0.212	94.92
DR2-1	19.99*	50	6.2	24.20	0.292	88.43
DR2-5	19.99*	146	6.1	26.70	0.201	96.02
IW-01	1.33	83.9	5.29	22.16	0.278	95.12
MW-85	19.99*	163	6	30.60	0.238	98.18

1) T.O.P. water level meter resting on top of pump

2) *= malfunctioning dissolved oxygen probe

Rnd 21 Pre-injection Measurements

START: 18-Jun-07

END: 27-Jun-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-45	7.13	18.88	4.79	89.19
IW101-01B	0.00	-126	7.42	18.84	0.691	89.06
IW101-01C	0.00	-30	6.69	18.84	0.9	89.08
IW101-02A	0.00	-122	5.86	18.38	1.73	89.31
IW101-02B	0.00	-107	5.95	18.56	0.685	89.39
IW101-02C	0.00	-80	5.72	18.64	0.614	89.80
IW101-03A	0.00	30	4.80	18.68	0.297	90.18
IW101-03B	0.21	-129	5.87	18.75	1.04	90.10
IW101-03C	0.00	-63	5.70	18.94	1.01	90.18
IW101-04A	0.00	-87	5.69	18.43	4.4	90.12
IW101-04B	0.00	-162	6.22	18.54	0.93	90.02
IW101-04C	0.00	-107	6.20	18.69	0.715	89.97
IW101-05A	0.16	-118	5.83	18.57	2.09	89.87
IW101-05B	0.00	-91	7.20	19.02	0.353	89.70
IW101-05C	0.00	-53	6.87	18.92	0.636	89.65
IW101-06A	0.00	-122	6.00	18.76	1.32	90.49
IW101-06B	0.00	-85	5.73	18.79	0.721	90.41
IW101-06C	0.00	-65	5.78	19.02	0.514	90.40
IW101-07A	0.00	-115	5.88	18.77	0.906	91.08
IW101-07B	0.00	-91	5.90	18.86	0.875	91.09
IW101-07C	0.00	-49	5.69	18.98	0.954	91.01
IW101-08A	0.00	-134	5.96	18.82	1.25	90.52
IW101-08B	0.00	-97	5.81	18.89	0.62	90.62
IW101-08C	0.00	-73	5.78	19.08	0.654	91.11
IW101-09A	0.00	-51	6.24	18.87	1.17	90.90
IW101-09B	0.00	-95	5.87	19.00	1.17	90.81
IW101-09C	0.00	-16	5.66	19.05	1.05	90.80
PMW101-01A	0.00	-122	8.32	20.72	9.39	89.46
PMW101-01B	0.00	-69	7.88	20.71	8.49	89.49
PMW101-02A	0.00	-128	8.13	20.88	8.15	90.10
PMW101-02B	0.00	-89	7.85	21.22	6.02	90.32
PMW101-03A	6.47	124	6.68	20.03	0.283	94.42
PMW101-03B	0.00	-15	7.34	20.11	26.9	90.42
PMW101-04A	0.37	-39	7.32	20.66	49.7	89.75
PMW101-04B	0.00	-64	7.66	20.24	39.2	90.30
PMW101-05A	0.00	-106	7.66	20.99	44.8	90.00
PMW101-05B	5.85	39	6.48	20.41	0.999	90.34
PMW101-06A	0.58	-2	6.74	23.55	83.6	90.59
PMW101-06B	0.00	-108	7.82	22.23	26.2	90.65
PMW101-07A	0.46	-84	7.49	24.10	55.5	90.58
PMW101-07B	8.68	137	5.86	22.71	0.169	90.78
PMW101-08A	2.43	99	5.96	24.79	3.8	91.28
PMW101-08B	10.14	157	5.63	23.67	0.185	91.27
MW-101T	0.00	-29	6.02	18.95	0.451	89.52
MW-101B	0.00	12	5.60	18.44	0.443	89.52
DR1-3	0.40	-69	7.31	22.66	54.4	90.90

Rnd 21 Pre-injection Measurements

START: 18-Jun-07

END: 27-Jun-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	1.04	-81	5.70	18.44	6.11	91.56
IW21-01B	4.70	-115	6.03	18.39	3.41	91.63
IW21-02A	0.24	-28	5.62	18.17	0.584	91.71
IW21-02B	0.12	-26	5.53	18.26	0.503	91.82
IW21-03A	0.00	-25	5.67	17.98	0.497	90.43
IW21-03B	1.15	-69	5.64	18.29	2.26	90.16
IW21-04A	0.03	-83	5.79	18.27	1.33	90.41
IW21-04B	0.10	-71	6.19	18.43	0.625	90.46
IW21-05A	3.80	-86	5.59	18.47	8.43	89.92
IW21-05B	1.21	-76	5.72	18.60	1.89	89.87
PMW21-01	4.48	141	7.95	19.89	23.4	91.51
PMW21-02	6.37	168	7.68	19.75	0.479	90.62
PMW21-03	7.79	176	7.67	20.65	0.299	89.94
PMW21-04	0.66	154	7.61	20.00	99.9	89.84
PMW21-05	10.20	184	7.53	20.16	0.338	88.02
MW-21	4.90	167	7.71	20.27	0.28	91.80
MW-115	0.00	58	7.82	19.55	62.3	89.53
TTA-2						
IW92-01	0.26	-121	6.12	20.08	9.84	87.42
IW92-02	4.28	-107	5.73	20.16	5.36	88.90
IW92-03	2.68	-79	5.65	20.13	0.968	91.96
IW92-04	3.53	-119	5.97	20.21	6.59	92.22
IW92-05	2.84	-178	6.23	20.56	14.9	91.92
IW92-06	2.09	-156	6.14	20.51	14.3	92.15
IW92-07	0.63	-133	5.95	20.53	13.4	93.49
IW92-08	1.03	-115	6.13	20.85	5.78	94.06
IW85-01	3.76	-108	5.75	20.61	2.75	94.42
IW85-02	2.99	-131	6.06	20.66	3.68	95.48
IW85-05	1.77	-86	5.91	20.67	0.794	96.08
IW85-06	7.92	-115	6.10	20.70	3.59	96.57
PMW92-01	4.39	147	7.36	22.16	0.999	94.00
PMW92-02	0.00	-130	8.37	23.06	2.46	93.78
PMW92-03	0.00	-110	8.33	23.29	2.24	93.39
PMW92-04	0.00	-88	8.18	23.07	2.49	93.36
PMW92-05	3.92	117	7.35	24.05	0.242	93.67
PMW92-06	4.97	78	7.31	24.52	0.361	94.94
PMW85-01	0.96	-27	5.88	23.22	99.9	96.98
PMW85-04	0.11	-94	6.18	25.44	96.2	97.46
PMW85-05	7.30	157	5.64	23.41	0.254	96.41
MW-85	7.23	145	4.96	22.48	1.06	98.22
DR2-1	4.52	18	7.77	22.33	0.999	88.15
DR2-5	9.58	152	4.98	23.12	1.3	95.99
IW-01	0.00	103	7.14	23.02	2.4	94.86

Rnd 22 Pre-injection Measurements

START: 2-Jul-07

END: 5-Jul-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-129	6.02	18.46	4.44	89.30
IW101-01B	0.00	-169	6.14	18.43	0.666	89.21
IW101-01C	0.00	-34	5.89	18.40	0.523	89.24
IW101-02A	0.00	-170	6.67	18.49	0.3	89.48
IW101-02B	0.93	-118	6.18	18.57	0.534	89.59
IW101-02C	1.70	-134	6.06	18.66	0.73	89.99
IW101-03A	2.92	-133	5.94	18.73	0.9	90.31
IW101-03B	1.40	-92	6.04	18.75	0.712	90.26
IW101-03C	0.00	-58	5.91	18.78	0.461	90.31
IW101-04A	7.90	-299	5.96	18.45	2.23	90.15
IW101-04B	0.80	-287	6.45	18.52	0.935	90.06
IW101-04C	0.00	-270	6.67	18.58	0.685	90.02
IW101-05A	0.00	-153	5.99	18.59	1.41	90.05
IW101-05B	0.00	-99	6.09	18.62	0.597	89.89
IW101-05C	0.00	-150	6.23	18.65	0.732	89.81
IW101-06A	0.99	-311	6.23	18.92	0.9	90.49
IW101-06B	0.75	-262	6.07	18.89	0.388	90.53
IW101-06C	0.17	-263	6.06	18.94	0.446	90.46
IW101-07A	0.19	-145	6.12	18.88	0.672	91.16
IW101-07B	0.00	-108	6.02	18.86	0.501	91.11
IW101-07C	0.00	-63	5.93	18.96	0.456	91.05
IW101-08A	1.84	-327	6.28	18.94	0.833	90.55
IW101-08B	0.00	-187	5.97	19.02	0.442	90.67
IW101-08C	0.00	-114	6.03	19.02	0.348	91.13
IW101-09A	0.46	-305	6.63	18.92	1	90.93
IW101-09B	1.50	-248	6.15	19.00	0.925	89.82
IW101-09C	0.77	-237	6.03	19.03	0.816	89.86
PMW101-01A	2.10	-137	7.92	22.29	8.6	89.49
PMW101-01B	0.46	-101	7.43	22.73	30.9	89.53
PMW101-02A	0.00	-146	7.88	20.78	33.1	90.17
PMW101-02B	0.00	-122	7.54	21.01	45.5	90.40
PMW101-03A	2.62	120	6.47	21.63	99.9	90.50
PMW101-03B	0.00	-47	7.27	20.38	99.9	90.50
PMW101-04A	0.21	-71	7.29	20.88	99.9	89.82
PMW101-04B	0.00	-77	7.26	7.26	20.66	99.90
PMW101-05A	1.01	-118	7.54	21.15	29.2	90.10
PMW101-05B	5.16	2	7.11	20.75	5.82	90.43
PMW101-06A	0.70	65	6.74	22.90	99.9	90.70
PMW101-06B	0.00	-132	7.71	20.56	22.2	90.77
PMW101-07A	0.61	-92	7.32	22.60	48	90.72
PMW101-07B	7.39	103	6.27	21.87	0.444	90.80
PMW101-08A	1.30	8	6.92	23.34	13.5	91.44
PMW101-08B	9.14	132	6.25	23.00	0.533	91.42
MW-101T	1.39	-19	6.16	19.11	0.499	89.74
MW-101B	1.10	9	5.90	18.47	0.484	89.74
DR1-3	0.72	-89	7.44	21.14	55.1	91.07

Rnd 22 Pre-injection Measurements

START: 2-Jul-07			END: 5-Jul-07			
Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	1.00	-155	5.98	18.18	1.37	91.45
IW21-01B	0.64	-153	6.10	18.31	1.62	91.55
IW21-02A	0.25	20	5.76	18.01	0.376	91.76
IW21-02B	0.13	-33	5.67	18.13	0.315	91.77
IW21-03A	0.00	26	5.69	17.97	0.396	90.38
IW21-03B	0.92	-154	5.91	18.34	1.04	90.15
IW21-04A	0.90	-107	5.77	18.34	0.639	90.30
IW21-04B	2.66	-158	5.96	18.39	0.876	90.47
IW21-05A	0.30	-135	5.64	18.57	0.725	89.82
IW21-05B	0.28	-63	5.86	18.43	0.791	89.82
PMW21-01	1.46	161	6.67	19.37	99.9	91.61
PMW21-02	4.82	152	6.64	20.03	28.5	90.69
PMW21-03	6.55	157	6.65	21.35	20	90.03
PMW21-04	1.19	145	6.83	21.06	99.9	89.91
PMW21-05	8.25	156	6.76	21.86	5.53	88.13
MW-21	1.90	172	6.69	19.41	99.9	91.89
MW-115	0.19	31	7.20	20.34	99.9	89.58
TTA-2						
IW92-01	0.13	-208	6.15	20.83	5.37	87.03
IW92-02	0.10	-166	5.95	21.17	3.73	88.80
IW92-03	5.98	-137	5.84	20.47	6.79	91.80
IW92-04	OR	-156	6.15	20.29	9.8	92.13
IW92-05	0.00	-152	6.28	21.00	14.9	91.88
IW92-06	OR	-136	6.28	20.58	14.6	92.10
IW92-07	OR	-102	5.98	20.70	13.9	93.31
IW92-08	1.53	-81	5.95	21.62	4.7	94.00
IW85-01	0.00	-103	5.95	21.06	11	94.32
IW85-02	0.82	-91	5.98	20.84	2.44	95.25
IW85-05	0.44	-59	5.63	20.76	0.388	95.95
IW85-06	0.78	-138	6.29	20.81	0.899	96.43
PMW92-01	2.38	143	6.77	27.23	99.9	94.05
PMW92-02	0.59	-144	8.03	25.08	34.8	93.70
PMW92-03	0.95	-95	7.70	23.96	57.9	93.35
PMW92-04	0.50	-97	7.65	23.98	45.5	94.32
PMW92-05	2.07	182	6.83	25.10	99.9	93.50
PMW92-06	0.58	7	7.30	24.21	99.9	94.99
PMW85-01	1.40	29	7.20	23.78	99.9	96.95
PMW85-04	1.94	-117	6.42	25.40	0.758	97.33
PMW85-05	4.94	151	5.69	25.73	0.242	96.32
MW-85	3.63	122	5.93	23.58	0.303	98.12
DR2-1	0.46	56	7.01	24.74	99.9	88.10
DR2-5	10.34	151	6.93	25.39	1.41	95.97
IW-01	3.06	95	6.89	23.77	60.2	94.85

Rnd 23 Pre-Injection Measurements

START: 16-Jul-07

END: 18-Jul-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-134	5.91	18.48	5.77	89.41
IW101-01B	0.00	-188	6.16	18.48	0.742	89.31
IW101-01C	0.00	-101	6.10	18.45	0.999	89.35
IW101-02A	0.00	-70	6.12	18.47	0.91	89.59
IW101-02B	5.90	1	6.69	18.60	0.309	89.68
IW101-02C	0.00	-143	6.09	18.69	0.999	90.11
IW101-03A	0.00	-151	5.98	18.72	1.13	90.44
IW101-03B	0.00	-54	6.04	18.79	0.999	90.37
IW101-03C	0.00	-86	5.97	18.78	0.999	90.39
IW101-04A	1.44	-294	5.93	18.47	2.74	90.24
IW101-04B	0.00	-272	6.44	18.61	1.02	90.20
IW101-04C	1.16	-274	6.71	18.62	0.819	90.17
IW101-05A	0.00	-158	6.00	18.61	1.56	91.17
IW101-05B	0.00	-105	6.08	18.61	0.16	89.96
IW101-05C	0.00	-182	6.26	18.58	0.778	89.90
IW101-06A	0.46	-296	6.18	18.91	1.14	90.58
IW101-06B	0.83	-248	6.07	18.93	0.501	90.62
IW101-06C	0.85	-249	6.01	19.02	0.573	90.60
IW101-07A	0.00	-166	6.12	18.91	0.999	91.24
IW101-07B	0.00	-154	6.23	18.90	0.999	91.25
IW101-07C	0.00	-91	5.99	19.00	0.999	91.20
IW101-08A	1.48	-342	6.25	18.88	0.908	90.64
IW101-08B	0.00	-185	6.04	19.03	0.633	90.81
IW101-08C	0.98	-106	5.99	19.05	0.48	91.28
IW101-09A	1.12	-306	6.52	18.95	1.24	91.08
IW101-09B	0.00	-261	6.09	19.06	1.1	90.96
IW101-09C	0.00	-250	5.99	19.04	1.07	90.97
PMW101-01A	0.18	-109.2	6.29	20.71	6.042	89.25
PMW101-01B	0.21	-164.9	6.18	21.01	0.837	89.37
PMW101-02A	0.58	-55	5.85	21.26	0.859	89.97
PMW101-02B	0.72	-118.8	6.00	21.27	0.562	90.19
PMW101-03A	3.36	88.8	5.73	20.39	0.309	90.30
PMW101-03B	0.53	-115.8	6.20	20.33	0.491	90.30
PMW101-04A	0.78	-76.8	6.50	20.76	0.681	89.65
PMW101-04B	0.72	-72.5	6.36	20.59	0.529	90.20
PMW101-05A	0.40	-83.2	6.44	21.06	0.544	89.96
PMW101-05B	3.86	13	6.11	21.36	0.33	91.26
PMW101-06A	1.12	29.9	6.11	23.32	0.33	90.52
PMW101-06B	0.19	-106.2	6.47	22.27	0.519	90.56
PMW101-07A	1.36	-70.5	6.35	23.90	0.465	90.50
PMW101-07B	4.09	172.2	5.77	21.80	0.17	90.70
PMW101-08A	8.21	2.2	6.64	26.49	0.487	91.23
PMW101-08B	6.28	163.7	5.81	23.29	0.119	91.20
MW-101T	0.00	-24	6.19	18.99	0.999	89.82
MW-101B	0.00	-5	6.15	18.50	0.999	89.82
DR1-3	0.89	-71	6.50	22.31	0.525	90.85

Rnd 23 Pre-Injection Measurements

START: 16-Jul-07

END: 18-Jul-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/m)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-135	5.99	18.32	2.22	91.62
IW21-01B	1.00	-103	6.00	18.52	2.71	91.75
IW21-02A	0.74	40	5.96	17.95	0.496	91.85
IW21-02B	0.89	-57	5.90	18.13	0.427	91.95
IW21-03A	0.83	0	5.98	17.96	0.486	90.57
IW21-03B	0.00	-125	5.96	18.40	1.43	90.30
IW21-04A	0.75	-94	5.99	18.23	0.728	90.58
IW21-04B	0.50	-179	6.08	18.40	1.12	90.58
IW21-05A	0.70	-150	5.93	18.55	3.6	90.05
IW21-05B	0.40	-114	6.03	18.53	1.14	90.00
PMW21-01	3.71	183.5	5.51	20.19	0.218	91.71
PMW21-02	4.85	171.8	5.71	20.00	0.23	90.53
PMW21-03	5.57	156.4	5.80	21.31	0.217	89.90
PMW21-04	1.93	144	5.77	21.18	0.278	89.77
PMW21-05	7.11	134.5	5.78	21.14	0.24	87.97
MW-21	3.71	183.5	5.51	20.19	0.218	91.71
MW-115	0.46	13	5.74	20.46	0.233	89.46
TTA-2						
IW92-01	1.08	-162	6.15	21.08	7.01	87.14
IW92-02	5.16	-164	6.04	20.25	6.37	88.90
IW92-03	0.00	-81	5.84	20.81	2.94	91.88
IW92-04	0.33	-134	6.17	20.39	9.03	92.22
IW92-05	9.55	-146	6.26	20.60	16	92.00
IW92-06	4.42	-149	6.18	20.77	15.2	92.20
IW92-07	9.55	-105	5.95	20.62	11	93.55
IW92-08	0.00	-56	5.93	21.27	3.85	94.05
IW85-01	0.00	-64	5.86	20.64	1.01	95.40
IW85-02	0.00	-80	5.95	21.35	3.32	94.40
IW85-05	0.60	-94	5.93	20.62	0.636	96.12
IW85-06	0.00	-143	6.23	20.86	1.88	96.55
PMW92-01	3.21	114.3	5.85	26.14	0.221	88.82
PMW92-02	0.11	-120.5	6.39	23.73	2.58	93.50
PMW92-03	0.58	-73.3	6.37	23.68	0.505	93.17
PMW92-04	0.18	-91.2	6.36	23.78	0.488	94.13
PMW92-05	3.54	163.6	5.57	23.66	0.199	93.27
PMW92-06	0.96	-13.3	5.81	23.97	0.208	97.55
PMW85-01	2.45	-32	5.89	22.92	0.598	97.04
PMW85-04	0.00	-135	6.48	24.62	1.06	97.50
PMW85-05	5.61	163	5.73	23.95	0.385	96.49
MW-85	2.84	97.3	5.97	24.48	0.236	98.12
DR2-1	0.53	64.9	5.78	23.88	0.239	87.88
DR2-5	12.07	150	6.07	22.88	0.283	96.05
IW-01	0.82	165.1	3.94	22.84	0.239	94.74

Rnd 24 Pre-injection Measurements

START: 30-Jul-07

END: 1-Aug-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	13.11	-133	5.95	18.33	5.49	89.50
IW101-01B	2.00	-191	6.16	18.37	0.677	89.33
IW101-01C	1.58	-113	6.10	18.44	0.672	89.36
IW101-02A	1.94	-153	6.19	18.38	0.971	89.63
IW101-02B	1.44	-148	6.24	18.56	0.551	89.73
IW101-02C	1.42	-139	6.13	18.60	0.785	90.15
IW101-03A	1.35	-137	6.04	18.77	0.94	90.46
IW101-03B	1.36	-82	6.05	18.63	0.999	90.40
IW101-03C	0.99	-82	6.05	18.78	0.627	90.45
IW101-04A	6.10	-145	5.97	18.47	2.64	90.34
IW101-04B	1.10	-174	6.50	18.44	0.991	90.31
IW101-04C	0.18	-165	6.75	18.51	0.798	90.27
IW101-05A	1.37	-141	6.11	18.52	1.06	90.20
IW101-05B	1.34	-126	6.18	18.65	0.558	90.00
IW101-05C	1.87	-135	6.23	18.69	0.739	89.94
IW101-06A	0.79	-167	6.27	18.88	0.9	90.65
IW101-06B	1.01	-41	6.10	18.92	0.4	90.70
IW101-06C	0.78	-97	6.06	18.97	0.471	90.70
IW101-07A	1.37	-149	6.15	18.92	0.691	91.30
IW101-07B	0.80	-133	6.28	18.93	0.583	91.31
IW101-07C	0.59	-92	6.17	18.97	0.542	91.28
IW101-08A	1.19	-199	6.39	18.94	0.936	90.75
IW101-08B	0.50	-176	6.38	18.99	0.516	90.81
IW101-08C	0.56	-97	6.23	19.06	0.929	91.30
IW101-09A	0.73	-318	6.58	18.91	1.04	91.16
IW101-09B	1.14	-261	6.20	19.04	1.1	91.03
IW101-09C	0.84	-247	6.15	19.10	1.02	91.03
PMW101-01A	14.48	-126	6.35	22.91	7.29	89.64
PMW101-01B	2.05	-132	6.46	22.21	1.2	89.61
PMW101-02A	1.10	-171	6.77	24.58	1.06	90.25
PMW101-02B	1.54	-140	6.57	24.46	0.852	90.46
PMW101-03A	2.86	54	6.04	23.49	0.517	90.55
PMW101-03B	1.37	-99	6.36	20.57	0.84	90.55
PMW101-04A	0.24	-143	6.66	22.41	0.91	89.85
PMW101-04B	0.67	-116	6.46	22.12	0.768	90.40
PMW101-05A	0.41	-139	6.45	20.19	0.768	89.95
PMW101-05B	3.80	-19	6.18	20.25	0.4	90.28
PMW101-06A	1.55	18	6.11	21.87	0.585	90.52
PMW101-06B	0.55	-154	6.52	20.82	0.815	90.58
PMW101-07A	1.55	-98	6.33	22.87	0.718	90.58
PMW101-07B	1.88	132	5.95	21.46	0.347	90.75
PMW101-08A	8.23	50	6.54	26.74	48.7	91.58
PMW101-08B	5.96	181	5.77	23.37	0.123	91.51
MW-101T	0.00	-3	6.19	19.46	0.515	89.87
MW-101B	0.00	11	6.08	18.52	0.49	89.87
DR1-3	0.79	-114	6.55	21.15	0.755	91.13

Rnd 24 Pre-injection Measurements

START: 30-Jul-07

END: 1-Aug-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-90	6.10	18.28	1.36	91.40
IW21-01B	0.00	-106	6.11	18.39	1.54	91.49
IW21-02A	0.00	29	6.09	18.17	0.77	91.58
IW21-02B	0.12	-51	5.96	18.10	0.426	91.70
IW21-03A	1.01	-4	6.00	17.94	0.463	90.30
IW21-03B	1.15	-94	6.00	18.26	1.06	90.05
IW21-04A	0.26	-50	6.01	18.17	0.626	90.25
IW21-04B	1.13	40	6.66	18.34	0.646	90.55
IW21-05A	10.57	-105	5.89	18.44	4.98	89.76
IW21-05B	1.60	-57	6.05	18.28	0.812	89.76
PMW21-01	3.79	197	5.87	21.32	0.4	91.67
PMW21-02	4.62	231	5.86	21.00	0.264	90.75
PMW21-03	5.48	237	5.84	22.86	0.247	90.10
PMW21-04	1.78	219	5.95	22.10	0.321	89.95
PMW21-05	6.87	208	5.79	21.24	0.28	88.23
MW-21	3.37	215	5.72	22.96	0.25	91.95
MW-115	0.85	-16	6.01	21.42	0.347	89.40
TTA-2						
IW92-01	3.06	-121	6.12	20.57	5.15	87.05
IW92-02	0.00	-104	6.03	20.90	2.52	88.80
IW92-03	0.00	-79	6.00	20.28	12.5	91.86
IW92-04	10.92	-143	6.21	20.42	8.53	91.98
IW92-05	5.49	-141	6.32	20.53	16	91.95
IW92-06	4.87	-128	6.37	20.64	15.7	91.95
IW92-07	4.26	-105	6.17	20.53	12.8	93.27
IW92-08	2.66	-71	6.11	20.91	4.95	94.00
IW85-01	2.59	-59	5.90	20.57	0.9	94.27
IW85-02	2.28	-102	6.12	20.68	2.81	95.50
IW85-05	2.61	-59	5.99	20.70	0.631	95.85
IW85-06	2.54	-110	6.31	20.75	1.55	96.60
PMW92-01	3.25	199	5.65	23.22	0.251	94.08
PMW92-02	0.00	-145	6.35	24.59	3.1	93.85
PMW92-03	0.12	-92	6.35	24.18	0.689	93.37
PMW92-04	0.00	-92	6.26	24.60	0.285	94.39
PMW92-05	3.02	147	5.59	25.46	0.237	93.27
PMW92-06	0.40	4	5.68	26.47	0.244	95.03
PMW85-01	2.02	21	5.94	25.17	0.366	96.90
PMW85-04	0.00	-144	6.50	26.88	0.768	97.48
PMW85-05	3.53	164	5.48	25.38	0.201	96.45
MW-85	3.00	27	5.94	26.99	0.307	98.26
DR2-1	0.17	132	5.55	22.91	0.276	88.10
DR2-5	3.88	115	5.78	25.21	0.283	95.75
IW-01	0.20	128	5.11	24.85	0.265	94.95

Rnd 25 Pre-injection Measurements

START: 13-Aug-07

END: 15-Aug-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	6.78	-117	5.93	18.46	6.94	89.31
IW101-01B	3.32	-209	6.29	18.50	0.792	89.16
IW101-01C	2.99	-106	6.08	18.45	0.853	89.21
IW101-02A	3.30	-139	5.86	18.51	3.01	89.45
IW101-02B	3.29	-69	6.33	18.57	0.187	89.53
IW101-02C	2.04	-141	6.04	18.75	0.999	89.97
IW101-03A	2.33	-144	6.02	18.80	1.19	90.27
IW101-03B	2.12	-92	6.05	18.80	0.999	90.20
IW101-03C	1.23	-86	6.00	18.85	0.999	90.23
IW101-04A	5.61	-205	5.94	18.53	3.23	90.07
IW101-04B	1.33	-224	6.44	18.59	1.17	90.04
IW101-04C	0.83	-191	6.65	18.71	0.864	89.98
IW101-05A	2.74	-164	6.09	18.68	1.26	90.01
IW101-05B	2.73	-186	6.24	18.74	0.715	89.81
IW101-05C	2.13	-115	6.17	18.67	0.999	89.76
IW101-06A	1.24	-222	6.20	18.95	1.07	90.39
IW101-06B	1.48	-135	6.01	18.99	0.453	90.42
IW101-06C	1.19	-153	5.99	19.09	0.532	90.39
IW101-07A	1.94	-148	6.09	18.83	0.916	91.06
IW101-07B	1.32	-133	6.15	18.93	0.766	91.18
IW101-07C	1.08	-71	5.97	19.03	0.572	91.02
IW101-08A	0.00	-232	6.16	19.04	1.01	90.52
IW101-08B	0.31	-220	6.11	19.03	0.576	90.62
IW101-08C	0.21	-162	6.07	19.11	0.629	91.11
IW101-09A	1.63	-269	6.45	18.96	1.06	90.90
IW101-09B	1.83	-212	6.08	19.04	1.37	90.79
IW101-09C	1.65	-187	5.99	19.11	1.25	90.78
PMW101-01A	0.00	-136	6.22	21.85	6.85	89.70
PMW101-01B	0.00	-143	6.47	23.77	1.3	89.70
PMW101-02A	0.00	-119	6.58	22.82	1.01	90.40
PMW101-02B	0.00	-119	6.24	22.89	0.602	90.50
PMW101-03A	1.58	204	5.79	21.26	0.39	90.68
PMW101-03B	0.00	-78	6.18	20.88	0.637	90.68
PMW101-04A	0.00	-112	6.56	21.19	0.8	89.98
PMW101-04B	0.00	-74	6.31	21.51	0.555	90.50
PMW101-05A	0.00	-109	6.45	21.67	0.588	90.25
PMW101-05B	2.72	41	6.00	20.56	0.258	90.50
PMW101-06A	0.65	32	5.96	25.54	0.337	90.83
PMW101-06B	0.00	-132	6.50	22.94	0.621	90.90
PMW101-07A	0.33	-73	6.14	27.74	0.501	90.82
PMW101-07B	0.27	127	5.58	24.66	0.182	90.98
PMW101-08A	1.59	30	6.19	31.90	0.537	91.50
PMW101-08B	3.60	169	5.65	26.82	0.117	91.50
MW-101T	2.27	-14	6.09	18.95	0.735	89.69
MW-101B	2.23	-4	6.06	18.44	0.734	89.69
DR1-3	0.00	-96	6.29	25.11	0.549	91.28

Rnd 25 Pre-injection Measurements

START: 13-Aug-07

END: 15-Aug-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	1.34	-187	6.07	18.01	1.41	91.40
IW21-01B	1.83	-171	6.04	18.25	2.27	91.49
IW21-02A	0.33	-33	5.97	17.96	0.509	91.62
IW21-02B	0.19	-66	5.89	18.11	0.362	91.72
IW21-03A	0.09	-23	5.98	17.98	0.665	90.33
IW21-03B	1.23	-172	6.01	18.26	1.13	90.05
IW21-04A	0.77	-164	6.05	18.24	0.86	90.22
IW21-04B	2.15	-199	6.09	18.44	1.69	90.39
IW21-05A	2.03	-179	6.05	18.51	2.38	89.69
IW21-05B	0.48	-156	6.03	18.30	0.999	89.70
PMW21-01	1.26	144	5.70	21.34	0.289	91.70
PMW21-02	3.51	171	5.70	21.50	0.248	90.79
PMW21-03	4.75	1.78	5.70	24.96	0.238	90.21
PMW21-04	0.37	174	5.75	22.33	0.308	90.00
PMW21-05	6.07	173	5.71	23.49	0.269	88.00
MW-21	2.61	137	5.55	22.26	0.237	92.00
MW-115	0.00	126	5.71	22.69	0.237	89.68
TTA-2						
IW92-01	0.00	-217	6.17	20.92	10.90	87.20
IW92-02	13.65	-184	6.09	20.44	3.71	88.55
IW92-03	6.11	-192	6.06	20.12	11.6	91.67
IW92-04	0.00	-208	6.19	20.67	12.8	91.91
IW92-05	0.00	-133	6.10	20.54	15.6	91.70
IW92-06	0.00	-107	6.15	20.48	14.6	91.91
IW92-07	0.00	-103	6.02	20.56	9.1	94.32
IW92-08	0.00	-89	5.97	21.08	9.43	93.74
IW85-01	0.00	-96	5.72	20.60	588	94.07
IW85-02	0.00	-131	6.02	20.64	2	95.23
IW85-05	0.00	-92	5.88	20.61	0.638	95.78
IW85-06	0.00	-150	6.27	20.63	1.15	96.20
PMW92-01	1.40	154	5.72	25.63	0.238	94.10
PMW92-02	0.00	-151	6.30	25.27	3	93.90
PMW92-03	0.00	-73	6.27	23.08	0.531	93.35
PMW92-04	0.00	-86	6.20	24.15	0.544	94.45
PMW92-05	1.03	127	5.54	24.94	0.209	93.25
PMW92-06	0.00	-17	5.72	25.41	0.225	95.08
PMW85-01	0.00	26	5.72	25.76	0.205	97.05
PMW85-04	0.00	-118	6.32	27.43	27.43	
PMW85-05	1.75	136	5.43	24.97	0.175	96.50
MW-85	1.31	-9	5.93	30.28	0.292	98.30
DR2-1	0.00	88	5.67	24.94	0.263	88.32
DR2-5	2.85	133	5.55	27.66	0.161	96.06
IW-01	0.00	124	4.97	24.63	0.261	95.00

Rnd 26 Pre-injection Measurements

START: 27-Aug-07

END: 30-Aug-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-101 Area						
IW101-01A	0.00	-138	5.96	18.50	5.78	89.53
IW101-01B	0.00	-181	6.25	18.49	0.999	89.39
IW101-01C	0.00	-163	6.02	18.58	0.999	89.41
IW101-02A	0.00	-178	5.96	18.52	2.13	89.74
IW101-02B	0.00	-137	6.26	18.57	0.999	89.79
IW101-02C	0.00	-189	6.07	18.83	0.999	89.80
IW101-03A	0.00	-193	6.03	18.78	0.999	90.53
IW101-03B	0.00	-206	5.96	18.86	1	90.34
IW101-03C	0.00	-133	5.96	18.85	0.999	90.51
IW101-04A	0.00	-188	5.94	18.56	2.33	90.34
IW101-04B	0.00	-189	6.42	18.61	0.96	90.29
IW101-04C	0.00	-184	6.63	18.96	0.999	90.30
IW101-05A	0.00	-177	5.96	18.72	1.87	90.26
IW101-05B	0.00	-198	6.18	18.73	0.999	90.08
IW101-05C	0.00	-159	6.09	18.71	0.999	90.03
IW101-06A	0.00	-224	6.18	19.09	0.999	90.65
IW101-06B	0.00	-78	5.96	18.99	0.419	90.71
IW101-06C	0.00	-148	5.96	19.00	0.437	90.65
IW101-07A	0.00	-202	6.07	18.89	0.999	91.35
IW101-07B	0.00	-173	6.16	18.96	0.755	91.31
IW101-07C	0.00	-114	6.03	19.05	0.697	91.26
IW101-08A	0.00	-218	6.32	19.18	0.999	90.64
IW101-08B	0.00	-204	6.21	19.06	0.592	90.74
IW101-08C	0.00	-162	6.13	19.12	0.759	91.21
IW101-09A	0.00	-281	6.52	19.04	0.999	91.20
IW101-09B	0.00	-210	6.05	19.11	0.97	91.03
IW101-09C	0.00	-124	6.01	19.11	0.94	91.02
PMW101-01A	9.21	-150	6.40	28.42	6.73	89.75
PMW101-01B	2.09	-136	6.32	23.44	0.763	89.68
PMW101-02A	0.00	-135	6.61	23.28	1.13	90.41
PMW101-02B	0.00	-93	6.38	24.27	0.661	90.64
PMW101-03A	2.36	163	5.91	21.26	0.414	90.75
PMW101-03B	0.36	-86	6.27	21.19	0.62	90.75
PMW101-04A	0.72	-136	6.62	23.65	0.869	89.95
PMW101-04B	0.62	-82	6.30	22.52	0.585	90.50
PMW101-05A	0.00	-127	6.43	21.30	0.612	90.37
PMW101-05B	2.16	49	5.93	21.37	0.193	90.70
PMW101-06A	0.42	66	5.96	21.38	0.442	90.89
PMW101-06B	0.00	-163	6.46	21.24	0.749	90.94
PMW101-07A	0.37	-110	6.20	24.50	0.65	90.79
PMW101-07B	0.00	172	5.70	21.89	0.255	91.08
PMW101-08A	1.10	33	6.08	24.70	0.647	91.70
PMW101-08B	1.90	192	5.55	23.56	0.125	91.67
MW-101T	0.00	-69	6.02	19.11	0.748	89.92
MW-101B	0.00	-59	5.98	18.57	0.723	89.92
DR1-3	0.73	-94	6.39	21.82	0.548	91.45

Rnd 26 Pre-injection Measurements

START: 27-Aug-07

END: 30-Aug-07

Well I.D.	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mv)	pH	Temperature (Celsius)	Conductivity (mS/cm)	Preinjection Water Depth (ft, btoc)
TTA-1, MW-21 Area						
IW21-01A	0.00	-139	6.06	18.17	1.26	91.69
IW21-01B	0.00	-156	6.24	18.30	1.17	91.78
IW21-02A	0.00	-18	5.92	18.04	0.392	91.90
IW21-02B	0.00	-6	5.81	18.15	0.296	92.00
IW21-03A	0.00	-7	5.97	18.30	0.39	90.64
IW21-03B	0.00	-154	6.00	18.54	1.45	90.28
IW21-04A	0.18	-187	6.06	18.44	0.675	90.51
IW21-04B	0.00	-162	6.01	18.61	1.72	90.62
IW21-05A	0.00	-134	5.87	18.64	6.75	90.01
IW21-05B	0.00	-135	6.02	18.41	1.07	89.96
PMW21-01	2.96	158	5.83	21.55	0.303	91.80
PMW21-02	6.00	202	5.79	21.57	0.252	90.92
PMW21-03	7.03	190	5.76	23.78	0.249	90.23
PMW21-04	2.21	196	5.85	23.02	0.316	90.10
PMW21-05	8.71	113	5.80	22.41	0.27	88.45
MW-21	3.70	181	5.67	21.30	0.241	92.10
MW-115	0.12	42	5.86	20.98	0.255	89.80
TTA-2						
IW92-01	0.00	-232	6.24	20.33	9.90	87.07
IW92-02	0.00	-164	6.04	20.40	7.36	88.25
IW92-03	0.00	-175	6.00	20.14	13.5	91.70
IW92-04	0.00	-188	6.08	20.30	12.2	92.07
IW92-05	0.00	-200	6.17	20.75	15.5	89.50
IW92-06	0.00	-177	6.19	20.67	15.1	92.04
IW92-07	0.00	-131	6.04	20.78	8.68	93.50
IW92-08	0.00	-84	6.04	20.85	10.4	93.88
IW85-01	3.98	-96	5.76	20.62	1.04	94.28
IW85-02	0.00	-141	6.06	20.69	3.56	95.51
IW85-05	0.55	-114	5.90	20.64	0.902	96.16
IW85-06	0.00	-131	6.24	20.69	2	96.42
PMW92-01	1.90	215	5.73	22.77	0.272	94.12
PMW92-02	3.20	-143	6.35	23.42	2.95	94.01
PMW92-03	0.00	-14	6.20	22.87	0.512	93.34
PMW92-04	0.00	-76	6.23	23.33	0.567	94.41
PMW92-05	1.89	98	5.53	25.17	0.239	93.69
PMW92-06	0.52	-37	5.82	25.13	0.298	95.11
PMW85-01	2.85	32	5.87	25.08	0.22	97.13
PMW85-04	0.00	-135	6.34	26.76	1.18	97.47
PMW85-05	3.35	106	5.41	24.87	24.87	96.49
MW-85	1.14	12	5.86	28.80	0.272	98.32
DR2-1	0.00	181	5.58	23.03	0.279	88.08
DR2-5	6.03	152	5.76	27.73	0.187	96.05
IW-01	6.91	133	5.07	23.49	0.272	94.97

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

APPENDIX E

SECONDARY PARAMETER TABLES

TTA-1, MW-21 AREA ORP MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	FIRST QUARTER							SECOND QUARTER					
	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007
IW21-01A	-21	-222	-161	-151	15	-456	-92	-370	-243	-242	-235	-228	-225
IW21-01B	-130	-225	-77	-121	1	-413	-175	-236	-218	-234	-222	-214	-236
IW21-02A	119	158	212	163	155	95	120	98	-157	49	43	38	76
IW21-02B	161	142	187	87	166	72	38	29	-32	32	-3	60	68
IW21-03A	94	102	144	135	183	94	120	39	-34	61	36	82	91
IW21-03B	45	35	-62	-115	-150	256	-171	-174	-275	-273	-242	-262	-261
IW21-04A	150	34	123	-75	112	-108	-130	-138	28	-37	-151	-262	9
IW21-04B	94	55	1	-113	5	-241	-76	-144	-247	-232	-251	-234	-204
IW21-05A	9	-28	-115	-107	-185	-354	-126	-182	-4	112	-254	-243	-184
IW21-05B	61	50	71	-44	118	-214	-123	-89	19	-64	-105	-133	-148
Average	58	10	32	-34	42	-178	-61	-117	-116	-84	-138	-140	-101

Monitoring Wells	FIRST QUARTER							SECOND QUARTER					
	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007
PMW21-01	131	119	180	143	154	192	193	116	175	152	190	236	194
PMW21-02	28	116	149	104	137	167	182	160	133	116	189	292	210
PMW21-03	119	153	214	207	260	227	-35	189	144	173	241	337	236
PMW21-04	105	134	170	202	163	198	-85	170	139	164	224	305	134
PMW21-05	82	NM	159	196	130	181	234	172	152	168	216	289	142
MW-115	94	NM	149	205	135	150	-48	151	132	109	152	225	129
MW-21	219	106	228	238	243	216	199	153	181	159	234	317	237
Average	111	120	178	185	175	190	91	159	151	149	207	286	183

Aerobic > 200 mV
Nitrate -50 to 200 mV
Iron Red. -220 to -50 mV
Sulfate Red. -240 to -220 mV
Methanogenic < -240 mV

NM= No measurement
Dates above reflect first day of lactate injection event

TTA-1, MW-21 AREA ORP MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	THIRD QUARTER										FOURTH QUARTER					
	14	15	16	17	18	19	20	21	22	23	24	25	26			
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
IW21-01A	-185	-191	258	-122	-200	-207	-170	-81	-155	-135	-90	-187	-139			
IW21-01B	-111	-188	234	-136	-183	-194	-132	-115	-153	-103	-106	-171	-156			
IW21-02A	-112	40	-61	10	-84	-105	-22	-28	20	40	29	-33	-18			
IW21-02B	-100	-1	-168	17	-180	-39	-78	-26	-33	-57	-51	-66	-6			
IW21-03A	24	57	-59	81	-30	18	3	-25	26	0	-4	-23	-7			
IW21-03B	-210	-202	20	-143	-215	-221	-163	-69	-154	-125	-94	-172	-154			
IW21-04A	-200	-213	250	-60	234	-200	-158	-83	-107	-94	-50	-164	-187			
IW21-04B	-130	-192	258	-104	288	-211	-78	-71	-158	-179	40	-199	-162			
IW21-05A	-153	236	205	-124	225	-210	-143	-86	-135	-150	-105	-179	-134			
IW21-05B	-89	-85	-173	-58	241	-161	-100	-76	-63	-114	-57	-156	-135			
Average	-127	-121	-197	-64	-186	-153	-104	-66	-91	-92	-49	-135	-110			

Monitoring Wells	THIRD QUARTER										FOURTH QUARTER					
	14	15	16	17	18	19	20	21	22	23	24	25	26			
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
PMW21-01	198	194	197	156	184	149	139	141	161	184	197	144	158			
PMW21-02	244	210	245	193	202	178	90	168	152	172	231	171	202			
PMW21-03	298	186	220	200	205	170	98	176	157	156	237	2	190			
PMW21-04	151	178	214	173	192	165	104	154	145	144	219	174	196			
PMW21-05	156	168	232	162	187	169	105	184	156	135	208	173	113			
MW-115	158	177	211	173	118	163	59	58	31	13	-16	126	42			
MW-21	257	182	238	188	208	181	127	167	172	184	215	137	181			
Average	209	185	222	178	185	168	103	150	139	141	184	132	155			

Aerobic > 200 mV

Nitrate -50 to 200 mV

Iron Red. -220 to -50 mV

Sulfate Red. -240 to -220 mV

Methanogens < -240 mV

NM= No measurement

Dates above reflect first t

TTA-1, MW-101 AREA ORP MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells Well ID	FIRST QUARTER												SECOND QUARTER											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
IW101-01A	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	IW101-01A	2/28/2007	3/13/2007	3/27/2007	4/10/2007	4/24/2007	5/8/2007	5/22/2007	6/5/2007	6/19/2007	7/3/2007	7/17/2007
IW101-01B	42	-110	-195	-87	-150	-144	-25	-217	-103	-231	-189	-286	IW101-01B	-147	-286	-231	-189	-286	-231	-189	-286	-231	-189	-286
IW101-01C	75	-110	50	43	26	51	-25	-68	-86	-123	-16	-46	IW101-01C	-59	-123	-16	-46	-123	-16	-46	-123	-16	-46	-123
IW101-02A	136	95	-135	-44	-143	-238	-149	-205	-227	-237	-236	-225	IW101-02A	-66	-237	-236	-225	-237	-236	-225	-237	-236	-225	-237
IW101-02B	130	135	109	58	32	210	89	-205	-227	-237	-236	-225	IW101-02B	-66	-237	-236	-225	-237	-236	-225	-237	-236	-225	-237
IW101-02C	67	116	-158	16	-107	-250	-163	-227	-191	-174	-187	-208	IW101-02C	-185	-191	-174	-187	-208	-191	-174	-187	-208	-191	-174
IW101-03A	84	161	-90	-13	-102	129	-125	-253	-69	20	31	21	IW101-03A	-214	-69	20	31	-253	-69	20	31	-214	-69	20
IW101-03B	171	115	57	39	31	-56	-13	-253	-69	-56	-35	-8	IW101-03B	-39	-56	-35	-8	-253	-69	-56	-35	-8	-253	-69
IW101-03C	160	-120	-55	-77	-37	-152	-176	-202	-124	-177	-157	-128	IW101-03C	-97	-124	-177	-157	-202	-124	-177	-157	-202	-124	-177
IW101-04A	95	45	-93	120	-139	-236	-213	-85	-240	-203	-239	-213	IW101-04A	-262	-85	-240	-203	-239	-213	-85	-240	-203	-239	-213
IW101-04B	114	-238	-124	-91	-156	0	-142	-118	-189	-203	-239	-213	IW101-04B	-240	-118	-189	-203	-239	-213	-118	-189	-203	-239	-213
IW101-04C	128	-127	-127	-209	-63	-171	-130	-82	-233	-237	-236	-225	IW101-04C	-210	-82	-233	-237	-236	-225	-237	-236	-225	-237	-236
IW101-05A	126	88	-132	-157	-209	-278	-84	-238	-237	-236	-225	-210	IW101-05A	-210	-238	-237	-236	-225	-237	-236	-225	-237	-236	-225
IW101-05B	246	90	73	-75	-5	-255	-8	-255	105	-220	-152	-80	IW101-05B	-78	-8	-255	-8	-255	105	-220	-152	-80	-78	-8
IW101-05C	223	-171	-84	-74	-113	-216	-73	-116	-233	-237	-236	-225	IW101-05C	-210	-113	-216	-73	-116	-233	-237	-236	-225	-237	-236
IW101-06A	150	36	87	-121	-150	-280	-128	-121	-233	-237	-236	-225	IW101-06A	-210	-121	-233	-237	-236	-225	-237	-236	-225	-237	-236
IW101-06B	146	70	68	-97	-108	-9	-32	-80	-124	-205	-151	-49	IW101-06B	-57	-97	-108	-9	-32	-80	-124	-205	-151	-49	-57
IW101-06C	143	-50	-2	-69	-64	-225	-32	-214	-231	-231	-231	-231	IW101-06C	-201	-64	-225	-32	-214	-231	-231	-231	-231	-231	-231
IW101-07A	185	66	-107	-70	-164	-228	-89	-214	-231	-231	-231	-231	IW101-07A	-218	-70	-164	-228	-89	-214	-231	-231	-231	-231	-231
IW101-07B	68	55	-7	-53	-82	-253	-104	-233	-186	-235	-235	-217	IW101-07B	-218	-53	-82	-253	-104	-233	-186	-235	-235	-217	-218
IW101-07C	113	29	-3	19	-29	-253	-114	-187	-173	-204	-158	-140	IW101-07C	-180	19	-29	-253	-114	-187	-173	-204	-158	-140	-180
IW101-08A	262	-11	104	-116	-67	-253	-102	-152	-38	-278	-259	-276	IW101-08A	-287	-67	-116	-67	-102	-152	-38	-278	-259	-276	-287
IW101-08B	113	16	87	-126	24	-254	62	-126	-235	-183	-192	-170	IW101-08B	-220	87	-126	24	-254	62	-126	-235	-183	-192	-170
IW101-08C	71	-85	-85	12	31	-254	-144	-95	-136	-166	-181	-127	IW101-08C	-100	-85	12	31	-254	-144	-95	-136	-166	-181	-127
IW101-09A	256	115	97	-51	-146	-227	-128	-215	-236	-201	-236	-225	IW101-09A	-192	-51	-146	-227	-128	-215	-236	-201	-236	-225	-192
IW101-09B	71	-253	-51	-70	-107	-253	-76	-215	-236	-201	-236	-225	IW101-09B	-192	-70	-107	-253	-76	-215	-236	-201	-236	-225	-192
IW101-09C	77	-149	23	-26	-68	-171	-49	-170	-149	-172	-150	-140	IW101-09C	-140	-149	23	-26	-68	-171	-49	-170	-150	-140	-140
Average	133	-20	-25	-47	-78	-187	-89	-176	-190	-215	-196	-177	Average	-177	-25	-47	-78	-187	-89	-176	-190	-215	-196	-177

Monitoring Wells Well ID	FIRST QUARTER												SECOND QUARTER											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
PMW101-01A	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	PMW101-01A	2/28/2007	3/13/2007	3/27/2007	4/10/2007	4/24/2007	5/8/2007	5/22/2007	6/5/2007	6/19/2007	7/3/2007	7/17/2007
PMW101-01B	17	79	123	-149	-153	-102	-127	-83	-105	-156	-75	-88	PMW101-01B	-33	-149	-153	-102	-127	-83	-105	-156	-75	-88	-33
PMW101-02A	86	109	-99	-93	-127	-123	-132	-74	-111	-142	-74	-78	PMW101-02A	-73	109	-99	-93	-127	-123	-132	-74	-111	-142	-73
PMW101-02B	68	146	144	40	119	124	110	97	44	-13	36	-92	PMW101-02B	-107	146	144	40	119	124	110	97	44	-13	-92
PMW101-03A	99	150	202	69	108	233	72	-70	-128	-142	-108	-79	PMW101-03A	-91	150	202	69	108	233	72	-70	-128	-142	-91
PMW101-03B	46	108	127	34	65	134	148	81	145	115	167	204	PMW101-03B	242	108	127	34	65	134	148	81	145	115	167
PMW101-03C	203	146	158	92	164	197	224	153	173	-66	190	254	PMW101-03C	110	146	158	92	164	197	224	153	-66	190	254
PMW101-04A	156	158	161	141	196	210	248	171	172	132	229	263	PMW101-04A	287	156	158	161	141	196	210	248	171	172	132
PMW101-04B	189	164	224	177	198	181	255	128	104	48	-39	-37	PMW101-04B	-53	189	164	224	177	198	181	255	128	104	48
PMW101-05A	225	-66	-82	-66	-135	-99	-82	-92	-105	-112	-103	-91	PMW101-05A	-102	225	-66	-82	-66	-135	-99	-82	-92	-105	-112
PMW101-05B	264	98	263	155	188	228	151	146	69	-19	20	25	PMW101-05B	15	264	98	263	155	188	228	151	146	69	-19
PMW101-06A	83	130	153	73	166	86	114	79	46	82	145	155	PMW101-06A	-84	83	130	153	73	166	86	114	79	46	82
PMW101-06B	240	152	153	-41	-77	-74	-205	-81	-80	-92	-88	-78	PMW101-06B	118	240	152	153	-41	-77	-74	-205	-81	-80	-92
PMW101-07A	200	121	88	-18	-116	-163	-195	-105	-76	-134	-88	-91	PMW101-07A	-90	200	121	88	-18	-116	-163	-195	-105	-76	-134
PMW101-07B	228	162	228	118	-37	163	-116	156	158	-50	179	244	PMW101-07B	256	228	162	228	118	-37	163	-116	156	158	-50
PMW101-08A	241	166	186	169	136	172	267	155	188	149	132	246	PMW101-08A	172	241	166	186	169	136	172	267	155	188	149
PMW101-08B	84	150	176	117	128	168	224	176	189	171	188	290	PMW101-08B	324	84	150	176	117	128	168	224	176	189	171
MW101B	302	NM	105	99	9	-44	-18	100	109	40	-46	48	MW101B	33	302	NM	105	99	9	-44	-18	100	109	40
MW101T	301	NM	105	93	0	-55	91	100	76	25	-24	27	MW101T	33	301	NM	105	93	0	-55	91	100	76	25
DR1-3	287	NM	196	195	147	202	-143	162	152	150	130	209	DR1-3	262	287	NM	196	195	147	202	-143	162	150	130
Average	175	123	137	62	57	78	47	66	54	-1	44	70	Average	65	175	123	137	62	57	78	47	66	-1	44

Aerobic > 200 mV
Nitrate -50 to 200 mV
Iron Red -220 to -50 mV
Sulfate Red -240 to -220 mV
Vibrio 0 to 400 TV

NM = No measurement
Dates above reflect first day of lactate injection event

TTA-1 MW-101 AREA ORP MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells		THIRD QUARTER												FOURTH QUARTER											
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
Well ID		3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007	9/11/2007	9/25/2007	10/9/2007	10/23/2007							
IW101-01A		-113	-107	-118	-95	-133	-97	-130	-45	-129	-134	-133	-117	-138	-118	-138	-118	-138							
IW101-01B		-118	-107	-150	-119	-200	-131	-148	-126	-169	-188	-191	-209	-181	-209	-181	-209	-181							
IW101-01C		-138	-36	-55	-29	-86	-56	-103	-30	-34	-101	-113	-106	-163	-106	-163	-106	-163							
IW101-02A		-116	-119	-150	-122	-221	-172	-92	-122	-170	-70	-153	-139	-178	-139	-178	-139	-178							
IW101-02B		38	-77	-31	117	-203	-160	-48	-107	-118	1	-148	-69	-137	-69	-137	-69	-137							
IW101-02C		-115	-111	-139	-118	-164	-137	-106	-80	-134	-143	-139	-141	-189	-141	-189	-141	-189							
IW101-03A		-137	-108	-159	-102	-220	-133	-168	30	-133	-151	-137	-144	-193	-144	-193	-144	-193							
IW101-03B		-137	-36	-59	-40	-234	-84	32	-129	-92	-54	-82	-92	-206	-92	-206	-92	-206							
IW101-03C		-111	-57	-73	-44	-158	-81	-108	-63	-58	-86	-82	-86	-133	-82	-133	-82	-133							
IW101-04A		-81	-245	-227	-103	-230	-304	-117	-87	-259	-284	-145	-205	-188	-205	-188	-205	-188							
IW101-04B		-112	-226	-216	-136	-156	-255	-107	-162	-287	-272	-174	-224	-189	-224	-189	-224	-189							
IW101-04C		-147	-225	-236	-152	-179	-195	-119	-107	-270	-273	-165	-191	-184	-270	-165	-191	-184							
IW101-05A		-71	-245	-144	-124	-199	-145	-222	-118	-153	-158	-141	-164	-177	-158	-164	-177	-158							
IW101-05B		-8	-115	-82	-36	-197	-112	-38	-91	-99	-105	-126	-186	-198	-105	-126	-186	-198							
IW101-05C		-110	-181	-136	-94	-149	-163	-196	-53	-150	-182	-135	-115	-159	-150	-182	-135	-115							
IW101-06A		-119	-240	-228	-150	-226	-212	-124	-122	-341	-296	-167	-222	-224	-296	-167	-222	-224							
IW101-06B		39	-172	-223	-78	-171	-162	-83	-85	-262	-243	-41	-135	-78	-243	-41	-135	-78							
IW101-06C		-73	-141	-198	-96	-150	-143	-107	-65	-263	-235	-97	-153	-148	-235	-97	-153	-148							
IW101-07A		-19	-122	-182	-127	-243	-152	-33	-115	-145	-166	-149	-148	-202	-145	-166	-149	-148							
IW101-07B		-58	-131	-165	-124	-201	-147	-40	-91	-108	-154	-133	-133	-173	-108	-154	-133	-133							
IW101-07C		-80	-96	-110	-75	-169	-107	-40	-49	-63	-91	-92	-71	-114	-49	-63	-91	-92							
IW101-08A		-17	-266	-306	-173	-276	-232	-1	-134	-327	-342	-199	-232	-218	-327	-342	-199	-232							
IW101-08B		7	-187	-244	-117	-214	-185	-36	-97	-187	-185	-176	-220	-204	-187	-185	-176	-220							
IW101-08C		-108	-129	-192	-57	-175	-127	-61	-73	-114	-106	-97	-162	-182	-106	-97	-162	-182							
IW101-09A		-107	-268	-230	-219	-80	-300	-112	-51	-305	-306	-318	-269	-281	-305	-306	-318	-269							
IW101-09B		-48	-225	-255	-157	-205	-253	-62	-95	-246	-261	-261	-212	-210	-246	-261	-212	-210							
IW101-09C		-13	-194	-243	-49	-64	-243	7	-16	-237	-250	-247	-187	-124	-237	-250	-247	-187							
Average		-77	-154	-177	-97	-182	-167	-87	-85	-180	-180	-150	-160	-176	-180	-150	-160	-176							

Monitoring Wells Well ID	14	15	16	17	18	19	20	21	22	23	24	25	26
	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007
PMW101-01A	-38	-110	-94	-111	-132	-135	0	-122	-137	-109	-126	-136	-150
PMW101-01B	-95	-80	-82	-102	-91	-115	-85	-69	-101	-165	-132	-143	-136
PMW101-02A	-125	-143	-147	-148	-136	-174	-124	-128	-146	-55	-171	-119	-135
PMW101-02B	-149	-116	-135	-143	-169	-112	-92	-89	-122	-119	-140	-119	-93
PMW101-03A	125	113	107	88	131	166	164	120	89	84	204	163	163
PMW101-03B	-97	97	30	33	-5	36	26	-15	-47	-116	-99	-78	-86
PMW101-04A	202	118	71	9	39	36	-7	-39	-71	-77	-143	-112	-136
PMW101-04B	-61	-79	-99	-106	-99	-99	-68	-64	-77	-73	-116	-74	-82
PMW101-05A	-94	-118	-116	-129	-130	-141	-109	-106	-118	-83	-139	-109	-127
PMW101-05B	8	-30	-28	-25	-17	60	-3	39	2	13	-19	41	49
PMW101-06A	-92	-17	35	-50	-66	-85	-30	-2	65	30	18	32	66
PMW101-06B	-108	-108	-114	-133	-141	-146	-173	-108	-132	-106	-154	-132	-163
PMW101-07A	-159	-106	-98	-114	-114	-133	-107	-84	-92	-71	-98	-73	-110
PMW101-07B	183	144	239	118	114	112	155	137	103	172	132	127	172
PMW101-08A	-36	18	63	6	83	99	0	99	8	2	50	30	33
PMW101-08B	202	153	224	142	149	149	158	157	132	164	181	169	192
MW101B	-82	157	78	62	63	59	78	12	9	-5	-3	-4	-59
MW101T	104	109	43	36	28	24	70	-29	-19	-24	11	-14	-69
DR1-3	124	132	103	-37	-55	-86	-53	-69	-89	-71	-114	-96	-94
Average	-10	7	4	-32	-29	-26	-8	-19	-37	-32	-53	-32	-40

Aerobic > 200 mV
Nitrate -50 to 200 mV
Iron Red -220 to -50 mV
Sulfate Red -240 to -220 mV
Methanogenic < -240 mV

NM = No measurement
Dates above reflect first day of lactate injection event

TTA-2, ORP MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	FIRST QUARTER						SECOND QUARTER					
	1	2	3	4	5	6	7	8	9	10	11	12
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007
IW85-01	147	275	38	388	-156	-179	-90	252	-179	252	-192	-198
IW85-02	105	275	-86	-213	-175	-203	-150	244	-174	223	-188	-170
IW85-03	-15	-121	-155	296	-142	262	**	-195	270	279	**	**
IW85-04	66	276	-101	385	-153	351	-130	-	**	**	**	246
IW85-05	-	-	-	-	-	-	-	-	-	-	-	-
IW85-06	-	-	-	-	-	-	-	-	-	-	-	-
IW92-01	167	-64	64	-145	24	847	-19	-116	-129	-153	259	260
IW92-02	121	116	-23	250	-210	-91	-26	243	-195	253	257	207
IW92-03	21	122	11	-83	-111	335	-140	-171	-178	-208	282	244
IW92-04	-1	147	-134	-120	-181	227	-115	248	-168	-141	-184	236
IW92-05	-59	-187	-48	-186	-112	269	-91	352	-191	-206	-185	-196
IW92-06	138	125	-138	-174	-172	342	-129	375	-197	246	-159	-173
IW92-07	-4	119	-62	-183	-69	-123	-62	262	-80	-68	-172	-197
IW92-08	72	-104	-98	257	-159	-106	-48	356	-153	-182	-164	-201
Average	63	-56	-61	-224	-135	-137	-91	-259	-174	-201	-204	-212

Monitoring Wells	FIRST QUARTER						SECOND QUARTER					
	1	2	3	4	5	6	7	8	9	10	11	12
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007
DR2-1	NM	80	60	86	111	105	-111	-16	-16	87	165	13
DR2-5	160	-64	28	-74	84	16	155	108	106	108	120	141
IW-01	-39	NM	-30	-31	-151	-48	1	171	154	48	15	94
MW-85	239	NM	208	193	191	212	321	176	321	156	180	147
PMW85-01	138	87	174	156	173	49	241	154	145	106	145	120
PMW85-02	-55	-39	179	174	179	154	380.7*	180	148	107	152	134
PMW85-03	42	**	**	**	**	**	**	**	**	**	**	**
PMW85-04	-	-	-	-	-	-	-	-	-	-	-	-
PMW85-05	-	-	-	-	-	-	-	-	-	-	-	-
PMW92-01	88	118	145	196	219	179	201	169	132	161	169	134
PMW92-02	220	124	-73	-96	-128	-121	-82	-113	-144	-105	-116	-180
PMW92-03	232	132	150	159	124	181	-30	79	-6	6	36	16
PMW92-04	145	-2	131	90	-8	-100	-60	-180	-173	-133	-101	-113
PMW92-05	201	-93	214	193	196	NM	-12	137	88	150	173	146
PMW92-06	182	-31	176	137	110	176	-33	195	134	85	93	76
Average	129	31	114	99	92	73	54	88	74	65	86	61

Aerobic > 200 mV
 Nitrate -50 to 200 mV
 Iron Red -220 to -50 mV
 Sulfate Red -240 to -220 mV
 Manganese < -240 mV

** Dry well
 NM = No measurement
 AB = abandoned
 - = well not installed
 Dates above reflect first day of lactate injection event

TTA-2, ORP MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	THIRD QUARTER								FOURTH QUARTER							
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
IW85-01	-74	-125	-190	-169	-77	-6	-153	-108	-103	-64	-59	-96	-96			
IW85-02	-110	-148	-185	-165	-108	-50	-53	-131	-91	-80	-102	-131	-141			
IW85-03	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
IW85-04	**	**	**	**	**	**	**	**	**	**	**	**	**			
IW85-05	81	39	-11	12	-8	63	-36	-86	-59	-94	-59	-92	-114			
IW85-06	-127	-149	-235	-180	-120	-58	-91	-115	-138	-143	-110	-150	-131			
IW92-01	-41	-229	-308	-149	-236	-186	-140	-121	-208	-162	-121	-217	-131			
IW92-02	-75	-198	-250	-75	-238	-157	-75	-79	-166	-104	-104	-184	-164			
IW92-03	-51	-200	-205	-107	-164	-112	-75	-119	-137	-81	-79	-192	-175			
IW92-04	-55	-172	-126	-155	-235	-107	-92	-119	-156	-134	-143	-208	-188			
IW92-05	-105	-131	-217	-181	-224	-135	-131	-178	-152	-146	-141	-203	-200			
IW92-06	-79	-184	-131	-154	-147	-89	-80	-156	-136	-149	-128	-107	-177			
IW92-07	-86	-120	-91	-176	-162	-60	-108	-133	-102	-105	-105	-89	-84			
IW92-08	-98	-153	-95	-142	-96	-54	-77	-115	-81	-56	-71	-89	-84			
Average	-68	-148	-174	-137	-151	-79	-93	-121	-127	-115	-102	-142	-153			

Monitoring Wells	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
DR2-1	50	61	113	89	151	38	50	18	56	85	132	88	181			
DR2-5	149	137	184	133	89	124	146	152	151	150	115	133	152			
IW-01	69	37	57	88	75	40	84	103	95	165	128	124	133			
MW-85	185	166	201	88	176	155	163	145	122	97	27	-9	12			
PMW85-01	130	59	76	80	24	-3	-26	-27	29	-32	21	26	32			
PMW85-02	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
PMW85-03	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
PMW85-04	-113	-68	-81	-126	-110	-110	-114	-94	-117	-135	-144	-118	-135			
PMW85-05	139	170	188	177	144	177	168	157	151	163	164	136	106			
PMW92-01	162	156	220	156	180	146	157	147	143	114	199	154	215			
PMW92-02	-125	-151	-117	-130	-129	-150	-125	-130	-144	-121	-145	-151	-143			
PMW92-03	-32	-86	-103	-128	-115	-123	-124	-110	-95	-73	-92	-73	-14			
PMW92-04	-111	-104	-108	-128	-129	-119	-135	-88	-97	-91	-92	-86	-76			
PMW92-05	180	162	177	179	163	190	172	117	182	164	147	127	98			
PMW92-06	-26	33	12	33	-2	-35	-43	78	7	-13	4	-17	-37			
Average	55	42	62	41	43	24	29	36	40	38	39	29	49			

Aerobic
Nitrate
Iron Red
Sulfate Red
Methanogenic

> 200 mV
-50 to 200 mV
-220 to -50 mV
-240 to -220 mV
-240 to -220 mV

** Dry well
NM = No measurement
AB = abandoned
- = well not installed
Dates above reflect first day of lactate injection event

TTA-1, MW-21 AREA DO MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	FIRST QUARTER													SECOND QUARTER												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007													
IW21-01A	2.1	0.7	0.4	0.1	4.7	0.0	0.4	0.0	0.0	1.9	0.0	0.0	0.0													
IW21-01B	1.2	4.4	3.4	0.2	2.4	0.0	0.3	0.0	0.0	5.6	0.0	0.0	0.0													
IW21-02A	0.0	6.3	12.1	2.4	3.0	0.8	4.1	0.6	0.6	1.2	0.6	0.2	0.2													
IW21-02B	0.0	6.5	13.5	1.0	5.9	0.7	2.0	1.2	0.0	1.0	0.0	1.1	0.7													
IW21-03A	1.5	5.2	2.4	1.5	6.4	1.1	2.8	0.8	0.0	0.6	0.1	0.0	0.0													
IW21-03B	0.0	4.6	5.6	0.5	0.9	0.0	0.8	0.1	0.0	0.4	0.0	0.0	0.0													
IW21-04A	2.2	9.1	4.2	0.5	1.8	0.0	0.8	0.0	7.0	1.7	0.2	0.0	1.3													
IW21-04B	0.2	3.7	7.4	2.9	1.5	0.0	5.7	0.4	0.0	0.4	0.1	0.0	0.0													
IW21-05A	2.2	5.2	11.4	0.0	1.1	0.0	0.5	3.6	6.3	4.2	0.0	0.0	0.0													
IW21-05B	3.8	5.3	14.4	1.0	3.1	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.0													
Average	1.3	5.1	7.5	1.0	3.1	0.3	1.8	0.7	1.4	1.8	0.1	0.1	0.2													

Monitoring Wells	FIRST QUARTER													SECOND QUARTER												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007													
PMW21-01	4.3	ERR	9.7	4.5	2.8	2.2	0.3	3.8	2.6	5.4	5.1	2.8	2.9													
PMW21-02	1.7	ERR	9.8	6.8	4.3	3.8	3.2	4.9	5.4	5.3	5.9	5.5	5.2													
PMW21-03	5.5	ERR	7.1	11.0	5.6	5.9	5.5	5.7	7.4	6.1	6.6	6.8	6.7													
PMW21-04	2.2	ERR	12.2	2.4	0.9	0.6	1.6	1.9	1.7	1.5	4.2	1.5	1.3													
PMW21-05	9.4	NM	12.6	12.4	8.8	8.0	8.9	7.7	9.6	7.5	7.6	7.9	8.6													
MW-115	0.6	NM	14.1	7.6	2.6	3.1	2.9	3.2	3.0	2.5	5.6	0.3	0.0													
MW-21	0.0	ERR	6.1	8.3	4.5	4.5	3.2	6.1	4.7	5.0	5.6	4.6	4.2													
Average	3.4	ERR	10.2	7.6	4.2	4.0	3.7	4.8	4.9	4.8	5.8	4.2	4.1													

Aerobic > 2 ppm
Nitrate 0-2 ppm
Anaerobic zero ppm

NM = No measurement
ERR = Measurements in error; meter malfunctioned
Dates above reflect first day of lactate injection event

TTA-1, MW-21 AREA DO MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	THIRD QUARTER											FOURTH QUARTER				
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007	9/11/2007	9/25/2007	10/9/2007
IW21-01A	0.0	0.0	0.0	2.9	3.1	2.6	0.2	1.0	1.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
IW21-01B	0.0	0.0	0.0	2.2	1.0	2.8	0.5	4.7	0.6	1.0	0.0	1.8	0.0	0.0	0.0	0.0
IW21-02A	0.3	0.0	0.0	0.0	2.6	0.7	0.9	0.2	0.3	0.7	0.0	0.3	0.0	0.0	0.0	0.0
IW21-02B	0.0	0.7	0.0	0.0	0.8	0.2	0.9	0.1	0.1	0.9	0.1	0.2	0.0	0.0	0.0	0.0
IW21-03A	0.0	0.0	0.0	0.0	0.3	0.4	0.6	0.0	0.0	0.8	1.0	0.1	0.0	0.0	0.0	0.0
IW21-03B	1.6	0.0	0.0	0.5	0.1	0.8	0.7	1.2	0.9	0.0	1.2	1.2	0.0	0.0	0.0	0.0
IW21-04A	0.0	0.0	0.0	0.0	0.0	1.4	0.6	0.0	0.9	0.8	0.3	0.8	0.0	0.0	0.0	0.2
IW21-04B	1.0	0.0	0.0	0.0	0.0	0.7	2.3	0.1	2.7	0.5	1.1	2.2	0.0	0.0	0.0	0.0
IW21-05A	0.0	0.0	0.0	0.0	0.3	8.3	0.7	3.8	0.3	0.7	10.6	2.0	0.0	0.0	0.0	0.0
IW21-05B	0.0	0.0	0.0	0.0	0.1	1.1	0.5	1.2	0.3	0.4	1.6	0.5	0.0	0.0	0.0	0.0
Average	0.3	0.1	0.0	0.6	0.8	1.9	0.8	1.2	0.7	0.6	1.6	1.0	0.0	0.0	0.0	0.0

Monitoring Wells	THIRD QUARTER											FOURTH QUARTER				
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007	9/11/2007	9/25/2007	10/9/2007
PMW21-01	3.8	2.9	4.4	4.7	3.3	2.4	5.0	4.5	1.5	3.7	3.8	1.3	3.0	0.0	0.0	0.0
PMW21-02	3.8	5.2	6.8	5.2	5.2	4.7	6.5	6.4	4.8	4.9	4.6	3.5	6.0	0.0	0.0	0.0
PMW21-03	5.7	6.2	6.8	6.0	6.8	5.8	7.5	7.8	6.6	5.6	5.5	4.8	7.0	0.0	0.0	0.0
PMW21-04	1.4	0.0	1.9	2.0	2.2	1.4	2.9	0.7	1.2	1.9	1.8	0.4	2.2	0.0	0.0	0.0
PMW21-05	8.7	8.8	10.1	7.5	8.6	7.7	7.5	10.2	8.3	7.1	6.9	6.1	8.7	0.0	0.0	0.0
MW-115	0.0	0.0	0.2	0.6	0.5	0.0	0.8	0.0	0.2	0.5	0.9	0.0	0.1	0.0	0.0	0.0
MW-21	3.8	3.6	5.8	4.4	5.4	3.4	5.7	4.9	1.9	3.7	3.4	2.6	3.7	0.0	0.0	0.0
Average	3.9	3.8	5.1	4.3	4.6	3.6	5.1	4.9	3.5	3.9	3.8	2.7	4.4	0.0	0.0	0.0

Aerobic > 2 ppm
Nitrate 0-2 ppm
Anaerobic 0-100 ppm

NM = No measurement
ERR = Measurements in error; meter malfunctioned
Dates above reflect first day of lactate injection event

TTA-1 MW-101 AREA DO MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

SECOND QUARTER

FIRST QUARTER

Injection Wells	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007
IW101-01A	7.0	ERR	0.2	0.1	2.4	0.0	0.0	0.3	0.0	1.6	0.3	0.0	0.0
IW101-01B	6.5	ERR	2.6	0.3	2.1	0.0	0.0	0.5	0.3	0.0	0.9	0.0	0.0
IW101-01C	6.0	ERR	2.5	1.3	1.7	0.0	0.0	0.1	0.3	0.1	0.4	0.0	0.0
IW101-02A	5.9	ERR	1.9	0.1	1.1	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0
IW101-02B	5.8	ERR	10.5	NM	2.8	0.0	1.1	0.0	0.0	0.4	0.0	0.0	0.0
IW101-02C	3.2	ERR	6.5	0.1	2.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0
IW101-03A	5.8	3.5	4.9	0.0	2.8	3.6	0.0	0.0	0.5	0.5	3.0	2.2	0.0
IW101-03B	7.1	5.2	2.7	0.2	2.4	0.0	0.0	0.0	0.1	0.4	0.2	0.0	0.0
IW101-03C	5.7	8.8	7.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-04A	5.9	ERR	7.3	9.1	3.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
IW101-04B	6.1	ERR	1.2	0.8	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-04C	4.2	ERR	0.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-05A	8.9	4.6	8.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
IW101-05B	8.1	4.8	10.4	0.0	1.7	0.0	0.0	0.0	7.1	0.0	0.1	0.0	0.0
IW101-05C	3.3	3.5	9.8	0.1	1.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
IW101-06A	3.0	ERR	6.9	0.5	0.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
IW101-06B	0.0	ERR	10.7	0.0	1.2	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0
IW101-06C	0.0	ERR	11.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
IW101-07A	0.0	1.3	8.0	0.1	1.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
IW101-07B	0.0	5.8	11.3	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-07C	0.0	1.8	10.7	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
IW101-08A	9.3	ERR	6.8	0.2	4.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
IW101-08B	7.2	ERR	6.3	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-08C	5.1	ERR	1.4	1.9	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.0	0.0
IW101-09A	7.1	ERR	11.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-09B	6.2	ERR	11.4	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IW101-09C	4.2	ERR	11.4	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average	4.9	4.4	6.8	0.6	1.7	0.1	0.4	0.1	0.3	0.1	0.2	0.1	0.0

Monitoring Wells	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007
PMW101-01A	0.0	5.8	8.3	0.8	0.5	0.0	5.7	0.6	0.0	0.4	3.9	2.9	1.9
PMW101-01B	6.5	8.6	7.3	1.2	1.5	0.0	9.5	0.5	0.0	0.4	3.6	0.5	0.2
PMW101-02A	13.0+	7.7	6.1	5.7	5.0	5.2	3.3	3.6	1.9	1.4	3.4	0.8	0.9
PMW101-02B	10.5	5.9	4.7	4.0	3.3	4.0	0.1	0.5	0.7	1.5	3.5	0.5	0.1
PMW101-03A	0.0	4.8	8.1	4.6	5.5	5.4	4.9	6.0	6.0	5.4	5.5	5.5	7.0
PMW101-03B	0.0	8.1	12.1	6.0	5.8	5.7	3.3	4.6	4.2	2.7	5.3	3.2	1.1
PMW101-04A	9.7	4.8	0.0	5.1	5.0	5.7	4.5	6.2	5.9	5.4	5.7	5.0	5.3
PMW101-04B	0.9	8.6	7.6	5.2	4.8	3.9	1.8	3.5	2.0	0.6	4.0	0.7	0.2
PMW101-05A	8.5	2.7	2.5	2.0	1.2	0.0	1.1	1.0	0.0	0.4	3.7	0.7	0.4
PMW101-05B	0.0	10.8	8.5	7.0	6.2	8.1	7.8	7.6	6.1	5.8	5.5	5.2	7.1
PMW101-06A	0.0	9.8	8.8	4.5	4.3	0.1	1.7	0.9	2.3	2.7	4.1	1.5	0.0
PMW101-06B	0.0	5.5	10.6	1.9	1.4	0.0	0.9	0.6	0.6	0.8	3.8	0.5	0.8
PMW101-07A	2.3	6.2	2.1	1.2	0.8	0.0	0.8	0.6	0.6	1.5	4.1	0.8	0.2
PMW101-07B	0.0	9.3	8.6	6.8	7.2	8.3	7.2	7.8	7.6	10.7	7.6	7.6	8.4
PMW101-07C	0.0	7.2	7.0	4.9	6.4	6.0	4.8	5.0	4.9	4.6	5.2	3.2	2.7
PMW101-08A	0.0	10.6	6.3	5.4	6.6	7.0	7.1	7.0	7.1	7.8	7.3	7.8	8.9
PMW101-08B	0.0	10.6	6.3	5.4	6.6	7.0	7.1	7.0	7.1	7.8	7.3	7.8	8.9
PMW101-08C	6.1	NM	9.8	2.8	0.8	0.0	0.0	4.2	5.1	3.4	4.4	4.3	4.5
MW101T	5.9	NM	9.8	2.4	0.7	0.0	0.0	3.4	4.4	3.1	4.3	4.1	4.2
DR1-3	1.4	NM	7.3	4.3	2.9	3.0	1.8	1.8	0.9	1.4	5.1	0.8	0.3
Average	3.4	7.3	7.5	4.0	3.7	3.3	3.5	3.4	3.2	3.2	4.7	2.9	2.9

Aerobic
Nitrate
Anaerobic

NM = No measurement
ERR = Measurements in error, meter malfunctioned
Dates above reflect first day of lactate injection event

TTA-1, MW-101 AREA DO MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

FOURTH QUARTER

THIRD QUARTER

Injection Wells	14	15	16	17	18	19	20	21	22	23	24	25	26
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007
IW101-01A	0.0	0.0	0.0	0.0	0.5	2.4	0.3	0.0	0.0	0.0	13.1	6.8	0.0
IW101-01B	0.3	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	2.0	3.3	0.0
IW101-01C	0.2	0.0	0.1	0.0	0.0	0.0	4.1	0.0	0.0	0.0	1.6	3.0	0.0
IW101-02A	0.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	1.9	3.3	0.0
IW101-02B	1.7	0.0	0.0	0.0	0.0	0.2	2.7	0.0	0.9	5.9	1.4	3.3	0.0
IW101-02C	0.0	0.0	0.1	0.0	0.8	0.0	1.7	0.0	1.7	0.0	1.4	2.0	0.0
IW101-03A	3.3	0.0	0.2	0.0	4.1	0.0	1.1	0.0	2.9	0.0	1.4	2.3	0.0
IW101-03B	0.5	0.0	0.3	0.0	3.8	0.0	1.0	0.2	1.4	0.0	1.4	2.1	0.0
IW101-03C	0.2	0.0	0.0	0.0	1.5	0.3	1.1	0.0	0.0	0.0	1.0	1.2	0.0
IW101-04A	2.9	0.0	0.0	0.0	6.9	0.0	0.5	0.0	7.9	1.4	6.1	5.6	0.0
IW101-04B	0.3	0.0	0.0	0.0	5.8	0.1	1.2	0.0	0.8	0.0	1.1	1.3	0.0
IW101-04C	0.2	0.0	0.0	0.0	2.9	0.0	0.8	0.0	0.0	1.2	0.2	0.8	0.0
IW101-05A	3.0	0.0	0.0	0.0	6.0	0.0	4.0	0.2	0.0	0.0	1.4	2.7	0.0
IW101-05B	0.2	0.0	0.4	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.3	2.7	0.0
IW101-05C	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.9	2.1	0.0
IW101-06A	0.1	0.0	0.0	0.0	3.3	0.0	6.4	0.0	1.0	0.5	0.8	1.2	0.0
IW101-06B	0.0	0.0	0.0	0.0	3.4	0.0	0.8	0.0	0.8	0.8	1.5	1.5	0.0
IW101-06C	0.0	0.0	0.0	0.0	4.9	0.0	0.5	0.0	0.2	0.9	0.8	1.2	0.0
IW101-07A	0.8	0.0	0.0	0.0	1.2	0.3	0.0	0.0	0.2	0.0	1.4	1.9	0.0
IW101-07B	10.3	0.0	0.0	0.0	1.6	0.4	1.4	0.0	0.0	0.0	0.8	1.3	0.0
IW101-07C	0.4	0.0	0.0	0.0	5.5	0.1	7.4	0.0	0.0	0.0	0.6	1.1	0.0
IW101-08A	0.0	0.0	0.0	0.0	4.2	0.0	0.8	0.0	1.8	1.5	1.2	0.0	0.0
IW101-08B	0.5	0.0	0.0	0.0	3.8	0.1	0.0	0.0	0.0	0.0	0.5	0.3	0.0
IW101-08C	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.0	0.6	0.2	0.0
IW101-09A	3.6	0.0	0.0	0.0	1.0	0.7	13.5	0.0	0.5	1.1	0.7	1.6	0.0
IW101-09B	4.1	0.0	0.0	0.0	1.7	0.3	2.5	0.0	1.5	0.0	1.1	1.8	0.0
IW101-09C	3.9	0.0	0.0	0.0	0.0	0.1	5.8	0.0	0.8	0.0	0.8	1.7	0.0
Average	1.4	0.0	0.0	0.0	2.2	0.2	2.4	0.0	0.8	0.5	1.8	2.1	0.0

Monitoring Wells	14	15	16	17	18	19	20	21	22	23	24	25	26
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007
PMW101-01A	0.3	0.0	9.2	1.8	0.0	0.0	0.0	0.0	2.1	0.2	14.5	0.0	9.2
PMW101-01B	0.1	0.0	1.1	0.3	0.0	0.0	0.0	0.0	0.5	0.2	2.1	0.0	2.1
PMW101-02A	0.0	0.0	0.4	1.1	0.2	0.0	0.0	0.0	0.0	0.6	1.1	0.0	0.0
PMW101-02B	0.0	0.0	0.6	0.0	0.2	0.0	0.3	0.0	0.0	0.7	1.5	0.0	0.0
PMW101-03A	6.0	5.2	7.0	5.5	4.3	5.5	7.8	6.5	2.6	3.4	2.9	1.6	2.4
PMW101-03B	0.7	0.0	0.8	0.7	0.4	0.2	0.9	0.0	0.0	0.5	1.4	0.0	0.4
PMW101-04A	4.3	1.7	3.5	2.1	1.8	2.6	0.6	0.4	0.2	0.8	0.2	0.0	0.7
PMW101-04B	0.3	0.0	0.8	0.3	0.3	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.6
PMW101-05A	0.5	0.0	0.8	0.0	0.4	0.0	0.0	0.0	1.0	0.4	0.4	0.0	0.0
PMW101-05B	6.4	3.4	5.3	3.5	3.4	7.3	4.0	5.9	5.2	3.9	3.8	2.7	2.2
PMW101-06A	0.4	0.0	2.2	1.1	1.1	0.7	0.1	0.6	0.7	1.1	1.6	0.7	0.4
PMW101-06B	0.1	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.0
PMW101-07A	0.0	0.0	1.1	0.4	1.0	0.0	0.0	0.5	0.6	1.4	1.6	0.3	0.4
PMW101-07B	7.1	8.8	8.9	7.4	6.8	7.5	8.0	8.7	7.4	4.1	1.9	0.3	0.0
PMW101-08A	1.6	0.0	1.6	1.7	2.6	0.8	3.2	2.4	1.3	8.2	8.2	1.6	1.1
PMW101-08B	9.0	8.8	8.8	8.1	6.9	7.3	8.5	10.1	9.1	6.3	6.0	3.6	1.9
MW101B	0.3	2.7	3.3	3.9	7.9	2.6	3.0	0.0	1.1	0.0	0.0	2.2	0.0
MW101T	3.1	2.2	2.5	3.8	0.0	1.5	3.8	0.0	1.4	0.0	0.0	2.3	0.0
DR1-3	0.7	0.0	1.5	0.6	0.8	0.2	0.8	0.4	0.7	0.9	0.8	0.0	0.7
Average	2.2	1.7	3.1	2.2	2.0	1.9	2.2	1.9	1.8	1.8	2.6	0.8	1.2

> 2 ppm

Aerobic

Nitrate

Analogic

zero ppm

ERR = Measurements in error; meter malfunctioned

Dates above reflect first day of lactate injection event

TTA-2 DO MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	FIRST QUARTER						SECOND QUARTER					
	1	2	3	4	5	6	7	8	9	10	11	12
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007
IW85-01	5.2	ERR	4.2	0.9	0.0	0.0	2.2	0.0	0.7	0.3	0.0	0.0
IW85-02	6.1	ERR	4.2	0.7	0.0	0.0	0.0	0.0	0.7	1.6	0.0	0.0
IW85-03	7.9	ERR	3.5	0.9	0.0	0.0	0.0	0.0	4.7	4.1	0.0	0.0
IW85-04	7.1	ERR	1.0	0.6	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0
IW85-05	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1
IW85-06	-	-	-	-	-	-	-	-	-	-	-	-
IW92-01	7.3	ERR	2.6	1.0	2.2	0.8	2.2	0.0	0.0	0.4	0.2	0.0
IW92-02	8.3	ERR	5.2	0.5	0.9	0.0	0.6	0.0	0.9	0.0	0.0	0.0
IW92-03	0.0	ERR	1.8	0.8	2.7	0.0	0.7	0.0	1.3	1.7	0.3	0.0
IW92-04	1.3	ERR	3.3	0.8	0.8	0.2	0.2	0.0	0.0	5.1	0.4	0.0
IW92-05	0.5	ERR	0.6	0.7	2.3	0.2	0.0	0.0	0.0	2.2	0.7	0.0
IW92-06	0.0	ERR	2.9	0.7	0.9	0.0	0.4	0.0	0.0	0.0	0.2	0.0
IW92-07	0.0	ERR	0.9	0.6	3.3	0.1	0.5	0.0	1.7	0.4	0.3	0.0
IW92-08	0.0	ERR	5.0	1.1	0.9	0.1	2.8	0.0	0.2	0.0	0.0	0.0
Average	3.6	-	2.9	0.8	1.2	0.1	0.9	0.0	0.9	1.4	0.2	0.0

Monitoring Wells	FIRST QUARTER						SECOND QUARTER					
	1	2	3	4	5	6	7	8	9	10	11	12
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007
DR2-1	6.6	ERR	7.4	7.9	5.8	6.5	4.6	4.8	4.3	6.8	8.9	6.1
DR2-5	5.9	ERR	4.8	7.0	8.8	5.0	8.0	7.4	7.7	7.4	6.9	7.0
IW-01	0.0	NM	15.2	4.3	0.0	9.8	0.0	1.2	1.2	5.0	4.2	0.2
MW-85	5.9	NM	6.4	6.0	6.6	6.3	ERR	7.8	8.1	6.2	5.3	6.4
PMW85-01	5.5	ERR	6.6	6.2	4.7	5.0	ERR	0.0	7.4	7.4	7.1	8.2
PMW85-02	1.7	ERR	7.8	6.6	6.8	7.5	ERR	0.0	8.7	7.6	7.2	6.8
PMW85-03	9.5	ERR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PMW85-04	-	-	-	-	-	-	-	-	-	-	-	-
PMW85-05	-	-	-	-	-	-	-	-	-	-	-	-
PMW92-01	1.9	ERR	1.5	4.7	4.6	4.6	4.6	9.0	7.0	6.6	7.5	4.3
PMW92-02	0.6	ERR	8.9	3.2	1.4	8.4	1.5	1.6	0.6	1.5	7.2	0.0
PMW92-03	4.7	ERR	5.3	4.3	3.4	4.4	2.5	4.5	1.3	2.5	6.2	1.7
PMW92-04	2.8	ERR	3.2	1.9	1.1	3.0	0.8	0.8	0.5	0.8	5.1	1.5
PMW92-05	4.0	ERR	4.5	4.3	2.9	0.0	3.6	3.6	3.3	4.1	5.7	3.0
PMW92-06	4.6	ERR	5.4	4.2	2.6	2.3	1.6	1.8	2.4	2.1	5.4	1.2
Average	4.1	ERR	6.4	5.0	4.1	5.7	3.0	3.5	4.4	4.8	6.4	3.9

** Dry well
ERR = Measurements in error, meter malfunctioned
NM = No measurement
AB = abandoned
- = well not installed
Dates above reflect first day of lactate injection event
OR = Out of Range

Aerobic
Nitrate
Ammonia

> 2 ppm
0-2 ppm
4500-9000

TTA-2 DO MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	THIRD QUARTER								FOURTH QUARTER							
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
IW85-01	0.0	0.4	0.0	1.4	0.0	0.0	0.9	3.8	0.0	0.0	2.6	0.0	4.0			
IW85-02	0.0	2.4	4.1	0.8	0.0	0.0	1.3	3.0	0.8	0.0	2.3	0.0	0.0			
IW85-03	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
IW85-04	**	**	**	**	**	**	**	**	**	**	**	**	**			
IW85-05	0.0	0.4	0.8	0.7	0.0	0.0	1.9	1.8	0.4	0.6	2.6	0.0	0.6			
IW85-06	0.0	1.1	0.0	1.4	1.8	0.0	0.6	7.9	0.8	0.0	2.5	0.0	0.0			
IW92-01	0.0	0.0	1.8	0.1	0.0	0.0	1.4	0.3	0.1	1.1	3.1	0.0	0.0			
IW92-02	1.1	0.0	0.0	1.0	0.0	0.0	0.2	4.3	0.1	5.2	0.0	13.7	0.0			
IW92-03	1.2	0.0	0.0	6.1	0.0	3.8	1.7	2.7	6.0	0.0	0.0	6.1	0.0			
IW92-04	3.2	1.7	0.0	OR	0.0	8.6	0.8	3.5	OR	0.3	10.9	0.0	0.0			
IW92-05	0.0	0.6	0.1	1.4	3.7	0.6	0.1	2.8	0.0	9.6	5.5	0.0	0.0			
IW92-06	0.6	7.7	0.0	0.8	0.0	0.0	0.3	2.1	OR	4.4	4.9	0.0	0.0			
IW92-07	0.5	0.4	0.0	2.3	6.9	0.0	0.8	0.6	OR	9.6	4.3	0.0	0.0			
IW92-08	0.0	4.8	0.0	1.8	3.9	0.0	2.0	1.0	1.5	0.0	2.7	0.0	0.0			
Average	0.5	1.6	0.6	1.6	1.7	1.1	1.0	2.8	1.1	2.6	3.4	1.6	0.4			

Monitoring Wells																
Well ID	14	15	16	17	18	19	20	21	22	23	24	25	26			
DR2-1	9.5	6.5	6.3	2.9	4.8	5.4	NM	4.5	0.5	0.5	0.2	0.0	0.0			
DR2-5	8.2	6.6	7.2	5.7	10.6	7.6	NM	9.6	10.3	12.1	3.9	2.9	6.0			
IW-01	1.4	0.0	0.0	4.1	1.5	0.3	1.3	0.0	3.1	0.8	0.2	0.0	6.9			
MW-85	6.8	4.3	4.5	2.7	7.1	6.0	NM	7.2	3.6	2.8	3.0	1.3	1.1			
PMW85-01	4.3	0.0	2.6	3.6	2.0	0.7	1.0	1.0	1.4	2.5	2.0	0.0	2.9			
PMW85-02	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
PMW85-03	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
PMW85-04	0.3	0.0	8.0	3.4	0.7	0.4	0.9	0.1	1.9	0.0	0.0	0.0	0.0			
PMW85-05	4.4	2.5	3.0	4.9	5.8	3.8	4.0	7.3	4.9	5.6	3.5	1.8	3.4			
PMW92-01	7.1	4.4	4.9	4.4	4.9	3.9	4.7	4.4	2.4	3.2	3.3	1.4	1.9			
PMW92-02	0.9	3.8	0.0	0.4	1.4	0.0	0.4	0.0	0.6	0.1	0.0	0.0	3.2			
PMW92-03	1.4	0.0	0.0	0.4	0.8	0.0	0.6	0.0	1.0	0.6	0.1	0.0	0.0			
PMW92-04	0.0	0.0	0.0	0.4	0.2	0.0	0.2	0.0	0.5	0.2	0.0	0.0	0.0			
PMW92-05	3.7	2.2	2.3	3.4	4.2	3.0	3.8	3.9	2.1	3.5	3.0	1.0	1.9			
PMW92-06	1.5	0.0	0.2	3.6	1.7	0.7	1.1	5.0	0.6	1.0	0.4	0.0	0.5			
Average	3.2	1.9	2.7	2.9	3.2	2.0	1.5	2.8	2.5	2.4	1.4	0.6	2.2			

** Dry well
ERR = Measurements in error, meter malfunctioned
NM = No measurement
AB = abandoned
- = well not installed
Dates above reflect first day of lactate injection event
OR = Out of Range

Aerobic > 2 ppm
Nitrate 0-2 ppm
Anaerobic /4500 ppm

TTA-1, MW21 AREA pH MEASUREMENTS
 YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
 Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	FIRST QUARTER												SECOND QUARTER			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007			
IW21-01A	8.0	9.7	6.1	6.1	4.0	5.9	6.0	5.9	6.1	6.0	6.0	6.1	6.1			
IW21-01B	9.3	9.6	6.4	10.6	4.4	6.1	6.0	6.2	6.4	6.4	6.3	6.4	6.4			
IW21-02A	5.9	6.6	4.4	5.6	5.8	6.0	5.9	5.9	6.2	5.9	5.9	6.0	6.0			
IW21-02B	5.5	6.7	4.8	6.9	5.8	6.0	5.7	5.9	5.9	6.0	5.9	6.0	6.0			
IW21-03A	5.9	6.8	5.9	6.2	4.5	6.0	6.0	5.9	6.0	5.9	5.9	6.0	6.0			
IW21-03B	5.8	7.4	6.3	10.5	6.9	6.2	6.3	6.3	6.3	6.3	6.3	6.4	6.3			
IW21-04A	5.8	7.6	6.3	10.2	7.3	7.6	6.7	6.2	7.6	8.2	6.6	6.9	6.6			
IW21-04B	5.9	7.3	7.8	10.6	6.0	6.2	6.1	6.0	6.2	6.2	6.1	6.2	6.3			
IW21-05A	6.8	7.9	9.6	5.9	6.1	6.5	5.9	5.9	8.0	6.9	6.2	6.1	7.0			
IW21-05B	6.4	7.0	6.3	5.8	5.8	6.1	6.0	6.0	6.1	6.0	6.1	6.1	6.1			
Average	6.5	7.7	6.4	8.4	5.7	6.2	6.1	6.0	6.5	6.4	6.1	6.2	6.3			

Monitoring Wells																
Well ID	1	2	3	4	5	6	7	8	9	10	11	12	13			
PMW21-01	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007			
PMW21-02	5.6	5.2	5.0	5.9	6.1	5.8	6.0	5.9	5.9	6.0	5.7	6.0	6.0			
PMW21-03	5.9	5.3	5.6	5.9	6.3	5.8	5.9	5.9	5.9	6.5	5.7	5.9	6.0			
PMW21-04	6.0	5.8	5.5	6.0	5.9	5.9	8.2	5.9	5.9	5.8	5.7	5.9	5.9			
PMW21-05	5.8	5.9	5.2	6.0	6.4	6.0	7.8	6.0	6.0	5.9	5.8	6.0	6.1			
MW-115	6.1	NM	5.4	6.0	5.9	5.7	5.9	5.9	5.9	6.0	5.8	5.9	6.0			
MW-21	5.6	NM	5.7	5.9	6.3	5.8	8.6	5.9	5.9	5.8	5.7	5.9	6.0			
Average	5.9	5.2	5.2	5.8	5.8	5.7	5.8	5.8	5.8	5.8	5.6	5.9	5.9			
	5.8	5.5	5.4	5.9	6.1	5.8	6.9	5.9	5.9	6.0	5.7	5.9	6.0			

NM = No measurement

ERR = Measurements in error; meter malfunctioned

Dates above reflect first day of lactate injection event

TTA-1, MW21 AREA pH MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	THIRD QUARTER							FOURTH QUARTER						
	14	15	16	17	18	19	20	21	22	23	24	25	26	
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007	
IW21-01A	6.3	6.0	6.1	6.0	6.4	6.1	6.4	5.7	6.0	6.0	6.1	6.1	6.1	
IW21-01B	6.3	6.4	6.2	6.3	6.6	6.3	6.1	6.0	6.1	6.0	6.1	6.0	6.2	
IW21-02A	5.8	6.0	6.1	6.0	6.6	6.0	5.7	5.6	5.8	6.0	6.1	6.0	5.9	
IW21-02B	6.0	5.9	6.1	5.9	6.6	5.9	6.0	5.5	5.7	5.9	6.0	5.9	5.8	
IW21-03A	6.4	6.0	6.0	6.0	6.6	5.9	6.2	5.7	5.7	6.0	6.0	6.0	6.0	
IW21-03B	6.6	6.4	6.3	6.3	6.7	6.4	6.1	5.6	5.9	6.0	6.0	6.0	6.0	
IW21-04A	6.2	6.1	6.1	6.0	6.7	6.0	6.2	5.8	5.8	6.0	6.0	6.1	6.1	
IW21-04B	6.2	6.1	6.3	6.1	6.7	6.1	6.1	6.2	6.0	6.1	6.7	6.1	6.0	
IW21-05A	6.0	5.9	6.2	6.3	6.5	6.0	5.7	5.6	5.6	5.9	5.9	6.1	5.9	
IW21-05B	6.2	6.1	6.1	6.0	6.6	6.1	5.8	5.7	5.9	6.0	6.1	6.0	6.0	
Average	6.2	6.1	6.2	6.1	6.6	6.1	6.0	5.7	5.8	6.0	6.1	6.0	6.0	

Monitoring Wells													
Well ID	14	15	16	17	18	19	20	21	22	23	24	25	26
PMW21-01	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007
PMW21-02	6.1	6.0	6.4	6.1	5.8	6.2	5.1	8.0	6.7	5.5	5.9	5.7	5.8
PMW21-03	6.3	6.0	6.4	6.1	5.9	6.2	6.0	7.7	6.6	5.7	5.9	5.7	5.8
PMW21-04	5.9	6.1	6.5	6.2	5.9	6.2	6.1	7.6	6.7	5.8	5.8	5.7	5.8
PMW21-05	5.9	6.0	6.3	6.2	5.8	6.2	5.9	7.5	6.8	5.8	5.8	5.7	5.8
MW-115	5.8	6.1	6.4	6.1	5.8	6.2	6.0	7.8	7.2	5.7	6.0	5.7	5.9
MW-21	6.3	5.9	6.3	6.0	5.7	6.2	5.9	7.7	6.7	5.5	5.7	5.6	5.7
Average	6.1	6.0	6.4	6.1	5.8	6.2	5.9	7.7	6.8	5.7	5.9	5.7	5.8

NM = No measurement

ERR = Measurements in error; meter malfunctioned

Dates above reflect first day of lactate injection event

6-2012-20

TTA-1, MW-101 AREA pH MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

FIRST QUARTER SECOND QUARTER

Injection Wells	FIRST QUARTER												SECOND QUARTER											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Well ID	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007	3/13/2007	3/28/2007	4/10/2007	4/23/2007	5/7/2007	5/21/2007	6/4/2007	6/18/2007	7/2/2007	7/16/2007	7/30/2007
IW101-01A	5.6	6.3	6.3	6.4	6.3	6.4	6.0	6.1	6.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
IW101-01B	6.5	6.4	6.1	6.9	6.4	6.4	6.3	6.2	6.3	6.3	6.4	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
IW101-01C	5.2	6.1	6.1	6.6	6.6	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-02A	5.3	6.2	6.3	6.3	6.1	6.3	6.2	6.1	6.2	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
IW101-02B	5.4	5.4	6.2	6.5	6.1	6.5	6.2	6.2	6.2	6.2	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-02C	6.2	5.9	6.0	7.2	6.2	6.2	6.2	6.1	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
IW101-03A	5.9	5.8	6.0	7.6	6.6	6.5	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
IW101-03B	6.9	6.4	6.0	6.7	6.4	6.3	6.0	6.0	6.1	6.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
IW101-03C	6.8	8.6	6.3	8.5	5.5	6.2	5.9	5.9	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-04A	5.6	5.3	6.3	5.5	5.9	6.5	5.9	6.2	6.4	6.2	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-04B	5.5	5.4	6.4	9.0	5.9	6.7	6.5	6.4	6.6	6.2	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
IW101-04C	5.8	8.9	6.5	11.4	5.2	7.7	6.3	6.7	8.9	6.9	7.3	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
IW101-05A	5.9	6.9	10.0	10.8	6.2	6.6	6.2	6.3	6.1	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
IW101-05B	5.0	6.8	6.5	8.7	6.1	6.5	6.1	6.2	6.4	6.2	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-05C	4.4	9.3	9.2	8.5	6.2	6.4	6.0	6.1	6.3	6.2	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-06A	5.9	6.2	6.2	9.3	6.5	6.5	6.0	6.2	6.4	6.3	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
IW101-06B	5.9	5.4	6.5	8.8	6.2	6.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
IW101-06C	5.9	5.4	7.9	8.3	6.1	6.1	6.1	6.1	6.2	6.2	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-07A	6.1	6.6	6.7	8.2	6.4	6.5	6.2	6.1	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-07B	5.9	7.3	7.7	8.1	6.3	6.4	6.2	6.1	6.2	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
IW101-07C	5.8	7.0	7.8	6.9	6.0	6.2	6.1	5.9	6.2	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-08A	5.1	6.0	6.1	9.1	5.3	6.4	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
IW101-08B	5.1	5.6	5.9	6.2	4.7	6.2	6.0	6.1	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-08C	5.3	5.5	5.9	6.7	4.4	6.0	5.8	5.9	6.1	6.2	6.1	6.2	6.1	6.2	6.1	6.2	6.1	6.2	6.1	6.2	6.1	6.2	6.1	6.1
IW101-09A	4.5	5.2	5.8	8.1	6.2	6.5	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
IW101-09B	5.3	5.2	8.6	8.3	6.0	6.2	5.9	6.2	6.1	6.0	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
IW101-09C	5.6	5.3	7.0	7.6	6.2	6.3	6.0	6.0	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1
Average	5.4	6.3	7.3	8.1	5.6	6.4	6.1	6.1	6.3	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3

Monitoring Wells																								
Well ID	1	2	3	4	5	6	7	8	9	10	11	12	13											
	9/11/2006	9/25/2006	10/11/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007											
PMW101-01A	60	58	62	64	63	64	58	61	60	60	61	62	62											
PMW101-01B	60	59	93	62	60	62	59	60	61	61	61	63	62											
PMW101-02A	60	56	70	61	61	61	61	60	62	63	62	66	66											
PMW101-02B	59	57	62	60	60	61	61	60	62	64	64	65	64											
PMW101-03A	60	59	60	60	59	60	60	59	58	60	59	60	59											
PMW101-03B	56	58	56	61	59	60	59	59	59	61	59	61	60											
PMW101-04A	59	57	68	60	60	60	60	59	59	60	60	61	60											
PMW101-04B	58	58	58	59	59	60	60	59	59	61	61	62	61											
PMW101-05A	58	76	105	62	64	65	63	64	64	65	65	66	65											
PMW101-05B	58	63	63	58	59	60	57	58	59	60	59	60	59											
PMW101-06A	61	62	56	61	60	57	58	60	60	61	60	61	65											
PMW101-06B	58	59	57	62	63	60	60	64	64	64	64	65	61											
PMW101-07A	59	63	72	62	63	62	86	63	62	64	61	65	64											
PMW101-07B	57	60	51	60	113	59	88	58	59	100	58	60	60											
PMW101-08A	59	59	57	62	61	59	61	61	61	61	61	63	63											
PMW101-08B	58	63	59	59	58	58	59	58	58	59	58	60	59											
MW101B	56	NM	60	55	61	60	62	59	60	62	62	61	61											
MW101T	58	NM	60	56	61	63	62	61	62	62	62	62	61											
DR1-3	59	NM	69	61	60	59	98	61	62	62	62	63	63											
Average	56	60	63	60	63	60	67	60	60	64	61	62	62											

NM = No measurement
Dates above reflect first day of lactate injection event

5/24/2007

TTA-1, MW-101 AREA pH MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

FOURTH QUARTER

THIRD QUARTER

Injection Wells	THIRD QUARTER												FOURTH QUARTER											
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007											
IW101-01A	6.1	5.9	6.3	5.9	6.1	6.0	6.0	7.1	6.0	5.9	6.0	5.9	6.0											
IW101-01B	6.3	6.3	6.7	6.4	6.4	6.2	6.1	7.4	6.1	6.2	6.2	6.3	6.3											
IW101-01C	6.1	6.1	6.2	6.3	6.3	6.2	5.9	6.7	5.9	6.1	6.1	6.1	6.0											
IW101-02A	6.1	6.2	6.3	6.1	6.4	6.2	5.9	5.9	6.7	6.1	6.2	5.9	6.0											
IW101-02B	6.1	6.2	6.4	6.2	6.5	6.3	5.9	6.0	6.2	6.7	6.2	6.3	6.3											
IW101-02C	6.1	6.1	6.3	6.1	6.3	6.2	6.1	5.7	6.1	6.1	6.1	6.0	6.1											
IW101-03A	6.1	6.0	6.2	6.0	6.2	6.0	6.0	4.8	5.9	6.0	6.0	6.0	6.0											
IW101-03B	6.0	6.1	6.2	6.0	6.2	6.0	6.0	5.9	6.0	6.0	6.0	6.1	6.0											
IW101-03C	6.1	6.1	6.2	6.0	6.2	6.0	5.9	5.7	5.9	6.0	6.1	6.0	6.0											
IW101-04A	6.2	6.1	6.5	5.9	6.2	6.0	6.1	5.7	6.0	5.9	6.0	5.9	5.9											
IW101-04B	6.4	6.5	6.6	6.3	6.7	6.4	6.6	6.2	6.5	6.4	6.5	6.4	6.4											
IW101-04C	6.5	7.1	7.1	6.9	6.9	6.7	6.7	6.2	6.7	6.7	6.8	6.7	6.6											
IW101-05A	6.3	6.3	6.4	6.2	6.4	6.1	6.1	5.8	6.0	6.0	6.1	6.1	6.0											
IW101-05B	6.2	6.3	6.4	6.1	6.4	6.2	6.1	7.2	6.1	6.1	6.2	6.2	6.2											
IW101-05C	6.1	6.2	6.2	6.1	6.3	6.2	6.2	6.9	6.2	6.3	6.2	6.2	6.1											
IW101-06A	6.2	6.3	6.3	6.2	6.6	6.2	6.2	6.0	6.2	6.2	6.3	6.2	6.2											
IW101-06B	5.9	6.1	6.2	6.1	6.5	6.0	5.7	5.7	6.1	6.1	6.1	6.0	6.0											
IW101-06C	6.0	6.1	6.2	6.1	6.5	6.0	5.8	5.8	6.1	6.0	6.1	6.0	6.0											
IW101-07A	6.2	6.1	6.3	6.1	6.4	6.1	NM	5.9	6.1	6.1	6.2	6.1	6.1											
IW101-07B	6.4	6.2	6.3	6.2	6.4	6.2	NM	5.9	6.0	6.2	6.3	6.2	6.2											
IW101-07C	6.0	6.0	6.1	6.1	6.2	6.2	NM	5.7	5.9	6.0	6.2	6.0	6.0											
IW101-08A	6.2	6.3	6.3	6.2	6.7	6.3	NM	6.0	6.3	6.3	6.4	6.2	6.3											
IW101-08B	6.2	6.2	6.6	6.1	6.7	6.1	NM	5.8	6.0	6.0	6.4	6.1	6.2											
IW101-08C	6.2	6.1	6.2	6.0	6.6	6.1	NM	5.8	6.0	6.0	6.2	6.1	6.1											
IW101-08A	6.2	6.3	6.5	6.3	6.3	6.4	6.5	6.2	6.6	6.5	6.6	6.5	6.5											
IW101-09B	6.2	6.1	6.3	6.2	6.3	6.2	6.2	5.9	6.2	6.1	6.2	6.1	6.1											
IW101-09C	6.1	6.0	6.5	6.0	6.1	6.0	5.9	5.7	6.0	6.0	6.2	6.0	6.0											
Average	6.2	6.2	6.4	6.1	6.4	6.2	6.1	6.1	6.1	6.1	6.2	6.2	6.1											

Monitoring Wells	THIRD QUARTER												FOURTH QUARTER											
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007											
PMW101-01A	6.1	6.4	6.4	6.4	6.3	6.4	NM	8.3	7.9	6.3	6.4	6.2	6.4											
PMW101-01B	5.8	6.3	6.2	6.3	6.1	6.4	NM	7.9	7.4	6.2	6.5	6.5	6.3											
PMW101-02A	6.5	6.7	6.8	6.7	6.4	6.7	NM	8.1	7.9	5.9	6.8	6.6	6.6											
PMW101-02B	6.4	6.6	6.4	6.3	6.8	6.6	NM	7.9	7.5	6.0	6.6	6.2	6.4											
PMW101-03A	5.9	6.0	5.9	5.9	5.9	6.1	5.4	6.7	6.5	5.7	6.0	5.8	5.9											
PMW101-03B	6.3	6.1	6.1	6.1	6.1	6.4	NM	7.3	7.3	6.2	6.4	6.2	6.3											
PMW101-04A	6.2	6.2	6.2	6.3	6.2	6.5	NM	7.3	7.3	6.5	6.7	6.6	6.6											
PMW101-04B	6.3	6.4	6.3	6.4	6.4	6.6	NM	7.7	7.3	6.4	6.5	6.3	6.3											
PMW101-05A	6.2	6.5	6.5	6.5	6.5	6.8	6.5	7.7	7.5	6.4	6.5	6.5	6.4											
PMW101-05B	5.8	6.1	6.0	6.1	6.1	6.3	6.1	6.5	7.1	6.1	6.2	6.0	5.9											
PMW101-06A	6.1	6.4	6.0	6.1	6.1	6.4	6.2	6.7	6.7	6.1	6.1	6.0	6.0											
PMW101-06B	6.5	6.5	6.4	6.5	6.5	6.6	6.6	7.8	7.7	6.5	6.5	6.5	6.5											
PMW101-07A	6.4	6.4	6.3	6.3	6.3	6.6	NM	7.5	7.3	7.3	6.3	6.1	6.2											
PMW101-07B	5.5	5.9	6.0	5.9	5.8	6.2	5.3	5.9	6.3	5.8	6.0	5.6	5.7											
PMW101-08A	6.4	6.3	6.5	6.1	6.2	6.3	NM	6.0	6.9	6.6	6.5	6.2	6.1											
PMW101-08B	5.9	6.0	6.3	5.9	5.9	6.2	5.7	5.6	6.3	5.8	5.8	5.7	5.6											
MW101B	6.2	6.1	6.1	6.0	6.3	6.1	6.1	5.6	5.9	6.2	6.1	6.1	6.0											
MW101T	6.2	6.0	6.1	6.0	6.3	6.1	6.1	6.0	6.2	6.2	6.2	6.1	6.0											
DR1-3	6.2	6.3	6.7	6.4	6.3	6.5	NM	7.3	7.4	6.5	6.6	6.3	6.4											
Average	6.1	6.3	6.3	6.2	6.2	6.4	6.0	7.0	7.1	6.2	6.3	6.2	6.2											

NM = No measurement
Dates above reflect first day of lactate injection event

5-2015-20

TTA-2 pH MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	FIRST QUARTER													SECOND QUARTER												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/1/2006	9/25/2006	10/1/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007													
IW85-01	4.3	6.3	8.0	5.7	6.0	6.1	6.3	6.1	6.3	6.3	6.1	6.2	6.2													
IW85-02	5.2	5.8	10.9	5.8	6.1	6.2	6.3	6.1	6.2	6.3	6.2	6.2	6.3													
IW85-03	5.9	6.2	5.2	5.8	6.5	6.2	**	6.7	6.7	6.7	**	**	AB													
IW85-04	5.8	6.3	6.1	6.0	6.8	6.4	6.7	**	6.3	**	**	6.5	**													
IW85-05	-	-	-	-	-	-	-	-	-	-	-	-	-													
IW85-06	-	-	-	-	-	-	-	-	-	-	-	-	-													
IW92-01	5.2	5.8	5.8	6.0	6.5	6.0	6.0	6.2	6.3	6.3	6.2	6.3	6.3													
IW92-02	5.8	5.8	5.7	6.7	6.9	6.0	6.1	6.7	6.8	6.7	6.6	6.6	6.2													
IW92-03	5.9	5.6	5.8	5.7	6.2	5.9	5.8	6.1	6.2	5.8	6.1	6.1	6.0													
IW92-04	6.2	5.7	11.2	5.6	5.9	6.0	6.3	6.3	6.2	6.1	6.1	6.1	6.0													
IW92-05	6.2	5.9	5.9	6.2	7.1	6.2	6.3	6.3	6.4	6.4	6.4	6.3	6.2													
IW92-06	6.9	5.8	11.2	5.9	6.2	6.3	6.2	6.2	6.4	6.2	6.2	6.2	6.2													
IW92-07	6.0	6.0	6.0	5.9	7.4	6.1	6.1	6.1	6.0	5.9	6.1	6.1	5.8													
IW92-08	5.9	5.3	10.6	6.0	6.1	5.9	5.8	6.1	6.0	6.1	6.0	6.2	6.1													
Average	5.8	5.9	8.4	5.9	6.5	6.1	6.2	6.2	6.3	6.2	6.2	6.3	6.3													

Monitoring Wells	FIRST QUARTER													SECOND QUARTER												
	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
Well ID	9/1/2006	9/25/2006	10/1/2006	10/23/2006	11/9/2006	11/27/2006	12/11/2006	12/20/2006	1/5/2007	1/18/2007	1/31/2007	2/13/2007	2/28/2007													
DR2-1	4.7	6.1	6.0	7.1	6.0	6.0	7.5	6.2	6.2	5.9	5.8	6.1	6.0													
DR2-5	5.0	3.1	8.3	9.7	6.3	6.2	6.0	6.0	6.0	5.9	6.1	6.0	5.9													
IW-01	5.5	NM	8.9	9.0	5.7	5.8	5.8	5.4	5.2	5.4	5.5	5.9	5.4													
MW-85	4.6	NM	5.8	5.5	5.7	5.7	5.6	5.8	5.9	5.8	5.8	5.9	5.7													
PMW85-01	4.8	6.1	5.6	6.0	5.7	6.0	5.6	5.6	5.9	6.0	6.0	6.3	5.9													
PMW85-02	6.1	4.8	6.1	5.7	5.9	6.0	5.6	5.6	6.2	6.6	6.3	6.3	AB													
PMW85-03	5.6	NM	5.8	5.8	**	**	**	**	**	**	**	**	AB													
PMW85-04	-	-	-	-	-	-	-	-	-	-	-	-	-													
PMW85-05	-	-	-	-	-	-	-	-	-	-	-	-	-													
PMW92-01	6.1	5.9	5.8	5.4	5.9	5.9	5.9	5.9	6.0	6.0	6.0	6.0	5.9													
PMW92-02	5.9	6.4	9.6	10.5	6.3	6.3	6.4	6.4	6.4	5.3	6.7	6.9	6.8													
PMW92-03	4.7	5.7	5.8	5.6	5.8	5.9	6.3	6.3	6.0	6.1	5.9	6.2	6.3													
PMW92-04	5.0	4.2	5.6	7.0	6.0	6.2	6.2	6.2	6.3	6.3	6.3	6.5	6.5													
PMW92-05	4.8	2.8	5.5	5.3	5.7	**	7.2	7.2	5.8	5.8	5.6	5.8	5.8													
PMW92-06	4.8	4.8	5.7	5.9	5.6	5.7	6.1	6.1	5.8	5.7	5.5	5.9	5.8													
AVERAGE	5.2	5.0	6.5	6.8	5.9	6.0	6.2	6.0	5.9	5.9	5.9	6.1	6.0													

** Dry well
NM = No measurement
AB = abandoned
- = well not installed
Dates above reflect first day of lactate injection event

TTA-2 OH MEASUREMENTS
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Injection Wells	THIRD QUARTER								FOURTH QUARTER							
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
IW85-01	6.1	6.2	6.1	6.2	6.0	NM	5.8	5.8	6.0	5.9	5.9	5.7	5.8			
IW85-02	6.1	6.3	6.3	6.2	6.3	NM	6.1	6.1	6.0	6.0	6.1	6.0	6.1			
IW85-03	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
IW85-04	**	**	**	**	**	**	**	**	**	**	**	**	**			
IW85-05	5.9	5.9	5.9	5.8	6.1	NM	6.3	5.9	5.6	5.9	6.0	5.9	5.9			
IW85-06	6.2	6.4	6.5	6.3	6.3	NM	6.2	6.1	6.3	6.2	6.3	6.3	6.2			
IW92-01	6.1	6.4	6.2	6.1	6.7	6.1	6.2	6.1	6.2	6.2	6.1	6.2	6.2			
IW92-02	6.4	6.1	6.2	5.8	6.5	6.1	6.0	5.7	6.0	6.0	6.0	6.1	6.0			
IW92-03	5.8	6.1	5.8	5.8	6.4	5.8	5.8	5.7	5.8	5.8	6.0	6.1	6.0			
IW92-04	6.3	6.2	6.2	6.3	6.2	6.2	6.2	6.0	6.2	6.2	6.2	6.2	6.1			
IW92-05	6.3	6.2	6.3	6.4	6.5	NM	6.5	6.2	6.3	6.3	6.3	6.1	6.2			
IW92-06	6.2	6.3	6.3	6.3	6.2	NM	6.3	6.1	6.3	6.2	6.4	6.2	6.2			
IW92-07	6.1	6.2	5.9	6.1	6.1	NM	6.1	6.0	6.0	6.0	6.2	6.0	6.0			
IW92-08	6.2	6.3	6.7	6.1	6.2	NM	6.2	6.1	6.0	5.9	6.1	6.0	6.0			
Average	6.1	6.2	6.2	6.1	6.3	6.0	6.1	6.0	6.0	6.0	6.1	6.1	6.1			

Monitoring Wells	THIRD QUARTER								FOURTH QUARTER							
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Well ID	3/14/2007	3/28/2007	4/11/2007	4/30/2007	5/9/2007	5/23/2007	6/11/2007	6/19/2007	7/3/2007	7/17/2007	7/31/2007	8/14/2007	8/28/2007			
DR2-1	6.1	6.1	6.5	6.2	5.8	6.3	6.2	7.8	7.0	5.8	5.6	5.7	5.6			
DR2-5	6.1	6.0	6.5	6.1	6.0	6.4	6.1	5.0	6.9	6.1	5.8	5.6	5.8			
IW-01	5.4	5.5	6.0	5.5	5.3	5.9	5.3	7.1	6.9	3.9	5.1	5.0	5.1			
MW-85	5.5	5.9	6.3	5.7	5.7	6.1	6.0	5.0	5.9	6.0	5.9	5.9	5.9			
PMW85-01	6.0	6.1	6.4	5.9	5.9	6.2	5.8	5.9	7.2	5.9	5.9	5.7	5.9			
PMW85-02	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
PMW85-03	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB			
PMW85-04	6.2	6.3	6.8	6.4	6.2	6.6	6.4	6.2	6.4	6.5	6.5	6.3	6.3			
PMW85-05	5.8	5.8	6.1	5.8	5.6	6.1	5.6	5.6	5.7	5.7	5.5	5.4	5.4			
PMW92-01	6.0	6.0	6.3	6.1	5.8	6.1	5.9	7.4	6.8	5.9	5.7	5.7	5.7			
PMW92-02	6.4	6.6	7.0	6.5	6.4	6.5	6.5	8.4	8.0	6.4	6.4	6.3	6.4			
PMW92-03	6.4	6.2	6.9	6.4	6.4	6.6	6.4	8.3	7.7	6.4	6.4	6.3	6.2			
PMW92-04	6.4	6.4	7.0	6.6	6.4	6.6	6.4	8.2	7.7	6.4	6.3	6.2	6.2			
PMW92-05	5.8	5.9	6.2	5.9	5.7	6.1	5.7	7.4	6.8	5.6	5.6	5.5	5.5			
PMW92-06	5.7	5.9	6.1	5.9	5.5	6.3	5.7	7.3	7.3	5.8	5.7	5.7	5.8			
AVERAGE	6.0	6.0	6.5	6.1	5.9	6.3	6.0	6.9	7.0	5.9	5.9	5.8	5.8			

** Dry well
NM = No measurement
AB = abandoned
- = well not installed
Dates above reflect first day of lactate injection event

*Main Installation EBT
Year One Remedial Action Operations Report
Defense Depot Memphis, Tennessee*

*July 2008
Revision 0*

APPENDIX F
LABORATORY ANALYTICAL RESULTS

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04A DUP
LAB SAMPLE ID	L0608210-04	L0608210-05	L0608253-01	L0608210-03	L0608253-03	L0608253-04	L0608292-01	L0608292-05
DATE COLLECTED	8/8/2006	8/8/2006	8/9/2006	8/9/2006	8/9/2006	8/9/2006	8/10/2006	8/10/2006
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.285 J
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.739	0.256 J	0.3 J	0.725 J	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	3.67 B	2.61 B	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.231 J	0.158 J	<0.3	<0.3	<0.3	0.275 J	0.254 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	3.17	1.99	1.78	0.99 J	2.71	0.916 J	4.13
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	27.8	16.6	4.98 J	6.19	35.6	20	28.7
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	234	144	99.7	80.2	193	49.4 J	276
Toluene	ug/L	0.576 J	0.414 J	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	0.463 J	<1	<1	<1	<1	<1	1.44
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	55.7	30.1	17	14.8	56.1	23.4	64.5
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-04B	IW21-05A	IW21-05B	MW-115	MW-21	MW-21 DUP	PMW21-01	PMW21-02
LAB SAMPLE ID	L0608292-02	L0608292-08	L0608292-07	L0608292-03	L0608210-01	L0608210-02	L0608253-08	L0608253-02
DATE COLLECTED	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/8/2006	8/8/2006	8/9/2006	8/9/2006
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	0.261 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.698	1.06	0.808	<0.5	<0.5	0.293 J
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.28 J	<0.3	<0.3	<0.3	<0.3	0.15 J	0.144 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	3.57	1.55	0.756 J	4.2	1.33	1.3	1.51
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	24.2	59.4	42	9.34	33.9	33.5	24.7
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	286	83.6	41.5	10.1	106	109	166
Toluene	ug/L	<1	<1	<1	<1	<1	<1	0.437 J
trans-1,2-Dichloroethene	ug/L	1.26	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	56.4	30.8	16.7	4.96	16.3	17	40.6
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly based high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW21-03	PMW21-04	PMW21-05	IW101-01A	IW101-01B	IW101-01C	IW101-01C DUP	IW101-02A
LAB SAMPLE ID	L0608292-06	L0608253-09	L0608292-09	L0608509-01	L0608515-01	L0608515-02	L0608515-04	L0608515-03
DATE COLLECTED	8/10/2006	8/9/2006	8/10/2006	8/21/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.293 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	6.73 J	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	0.297 J	<0.5	<0.5	<0.5
Bromofarm	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.173 J	<0.3	<0.3	0.38	0.179 J	0.243 J	0.235 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	2.55	2.94	0.525 J	<1	0.253 J	<1	<1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	0.479 J	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	35.4	83.6	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	0.28 B	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	185	199	6.37	47.5	71.8	228	229
Toluene	ug/L	<1	<1	0.286 J	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	0.291 J	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	58	87.7	34.4	0.625 J	<1	0.91 J	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-02B	IW101-02C	IW101-03A	IW101-03B	IW101-03B DUP	IW101-03C	IW101-04A	IW101-04B
LAB SAMPLE ID	L0608554-01	L0608554-02	L0608553-01	L0608553-02	L0608553-03	L0608582-02	L0608582-03	L0608582-04
DATE COLLECTED	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/24/2006	8/24/2006	8/24/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.331 J	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	0.478 J	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	3.23 B	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.23 J	0.237 J	<0.3	0.29 J	<0.3	0.257 J	0.265 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	<1	0.275 J	<1	<1	3.03	<1	<1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	0.597 B	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	221	190	3.95	89.9	75.3	59	182
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.406 J	3.74	<1	1.08	0.779 J	78.5	0.312 J
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-04C	IW101-04C DUP	IW101-05A	IW101-05B	IW101-05C	IW101-06A	IW101-06B	IW101-06B DUP
LAB SAMPLE ID	L0608582-05	L0608582-06	L0608627-01	L0608627-02	L0608599-02	L0608650-01	L0608627-03	L0608627-08
DATE COLLECTED	8/24/2006	8/24/2006	8/28/2006	8/28/2006	8/25/2006	8/29/2006	8/28/2006	8/28/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.251 J	<0.5	<0.5	<0.5	0.362 J	0.328 J
1,2-Dichloropropene	ug/L	0.291 J	0.367 J	<1	<1	<1	0.315 J	0.286 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	2.81 B	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	0.278 J	0.271 J	<0.5	<0.5	<0.5	<0.5	<0.5
Bromofom	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.502	0.525	0.219 J	<0.3	0.294 J	<0.3	0.197 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	1.62	1.79	<1	<1	0.284 J	<1	2.19
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	0.326 J	0.258 J	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	0.478 B	0.298 B	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	169	172	63.1	202	219	6.84	47
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	29.7	32.4	<1	0.318 J	3.44	<1	64.7
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C	IW101-09A
LAB SAMPLE ID	L0608627-04	L0608627-05	L0608649-02	L0608649-03	L0608627-06	L0608627-07	L0608649-04	L0608649-05
DATE COLLECTED	8/28/2006	8/28/2006	8/29/2006	8/29/2006	8/28/2006	8/28/2006	8/29/2006	8/29/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	0.42 J	<1	<1	0.687 J	<1	<1	0.704 J
1,1-Dichloroethane	ug/L	0.359 J	<1	0.229 J	0.437 J	<1	<1	0.543 J
1,1-Dichloroethene	ug/L	0.566 J	<1	<1	0.552 J	<1	<1	0.563 J
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	1.4	<0.5	0.847	1.03	<0.5	<0.5	0.889
1,2-Dichloropropane	ug/L	1.47	<1	0.684 J	1.49	<1	<1	1.35
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	0.326 J	<0.4	0.15 J	0.396 J	<0.4	<0.4	0.367 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromofom	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.45	<0.3	0.271 J	0.47	<0.3	<0.3	0.451
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	11.2	<1	5.63	16.2	0.318 J	2.09	19.9
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	1.44 B	<1	0.609 B	1.24 B	<1	<1	1.34 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	66.2	5.16	38	60.9	0.907 J	17.5	66.6
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	204	2.61	138	207	0.983 J	51	240
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-09B	IW101-09C	MW-101B	MW-101T	MW101-T DUP	DR1-3	PMW101-01A	PMW101-01B
LAB SAMPLE ID	L0608649-08	L0608649-09	L0608599-03	L0608599-06	L0608599-08	L0608599-01	L0608510-01	L0608510-04
DATE COLLECTED	8/29/2006	8/29/2006	8/25/2006	8/25/2006	8/25/2006	8/25/2006	8/21/2006	8/21/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	0.583 J	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	0.826 J	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.335 J	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	0.233 J	1.32	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	2.72 J	<10
Benzene	ug/L	<0.4	0.43	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.228 J	0.524	0.233 J	0.261 J	0.261 J	<0.3	0.222 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5.36	22.9	0.279 J	0.266 J	<1	0.257 J	0.3 J
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Elthylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.812 B	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	0.232 J
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	45.8	101	239	251	235	45.7	110 J
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	96	316	0.293 J	0.298 J	0.257 J	4.18	1.19
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04A DUP	PMW101-04B	PMW101-05A
LAB SAMPLE ID	L0608517-01	L0608517-02	L0608552-01	L0608552-02	L0608517-03	L0608517-05	L0608549-10	L0608517-04
DATE COLLECTED	8/22/2006	8/22/2006	8/23/2006	8/23/2006	8/23/2006	8/22/2006	8/29/2006	8/22/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.267 J	0.202 J	0.17 J	0.186 J	0.199 J	0.191 J	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	<1	0.326 J	<1	<1	<1	0.971 J	<1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	0.28 B	<1	<1	<1	0.274 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	257	196	100	144	199	191	90.4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.322 J	4.73	<1	2.41	0.26 J	<1	23.2
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07A DUP	PMW101-07B	PMW101-08A	PMW101-08B
LAB SAMPLE ID	L0608552-03	L0608552-04	L0608581-01	L0608599-07	L0608599-09	L0608581-04	L0608581-05	L0608581-06
DATE COLLECTED	8/23/2006	8/23/2006	8/24/2006	8/25/2006	8/25/2006	8/24/2006	8/24/2006	8/24/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Units								
Analyte								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	0.401 J	<1	<1	<1	0.492 J	<1	<1
1,1-Dichloroethane	ug/L	0.273 J	<1	<1	<1	0.361 J	<1	0.398 J
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	0.659 J
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.533	<0.5	<0.5	<0.5	0.529	<0.5	<0.5
1,2-Dichloropropane	ug/L	1	<1	<1	<1	1.34	<1	0.771 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	3.15 J	<10	3.16 J
Benzene	ug/L	0.211 J	<0.4	<0.4	<0.4	0.303 J	<0.4	0.239 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.336	<0.3	0.166 J	<0.3	0.431	0.163 J	0.343
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	8.85	<1	0.687 J	0.263 J	<1	14.6	0.288 J
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	1.04	<1	<1	<1	1.38	<1	0.746 J
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	38.7	4.16	23.3	0.562 J	0.62 J	53.6	0.735 J
Toluene	ug/L	<1	<1	<1	<1	<1	<1	0.438 J
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	151	<1	16.2	0.782 J	0.771 J	187	232
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW85-01	IW85-02	IW85-04	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05
LAB SAMPLE ID	L0609061-01	L0609061-02	L0609061-03	L0609050-03	L0609050-04	L0609052-01	L0609052-02	L0609052-03
DATE COLLECTED	9/1/2006	9/1/2006	9/1/2006	8/31/2006	8/31/2006	8/31/2006	8/31/2006	8/31/2006
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	40.1	79	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	0.157 J	0.171 J	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.503	0.776	0.495 J	<0.5	0.34 J	0.3 J	<0.5
1,2-Dichloropropane	ug/L	0.274 J	0.287 J	<1	<1	<1	<1	0.256 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	3.63 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	0.269 J	<1
Bromodichloromethane	ug/L	<0.5	<0.5	1.41	<0.5	<0.5	<0.5	0.758
Bromoform	ug/L	<1	<1	2.17	<1	<1	<1	1.18
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	168	71.4	2.02	22.7	13	30.5	29.9
Chlorobenzene	ug/L	0.218 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	51.8	39.5	7.04	7.83	9.49	12.8	18.5
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	40.3	29.4	0.677 J	14.1	10.4	9.31	10.2
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	0.301 J	2.57	<0.5	<0.5	0.276 J	0.287 J
Dibromomethane	ug/L	<1	<1	<1	<1	<1	0.362 J	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	1030	<10	<10	172
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	79.2	48.7	1.06	160	104	184	170
Toluene	ug/L	<1	<1	0.6 B	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	0.525 J	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	26.3	15.5	<1	6.36	4.01	6.84	6.1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	W92-06	W92-07	W92-08	DR2-1	DR2-5	W-01	MW-85	MW-85 DUP
LAB SAMPLE ID	L0609060-01	L0609060-02	L0609068-02	L0609050-01	L0609050-02	L0609098-01	L0608882-01	L0608882-04
DATE COLLECTED	9/1/2006	9/1/2006	9/5/2006	8/31/2006	8/31/2006	9/5/2006	8/30/2006	8/30/2006
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	89.5	<1	28.4	0.667 J	40.4
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	0.342 J	<1	0.166 J	<1	0.163 J
1,2-Dichloroethane	ug/L	<0.5	0.529	1.97	<0.5	0.705	0.661	0.769
1,2-Dichloropropane	ug/L	<1	0.343 J	0.848 J	<1	0.214 J	0.601 J	0.255 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	0.14 J	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	1.9	0.333 J	<0.5	<0.5	<0.5	<0.5	<0.5
Bromofom	ug/L	2.09	0.884 J	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	8.77	38.4	103	32.3	142	9.79	188
Chlorobenzene	ug/L	<0.5	<0.5	0.23 J	<0.5	0.183 J	0.134 J	0.162 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	7.63	21	68.9	9.91	46.7	8.72	43.6
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	3.12	13.3	57.9	17	31	149	26.1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	2.58	0.461 J	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	51.2	196	156	176	54.2	40.4	74.8
Toluene	ug/L	0.251 J	<1	0.252 J	<1	<1	0.3 J	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	0.319 J	0.506 J	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	2.58	9.2	26.9	8.51	18.3	5.85	25.1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	0.453 J	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-1
VOLATILE ORGANIC COMPOUNDS, BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW85-01	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
LAB SAMPLE ID	L0608682-02	L0608682-03	L0609052-04	L0608683-01	L0608683-02	L0608683-03	L0608683-04
DATE COLLECTED	8/30/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006	8/30/2006
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units						
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	12.7	<1	<1	<1	1.43	188
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	0.558 J
1,2-Dichloroethane	ug/L	0.732	<0.5	<0.5	0.701	0.335 J	0.661
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	0.359 J	0.911 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.182 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	222	8.92	19.8	58.1	33.1	77.5
Chlorobenzene	ug/L	0.175 J	<0.5	<0.5	<0.5	<0.5	0.29 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	58.9	5.59	12.2	19.2	11.4	28.8
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	28.3	4.72	10.9	19.9	10.7	26.2
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	79.6	73	157	252	165	223
Toluene	ug/L	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	0.443 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	26.1	2.87	5.81	11.5	7.8	17.1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-01A	IW21-01A DUP	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03A DUP	IW21-03B	IW21-04A	IW21-04B
LAB SAMPLE ID	L0612275-01	L0612275-04	L0612274-01	L0612274-02	L0612275-02	L0612274-05	L0612274-07	L0612274-06	L0612275-03	L0612296-01
DATE COLLECTED	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/11/2006	12/12/2006
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.735
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.181 J
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.256 J	<0.5	0.306 J	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	29.3	45.3	68.4	<10	<10	<10	<10	3.41 J	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	0.192 J	<0.3	<0.3	0.136 J	0.139 J	<0.3	0.221 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	3.05	3.12	2.42	1.45	0.888 J	1.75	1.89	0.633 J	70.3
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m-p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	46.3	49.8	49.7	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	31.1	30.4	16	21.7	40.1	47.2	48	28.8	22.6
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	197	245	151	117 J	99.2	158	173	50.8	79
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	0.462 J	0.422 J	0.526 J	<1	<1	<1	<1	0.894 J	1.77
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	63.8	62.6	35.2	21.4	16.3	50.9	54.1	19.1	28.8
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

	WELL ID	IW21-05A	IW21-05B	MW-115	MW-21	PMW21-01	PMW21-02	PMW21-03	PMW21-03 DUP	PMW21-04	PMW21-05
	LAB SAMPLE ID	L0612296-02	L0612295-01	L0612161-03	L0612154-03	L0612154-01	L0612154-02	L0612161-01	L0612161-05	L0612161-02	L0612103-01
	DATE COLLECTED	12/12/2006	12/12/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/5/2006
	AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units										
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	0.652	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.447 J	0.607	0.564	<0.5	0.257 J	0.535	0.643	0.608	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	10.5	3.21 B	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	0.129 J	<0.3	<0.3	<0.3	<0.3	0.199 J	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	1.36	0.725 J	0.664 J	1.17	2.27	0.825 J	0.527 J	0.709 J	2.47	0.278 J
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	10.8	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	40.1	38	4.58 J	48.5	31.8	24.4	16.6	19.5	73.8	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	99.1	81.7	9.16	129	193	62.5	46.3	56	190	8.66
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.26 J	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	31	25	2.18	19.8	46.4	22	14.6	19.2	84.5	18.3
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	W101-01A	W101-01A DUP	W101-01B	W101-01C	W101-02A	W101-02B	W101-02C	W101-03A	W101-03B	W101-03C
LAB SAMPLE ID	L0612077-02	L0612077-01	L0612077-03	L0612077-04	L0612077-05	L0612077-06	L0612104-01	L0612104-02	L0612104-03	L0612104-04
DATE COLLECTED	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.196 J
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.982
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	1.22
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	31.8	26.5	<10	7.59 J	8.55 J	9.71 J	4.5 J	9.2 J	4.03 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	0.888 J	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.37	0.154 J	0.139 J	0.234 J	0.187 J	0.174 J	<0.3	<0.3	0.19 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	1.04	<1	21.8
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	42.4	31.7	<10	<10	4.7 J	<10	2.91 J	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	0.27 J	<1	<1	<1	<1	<1	<1	<1	1.03
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	19.1	25.4	65.3	183	189	174	188	38.8	154
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.721 J	0.523 J	<1	0.972 J	<1	<1	20.5	<1	1.33
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-04A	IW101-04B	IW101-04C	IW101-05A	IW101-05A DUP	IW101-05B	IW101-05C	IW101-06A	IW101-06B	IW101-06C
LAB SAMPLE ID	L0612160-01	L0612160-02	L0612160-03	L0612160-04	L0612160-08	L0612160-05	L0612160-06	L0612160-07	L0612203-01	L0612203-02
DATE COLLECTED	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/6/2006	12/7/2006	12/7/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	0.258 J	<1	<1	<1	<1	<1	0.75 J
1,1-Dichloroethane	ug/L	<1	<1	0.172 J	<1	<1	<1	<1	<1	0.553 J
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.52 J
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	1.08	<0.5	<0.5	<0.5	<0.5	<0.5	1.42
1,2-Dichloropropene	ug/L	<1	<1	1.46	<1	<1	<1	<1	<1	2.17
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	15.8	<10	<10	<10	<10	7.56 J	8.12 J	<10	5.76 J
Benzene	ug/L	<0.4	<0.4	0.14 J	<0.4	<0.4	<0.4	<0.4	<0.4	0.191 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroforn	ug/L	<0.3	<0.3	0.376	0.164 J	<0.3	0.201 J	<0.3	0.146 J	0.52
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	<1	94.3	39.8	<1	<1	0.399 J	<1	0.433 J	16.8
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	82.3	2.83 J	<10	<10	<10	5.08 J	10.5	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	0.252 J	<1	1.08	<1	<1	<1	<1	<1	2.48 J
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	123	4.12	102	181	171	181	194	5.34	61.1
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	0.462 J	1.46	113	<1	<1	9.2	<1	13.2	241
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08A DUP	IW101-08B	IW101-08C	IW101-08A	IW101-08B	IW101-09C
LAB SAMPLE ID	L0612203-03	L0612203-04	L0612229-01	L0612229-02	L0612229-05	L0612229-03	L0612229-04	L0612230-01	L0612230-04	L0612230-05
DATE COLLECTED	12/7/2006	12/7/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	1.86	<1	<1	<1	1.03	<1	0.288 J
1,1-Dichloroethane	ug/L	<1	<1	0.944 J	<1	<1	<1	0.741 J	<1	0.276 J
1,1-Dichloroethene	ug/L	<1	<1	0.605 J	<1	<1	<1	0.517 J	<1	0.77 J
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.557	2.89	<0.5	<0.5	<0.5	1.18	<0.5	0.418 J
1,2-Dichloropropane	ug/L	<1	0.747 J	4.17	<1	<1	<1	1.9	<1	0.535 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	5.75 J	<10	3.39 B	3.71 B	3.7 B	<10	8.06 B	6.26 J	8.31 J
Benzene	ug/L	<0.4	<0.4	0.351 B	<0.4	<0.4	<0.4	<0.4	<0.4	0.317 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	0.203 J	0.672	<0.3	<0.3	<0.3	0.485	<0.3	0.493
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	0.938 J	4.37	25.8	<1	<1	2.33	18.7	<1	10.2
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	3.31 J	<10	<10	<10	<10	7.48 J	<10	73.3	18.6
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.802 B	3.4	<1	<1	1.83	<1	0.787 B	1.32 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	22.2	38.2	102	0.944 J	0.998 J	15.3	80.2	2.55	46.4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	31.1	140	402	0.796 J	0.753 J	55.3	270	0.763 J	173
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result, possibly based high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	MW-101B	MW-101T	DR1-3	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B
LAB SAMPLE ID	L0612203-06	L0612203-05	L0612107-04	L0612076-01	L0612076-04	L0612078-03	L0612078-04	L0612078-05	L0612078-06
DATE COLLECTED	12/7/2006	12/7/2006	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006	12/4/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	1860	492 J	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.156 J	0.155 J	<0.3	<0.3	<0.3	0.224 J	0.233 J	0.153 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	1.77	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	12000	11.7	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	0.439 J	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	192	196	54.7	29.7	137	192	191	112
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	<1	<1	5.13	14.2	32.1	<1	1.25	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B
LAB SAMPLE ID	L0612103-02	L0612103-03	L0612076-05	L0612076-06	L0612076-07	L0612107-01	L0612107-02	L0612107-03	L0612103-04	L0612103-05
DATE COLLECTED	12/5/2006	12/5/2006	12/4/2006	12/4/2006	12/4/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006	12/5/2006
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	0.213 J	<1	<1	<1	0.287 J	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	0.71 J
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	0.498 J	<0.5	<0.5	0.468 J	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	0.924 J	<1	<1	<1	<1	0.796 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	2.65 J	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	0.16 J	<0.4	<0.4	0.218 J	<0.4	0.285 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.163 J	0.172 J	0.134 J	0.313	<0.3	<0.3	<0.3	0.275 J	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	<1	0.394 J	71.3	7.84	<1	0.722 J	<1	11.8	<1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	0.931 J	<1	<1	0.822 J	<1	0.575 J
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	176	109	78.8	37.5	5.66	37.6	0.65 J	46.4	0.522 J
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	0.313 J	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	<1	9.06	12	144	<1	18.6	0.532 J	154	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	W85-01	W85-02	W85-04	W92-01	W92-02	W92-03	W92-04	W92-05	W92-06	W92-06 DUP
LAB SAMPLE ID	L0612386-01	L0612386-02	L0612386-03	L0612295-02	L0612296-04	L0612295-03	L0612336-01	L0612368-01	L0612358-02	L0612368-04
DATE COLLECTED	12/14/2006	12/14/2006	12/14/2006	12/12/2006	12/12/2006	12/12/2006	12/13/2006	12/13/2006	12/13/2006	12/13/2006
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	42	96.5	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	0.161 J	0.234 J	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.512	1.32	1.3	<0.5	0.487 J	0.252 J	0.318 J	0.588	0.419 J
1,2-Dichloropropane	ug/L	0.249 J	0.43 J	0.295 J	<1	0.281 J	<1	<1	0.301 J	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	10.2	12.7	114	18.2 B	481	106	143	108	54.8
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	0.207 J	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	68.3	39.2	96.1	23.6	38.7	5.27	2.6	1.14	3.99
Chlorobenzene	ug/L	0.141 J	0.141 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	78.2	62.4	191	9.7	25.2	24.7	20.6	2.08	23.2
Chloromethane	ug/L	<1	<1	0.309 J	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	35.3	33.6	3.18	15.2	3.27	2.82	12	5.42	7.4
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	23.5	5.89 J	78.9	49.9	25.3	57	89.4
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	0.679 J	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	11.2	6.67	1.17 B	<1	<1	1.2	6.54	16.9	2.52
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	67	65.6	59.6	228	228	173	241	175	133
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	24.2	21.1	5.35	7.45	4.68	4.19	6.76	6.96	6.36
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW92-07	IW92-08	DR2-1	DR2-5	IW-01	MW-65	PMW85-01	PMW85-01 DUP	PMW85-02	PMW92-01
LAB SAMPLE ID	L0612336-02	L0612336-03	L0612161-04	L0612202-03	L0612202-04	L0612231-02	L0612231-01	L0612231-03	L0612231-04	L0612154-04
DATE COLLECTED	12/13/2006	12/13/2006	12/6/2006	12/7/2006	12/7/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006	12/8/2006
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	0.63 J	100	<1	28.7	0.685 J	70.4	14.8	15.6	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	0.25 J	<1	0.162 J	<1	0.213 J	0.136 J	0.14 J	<1
1,2-Dichloroethane	ug/L	0.679	3.95	<0.5	0.503	0.566	0.989	0.666	0.658	0.705
1,2-Dichloropropane	ug/L	0.398 J	1.38	<1	<1	0.466 J	0.308 J	0.248 J	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	0.229 J	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	36.5	199	4.45 J	<10	22.8	8.44 J	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	39.9	50	29 J	100	1.39	179	199	201	103
Chlorobenzene	ug/L	<0.5	0.132 J	<0.5	0.162 J	<0.5	0.186 J	0.182 J	0.152 J	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	20.2	108	13.3	35.8	3.31	49.5	56.9	55.1	41.5
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	16.4	38.3	34.7	27.7	154	32.2	25.8	24.3	1.92
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	10.2	14.5	<10	<10	12	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	0.687 J	0.723 J	0.272 B	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	213	136	191	45.3	8.25	73.4	76.6	74	19.2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	0.287 J	0.959 J	<1	<1	0.387 J	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	11.4	18.9	8.49	15.4	1.89	24.4	23.7	22.1	5.18
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result; possibly biased high or false positive based on blank data

TABLE F-2
VOLATILE ORGANIC COMPOUNDS, FIRST QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
LAB SAMPLE ID	L0612202-01	L0612201-01	L0612202-02	L0612201-02	L0612201-05
DATE COLLECTED	12/7/2006	12/7/2006	12/7/2006	12/7/2006	12/7/2006
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units				
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	1.45	148
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	0.514 J
1,2-Dichloroethane	ug/L	<0.5	0.54	0.321 J	0.439 J
1,2-Dichloropropane	ug/L	<1	0.387 J	<1	0.328 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1
2,2-Dichloropropene	ug/L	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1
Acetone	ug/L	485 J	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	0.143 J
Bromobenzene	ug/L	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3
Carbon tetrachloride	ug/L	0.462 J	41.9	17.7	55.3 J
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	0.285 J
Chloroethane	ug/L	<1	<1	<1	<1
Chloroform	ug/L	4.42	18.9	10.7	22.1
Chloromethane	ug/L	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	172 J	21.3	10.6 J	27.6
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	2570	<10	3.15 J	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5
Methylene chloride	ug/L	6.31	<1	0.841 J	<1
MTBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1
Tetrachloroethane	ug/L	13	252	142	196
Toluene	ug/L	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	0.31 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1
Trichloroethane	ug/L	4.03	12	7.21	16.6
Trichlorofluoromethane	ug/L	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QIC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B DUP	IW21-04B
LAB SAMPLE ID	L0703230-08	L0703230-09	L0703246-01	L0703246-02	L0703230-10	L0703230-11	L0703276-01	L0703246-06	L0703246-05
DATE COLLECTED	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/8/2007	3/8/2007	3/12/2007	3/9/2007	3/9/2007
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	0.159 B	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.254 J	<0.5	0.276 J	0.271 J	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	14.7	44	3.56 J	4.18 J	4.04 J	5.2 J	<10	3.65 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.248 J	0.141 J	<0.3	<0.3	0.196 J	<0.3	<0.3	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	9.09	0.917 J	1.37	0.787 J	2.13	<1	68.8	30.7
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	53.8	110	<10	<10	<10	13.2	<10	6.22 J
Methyl t-butyl ether (MTBE)	ug/L	26.6	3.1 J	33.7	56	47.1	14.6	37.6 J	25.9
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	111	90.5	119	87.4 J	167	16.3	142	101
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	0.537 J	0.716 J	<1	<1	<1	<1	0.784 J	0.626 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	35.9	5.43	19.9	11.6	47.7	11.6	46.1	33.8
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-05A	IW21-05B	MW-115	MW 21	PMW21-01DUP	PMW21-01	PMW21-02	PMW21-03	PMW21-04
LAB SAMPLE ID	L0703276-02	L0703276-04	L0703180-10	L0703180-05	L0703180-01	L0703180-02	L0703180-03	L0703180-04	L0703180-08
DATE COLLECTED	3/12/2007	3/12/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007	3/7/2007
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromothane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.447 J	0.629	0.591	<0.5	0.318 J	0.342 J	0.493 J	0.602
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	15.6	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.161 J	<0.3	<0.3	0.126 J	<0.3	0.127 J	<0.3	0.157 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	3.14	2.08	0.253 J	1.66	2	2.06	0.823 J	0.485 J
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	40.4	8.17 J	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	36.3 J	38.3 J	4.23 J	49.6	26.1	25.4	23.4	12.6
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	0.434 B	0.227 B	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	52.2	64	10.4	130 J	152	152	45.2	32.5
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	0.341 J	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	18.4	17.7	1.85	25	37.2	36.3	17.6	9.78
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW21-05	IW101-01A	IW101-01B	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A	IW101-03B
LAB SAMPLE ID	L0703180-09	L0703108-01	L0703106-02	L0703106-03	L0703106-04	L0703106-05	L0703140-14	L0703140-15	L0703140-16
DATE COLLECTED	3/7/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/6/2007
AREA	TTA-1 21	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	5.31 J	<10	3.41 J	<10	<10	2.64 B	5.45 B
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	0.125 J	0.17 J	<0.3	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	0.346 J	5.24	1.97	<1	9.79	0.489 J	7.17	2.89
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	6.7 B	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	18.7	19.8	52.5	178	176	195	157	50.2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	14	1.64	0.346 J	5.26	1.72	<1	18.5	0.459 J
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-03C	IW101-04A DUP	IW101-04A	IW101-04B	IW101-04C	IW101-05A	IW101-05B	IW101-05C	IW101-06A
LAB SAMPLE ID	L0703180-13	L0703230-01	L0703230-04	L0703230-05	L0703230-08	L0703246-11	L0703246-12	L0703246-13	L0703246-14
DATE COLLECTED	3/7/2007	3/8/2007	3/8/2007	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/9/2007	3/9/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	0.271 J	<1	<1	<1
1,1-Dichloroethane	ug/L	0.269 J	<1	<1	<1	0.264 J	<1	<1	<1
1,1-Dichloroethene	ug/L	0.682 J	<1	<1	0.583 J	0.915 J	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	1.04	<0.5	<0.5	<0.5	1.32	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	1.47	<1	<1	<1	1.8	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	8.53 J	20.5	31.8	<10	<10	4.14 J	<10	23.1 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.209 J	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodiform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.255 J	<0.3	<0.3	<0.3	0.331	0.133 J	0.141 J	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	63.1	10.6	10.1	82.6	182	21.1	30.6	74.3
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	6.45 J	105	113	17.6	14.1	<10	7.63 J	151 J
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	1.38	<1	<1	<1	1.18	<1	<1	<1
MBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	36.1	71.3	67.9	0.622 J	6.12	89.6	89.7	63
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	0.397 J	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	75.6	2.23	1.99	<1	15.9	4.11	2.93	7.04
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly based high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A DUP	IW101-08A	IW101-08B	IW101-08C
LAB SAMPLE ID	L0703246-17	L0703246-18	L0703180-14	L0703180-15	L0703180-16	L0703276-05	L0703276-06	L0703276-07	L0703276-08
DATE COLLECTED	3/9/2007	3/9/2007	3/7/2007	3/7/2007	3/7/2007	3/12/2007	3/12/2007	3/12/2007	3/12/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	0.722 J	<1	<1	1.77	<1	<1	0.669 J
1,1-Dichloroethane	ug/L	<1	0.501 J	<1	0.23 J	0.912 J	<1	<1	0.795 J
1,1-Dichloroethane	ug/L	<1	0.909 J	<1	0.56 J	1.07	<1	<1	1.07
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	1.71	<0.5	0.701	2.84	<0.5	<0.5	1.56
1,2-Dichloropropane	ug/L	<1	2.1	<1	0.851 J	4.27	<1	<1	1.93
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	6.85 J	3.83 J	4.87 J	3.42 J	4.91 J	<10	5.99 J	36
Benzene	ug/L	<0.4	0.156 J	<0.4	<0.4	0.518	<0.4	<0.4	0.439
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.166 J	0.438	<0.3	0.223 J	0.603	<0.3	<0.3	0.507
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	0.621 J	38.8	7.51	39.4	125	0.323 J	0.271 J	4.72
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	6.76 J	9.32 J	15.4	4.58 J	<10	2.78 J	308
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	2.12	0.251 J	0.953 J	2.81	<1	<1	1.83
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	61.8	58.8	15.7	24.6	65.7	0.891 J	0.963 J	12.8
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.313 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	11.8	209	13.5	81.8	267	0.7 J	0.797 J	34.1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T	DR1-3	PMW101-01A DUP	PMW101-01A	PMW101-01B
LAB SAMPLE ID	L0703180-17	L0703180-18	L0703230-07	L0703140-18	L0703140-17	L0703180-11	L0703107-05	L0703107-01	L0703107-02
DATE COLLECTED	3/7/2007	3/7/2007	3/8/2007	3/6/2007	3/6/2007	3/7/2007	3/5/2007	3/5/2007	3/5/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	0.406 J	0.683 J	<1	<1	<1	<1	<1
1,1,2-Dichloroethane	ug/L	<1	0.989 J	1.06	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.445 J	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	0.842 J	1.88	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	29	20.9	12	<10	<10	150	147	2.67 J
Benzene	ug/L	<0.4	0.216 J	0.243 J	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.127 J	<0.3	0.387	0.129 J	0.164 J	<0.3	<0.3	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	<1	99.3	112	9.4	0.621 J	27.6	5.73	5.98
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	76.3	41.1	<10	<10	288	284	14.1
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.998 J	1.31	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	0.654 J	30.6	58.4	193	192	8.31	27.7	28.9
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	<1	111	209	0.358 J	<1	2.74	4.48	4.3
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B	PMW101-06A
LAB SAMPLE ID	L0703136-01	L0703136-02	L0703136-03	L0703136-04	L0703140-01	L0703140-02	L0703107-03	L0703107-04	L0703140-07
DATE COLLECTED	3/5/2007	3/5/2007	3/5/2007	3/5/2007	3/6/2007	3/6/2007	3/5/2007	3/5/2007	3/6/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	0.858 J	0.926 J	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	0.142 B	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.69	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	0.887 J	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	2.65 J	<10	<10	<10	<10	<10	4.08 J	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	0.139 J	<0.3	0.144 J	<0.3	0.341	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	8.72	7.27	<1	26.4	<1	18.8	113	21
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	12.2	<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	0.876 J	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	178	151	99.7	134	177	104	0.482 J	36.5
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	0.642 J	0.453 J	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	3.22	11.1	<1	1.7	<1	3.04	<1	172
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-06B	PMW101-07A	PMW101-07B DUP	PMW101-07B	PMW101-08A	PMW101-08B	W85-01	W85-02	W85-05
LAB SAMPLE ID	L0703140-08	L0703140-09	L0703140-05	L0703140-12	L0703140-03	L0703140-04	L0703310-04	L0703346-02	L0703346-03
DATE COLLECTED	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/6/2007	3/13/2007	3/14/2007	3/14/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-2	TTA-2	TTA-2
Units									
Analyte									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	0.987 J	0.676 J	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	37.5	80.6	13.8
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	0.236 J	0.183 J	0.142 J
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.733	1.14	0.598
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	0.203 J	0.361 J	0.239 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	15.9 B	80.1	40
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.137 B	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromotom	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	161	2.48	199
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.217 J	0.18 J	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	0.161 J	77.8	42.6	67.7
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	45	<1	1.25	1.9	<1	6.25	37.6	27.1
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	3.81 B	14.8	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	1.05	6.75	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	0.294 J	0.662 J	21.5	24.3	7.02	39.5	86.4	13.1
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	0.258 J	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	<1	0.54 J	37.1	47	<1	165	31.1	6.85
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly based high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW85-06	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05	IW92-06	IW92-07	IW92-08 DUP
LAB SAMPLE ID	L0703346-04	L0703276-09	L0703346-05	L0703310-06	L0703310-09	L0703346-06	L0703346-07	L0703346-08	L0703310-01
DATE COLLECTED	3/14/2007	3/12/2007	3/14/2007	3/13/2007	3/13/2007	3/14/2007	3/14/2007	3/14/2007	3/13/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	0.84 J	<1	<1	0.545 J
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	51	<1	<1	<1	<1	<1	<1	79.6
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	0.129 J	<1	<1	<1	<1	<1	<1	0.317 J
1,2-Dichloroethane	ug/L	0.472 J	<0.5	0.254 J	<0.5	0.319 J	0.319 J	0.43 J	0.542
1,2-Dichloropropane	ug/L	0.221 J	<1	<1	<1	<1	<1	0.379 J	1.03
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	12.9	152	20.9 B	71.9 B	201	63.9	29.2
Benzene	ug/L	0.128 J	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	3.02	18.8	4.37	8.72	<1	<1	<1	25.7
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.169 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	39.6	9.02	14.1	14.3	29.9	1.83	18.4	14.7
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.358 J
cis-1,2-Dichloroethene	ug/L	18.4	11.1	9.94	9.13	166	5.14	9.98	54.5
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	168	4.48 J	20	10.4 B	22.8	92.4	70.1	15.7
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.288 J	<1	2.51	2.02	2.65	3.68	0.782 J
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	31	170	54	181	22.9	95.1	110	118
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	9.93	6.09	6.58	5.91	14.2	5.13	6.92	10.1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on OC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	FW92-08	DR2-1	DR2-5 DUP	DR2-5	FW-01	MW-85	PMW85-01	PMW85-04	PMW85-05
LAB SAMPLE ID	L0703310-03	L0703230-16	L0703310-10	L0703310-14	L0703276-12	L0703276-11	L0703310-11	L0703310-12	L0703310-13
DATE COLLECTED	3/13/2007	3/8/2007	3/13/2007	3/13/2007	3/12/2007	3/12/2007	3/13/2007	3/13/2007	3/13/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	0.771 J	<1	<1	<1	<1	<1	<1	0.708 J
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	88.8	<1	23.4	23.6	47.1	12.6	89.3	141
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	0.414 J	<1	0.191 J	0.168 J	<1	0.192 J	<1	0.314 J
1,2-Dichloroethane	ug/L	2.54	0.253 J	0.473 J	0.495 J	0.424 J	0.705	0.524	1.02
1,2-Dichloropropane	ug/L	1.25	<1	<1	0.227 J	0.445 J	0.298 J	<1	0.395 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	48.5 B	<10	<10	<10	8.15 J	<10	3.83 B	4.11 B
Benzene	ug/L	0.144 B	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.22 B
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	8.21	22.6	138	130	16.6	123	161	57.9
Chlorobenzene	ug/L	0.236 J	<0.5	0.204 J	0.184 J	<0.5	0.128 J	<0.5	0.175 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	97.2	10	44	43	9.98	36.2	48.4	69.8
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	142	19.3	32.3	32.9	73.2	23.8	13.4	36.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	8.41 B	<10	<10	<10	<10	<10	5.09 B	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	1.14	<1	<1	<1	0.824 J	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	41.5	194	49.5	48.4	78.4	58.6	51.2	79.5
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	0.333 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloromethane	ug/L	22.4	7.91	18.5	18.5	9.04	20.3	18.1	25.6
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-3
VOLATILE ORGANIC COMPOUNDS, SECOND QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW92-01	PMW92-02	PMW92-03	PMW92-04 DUP	PMW92-04	PMW92-05	PMW92-06
LAB SAMPLE ID	L0703230-13	L0703230-14	L0703230-15	L0703246-07	L0703246-08	L0703246-09	L0703276-10
DATE COLLECTED	3/8/2007	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/9/2007	3/12/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units						
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	0.688 J	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	1.6	143
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	0.562 J
1,2-Dichloroethane	ug/L	0.254 J	<0.5	0.533	0.364 J	0.336 J	2.63
1,2-Dichloropropane	ug/L	<1	<1	0.327 J	0.204 J	0.351 J	1.19
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	80	19.2	5.63 J	4.96 J	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.154 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	11.8	<1	19.3	5.38	4.7	57
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.31 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	8.34	8.75	27.4	17.3	16.2	22.8
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	6.08	171	70.7	116	112	25.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	103	3.8 J	7.58 J	6.79 J	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	1.8	0.332 J	0.262 J	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	109	1.58	170	38.1	33.1	195
Toluene	ug/L	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	0.334 J	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	4.02	0.518 J	9.92	7.35	7.15	15
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL).

J: Estimated result based on QC data or reported below RL.

B: Estimated result possibly biased high or false positive based on blank data.

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-01A	IW21-01B DUP	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A DUP	IW21-04A
LAB SAMPLE ID	L0706104-05	L0706104-09	L0706104-06	L0706151-07	L0706151-08	L0706151-09	L0706151-10	L0706151-03	L0706151-01
DATE COLLECTED	6/5/2007	6/5/2007	6/5/2007	6/6/2007	6/6/2007	6/6/2007	6/6/2007	6/6/2007	6/6/2007
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.335 J	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	11	277	262	5.86 J	<10	<10	11.6	3.5 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	0.184 J	<0.3	0.126 J	0.143 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	12.6	66.8	64.8	1.32	0.799 J	2.25	2.34	17.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	12.9	138	137	<10	<10	<10	18.1	6.57 J
Methyl t-butyl ether (MTBE)	ug/L	16	4.49 J	4.91 J	26.2	47.1	45.1	23.4	23.2
Methylene chloride	ug/L	0.506 B	0.385 B	0.328 B	0.251 B	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	41.5	42.5	48.9	127	94.3	189	42.3	130
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	0.629 J	0.932 J	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	15.6	26.9	26.8	19.4	11.2	52.4	26.4	38.2
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly based high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-04B	IW21-05A	IW21-05B	MW-115	MW-21	PMW21-01	PMW21-02	PMW21-03	PMW21-04
LAB SAMPLE ID	L0706151-02	L0706151-14	L0706151-18	L0706104-08	L0706073-11	L0706073-07	L0706073-08	L0706073-09	L0706073-10
DATE COLLECTED	6/6/2007	6/6/2007	6/6/2007	6/5/2007	6/4/2007	6/4/2007	6/4/2007	6/4/2007	6/4/2007
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.296 J	0.566	0.45 J	<0.5	0.339 J	0.428 J	0.589
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	2.89 J	16.2	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromofrom	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	0.154 J	<0.3	<0.3	<0.3	0.152 J	<0.3	0.141 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	26.1	7.44	5.11	0.492 J	1.53	2.19	0.739 J	0.355 J
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	5.05 J	47	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	17.2	28.6	27.5	3.05 J	88.2	30	26.5	10.2
Methylene chloride	ug/L	<1	0.316 B	<1	0.37 B	0.424 B	0.274 B	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	68	47.1	54.2	12.1	134	165	44.4	25.6
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	29	17.7	14.5	2.14	28.3	39.9	18.3	6.73
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on OC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW21-05	IW101-01A	IW101-01A DUP	IW101-01B	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A
LAB SAMPLE ID	L0706104-07	L0706043-04	L0706043-01	L0705656-01	L0705656-02	L0705656-03	L0705656-04	L0705683-10	L0705683-13
DATE COLLECTED	6/5/2007	6/1/2007	6/1/2007	5/29/2007	5/29/2007	5/29/2007	5/29/2007	5/30/2007	5/30/2007
AREA	TTA-1 21	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	22.1 B	17.1 B	<10	3.98 J	<10	2.62 J	7.63 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	0.155 J	<0.3	0.187 J	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	0.442 J	15.5	15.7	23.7	1.04	24.1	18	54.1 J
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	21.2 B	18.7 B	<10	<10	<10	17.3	5.89 J
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	0.327 B	<1	0.463 B	0.319 B	0.387 B	0.311 B	1.21 B	0.279 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	27.9	5.02	5.45	5.85 B	136	88.1	103	82.3
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	17.1	0.437 J	0.456 J	2.1	4.23	3.69	4.03	13.8
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result; possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-03B	IW101-03C DUP	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-05A	IW101-05B	IW101-05C
LAB SAMPLE ID	L0706043-05	L0706043-02	L0706043-06	L0706073-12	L0706073-13	L0706073-14	L0706104-01	L0706104-02	L0706104-03
DATE COLLECTED	6/1/2007	6/1/2007	6/1/2007	6/4/2007	6/4/2007	6/4/2007	6/5/2007	6/5/2007	6/5/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	0.312 J	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	0.204 J	<1	0.257 J	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	0.714 J	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.601	0.684	<0.5	<0.5	1.8	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	0.845 J	0.918 J	<1	<1	1.92	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	9.18 B	<10	<10	19.5 J	<10	2.63 J	4.69 J	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.176 J	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	0.152 B	0.173 B	<0.3	<0.3	0.269 J	0.182 J	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	0.784 J	28	30.7	30	70.9	190	30.1	28.5
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	105 J	27 J	3.61 J	19.2	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.951 B	1.16 B	<1	<1	0.954 B	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	99.7	44.5	50.6	4.21 B	0.345 B	4.78 B	73.3	95.1
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	0.746 J	1.75	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	<1	70	77.8	2.06	<1	18.9	8.07	1.57
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08C
LAB SAMPLE ID	L0706104-04	L0706151-15	L0706151-16	L0706073-01	L0706073-02	L0706073-03	L0706073-06	L0706104-11	L0706104-12
DATE COLLECTED	6/5/2007	6/5/2007	6/6/2007	6/4/2007	6/4/2007	6/4/2007	6/4/2007	6/5/2007	6/5/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	0.258 J	<1	<1	1.62	<1	0.529 J
1,1-Dichloroethane	ug/L	<1	<1	0.339 J	<1	<1	0.822 J	<1	0.77 J
1,1-Dichloroethene	ug/L	<1	<1	0.536 J	<1	<1	<1	<1	1.01
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	1.24	<0.5	0.562	3.09	<0.5	1.27
1,2-Dichloropropane	ug/L	<1	<1	1.59	<1	0.628 J	4.46	<1	1.96
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	4.67 J	6.08 J	3.38 J	6.66 J	<10	3.95 J	<10	3.99 J
Benzene	ug/L	<0.4	<0.4	0.128 J	<0.4	<0.4	0.414	<0.4	0.504
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	0.161 J	0.325	<0.3	0.202 J	0.468	<0.3	0.209 J
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	2.1	1.59	134	8.18	88	171 J	3.34	255
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	19.1	2.63 J	11.5	4.19 J	5.89 J	3.48 J	<10	165
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	1.33 B	<1	0.753 B	1.4 B	<1	0.438 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	17.4	55.6	18.8	5.78	8.88	38.9 J	0.86 B	10.9
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	0.344 J	<1	<1	<1	<1	0.286 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.608 J	8.82	65.3	2.37	28.4	191 J	0.478 J	25.3
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	0.299 J

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result, possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-09A DUP	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T	DR1-3	PMW101-01A-EBT	PMW101-01B DUP
LAB SAMPLE ID	L0706104-10	L0706104-13	L0706151-04	L0706151-05	L0705683-15	L0705683-14	L0706043-09	L0705683-02	L0705683-01
DATE COLLECTED	6/5/2007	6/5/2007	6/6/2007	6/6/2007	5/30/2007	5/30/2007	6/1/2007	5/30/2007	5/30/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	0.262 J	0.641 J	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	0.73 J	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	0.331 J	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	0.445 J	1.48	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.137 J	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	96.4	83.2	14.8	4.87 J	7.91 J	9.54 J	<10	44.1
Benzene	ug/L	<0.4	<0.4	<0.4	0.329 J	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.129 J	<0.3	<0.3	0.306	0.206 J	0.148 J	<0.3	<0.3
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	0.42 J	0.405 J	93.3	1.14	1.01	0.428 J	32.9	17.3
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	66.7	56.5	<10	<10	106	7.45 J
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.586 B	0.692 B	0.945 B	<1	<1	0.351 B	0.256 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	0.399 J	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	0.696 B	0.895 B	18.1	62.7	135	123	2.18	9.59
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.258 J	0.277 J	50.6	207	0.311 J	0.364 J	0.572 J	1.54
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J Estimated result based on QC data or reported below RL

B Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-018-EBT	PMW101-02A	PMW101-02B	PMW101-03A-EBT	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B
LAB SAMPLE ID	L0705683-03	L0705656-05	L0705656-06	L0705683-04	L0705656-07	L0706016-01	L0706016-02	L0706016-11	L0706016-12
DATE COLLECTED	5/30/2007	5/29/2007	5/29/2007	5/30/2007	5/29/2007	5/31/2007	5/31/2007	5/31/2007	5/31/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.314 J
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.323 J
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.875
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	1.53
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	4.78 J	4 J	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.255 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	0.138 J	<0.3	<0.3	<0.3	0.368
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	57	51.2	93.3	<1	19.9	20.9	86.3	110
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	9.7 J	20.3	4.38 J	<10	<10	<10	3.95 J	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.331 B	0.349 B	<1	0.275 B	<1	<1	0.602 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	20.8	50.8	15.3	88	123	138	19.1	0.832 B
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	0.264 J	0.416 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	0.824 J	6.43	4.29	<1	2	1.2	1.24	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on GC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07B	PMW101-08A DUP	PMW101-08A	PMW101-08B	W85-01	W85-02
LAB SAMPLE ID	L0706016-13	L0706016-14	L0706016-03	L0706016-04	L0706043-07	L0706043-08	L0706043-05	L0706043-14	L0706043-15
DATE COLLECTED	5/31/2007	5/31/2007	5/31/2007	5/31/2007	6/1/2007	6/1/2007	5/31/2007	6/1/2007	6/1/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	43.5	75.2
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	0.154 J	0.152 J
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.676	1.54
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	0.278 J	0.338 J	0.402 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.147 B	0.136 B
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	2.69 J	<10	<10	<10	<10	11.5 B	161
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	107	1.18
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	0.17 J	76.3	50.8
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	2.9	40.3	0.432 J	1.44	<1	<1	7.17	33.4
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	<10	<10	<10	<10	6.58 B	68
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.269 B	<1	<1	<1	0.391 B	1.4 B	4.26 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	4.62 B	<1	0.747 B	21.4	24.5	24.4	37.7	56.8
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	<1	<1	0.27 J	37	0.299 J	0.324 J	144	20.9
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW85-05	IW85-06	IW92-01	IW92-02 DUP	IW92-02	IW92-03	IW92-04	IW92-05	IW92-06
LAB SAMPLE ID	L0706073-15	L0706151-13	L0706043-13	L0706201-07	L0706201-08	L0706151-08	L0706201-10	L0706201-01	L0706201-02
DATE COLLECTED	6/4/2007	6/6/2007	6/1/2007	6/7/2007	6/7/2007	6/6/2007	6/7/2007	6/7/2007	6/7/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Units									
Analyte									
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	15	84.7	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	0.27 J	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	0.694	0.918	<0.5	0.32 J	0.301 J	<0.5	<0.5	0.414 J
1,2-Dichloropropane	ug/L	0.246 J	0.512 J	<1	0.22 J	<1	<1	<1	0.232 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	0.137 J	0.154 B	<0.5	<0.5	<0.5	0.554	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	166 J	21.6	22 B	337	371	31.6	68.5	1550
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	169	7.5	8.67	11.4	9.79	1.8	<1	<1
Chlorobenzene	ug/L	<0.5	0.267 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	82.4	76.9	13.9	22	23	12.2	19.5	0.562
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethane	ug/L	15.3	121	78.6	112	113	40.2	186	16.5
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	30.2 J	5.39 J	10.5 B	40.8	44.9	13	39.8	343
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	1.63 B	0.711 B	1.68 B	1.62 B	2.05 B	1.35 B	2.65 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	67.3	1.98 B	71.4	110	90.5	146	4.01 B	13
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	0.315 J	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	18.5	1.87	25	14.2	14.2	14.4	0.882 J	1.21
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	W92-07	W92-08	DR2-1	DR2-5	W-01	MW-85	PMW85-01	PMW85-04	PMW85-05 DUP
LAB SAMPLE ID	L0706201-03	L0706201-04	L0705656-09	L0705656-10	L0705683-09	L0705656-08	L0706043-16	L0706016-09	L0706016-06
DATE COLLECTED	6/7/2007	6/7/2007	5/29/2007	5/29/2007	5/30/2007	5/29/2007	6/1/2007	5/31/2007	5/31/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	97.8 J	<1	25.3	1.25	49	16.1	90.9
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	0.352 J	<1	<1	0.129 J	<1	0.26 J	0.504 J
1,2-Dichloroethane	ug/L	0.483 J	2.63	<0.5	0.504	0.307 J	0.722	0.629	1.21
1,2-Dichloropropane	ug/L	0.337 J	1.44	<1	<1	0.348 J	<1	0.463 J	0.816 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	0.145 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	73.6	50 J	<10	<10	3.79 J	<10	3.28 B	10.7
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.179 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	15.5	5.44	25.7 J	132 J	13.9	106 J	171	48.7
Chlorobenzene	ug/L	<0.5	0.208 J	<0.5	0.128 J	<0.5	<0.5	0.177 J	0.333 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	13.1	89.7 J	6.76	37.6	9.16	34.6	56.1	82.5
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	59.1	192	15.2	25.9	65.5	18.6	8.2	48.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	24.4	14.8	<10	<10	<10	<10	3.29 J	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	2.05 B	3.02 B	0.296 B	<1	1.06 B	<1	0.394 B	0.291 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	87.8	11.9	160	41.1	78.4	37.8	57.2	62.1
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	7.62	8.31	7.21	14.4	9.38	15.5	12.5	23.2
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-4
VOLATILE ORGANIC COMPOUNDS, THIRD QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW85-05	PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05	PMW92-06
LAB SAMPLE ID	L0706016-10	L0705683-05	L0705683-06	L0705683-07	L0705683-08	L0706016-07	L0706016-08
DATE COLLECTED	5/31/2007	5/30/2007	5/30/2007	5/30/2007	5/30/2007	5/31/2007	5/31/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Units	Units	Units	Units	Units	Units	Units	Units
Analyte							
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	151	<1	<1	<1	137	137
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	0.471 J	<1	<1	<1	<1	0.573 J
1,2-Dichloroethane	ug/L	128	<0.5	<0.5	0.523	0.373 J	0.539
1,2-Dichloropropane	ug/L	0.779 J	<1	<1	0.314 J	<1	0.329 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	0.359 J	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	113	37.6	4.79 J	<10
Benzene	ug/L	0.161 J	<0.4	<0.4	<0.4	<0.4	0.175 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromotom	ug/L	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/L	157	10.7	<1	7.59	4.38	56.6
Chlorobenzene	ug/L	0.324 J	<0.5	<0.5	<0.5	<0.5	0.331 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	69	8.55	8.52	31	25.1	24.2
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	84.1	13.6	150	166	148	26.3
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	82.7	9.35 J	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	0.302 B	0.334 B	1.47 B	0.614 B	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	119	123	1.47 B	54.4	22	194
Toluene	ug/L	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	1.93	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	36.5	4.9	0.283 J	7.03	2.73	16.3
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-01A	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A
LAB SAMPLE ID	L0709346-09	L0709471-01	L0709530-01	L0709530-02	L0709530-07	L0709530-05	L0709471-06	L0709471-02	L0709530-08
DATE COLLECTED	9/14/2007	9/19/2007	9/20/2007	9/20/2007	9/20/2007	9/20/2007	9/19/2007	9/19/2007	9/20/2007
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	0.146 J	<0.5	0.213 B	<0.5	<0.5	0.167 J	<0.5	0.261 B
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	47 J	62.6	4.98 J	<10	<10	7.17 J	<10	69.9
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	0.833 J	<1	<1	<1	0.56 J	<1	<1	1.36
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.161 J	<0.3	0.127 J	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	ug/L	0.256 B	<1	0.572 B	<1	0.551 B	<1	0.412 J	<1
cis-1,2-Dichloroethane	ug/L	49.5	109	2.05	14.2	1.77	3.1	87.1	74.4
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	99.7	134	<10	<10	<10	10.3	3.9 J	219
Methyl t-butyl ether (MTBE)	ug/L	50.9	14.2	37.3	53.4	48.3	30.5	20.1	16.9
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	88.6	1.32	132	75.8 J	79.4	56.4	14.8	10.2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	0.45 J	<1	<1	<1	<1	0.274 J	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	41.9	1.28	23.7	12.8	31.3	21	7.54	7.35
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW21-05A DUP	IW21-05B	MW-115	MW21	PMW21-01	PMW21-02	PMW21-03	PMW21-03 DUP	PMW21-04
LAB SAMPLE ID	L0709530-10	L0709530-09	L0709471-12	L0709422-05	L0709422-01	L0709422-02	L0709471-11	L0709471-09	L0709422-03
DATE COLLECTED	9/20/2007	9/20/2007	9/19/2007	9/18/2007	9/18/2007	9/18/2007	9/19/2007	9/19/2007	9/18/2007
AREA	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.359 J	0.331 J	<0.5	<0.5	0.298 J	0.416 J	0.413 J
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	0.273 B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	127	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromofom	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	1.43	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	ug/L	1 B	1.29 B	0.61 J	0.316 J	0.864 J	0.487 J	0.702 J	0.506 J
cis-1,2-Dichloroethene	ug/L	33.1	21.7	10.2	1.95	2	0.782 J	0.636 J	0.814 J
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	254	3.1 J	6.89 J	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	15.9	25.3	6.03	68.2	27	24.6	14.3	15.2
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	7.39	32.2	9.62	132	122	44.7	49	56.9
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	0.278 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	4.79	12.3	1.5	27.5	35.5	19.8	15.9	18.5
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW21-05	IW101-01A	IW101-01B	IW101-01B DUP	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A
LAB SAMPLE ID	L0709422-04	L0709182-10	L0709182-11	L0709182-09	L0709237-01	L0709237-02	L0709280-11	L0709280-12	L0709280-13
DATE COLLECTED	9/18/2007	9/19/2007	9/19/2007	9/19/2007	9/11/2007	9/11/2007	9/12/2007	9/12/2007	9/12/2007
AREA	TTA-1 21	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	0.597 J	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	0.143 J	0.142 J	<0.5	0.13 J	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	79	9.95 B	7.35 B	<10	3.58 J	2.86 J	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	0.886 J	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	0.125 J	<0.3	0.159 J	<0.3	0.208 J	<0.3
Chloromethane	ug/L	0.896 J	<1	0.707 B	0.939 B	0.506 B	<1	1.02	<1
cis-1,2-Dichloroethane	ug/L	0.52 J	16.4	24.9	24.9	14.8	45	12.8	80.1
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	56	4.42 J	5.68 J	<10	14.7 J	<10	56.2
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	36.3	1.11	1.06	1.09	120	40.7	127	56.3 J
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	30.2	<1	0.513 J	0.424 J	7.83	3.85	1.56	9.18
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	W101-03B	W101-03C	W101-04A	W101-04B	W101-04C	W101-05A	W101-05B	W101-05C	W101-06C DUP
LAB SAMPLE ID	L0709280-16	L0709280-17	L0709280-07	L0709346-11	L0709346-12	L0709237-05	L0709280-08	L0709280-09	L0709280-08
DATE COLLECTED	9/12/2007	9/12/2007	9/12/2007	9/14/2007	9/14/2007	9/11/2007	9/12/2007	9/12/2007	9/12/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	0.568 J	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	0.178 J	<1	<1	0.517 J	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	0.625 J	<1	<1	1.07	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	0.488 J	<0.5	<0.5	3.7	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	0.655 J	<1	<1	4.57	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	5.79 J	<10	86.6	<10	3.15 J	<10	<10	3.03 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.453	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoforn	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	0.712 J	<1	<1	0.617 J	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.162 J	0.202 J	<0.3	<0.3	0.409	0.17 J	<0.3	0.131 J
Chloromethane	ug/L	<1	0.749 B	<1	0.487 B	0.762 B	0.396 B	0.539 B	1.04
cis-1,2-Dichloroethene	ug/L	3.45	37.9	27	53	259	28.7	36.5	84.8
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	<10	243	90.3	11.1	19.6 J	<10	23.1
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	0.314 J	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethane	ug/L	105 J	49.8 J	0.632 J	1.34	7.36	69.2	66	49.2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	0.717 J	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.934 J	77.2	<1	0.658 J	33.3	3.93	2.05	6.27
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-08A	IW101-08B	IW101-08B DUP
LAB SAMPLE ID	L0709237-06	L0709237-07	L0709237-08	L0709322-02	L0709322-05	L0709322-06	L0709182-05	L0709182-06	L0709182-04
DATE COLLECTED	9/11/2007	9/11/2007	9/11/2007	9/13/2007	9/13/2007	9/13/2007	9/10/2007	9/10/2007	9/10/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	1.65	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	0.296 J	<1	0.187 J	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	0.637 J	<1	1.19	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	1.06	<0.5	0.462 J	3.37	<0.5	<0.5
1,2-Dichloropropane	ug/L	<1	<1	1.28	<1	0.501 J	4.8	0.292 J	0.328 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	0.253 J	<0.5	<0.5	0.138 J	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	3.19 J	3.16 J	4.03 J	8.61 J	5.05 J	4.6 J	4.61 B	3.39 B
Benzene	ug/L	<0.4	<0.4	0.136 J	<0.4	<0.4	0.613	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1	2.66 J	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	0.149 J	0.333	<0.3	<0.3	0.556	<0.3	<0.3
Chloromethane	ug/L	0.289 B	0.553 B	0.845 B	0.546 J	0.447 J	1.35	0.615 B	0.734 B
cis-1,2-Dichloroethane	ug/L	3.24	0.489 J	109	20.4	96.9	387	9.11	54.5
cis-1,3-Dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	6.4 J	<10	14.1 J	17.4	20.1	18.3	16.7	9.15 J
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	0.504 J	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	17.4	44.2	26	6.87	3.3	13.4	0.627 J	3.69
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	0.542 J	<1	<1	<1
trans-1,3-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	1.23	9.7	78.1	7.43	9.15	57	4.3	3.95
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW101-08C	IW101-09A	IW101-09B	IW101-09C	MW-101B	MW-101T	DR1-3	DR1-3 DUP	PMW101-01A
LAB SAMPLE ID	L0709192-07	L0709322-07	L0709322-08	L0709346-13	L0709237-04	L0709237-03	L0709471-05	L0709471-03	L0709322-10
DATE COLLECTED	9/10/2007	9/13/2007	9/13/2007	9/14/2007	9/11/2007	9/11/2007	9/19/2007	9/18/2007	9/13/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	0.481 J	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	0.767 J	<1	0.256 J	0.658 J	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	1.05	<1	0.532 J	1.07	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene	ug/L	1.34	<0.5	<0.5	0.389 J	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	ug/L	2	<1	0.51 J	1.61	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.126 J	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	9.29 B	13.8 J	16.5	18.4	<10	8.98 J	<10	46.2
Benzene	ug/L	0.455	<0.4	0.152 J	0.375 J	<0.4	<0.4	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	0.524 J
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	0.166 J	0.149 J	<0.3	0.217 J	0.164 J	0.162 J	<0.3	<0.3
Chloromethane	ug/L	<1	0.91 J	0.974 J	0.39 B	<1	0.38 B	0.991 J	0.37 J
cis-1,2-Dichloroethene	ug/L	286	0.438 J	138	235	7.35	0.609 J	30.7	31.6
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	145	<10	186	182	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	4.61	0.795 J	3.81	14.2	147	134	0.45 J	0.486 J
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	0.279 J	<1	<1	0.346 J	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	18.2	<1	11.5	55.8	0.646 J	0.46 J	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	0.619 J

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-04A	PMW101-04B	PMW101-05A	PMW101-05B
LAB SAMPLE ID	L0709322-11	L0709322-12	L0709322-13	L0709399-04	L0709399-05	L0709399-06	L0709399-07	L0709399-08	L0709399-09
DATE COLLECTED	9/13/2007	9/13/2007	9/13/2007	9/17/2007	9/17/2007	9/17/2007	9/17/2007	9/17/2007	9/17/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.361 J
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.348 J
1,1-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	0.593 J
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.837
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	1.58
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.223 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.334
Chloromethane	ug/L	0.682 J	0.462 J	0.529 J	0.318 B	<1	0.359 B	0.52 B	0.736 B
cis-1,2-Dichloroethene	ug/L	61.3	70.4	110	12.2	91.5	86.9	72.1	90.6
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	5.09 J	11.1	24.9	<10	<10	2.97 J	<10	4.81 J
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	12.1	12.4	0.613 J	60.1	14.4	12.2	14.1	0.367 J
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	0.254 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.846 J	1.47	<1	0.471 J	1.02	1.31	1.65	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	0.277 J	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW101-05A	PMW101-05B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	W85-01	W85-02	W85-05
LAB SAMPLE ID	L0709422-09	L0709422-10	L0709422-11	L0709422-12	L0709422-13	L0709471-04	L0709322-14	L0709346-04	L0709346-05
DATE COLLECTED	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/13/2007	9/14/2007	9/14/2007
AREA	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-2	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	53.1	96	16.4
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	0.214 J	<1	<1
1,2-Dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.62	1.57	0.671
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	0.293 J	0.38 J	0.406 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.142 J	<0.5	0.177 J
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	<10	<10	<10	<10	4.06 J	77.3 J	21.1
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.182 J	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	0.97 J	1.01	0.844 J
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	83	13.9	62.2
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	0.15 J	63	73.5
Chloromethane	ug/L	<1	<1	0.711 J	<1	<1	0.383 J	0.684 J	1.77 B
cis-1,2-Dichloroethane	ug/L	0.798 J	38.7	0.488 J	1.37	<1	6.21	59.4	81
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	7.03 J	<10	<10	<10	3.33 J	127	14.2
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	<1	7.27	<1
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	7.26	<1	0.294 J	22.8	3.46	41.7	34.6	4.14
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethane	ug/L	<1	<1	<1	40.1	0.32 J	125	13.9	2.39
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1

< Not detected above Reporting Limit (RL)

J. Estimated result based on QC data or reported below RL

B. Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW85-05 DUP	IW85-06	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05	IW92-06	IW92-07
LAB SAMPLE ID	L0709345-01	L0709322-15	L0709471-07	L0709471-08	L0709422-08	L0709422-07	L0709399-01	L0709346-02	L0709345-03
DATE COLLECTED	9/14/2007	9/13/2007	9/19/2007	9/19/2007	9/18/2007	9/18/2007	9/17/2007	9/14/2007	9/14/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,2,3-Trichloropropane	ug/L	19.3	94.6	<1	<1	<1	<2	<1	<1
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<4	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,2-Dichlorobenzene	ug/L	<1	0.289 J	<1	<1	<1	<2	<1	<1
1,2-Dichloroethane	ug/L	0.879	0.984	<0.5	<0.5	<0.5	<1	<0.5	0.505
1,2-Dichloropropane	ug/L	0.258 J	0.51 J	<1	<1	<1	<2	<1	0.328 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.8	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	0.184 J	0.211 J	0.198 J	0.157 J	0.137 J	0.369 J	<1	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<20	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Acetone	ug/L	23.8 J	9.6 J	10.7	28.4	20	60.5	515	178 J
Benzene	ug/L	<0.4	0.125 J	<0.4	<0.4	<0.4	<0.8	<0.4	<0.4
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Carbon disulfide	ug/L	0.827 J	<1	0.516 J	<1	1.5	<1	1.02 J	0.761 J
Carbon tetrachloride	ug/L	67.2	1.02	6.33	3.17	<1	0.328 J	<2	<1
Chlorobenzene	ug/L	<0.5	0.261 J	<0.5	<0.5	<0.5	<1	<0.5	<0.5
Chloroethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Chloroform	ug/L	79.8	87.9	11	12.3	7.05	0.744	1.56	1.53
Chloromethane	ug/L	0.539 B	0.902 J	1.01	0.26 J	<1	<1	<2	0.344 B
cis-1,2-Dichloroethene	ug/L	45.8	105	65.4	105	105	90.9	67.4	39.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Hexachlorobutadiene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<1.2	<0.5	<0.5
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<4	<2	<2
MEK (2-Butanone)	ug/L	14.1	5.39 J	7.21 J	14.4	28.7	79.8	556	336
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<10	<5	<5
Methylene chloride	ug/L	0.287 B	<1	<1	1.64	2.2	<1	1.43 J	6.06
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<20	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<2	1.91	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Tetrachloroethane	ug/L	24.3	2.35	42.9	13.4	9.74	0.396 J	2.13	17
Toluene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Trichloroethene	ug/L	12	2.16	14	4.55	3.21	<1	0.867 J	3.07
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<2	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<10	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<2	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	IW92-08	IW92-08 DUP	DR2-1	DR2-5	IW-01	MW-85	PMW85-01	PMW85-04	PMW85-05
LAB SAMPLE ID	L0709399-02	L0709399-12	L0709280-05	L0709322-16	L0709346-06	L0709237-13	L0709182-01	L0709182-02	L0709182-03
DATE COLLECTED	9/17/2007	9/17/2007	9/12/2007	9/13/2007	9/14/2007	9/11/2007	9/10/2007	9/10/2007	9/10/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units								
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	73.6	75.8	<1	29.1	1.6 J	36.2	13.8	83.9
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	0.162 J	0.199 J	<1	0.179 J	<1	<1	0.319 J	0.528 J
1,2-Dichloroethane	ug/L	0.967	1.19	<0.5	0.555	0.445 J	0.644	0.596	1.02
1,2-Dichloropropane	ug/L	0.425 J	0.446 J	<1	0.222 J	0.342 J	<1	0.216 J	0.427 J
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	0.528	0.541	<0.5	<0.5	<0.5	<0.5	<0.5	0.147 J
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	57.2	50.9	9.77 J	<10	8.02 J	6.4 J	7.31 B	14.9 B
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.199 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	0.376 J	0.415 J	13.4	123	30.6 J	75.1	102	6.41
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	0.155 J	<0.5	<0.5	0.216 J	0.331 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	15.3	16.8	8.58	42.2	16.5	44.2	83.7	91.9
Chloromethane	ug/L	<1	0.473 B	0.372 B	0.611 J	0.677 B	0.634 B	0.488 B	0.473 B
cis-1,2-Dichloroethene	ug/L	43.9	46.7	50.4	30.5	59.4 J	37.4	18	96.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
m-p-Xylene	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	100	96.8	183	<10	<10	3.51 J	3.84 J	9.14 J
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	2.25	2.64	<1	<1	<1	0.59 B	<1	3.37
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	2.27	2.07	138	46.8	148 J	32.5	45.3	7.53
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	0.489 J
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	0.775 J	0.806 J	4.54	16	14.8	14.3	12.7	4.11
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	1.25	<1	0.474 J	<1	<1	<1

< Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

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TABLE F-5
VOLATILE ORGANIC COMPOUNDS, FORTH QUARTER SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

WELL ID	PMW92-01	PMW92-02	PMW92-03	PMW92-03 DUP	PMW92-04	PMW92-05	PMW92-06
LAB SAMPLE ID	L0709280-02	L0709280-03	L0709280-04	L0709280-01	L0709237-10	L0709237-11	L0709237-12
DATE COLLECTED	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/11/2007	9/11/2007	9/11/2007
AREA	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2	TTA-2
Analyte	Units						
1,1,1,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	0.951 J	133
1,2,4-Trichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	<2	<2	<2	<2	<2	<2
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	0.505 J
1,2-Dichloroethane	ug/L	<0.5	<0.5	0.601	0.558	0.448 J	2.3
1,2-Dichloropropane	ug/L	<1	<1	0.423 J	0.374 J	0.224 J	1.02
1,3,5-Trimethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	ug/L	<0.5	0.172 J	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	ug/L	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
2-Hexanone	ug/L	<10	<10	<10	<10	<10	<10
4-Chlorotoluene	ug/L	<1	<1	<1	<1	<1	<1
Acetone	ug/L	<10	73	2.74 J	<10	<10	6.23 J
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	<0.4	0.175 J
Bromobenzene	ug/L	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	ug/L	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	9.62	<1	2.32	2.09	9.28	53.2
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.34 J
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	8.79	0.751	25.7	24.8	15.7	114
Chloromethane	ug/L	0.477 B	0.366 B	0.303 B	<1	<1	0.484 B
cis-1,2-Dichloroethene	ug/L	23.6	130	182	177	139	26.9
cis-1,3-Dichloropropene	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	ug/L	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	ug/L	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	<2	<2	<2	<2	<2	<2
MEK (2-Butanone)	ug/L	<10	74.2	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	ug/L	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<1	<1	<1	<1	<1	0.908 B
MIBK (methyl isobutyl ketone)	ug/L	<10	<10	<10	<10	<10	<10
Naphthalene	ug/L	<1	<1	<1	<1	<1	<1
n-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
n-Propylbenzene	ug/L	<1	<1	<1	<1	<1	<1
o-Xylene	ug/L	<1	<1	<1	<1	<1	<1
p-Isopropyltoluene	ug/L	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Styrene	ug/L	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	108	0.689 J	31.8	29.5	55.5	69.7
Toluene	ug/L	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	4.09	<1	5.09	4.87	5.34	21.5
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Sample ID					
		Lab ID	Date	Time	Area	Units	
Bromide	300	IW21-01A	L0608210-04	8/8/2006	TTA-1 21	mg/L	IW21-01B
Chloride	300			14:52		mg/L	
Nitrate	300					mg/L	
Nitrite	300					mg/L	
Sulfate	300					mg/L	
Sulfide	9030					mg/L	
Alkalinity, Total	310.2					mg/L	
Total Organic Carbon	9060					mg/L	
Arsenic, Total	6010B\3005A					mg/L	
Manganese, Total	6010B\3005A					mg/L	
Selenium, Total	6010B\3005A					mg/L	
Acetic Acid	830-MBA					mg/L	
Butyric Acid	830-MBA					mg/L	
Lactic Acid	830-MBA					mg/L	
Propionic Acid	830-MBA					mg/L	
Pyruvic Acid	830-MBA					mg/L	
Carbon Dioxide	RSK175\5021					ug/L	
Ethane	RSK175\5021					ug/L	
Ethene	RSK175\5021					ug/L	
Methane	RSK175\5021					ug/L	
Hydrogen	AM20GAX					nM	

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--: Not Sampled

TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				
			Lab ID	Date	Time	Area	
Bromide	300	mg/L	IW21-03B	L0608253-04	8/9/2006	13:40	TTA-1 21
Chloride	300	mg/L	IW21-04A	L0608292-01	8/10/2006	8:00	TTA-1 21
Nitrate	300	mg/L	IW21-04A DUP	L0608292-05	8/10/2006	8:00	TTA-1 21
Nitrite	300	mg/L	IW21-04B	L0608292-02	8/10/2006	9:40	TTA-1 21
Sulfate	300	mg/L	IW21-05A	L0608292-08	8/10/2006	14:20	TTA-1 21
Sulfide	9030	mg/L					
Alkalinity, Total	310.2	mg/L					
Total Organic Carbon	9060	mg/L					
Arsenic, Total	6010B\3005A	mg/L					
Manganese, Total	6010B\3005A	mg/L					
Selenium, Total	6010B\3005A	mg/L					
Acetic Acid	830-MBA	mg/L					
Butyric Acid	830-MBA	mg/L					
Lactic Acid	830-MBA	mg/L					
Propionic Acid	830-MBA	mg/L					
Pyruvic Acid	830-MBA	mg/L					
Carbon Dioxide	RSK175\5021	ug/L					
Ethane	RSK175\5021	ug/L					
Ethene	RSK175\5021	ug/L					
Methane	RSK175\5021	ug/L					
Hydrogen	AM20GAX	nM					

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID	IW21-05B	MW-115	MW-21	MW-21 DUP	PMW21-01
Bromide	300	mg/L	Lab ID	L0608292-07	L0608292-03	L0608210-01	L0608210-02	L0608253-08
Chloride	300	mg/L	Date	8/10/2006	8/10/2006	8/8/2006	8/8/2006	8/9/2006
Nitrate	300	mg/L	Time	12:20	14:20	12:22	12:24	8:32
Nitrite	300	mg/L	Area	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21	TTA-1 21
Sulfate	300	mg/L						
Sulfide	9030	mg/L						
Alkalinity, Total	310.2	mg/L						
Total Organic Carbon	9060	mg/L						
Arsenic, Total	6010B\3005A	mg/L						
Manganese, Total	6010B\3005A	mg/L						
Selenium, Total	6010B\3005A	mg/L						
Acetic Acid	830-MBA	mg/L						
Butyric Acid	830-MBA	mg/L						
Lactic Acid	830-MBA	mg/L						
Propionic Acid	830-MBA	mg/L						
Pyruvic Acid	830-MBA	mg/L						
Carbon Dioxide	RSK175\5021	ug/L						
Ethane	RSK175\5021	ug/L						
Ethene	RSK175\5021	ug/L						
Methane	RSK175\5021	ug/L						
Hydrogen	AM20GAX	nM						

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				
			PMW21-02	PMW21-03	PMW21-04	PMW21-05	IW101-01A
Bromide	300	mg/L	<0.2	0.255	0.409	<0.2	<0.2
Chloride	300	mg/L	12.3	13.6	13.7	14.3	12.7
Nitrate	300	mg/L	3.3	3.39	3.14	3.87	3.16
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	22.4	15.8	30.3	14.6	23.8
Sulfide	9030	mg/L	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	102	91.3	114	61.6	129
Total Organic Carbon	9060	mg/L	3.15 B	4.97	3.98 B	3.43	6.05
Arsenic, Total	6010B\3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B\3005A	mg/L	0.675	0.0109	<0.01	0.274	0.225
Selenium, Total	6010B\3005A	mg/L	<0.02	<0.01	<0.02	<0.02	<0.01
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Dioxide	RSK175\5021	ug/L	88000 J	100000	120000 J	55000	72000
Ethane	RSK175\5021	ug/L	<5	<5	<5	<5	<5
Ethene	RSK175\5021	ug/L	2.6 J	<5	<5	<5	<5
Methane	RSK175\5021	ug/L	6.3 B	8	7 B	8.4	4.8 J
Hydrogen	AM20GAX	nM	--	9.4	--	--	--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID	IW101-01B	IW101-01C	IW101-01C DUP	IW101-02A	IW101-02B
Bromide	300	mg/L	Lab ID	L0608515-01	L0608515-02	L0608515-04	L0608515-03	L0608554-01
Chloride	300	mg/L	Date	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/23/2006
Nitrate	300	mg/L	Time	8:16	11:00	11:00	14:30	9:00
Nitrite	300	mg/L	Area	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Sulfate	300	mg/L						
Sulfide	9030	mg/L						
Alkalinity, Total	310.2	mg/L						
Total Organic Carbon	9060	mg/L						
Arsenic, Total	6010B\3005A	mg/L		<0.01	<0.01	<0.01	<0.01	0.00792 J
Manganese, Total	6010B\3005A	mg/L		0.00715 J	0.0327	0.0352	0.00875 J	0.00816 J
Selenium, Total	6010B\3005A	mg/L		<0.02	<0.01	<0.01	<0.02	<0.02
Acetic Acid	830-MBA	mg/L		<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L		<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L		<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L		<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Dioxide	RSK175\5021	ug/L		110000 J	87000 J	93000 J	90000 J	100000 J
Ethane	RSK175\5021	ug/L		<5	<5	<5	<5	<5
Ethene	RSK175\5021	ug/L		<5	<5	<5	<5	<5
Methane	RSK175\5021	ug/L		6	4.6 J	6.1	6	7.1
Hydrogen	AM20GAX	nM		--	--	--	--	--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				
			Lab ID	Date	Time	Area	
Bromide	300	mg/L	IW101-04A	L0608582-03	8/24/2006	10:51	IW101-04C
Chloride	300	mg/L	L0608582-03	8/24/2006	10:51	TTA-1 101	DUP
Nitrate	300	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-05
Nitrite	300	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-06
Sulfate	300	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	8/24/2006
Sulfide	9030	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	15:20
Alkalinity, Total	310.2	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Total Organic Carbon	9060	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Arsenic, Total	6010B\3005A	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Manganese, Total	6010B\3005A	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Selenium, Total	6010B\3005A	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Acetic Acid	830-MBA	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Butyric Acid	830-MBA	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Lactic Acid	830-MBA	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Propionic Acid	830-MBA	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Pyruvic Acid	830-MBA	mg/L	L0608582-04	8/24/2006	12:41	TTA-1 101	TTA-1 101
Carbon Dioxide	RSK175\5021	ug/L	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-05
Ethane	RSK175\5021	ug/L	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-06
Ethene	RSK175\5021	ug/L	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-07
Methane	RSK175\5021	ug/L	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-08
Hydrogen	AM20GAX	nM	L0608582-04	8/24/2006	12:41	TTA-1 101	L0608582-09

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

--: Not Sampled

TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID					
			Lab ID	Date	Time	Area	IW101-05B	IW101-06B
Bromide	300	mg/L	L0608627-02	8/28/2006	9:30	TTA-1 101	0.33	0.264
Chloride	300	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	17	19.5
Nitrate	300	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	4.69	5.05
Nitrite	300	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<0.4	<0.4
Sulfate	300	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	22.3	16.6
Sulfide	9030	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<1	<1
Alkalinity, Total	310.2	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	124	112
Total Organic Carbon	9060	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	3.62	2.64
Arsenic, Total	6010B\3005A	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	0.00582 J	<0.01
Manganese, Total	6010B\3005A	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	0.0113	0.0312
Selenium, Total	6010B\3005A	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<0.05	<0.05
Acetic Acid	830-MBA	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<1	<1
Butyric Acid	830-MBA	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<1	<1
Lactic Acid	830-MBA	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<1	<1
Propionic Acid	830-MBA	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<10	<10
Pyruvic Acid	830-MBA	mg/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<0.1	<0.1
Carbon Dioxide	RSK175\5021	ug/L	L0608627-02	8/28/2006	15:10	TTA-1 101	97000 J	95000 J
Ethane	RSK175\5021	ug/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<5	<5
Ethene	RSK175\5021	ug/L	L0608627-02	8/28/2006	15:10	TTA-1 101	<5	<5
Methane	RSK175\5021	ug/L	L0608627-02	8/28/2006	15:10	TTA-1 101	7.6	6
Hydrogen	AM20GAX	nM	L0608627-02	8/28/2006	15:10	TTA-1 101	--	--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Sample ID					Units				
		Lab ID	Date	Time	Area		mg/L	mg/L	mg/L	mg/L	mg/L
Bromide	300	IW101-06C	L0608627-04	8/28/2006	12:00	TTA-1 101	<0.2	10	3.22	<0.4	<0.4
Chloride	300	IW101-07A	L0608627-05	8/28/2006	14:56	TTA-1 101	0.247	21.6	4.76	<0.4	<0.4
Nitrate	300	IW101-07B	L0608649-02	8/29/2006	8:00	TTA-1 101	0.221	9.23	3.09	<0.4	<0.4
Nitrite	300	IW101-07C	L0608649-03	8/29/2006	9:40	TTA-1 101	0.247	7.61	3.49	<0.4	<0.4
Sulfate	300	IW101-08A	L0608627-06	8/28/2006	14:15	TTA-1 101	0.277	26.1	5.06	<0.4	<0.4
Sulfide	9030										
Alkalinity, Total	310.2										
Total Organic Carbon	9060										
Arsenic, Total	6010B\3005A										
Manganese, Total	6010B\3005A										
Selenium, Total	6010B\3005A										
Acetic Acid	830-MBA										
Butyric Acid	830-MBA										
Lactic Acid	830-MBA										
Propionic Acid	830-MBA										
Pyruvic Acid	830-MBA										
Carbon Dioxide	RSK175\5021										
Ethane	RSK175\5021										
Ethene	RSK175\5021										
Methane	RSK175\5021										
Hydrogen	AM20GAX										

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				
			Lab ID	Date	Time	Area	
Bromide	300	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	IW101-09C
Chloride	300	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	IW101-09B
Nitrate	300	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	L0608649-08
Nitrite	300	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	L0608649-09
Sulfate	300	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	8/29/2006
Sulfide	9030	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	15:35
Alkalinity, Total	310.2	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	TTA-1 101
Total Organic Carbon	9060	mg/L	IW101-08B	L0608627-07	8/28/2006	15:45	TTA-1 101
Arsenic, Total	6010B\3005A	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	IW101-09A
Manganese, Total	6010B\3005A	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	L0608649-05
Selenium, Total	6010B\3005A	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	L0608649-08
Acetic Acid	830-MBA	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	L0608649-09
Butyric Acid	830-MBA	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	8/29/2006
Lactic Acid	830-MBA	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	13:30
Propionic Acid	830-MBA	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	TTA-1 101
Pyruvic Acid	830-MBA	mg/L	IW101-08C	L0608649-04	8/29/2006	8:40	TTA-1 101
Carbon Dioxide	RSK175\5021	ug/L	IW101-08C	L0608649-04	8/29/2006	8:40	31000
Ethane	RSK175\5021	ug/L	IW101-08C	L0608649-04	8/29/2006	8:40	41000
Ethene	RSK175\5021	ug/L	IW101-08C	L0608649-04	8/29/2006	8:40	<5
Methane	RSK175\5021	ug/L	IW101-08C	L0608649-04	8/29/2006	8:40	<5
Hydrogen	AM20GAX	nM	IW101-08C	L0608649-04	8/29/2006	8:40	9.3

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Sample ID		MW-101B	MW-101T	MW101-T DUP	DR1-3	PMW101-01A
		Lab ID	Date					
		Time	Area	8/25/2006	8/25/2006	8/25/2006	8/25/2006	8/21/2006
				9:50	11:50	11:50	8:15	10:00
				TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101	TTA-1 101
Units								
Bromide	300	mg/L	0.38	0.269	0.264	<0.2		0.339
Chloride	300	mg/L	18.9	18.9	18.5	18.9		14.1
Nitrate	300	mg/L	5.09	4.98	5.06	5.36		3.54 J
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4		<0.4
Sulfate	300	mg/L	19.8	20	20.2	14.5		24.7
Sulfide	9030	mg/L	<1	<1	<1	<1		<1
Alkalinity, Total	310.2	mg/L	125	122	122	91.3		128
Total Organic Carbon	9060	mg/L	2.95	2.47	1.79	2.64		5.73
Arsenic, Total	6010B\3005A	mg/L	0.00813 J	<0.01	<0.01	<0.01		<0.01
Manganese, Total	6010B\3005A	mg/L	0.00939 J	0.00809 J	0.00832 J	<0.01		0.153
Selenium, Total	6010B\3005A	mg/L	<0.05	<0.05	<0.02	<0.05		<0.02
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1		<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1		<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1		<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10		<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1		<0.1
Carbon Dioxide	RSK175\5021	ug/L	120000 J	110000 J	64000 J	92000 J		94000 J
Ethane	RSK175\5021	ug/L	<25	<5	<5	<5		<5
Ethene	RSK175\5021	ug/L	<25	<5	<5	<5		<5
Methane	RSK175\5021	ug/L	39 J	8.3	7.7	7.2		5.8
Hydrogen	AM20GAX	nM	2.2	2.5	2.5	1.5		--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				
			PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B
Bromide	300	mg/L	0.276	<0.2	0.447	0.282	0.342
Chloride	300	mg/L	15.9	17	20	19.4	19.6
Nitrate	300	mg/L	4.27 J	4.52	5.3	5.41	5.7
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	30.8	21.8	15.4	15.6	15
Sulfide	9030	mg/L	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	124	126	95	84.5	78.6
Total Organic Carbon	9060	mg/L	4.96	4.16	4.02	1.05	0.758 J
Arsenic, Total	6010B\3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B\3005A	mg/L	0.0134	0.0456	0.0195	0.0971	<0.01
Selenium, Total	6010B\3005A	mg/L	0.0105 J	<0.02	<0.01	<0.01	<0.02
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Dioxide	RSK175\5021	ug/L	98000 J	110000 J	88000 J	100000 J	100000 J
Ethane	RSK175\5021	ug/L	<5	<5	<5	<5	<5
Ethene	RSK175\5021	ug/L	<5	<5	<5	<5	<5
Methane	RSK175\5021	ug/L	6.9	6.3	6.3	7.7	8.4
Hydrogen	AM20GAX	nM	--	--	--	74	--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	PMW101-04A				PMW101-04B				PMW101-05A				PMW101-05B			
			Sample ID				Sample ID				Sample ID				Sample ID			
			Lab ID				Lab ID				Lab ID				Lab ID			
			Date				Date				Date				Date			
			Time				Time				Time				Time			
Area				Area				Area				Area						
Bromide	300	mg/L	0.309	0.293	0.339	0.314	<0.2											
Chloride	300	mg/L	19.2	20	17	18.9	10.8											
Nitrate	300	mg/L	5.19	5.3	5.02	5.33	3.44											
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4											
Sulfate	300	mg/L	17	17.3	11.8	17.8	9.36											
Sulfide	9030	mg/L	<1	<1	<1	<1	<1											
Alkalinity, Total	310.2	mg/L	97.6	98.6	76.3	105	58.9											
Total Organic Carbon	9060	mg/L	3.72	2.79	1.69 B	4.4	9.01											
Arsenic, Total	6010B\3005A	mg/L	<0.01	<0.01	<0.01	0.00648 J	<0.01											
Manganese, Total	6010B\3005A	mg/L	0.0682	0.067	0.0105	<0.01	0.00877 J											
Selenium, Total	6010B\3005A	mg/L	<0.01	<0.02	<0.01	<0.02	<0.01											
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1											
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1											
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1											
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10											
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1											
Carbon Dioxide	RSK175\5021	ug/L	84000 J	98000 J	60000 J	87000 J	57000 J											
Ethane	RSK175\5021	ug/L	<5	<5	<5	<5	<5											
Ethene	RSK175\5021	ug/L	<5	<5	<5	<5	<5											
Methane	RSK175\5021	ug/L	14	13	4.3 J	7.6	5.9											
Hydrogen	AM20GAX	nM	--	--	--	--	--											

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	PMW101-06A		PMW101-06B		PMW101-07A		PMW101-07A DUP		PMW101-07B	
			Sample ID Lab ID	Date	Time	Area	Sample ID Lab ID	Date	Time	Area	Sample ID Lab ID	Date
Bromide	300	mg/L	L0608552-04	8/23/2006	15:05	TTA-1 101	L0608581-01	8/24/2006	8:00	TTA-1 101	L0608599-09	8/25/2006
Chloride	300	mg/L										8/24/2006
Nitrate	300	mg/L										11:50
Nitrite	300	mg/L										TTA-1 101
Sulfate	300	mg/L										
Sulfide	9030	mg/L										
Alkalinity, Total	310.2	mg/L										
Total Organic Carbon	9060	mg/L										
Arsenic, Total	6010B\3005A	mg/L										
Manganese, Total	6010B\3005A	mg/L										
Selenium, Total	6010B\3005A	mg/L										
Acetic Acid	830-MBA	mg/L										
Butyric Acid	830-MBA	mg/L										
Lactic Acid	830-MBA	mg/L										
Propionic Acid	830-MBA	mg/L										
Pyruvic Acid	830-MBA	mg/L										
Carbon Dioxide	RSK175\5021	ug/L										
Ethane	RSK175\5021	ug/L										
Ethene	RSK175\5021	ug/L										
Methane	RSK175\5021	ug/L										
Hydrogen	AM20GAX	nM										

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				Sample ID			
			Lab ID	Date	Time	Area	Lab ID	Date	Time	Area
Bromide	300	mg/L	L0608581-05	8/24/2006	13:45	TTA-1 101	L0608581-05	8/24/2006	13:45	TTA-1 101
Chloride	300	mg/L	L0608581-06	8/24/2006	15:53	TTA-1 101	L0608581-06	8/24/2006	15:53	TTA-1 101
Nitrate	300	mg/L	L0609061-01	9/1/2006		TTA-2	L0609061-01	9/1/2006	13:40	TTA-2
Nitrite	300	mg/L	L0609061-02	9/1/2006		TTA-2	L0609061-02	9/1/2006	12:10	TTA-2
Sulfate	300	mg/L	L0609061-03	9/1/2006		TTA-2	L0609061-03	9/1/2006	7:05	TTA-2
Sulfide	9030	mg/L								
Alkalinity, Total	310.2	mg/L								
Total Organic Carbon	9060	mg/L								
Arsenic, Total	6010B\3005A	mg/L								
Manganese, Total	6010B\3005A	mg/L								
Selenium, Total	6010B\3005A	mg/L								
Acetic Acid	830-MBA	mg/L								
Butyric Acid	830-MBA	mg/L								
Lactic Acid	830-MBA	mg/L								
Propionic Acid	830-MBA	mg/L								
Pyruvic Acid	830-MBA	mg/L								
Carbon Dioxide	RSK175\5021	ug/L								
Ethane	RSK175\5021	ug/L								
Ethene	RSK175\5021	ug/L								
Methane	RSK175\5021	ug/L								
Hydrogen	AM20GAX	nM								

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Sample ID Lab ID Date Time Area	Units	IW92-01	IW92-02	IW92-03	IW92-04	IW92-05
				L0609050-03 8/31/2006 10:00 TTA-2	L0609050-04 8/31/2006 13:30 TTA-2	L0609052-01 8/31/2006 10:25 TTA-2	L0609052-02 8/31/2006 12:35 TTA-2	L0609052-03 8/31/2006 15:00 TTA-2
Bromide	300		mg/L	<0.2	<0.2	<0.2	<0.2	<0.2
Chloride	300		mg/L	17.5	12	11.6	10.4	11.5
Nitrate	300		mg/L	4.28 J	3.96	2.69	2.57	0.526 J
Nitrite	300		mg/L	<0.4	<0.4	0.116 J	<0.4	<0.4
Sulfate	300		mg/L	16.1	11.5	8.55	11.4	10.9
Sulfide	9030		mg/L	<1	<1	<1	<1	<1
Alkalinity, Total	310.2		mg/L	62.8	44.7	52.2	54.6	97
Total Organic Carbon	9060		mg/L	4.84	17	3.52	2.62	11.7
Arsenic, Total	6010B\3005A		mg/L	0.00512 J	0.0212	<0.01	<0.01	0.00567 J
Manganese, Total	6010B\3005A		mg/L	0.0836	0.11	0.169	0.0857	0.126
Selenium, Total	6010B\3005A		mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Acetic Acid	830-MBA		mg/L	<1	<1	<1	<1	<1
Butyric Acid	830-MBA		mg/L	<1	<1	<1	<1	<1
Lactic Acid	830-MBA		mg/L	<1	<1	<1	<1	11.1
Propionic Acid	830-MBA		mg/L	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA		mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Dioxide	RSK175\5021		ug/L	40000 J	8100 J	46000 J	49000 J	49000 J
Ethane	RSK175\5021		ug/L	<5	<0.5	<5	<5	<5
Ethene	RSK175\5021		ug/L	<5	<0.5	<5	<5	<5
Methane	RSK175\5021		ug/L	5.9 B	<0.5	6.7 B	11 B	7 B
Hydrogen	AM20GAX		nM	--	--	--	--	17

<: Not detected above Reporting Limit (RL)

J: Estimated result based on QC data or reported below RL

B: Estimated result possibly biased high or false positive based on blank data

--: Not Sampled

TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Sample ID	IW92-06					IW92-07					IW92-08					DR2-1					DR2-5				
			Lab ID	Date	Time	Area	Units	Lab ID	Date	Time	Area	Units	Lab ID	Date	Time	Area	Units	Lab ID	Date	Time	Area	Units	Lab ID	Date	Time	Area	Units
Bromide	300						mg/L																				
Chloride	300						mg/L																				
Nitrate	300						mg/L																				
Nitrite	300						mg/L																				
Sulfate	300						mg/L																				
Sulfide	9030						mg/L																				
Alkalinity, Total	310.2						mg/L																				
Total Organic Carbon	9060						mg/L																				
Arsenic, Total	6010B\3005A						mg/L																				
Manganese, Total	6010B\3005A						mg/L																				
Selenium, Total	6010B\3005A						mg/L																				
Acetic Acid	830-MBA						mg/L																				
Butyric Acid	830-MBA						mg/L																				
Lactic Acid	830-MBA						mg/L																				
Propionic Acid	830-MBA						mg/L																				
Pyruvic Acid	830-MBA						mg/L																				
Carbon Dioxide	RSK175\5021						ug/L																				
Ethane	RSK175\5021						ug/L																				
Ethene	RSK175\5021						ug/L																				
Methane	RSK175\5021						ug/L																				
Hydrogen	AM20GAX						nM																				

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID					PMW85-02	
			Lab ID	Date	Time	Area	TTA-2	PMW85-01	PMW85-02
Bromide	300	mg/L	L0609098-01	9/5/2006	8:35	TTA-2	1.24	L0608682-01	L0609049-01
Chloride	300	mg/L					16.2	8/30/2006	8/30/2006
Nitrate	300	mg/L					0.669	7:45	9:40
Nitrite	300	mg/L					<0.4	TTA-2	TTA-2
Sulfate	300	mg/L					8.45		
Sulfide	9030	mg/L					<1		
Alkalinity, Total	310.2	mg/L					164		
Total Organic Carbon	9060	mg/L					21.4		16.7
Arsenic, Total	6010B\3005A	mg/L					0.0152		0.00701 J
Manganese, Total	6010B\3005A	mg/L					1.45 J	0.00589 J	0.483
Selenium, Total	6010B\3005A	mg/L					<0.01	0.0103	<0.01
Acetic Acid	830-MBA	mg/L					<1	<1	<1
Butyric Acid	830-MBA	mg/L					<1	<1	<1
Lactic Acid	830-MBA	mg/L					<1	<1	<1
Propionic Acid	830-MBA	mg/L					<10	<10	<10
Pyruvic Acid	830-MBA	mg/L					<0.1	<0.1	<0.1
Carbon Dioxide	RSK175\5021	ug/L					430000 J	58000 J	61000 J
Ethane	RSK175\5021	ug/L					<5	<5	<5
Ethene	RSK175\5021	ug/L					<5	<5	<5
Methane	RSK175\5021	ug/L					4600	5.9	6.4
Hydrogen	AM20GAX	nM					2	1.6	--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Units	Sample ID				
			PMW92-01	PMW92-02	PMW92-03	PMW92-04	PMW92-05
Bromide	300	mg/L	<0.2	<0.2	0.249	0.248	<0.2
Chloride	300	mg/L	15.7	14	18.2	33.8	18.3
Nitrate	300	mg/L	0.677	2.37	4.81	2.58	2.65
Nitrite	300	mg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Sulfate	300	mg/L	11.7	9.49	12.4	13.4	15.3
Sulfide	9030	mg/L	<1	<1	<1	<1	<1
Alkalinity, Total	310.2	mg/L	82.8	58.1	56.4	55.9	55.7
Total Organic Carbon	9060	mg/L	15.6	1.8	1.7	1.52	1.59
Arsenic, Total	6010B\3005A	mg/L	0.00726 J	<0.01	<0.01	<0.01	<0.01
Manganese, Total	6010B\3005A	mg/L	1.34	0.563	0.0615	0.157	0.0242
Selenium, Total	6010B\3005A	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Acetic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Butyric Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Lactic Acid	830-MBA	mg/L	<1	<1	<1	<1	<1
Propionic Acid	830-MBA	mg/L	<10	<10	<10	<10	<10
Pyruvic Acid	830-MBA	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Dioxide	RSK175\5021	ug/L	48000 J	31000 J	62000 J	67000 J	67000 J
Ethane	RSK175\5021	ug/L	<5	<5	<5	<5	<5
Ethene	RSK175\5021	ug/L	2.8 J	<5	<5	<5	<5
Methane	RSK175\5021	ug/L	7.4	6 B	6.8	6.5	5.9
Hydrogen	AM20GAX	nM	--	--	--	2.1	--

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TABLE F-6
MONITORED NATURAL ATTENUATION PARAMETERS
BASELINE SAMPLES
YEAR ONE REMEDIAL ACTION OPERATIONS REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Method	Sample ID			
		Lab ID	Date	Time	Area
					TTA-2
Analyte	Method	Units			
Bromide	300	mg/L	0.302		
Chloride	300	mg/L	22.8		
Nitrate	300	mg/L	3.21		
Nitrite	300	mg/L	<0.4		
Sulfate	300	mg/L	8.27		
Sulfide	9030	mg/L	<1		
Alkalinity, Total	310.2	mg/L	35		
Total Organic Carbon	9060	mg/L	1.67		
Arsenic, Total	6010B\3005A	mg/L	0.00576 J		
Manganese, Total	6010B\3005A	mg/L	0.0113		
Selenium, Total	6010B\3005A	mg/L	<0.01		
Acetic Acid	830-MBA	mg/L	<1		
Butyric Acid	830-MBA	mg/L	<1		
Lactic Acid	830-MBA	mg/L	<1		
Propionic Acid	830-MBA	mg/L	<10		
Pyruvic Acid	830-MBA	mg/L	<0.1		
Carbon Dioxide	RSK175\5021	ug/L	71000 J		
Ethane	RSK175\5021	ug/L	<5		
Ethene	RSK175\5021	ug/L	<5		
Methane	RSK175\5021	ug/L	6.4		
Hydrogen	AM20GAX	nM	--		

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FINAL PAGE

PART I

ADMINISTRATIVE RECORD

PART I

FINAL PAGE