



Memorandum

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Carolyn Jones, DAIM-ODB

From: Kevin Sedlak
Tom Holmes

Date: 10 February 2012

Re: **December 2011 Baseline Samples for the Enhanced
Bioremediation Treatment System
Main Installation - Defense Depot Memphis, Tennessee**

HDR has prepared this report to present results of the December 2011 Baseline Samples for the Enhanced Bioremediation Treatment (EBT) System on the Main Installation (MI) at Defense Depot Memphis, Tennessee (DDMT). This report was prepared for the Department of the Army (DA), Base Realignment and Closure Division (DAIM-ODB) under Contract FA8903-08-D-8771, Task Order 0069 to the Air Force Center for Engineering and the Environment.

INTRODUCTION

Remedial action objectives (RAOs) and the selected remedy were presented in the *Memphis Depot Main Installation Record of Decision* (CH2M HILL, 2001). The RAOs included:

- reduce concentrations of chemicals of concern to maximum contaminant levels (MCLs) or lower; and
- prevent horizontal and vertical offsite migration of groundwater contaminants in excess of MCLs.

The selected remedy included:

- enhanced bioremediation of chlorinated volatile organic compounds (CVOCs) in the most contaminated part of the groundwater plume; and
- long-term groundwater monitoring to document changes in plume concentrations and to detect potential plume migration to off-site areas or into deeper aquifers.

EBT system construction, operations and performance monitoring and long-term monitoring (LTM) were described in the *Interim Remedial Action Completion Report, Main Installation, Rev. 1* (IRACR) (HDR|e²M, 2010), which included an Operating Properly and Successfully (OPS) demonstration. United States Environmental Protection Agency (USEPA) approved the OPS demonstration and the IRACR in March 2010.

EBT system construction included installation of 50 injection wells (IWs) and 30 performance monitoring wells (PMWs) in two target treatment areas (TTA-1 and TTA-2);

construction was completed in August 2006. EBT operations, including injections of sodium lactate solutions and performance monitoring, were performed from September 2006 through March 2009.

EBT injections were halted based on reduction in tetrachloroethene (PCE) and trichloroethene (TCE) concentrations in the treatment areas and the lack of significant contaminant concentrations in identified soil source areas. CVOC isopleths maps and trend analysis of LTM wells indicated plumes were stable and CVOC concentrations had decreased outside the EBT areas; offsite migration of CVOCs in excess of MCLs was not observed. Since completion of EBT, LTM results have shown rebound in concentrations of PCE, TCE and carbon tetrachloride (CT) in TTA-1 and TTA-2.

MI EBT components were planned to be removed following a period of monitoring after injections were halted, but complete removal is not recommended due to rebound in contaminant concentrations. Baseline groundwater monitoring of injection and performance monitoring wells followed by abandonment of selected wells was recommended in the *Work Plan for Partial Abandonment of Enhanced Bioremediation Treatment System* (HDR, 2011). The baseline samples outlined in the work plan was approved by USEPA and Tennessee Department of Environment and Conservation (TDEC) in a conference call on 10 November 2011.

There were 49 IWs and 30 PMWs used for EBT. Six PMWs are currently included in LTM; the remaining wells have not been sampled since March 2009 following the last EBT injections in February 2009. Baseline groundwater samples were collected from these wells in December 2011.

FIELD ACTIVITIES

The field activities consisted of water level measurements in 101 wells throughout TTA-1 and TTA-2, and sampling of 49 IWs and 24 PMWs. The sampled wells are listed on [Table 1](#). The well locations for IWs, PMWs and LTM wells near TTA-1 and TTA-2 are shown on [Figures 1](#) and [2](#), respectively.

Water Level Measurements

Groundwater levels were measured on 5 December 2011. Measurements were made using Solinst Model 101 water level meters with electronic sensors and tapes graduated in 0.01-foot increments. Six wells were not accessible due to heavy rain. The water level measurements are shown on [Table 2](#).

Groundwater Sampling

HDR collected groundwater samples from the designated wells on 5 to 14 December 2011. Groundwater samples were collected using low-flow purging methods. Dedicated Teflon® bladders and Teflon®-lined polyethylene tubing were used for each well. The pumping rate at each well was set such that the water levels would not decline more than 4 inches (0.1 meter).

Water quality parameters were measured at 5 to 10 minute intervals during purging using a flow-through cell with a YSI 6550. The YSI 6550 was calibrated each morning prior to sampling and, if abnormal readings were observed during the day, the instruments were recalibrated in the field. All measurements were recorded on the field sampling forms.

Purging continued at each well for up to two hours in order to meet the stabilization criteria: three successive readings within 0.1 for pH, 10 millivolts for oxygen reduction potential, 5 percent for specific conductance, 10 percent for dissolved oxygen and <20 nephelometric turbidity units (NTUs) for turbidity. Temperature was also measured and recorded but was not used as a stabilization parameter. Samples were collected when stabilization criteria were met or the field team leader approved the variance from the criteria. The final stabilization measurements are shown on [Table 3](#). The following samples were collected without meeting the stabilization criteria:

- Samples were collected from IW-21-02B and IW-21-05A with turbidity values of not recorded and 62 NTUs, respectively. During sampling of IW-21-02B, the turbidity meter malfunctioned and readings were not collected; the sample was visually clear. At well IW-21-05A the sampling team collected the sample when the turbidity reading stabilized as opposed to meeting the 20 NTU criterion.

Samples were sent to Microbac Laboratories in Marietta, Ohio for laboratory analysis. The samples were analyzed for volatile organic compounds (VOCs) by method 8260B.

IDW Management

The waste generated during groundwater sampling in December 2011 was classified as either non-investigative waste or investigation derived waste (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.

The IDW consisted of groundwater from purging and equipment decontamination. The water was collected in five gallon buckets with lids and added to the fluvial soil vapor extraction condensate storage tank on Dunn Field. When the storage tank nears capacity, the waste water will be analyzed and, if concentration limits are met, discharged to the storm sewer per agreement with the TDEC.

SUMMARY OF FINDINGS

Water Level Measurements

Groundwater elevations are shown for TTA-1 and TTA-2 on [Figures 3](#) and [4](#), respectively. Groundwater flow near TTA-1 is to the northeast, with an approximate gradient of 0.003 (DR1-1 to DR1-7); flow near TTA-2 is to the west-southwest, with an approximate gradient of 0.07 (IW92-01 to PMW92-04) in the treatment area and 0.01 (PMW92-04 to MW-26) further downgradient.

Analytical Results

The complete analytical results for the 73 groundwater samples collected in December 2011 are presented in [Appendix A](#). [Table 4](#) lists the analytical results for the primary CVOCs [CT, chloroform (CF), cis-1,2-dichloroethene (cDCE), PCE, trans-1,2-dichloroethene, TCE and vinyl chloride (VC)] and for all other VOCs detected above the reporting limit (RL) in one or more samples. A summary of analytical results for the primary CVOCs is provided on [Table 5](#). Data quality evaluation of the analytical results will be presented in the final abandonment report.

A total of 16 VOCs were detected above RLs in the samples. The numbers of wells listed below includes only those with concentrations above the RL.

The analytical results for the primary CVOCs are summarized below:

- CT was reported in 9 wells with a maximum concentration of 102 micrograms per liter (µg/L) in PMW85-01. The MCL (5 µg/L) was exceeded in 6 wells.
- CF was reported in 14 wells with a maximum concentration of 42.5 µg/L in PMW85-01. The MCL (80 µg/L for total trihalomethanes) was not exceeded.
- cDCE was reported in 50 wells with a maximum concentration of 201 µg/L in IW92-06. The MCL (70 µg/L) was exceeded in 16 wells.
- PCE was reported in 64 wells with a maximum concentration of 280 µg/L in PMW21-01. The MCL (5 µg/L) was exceeded in 57 wells.
- Trans-1,2-Dichloroethene was reported in PMW85-01 at a concentration of 2.01 µg/L, below the MCL of (100 µg/L).
- TCE was reported in 47 wells with a maximum concentration of 127 µg/L in PMW101-08B. The MCL (5 µg/L) was exceeded in 30 wells.
- VC was reported in IW101-09C at a concentration of 56.6 µg/L, above the MCL of (2 µg/L).

The analytical results for other VOCs are summarized as follows:

- 1,2-Dichloroethane was reported in four wells with a maximum of 1.63 µg/L in IW21-02A.
- 1,2,3-Trichloropropane was reported in eight wells with a maximum concentration of 82.9 µg/L in PMW85-05.
- 1,2-Dichloropropane was reported in five wells with a maximum concentration of 6.59 µg/L in IW85-06.
- 1,3-Dichloropropane was reported in five wells with a maximum concentration of 6.17 µg/L in IW85-06.
- Acetone was reported in six wells with a maximum concentration of 79 µg/L in IW92-05.
- Carbon disulfide was reported in IW92-07 at a concentration of 1.05 µg/L.
- Chlorobenzene was reported in PMW85-04 at a concentration of 0.524 µg/L.
- MEK (2-Butanone) was reported in two wells with a maximum concentration of 129 µg/L in IW101-09C.
- Methyl t-butyl ether was reported in eleven wells with a maximum concentration of 123 µg/L in IW21-04B.

Plume Maps

Isoconcentration maps were created using these baseline sample results and the October 2011 results for LTM wells near TTA-1 and TTA-2. The isopleths are shown on [Figures 5](#) (PCE) and [6](#) (TCE) for TTA-1 and [Figures 7](#) (PCE), [8](#) (TCE) and [9](#) (CT) for TTA-2. The isopleths are similar to those from 2011 LTM, but provide additional detail showing residual effects from EBT.

Rebound

Analytical results for PCE, TCE and CT from the August-September 2006 pre-EBT baseline samples, the March 2009 samples (after final EBT injections in February 2009) and the December 2011 samples are shown on [Tables 6, 7 and 8](#). Four wells in TTA-2 (IW-85-05, IW85-06, PMW-85-04 and PMW85-05) were installed in February 2007 and results from the initial March 2007 samples are shown. The latest results for the six performance monitoring wells currently included in LTM are from October 2011 not December. Concentrations above 100 µg/L, the concentration used to select EBT treatment areas, are highlighted. The percentage change in concentration from August 2006 to December 2011 is shown for those wells with initial concentrations above 10 µg/L.

The results are discussed by area below. CT was not detected above the RL in TTA-1 wells during any of the three sample events, and those results are discussed for TTA-2 only.

TTA-1S

The PCE results on [Table 6](#) show 18 of 43 wells in TTA-1S had concentrations above 100 µg/L in August 2006 and no wells exceeded that concentration in December 2011. The latest results average 36% of the pre-EBT baseline. The 2011 PCE results were higher than the March 2009 results at almost all wells.

The TCE results on [Table 7](#) show eight wells in TTA-1S had concentrations above 100 µg/L in August 2006 and two of those wells exceeded that concentration in December 2011. The latest results average 40% of the pre-EBT baseline. The 2011 TCE results were higher than the March 2009 results at many wells where initial concentrations were elevated (> 20 µg/L).

TTA-1N

The PCE results on [Table 6](#) show 9 of 15 wells in TTA-1N had concentrations above 100 µg/L in August 2006 and the same number exceeded that concentration in December 2011. The latest results average 110% of the pre-EBT baseline. The 2011 PCE results were higher than the March 2009 results at all but two wells.

The TCE results on [Table 7](#) show no wells in TTA-1N had concentrations above 100 µg/L in August 2006 or December 2011. The average TCE concentrations were 42 µg/L in pre-EBT baseline samples and 28 µg/L in the latest samples. The 2011 TCE results were higher than the March 2009 results at most wells.

TTA-2

The PCE results on [Table 6](#) show 13 of 21 wells in TTA-2 had concentrations above 100 µg/L in August 2006 and 4 of those wells exceeded that concentration in December 2011. The latest results average 35% of the pre-EBT baseline. The 2011 PCE results were higher than the March 2009 results at many wells.

The TCE results on [Table 7](#) show no wells in TTA-2 had concentrations above 100 µg/L in August 2006 or December 2011. The average TCE concentrations were 15 µg/L in

pre-EBT baseline samples and 8 µg/L in the latest samples. The 2011 TCE results were higher than the March 2009 results at most wells, but concentrations remained low.

The CT results on [Table 8](#) show 6 wells in TTA-2 had concentrations above 100 µg/L in August 2006 and 2 of those wells exceeded that concentration in December 2011. The latest results average 30% of the pre-EBT baseline. The 2011 CT results were higher than the March 2009 results at several wells.

CONCLUSIONS AND RECOMMENDATION

The samples from IWs and PMWs in TTA-1 and TTA-2 indicate rebound in the concentrations of parent compounds, with increasing concentrations of PCE in all areas, TCE in TTA-1S and CT in TTA-2. Concentrations have returned to pre-EBT baseline levels throughout TTA-1N. Concentrations in TTA-1S and TTA-2 are approximately one-third of pre-EBT baseline levels on average and the isopleths on [Figures 5 to 9](#) indicate areas with varying rebound.

Based on the increased concentrations in TTA-1 and TTA-2, LTM results throughout the MI and concentrations above MCLs in the intermediate aquifer, additional EBT is recommended. The recommendation is made to improve progress toward groundwater RAOs, decrease the time required for LTM and reduce potential for impacts to the Memphis Aquifer. The October 2011 LTM results for PCE and TCE are shown on [Figures 10 and 11](#).

EBT is recommended in areas where individual CVOC concentrations of parent compounds (PCE, TCE and CT) exceed 100 µg/L; this would include TTA-1, TTA-2, the west-central plume and the Bldg 835 plume. Within TTA-1 and TTA-2, injections would be made in areas where previous EBT has reduced concentrations below 100 µg/L.

Performance monitoring and LTM since EBT was implemented in 2006 indicated significant migration and diffusion of carbon source material up to 2,000 feet downgradient of the treatment area. The observed increase in the area of reductive dechlorination demonstrates that rows of injection wells in the treatment areas are not necessary as long as sufficient mass of carbon substrate is available. Higher concentrations of sodium lactate in the injection solution will be used to provide an equivalent mass of carbon through fewer wells and less frequent injections. Monitoring wells will be used to expand the treatment areas as done previously. Installation of additional injection wells is not planned. Based on results of the initial EBT at the MI and approval of the OPS demonstration, performance monitoring in the treatment area will be limited with success of additional EBT determined through LTM outside the treatment areas.

The wells recommended for injections and performance monitoring are listed on [Table 9](#). The remaining IWs and PMWs, which are listed on [Table 10](#), are recommended to be abandoned. The recommendations for TTA-1 and TTA-2 are shown on [Figures 12 and 13](#).

TABLES

1	Baseline Sample Locations
2	Water Level Measurements
3	Final Well Stabilization Measurements
4	Analytical Results Summary
5	Primary CVOC Results
6	PCE Rebound
7	TCE Rebound
8	CT Rebound
9	Recommended EBT Injection Locations
10	Proposed Well Abandonment

TABLE 1
 BASELINE SAMPLE LOCATIONS
 DECEMBER 2011 EBT BASELINE SAMPLE REPORT
 Main Installation - Defense Depot Memphis Tennessee

TTA-1N (MW-21 area)		TTA-1S (MW-101 area)		TTA-2	
<u>Injection Well</u>	<u>Monitoring Well</u>	<u>Injection Well</u>	<u>Monitoring Well</u>	<u>Injection Well</u>	<u>Monitoring Well</u>
IW21-01A	PMW21-01	IW101-01A	PMW101-01A	IW85-01	PMW85-01
IW21-01B	PMW21-02	IW101-01B	PMW101-01B	IW85-02	PMW85-04
IW21-02A	PMW21-04	IW101-01C	PMW101-02A	IW85-05	PMW85-05
IW21-02B		IW101-02A	PMW101-02B	IW85-06	PMW92-01
IW21-03A		IW101-02B	PMW101-03A	IW92-01	PMW92-02
IW21-03B		IW101-02C	PMW101-03B	IW92-02	PMW92-04
IW21-04A		IW101-03A	PMW101-05A	IW92-03	PMW92-05
IW21-04B		IW101-03B	PMW101-05B	IW92-04	
IW21-05A		IW101-03C	PMW101-06A	IW92-05	
IW21-05B		IW101-04A	PMW101-06B	IW92-06	
		IW101-04B	PMW101-07A	IW92-07	
		IW101-04C	PMW101-07B	IW92-08	
		IW101-05A	PMW101-08A		
		IW101-05B	PMW101-08B		
		IW101-05C			
		IW101-06A			
		IW101-06B			
		IW101-06C			
		IW101-07A			
		IW101-07B			
		IW101-07C			
		IW101-08A			
		IW101-08B			
		IW101-08C			
		IW101-09A			
		IW101-09B			
		IW101-09C			

TABLE 2
WATER LEVEL MEASUREMENTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Top of Casing Elevation (ft, msl)	Top of Screen Elevation (ft, msl)	Depth to Water (ft, btoc)	Groundwater Elevation 5-Dec-11 (ft, msl)
IW101-01A	290.76	291.29	86.39	204.37
IW101-01B	290.70	291.34	86.36	204.34
IW101-01C	290.66	291.52	86.40	204.26
IW101-02A	291.12	291.60	86.64	204.48
IW101-02B	291.14	291.72	86.70	204.44
IW101-02C	291.53	291.74	87.19	204.34
IW101-03A	291.94	292.36	87.43	204.51
IW101-03B	291.91	292.51	87.40	204.51
IW101-03C	292.04	292.54	87.50	204.54
IW101-04A	291.72	292.18	87.26	204.46
IW101-04B	291.59	292.08	87.30	204.29
IW101-04C	291.47	292.05	87.22	204.25
IW101-05A	291.52	292.12	87.18	204.34
IW101-05B	291.41	292.06	87.04	204.37
IW101-05C	291.27	291.89	86.92	204.35
IW101-06A	292.16	292.76	87.68	204.48
IW101-06B	292.19	292.85	87.63	204.56
IW101-06C	292.18	292.74	87.70	204.48
IW101-07A	292.83	293.13	88.20	204.63
IW101-07B	292.81	293.15	84.09	208.72
IW101-07C	292.78	293.08	88.15	204.63
IW101-08A	292.28	292.83	87.65	204.63
IW101-08B	292.20	292.92	87.82	204.38
IW101-08C	292.73	293.07	88.29	204.44
IW101-09A	292.59	292.94	88.07	204.52
IW101-09B	292.51	292.85	87.96	204.55
IW101-09C	292.59	292.99	87.97	204.62
IW21-01A	294.34	294.99	88.79	205.55
IW21-01B	294.61	294.85	88.95	205.66
IW21-02A	294.62	295.25	88.97	205.65
IW21-02B	294.65	295.12	88.91	205.74
IW21-03A	292.81	293.23	87.72	205.09
IW21-03B	292.50	293.12	87.39	205.11
IW21-04A	292.69	293.20	-	-
IW21-04B	292.79	293.30	87.70	205.09
IW21-05A	291.78	292.16	86.96	204.82
IW21-05B	291.82	292.26	87.01	204.81
IW85-01	304.79	305.15	93.10	211.69
IW85-02	304.93	305.33	93.72	211.21
IW85-05	304.73	305.30	94.31	210.42
IW85-06	304.81	305.45	95.39	209.42
IW92-01	304.51	304.88	84.65	219.86
IW92-02	304.05	304.87	82.84	221.21
IW92-03	304.20	304.72	90.97	213.23
IW92-04	303.80	304.40	91.26	212.54
IW92-05	303.99	304.28	89.23	214.76
IW92-06	304.07	304.34	84.89	219.18
IW92-07	303.78	304.31	91.89	211.89
IW92-08	304.55	304.93	92.49	212.06
PMW101-01A	290.78	291.17	86.43	204.35
PMW101-01B	290.86	291.20	86.60	204.26
PMW101-02A	291.47	291.87	87.25	204.22
PMW101-02B	291.60	291.83	87.47	204.13

TABLE 2
WATER LEVEL MEASUREMENTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Top of Casing Elevation (ft, msl)	Top of Screen Elevation (ft, msl)	Depth to Water (ft, btoc)	Groundwater Elevation 5-Dec-11 (ft, msl)
PMW101-03A	291.61	291.99	87.55	204.06
PMW101-03B	291.55	291.82	87.50	204.05
PMW101-04A	291.07	291.43	86.95	204.12
PMW101-04B	291.47	291.75	87.45	204.02
PMW101-05A	291.43	291.84	87.22	204.21
PMW101-05B	291.68	292.11	87.52	204.16
PMW101-06A	292.13	292.72	87.79	204.34
PMW101-06B	292.17	292.40	87.83	204.34
PMW101-07A	292.20	292.52	87.82	204.38
PMW101-07B	292.36	292.70	88.00	204.36
PMW101-08A	293.01	293.30	88.51	204.50
PMW101-08B	293.03	293.47	88.49	204.54
PMW21-01	294.73	295.12	88.86	205.87
PMW21-02	292.98	293.19	87.83	205.15
PMW21-03	292.11	292.72	87.03	205.08
PMW21-04	291.87	292.20	87.11	204.76
PMW21-05	288.53	288.92	85.16	203.37
PMW85-01	305.08	305.39	95.40	209.68
PMW85-04	305.18	305.33	95.81	209.37
PMW85-05	305.12	305.32	94.70	210.42
PMW92-01	304.23	304.52	92.92	211.31
PMW92-02	304.17	304.35	93.11	211.06
PMW92-03	303.91	304.17	92.24	211.67
PMW92-04	303.93	304.08	92.96	210.97
PMW92-05	304.07	304.31	92.23	211.84
PMW92-06	304.65	304.97	93.36	211.29
DR1-1	293.09	171.42	88.19	204.90
DR1-1A	293.13	203.79	88.11	205.02
DR1-2	290.08	192.28	86.25	203.83
DR1-3	290.93	181.26	-	-
DR1-4	292.78	186.50	88.43	204.35
DR1-5	294.50	169.28	-	-
DR1-5A	294.61	204.88	89.46	205.15
DR1-6	292.98	177.14	88.11	204.87
DR1-6A	293.14	202.32	88.22	204.92
DR1-7	289.15	180.86	86.59	202.56
DR1-8	290.02	197.37	85.44	204.58
DR2-2	304.37	225.37	80.63	223.74
DR2-3	303.44	210.44	94.12	209.32
DR2-4	303.47	215.47	92.16	211.31
MW-26	303.69	206.09	96.54	207.15
MW-85	304.13	208.23	96.05	208.08
MW-96	289.02	213.52	79.46	209.56
MW-100B	291.06	183.56	86.21	204.85
MW-219	294.90	197.16	88.81	206.09

Notes:

ft, btoc: feet below top of casing

ft, msl: feet mean sea level

TABLE 3
FINAL WELL STABILIZATION MEASUREMENTS
DECEMBER 2011 EBT BASELINE SAMPLE 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 (L)	pH	Temp (°C)	Specific Conductivity (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTUs)
IW101-01A	12/6/2011	10:30	129.0	86.5	150	24.2	6.3	17.8	0.394	1.5	115.2	5.4
IW101-01B	12/6/2011	12:03	120.0	86.5	120	7.0	6.3	16.6	0.392	5.5	171.0	0.1
IW101-01C	12/6/2011	12:46	99.0	86.5	230	4.3	6.2	17.1	0.378	4.7	155.4	1.2
IW101-02A	12/6/2011	16:14	131.0	86.7	240	6.3	6.3	15.7	0.386	3.3	175.9	1.8
IW101-02B	12/6/2011	14:47	117.0	86.8	140	7.2	6.2	18.0	0.358	5.9	174.6	5.4
IW101-02C	12/7/2011	09:01	100.0	87.3	200	5.9	6.1	16.7	0.353	3.5	204.5	0.0
IW101-03A	12/7/2011	11:02	133.0	87.6	175	6.7	6.4	14.7	0.428	1.9	141.3	5.4
IW101-03B	12/7/2011	12:20	117.0	87.6	150	5.7	6.0	16.2	0.304	6.1	169.7	5.7
IW101-03C	12/8/2011	13:46	101.0	87.7	200	3.7	6.1	17.6	0.167	5.5	99.8	16.3
IW101-04A	12/7/2011	15:16	131.0	87.5	150	5.1	6.4	7.0	0.449	2.3	118.0	7.0
IW101-04B	12/8/2011	16:05	115.0	87.5	120	4.8	6.4	17.7	0.363	1.7	-7.7	0.0
IW101-04C	12/8/2011	14:51	99.0	87.4	200	4.9	6.4	18.7	0.241	1.8	51.3	16.2
IW101-05A	12/9/2011	10:18	129.0	87.4	110	5.4	6.2	17.0	0.356	4.9	130.0	1.3
IW101-05B	12/9/2011	11:11	115.0	87.3	160	5.7	6.1	18.0	0.326	5.7	128.8	5.7
IW101-05C	12/9/2011	9:02	98.0	87.1	110	4.5	6.2	17.6	0.340	3.6	147.6	2.2
IW101-06A	12/9/2011	14:11	131.0	87.8	120	8.2	8.8	17.3	0.570	1.6	-2.8	5.3
IW101-06B	12/9/2011	15:08	101.0	87.9	110	5.3	5.9	17.9	0.233	6.4	102.5	5.5
IW101-06C	12/10/2011	8:36	101.0	88.1	140	3.6	6.1	16.2	0.205	4.0	116.7	5.4
IW101-07A	12/10/2011	12:07	131.0	88.7	100	4.3	6.4	17.2	0.284	8.0	124.4	2.5
IW101-07B	12/10/2011	15:04	113.0	89.6	120	5.1	7.0	17.3	0.334	6.4	82.9	8.1
IW101-07C	12/11/2011	09:16	100.0	88.5	60	4.5	6.0	16.4	0.170	1.8	129.2	3.7
IW101-08A	12/10/2011	12:15	131.0	88.1	120	5.4	6.3	15.0	1.404	7.4	100.8	8.5
IW101-08B	12/11/2011	10:25	115.0	88.1	120	4.1	6.0	18.1	0.225	7.3	175.0	10.2
IW101-08C	12/11/2011	11:46	99.0	88.5	150	6.1	5.9	17.0	0.171	3.1	124.1	6.2
IW101-09A	12/11/2011	14:31	132.0	88.2	110	3.9	6.2	17.9	0.544	7.3	134.1	1.5
IW101-09B	12/12/2011	9:30	116.0	88.1	240	4.4	6.2	17.2	0.188	5.6	130.6	2.6
IW101-09C	12/12/2011	10:41	101.0	88.1	200	7.3	6.4	18.7	0.232	1.3	-68.9	18.5
IW21-01A	12/8/2011	09:29	102.0	89.2	140	10.3	6.1	14.9	0.296	1.5	37.0	2.3
IW21-01B	12/8/2011	13:45	94.0	89.3	100	11.5	6.2	17.7	0.382	2.1	116.6	2.7
IW21-02A	12/8/2011	15:29	105.0	89.2	172	5.9	6.0	16.6	0.274	2.3	146.7	0.8
IW21-02B	12/8/2011	16:29	95.0	89.4	80	4.0	6.0	11.3	0.295	3.4	99.0	NR
IW21-03A	12/9/2011	08:54	104.0	87.9	130	6.4	6.1	15.7	1.210	2.4	151.0	5.1
IW21-03B	12/9/2011	10:46	96.0	87.7	140	9.3	6.4	17.4	1.237	1.4	-54.7	1.5
IW21-04A	12/9/2011	13:19	90.5	87.9	140	11.5	6.1	16.7	1.101	1.2	87.7	4.3
IW21-04B	12/9/2011	14:51	94.0	87.9	160	6.7	6.2	17.1	1.137	1.4	8.3	4.4
IW21-05A	12/10/2011	9:05	106.0	87.5	140	8.9	7.0	14.5	1.162	7.5	109.2	62.1
IW21-05B	12/10/2011	10:42	95.0	87.5	140	6.4	6.1	15.8	1.239	2.8	99.5	6.5
IW85-01	12/14/2011	12:01	96.0	92.1	120	6.4	6.4	21.2	0.557	1.8	-53.6	3.9
IW85-02	12/14/2011	10:31	98.0	93.6	100	6.4	6.9	20.7	1.224	2.0	-66.3	6.3
IW85-05	12/14/2011	14:31	101.0	94.1	110	4.6	6.3	22.1	0.298	4.6	66.6	-0.1

TABLE 3
FINAL WELL STABILIZATION MEASUREMENTS
DECEMBER 2011 EBT BASELINE SAMPLE 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 (L)	pH	Temp (°C)	Specific Conductivity (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTUs)
IW85-06	12/14/2011	13:18	103.0	94.7	120	4.4	6.5	22.2	0.632	1.9	-66.4	1.9
IW92-01	12/12/2011	12:36	89.0	84.6	80	4.1	5.9	19.4	0.151	3.4	74.4	12.5
IW92-02	12/12/2011	13:57	90.0	81.8	76	3.6	5.9	18.1	0.178	2.2	106.7	9.0
IW92-03	12/12/2011	16:01	92.0	90.9	60	4.5	6.2	16.5	0.194	2.5	-111.4	18.8
IW92-04	12/13/2011	09:27	92.0	91.3	110	3.5	6.7	16.2	0.627	1.5	-84.3	9.5
IW92-05	12/13/2011	11:50	92.0	90.0	50	2.7	6.4	27.2	38.910	0.0	-343.0	91.9
IW92-06	12/13/2011	16:44	93.0	90.9	80	4.6	7.4	17.4	4.878	3.5	-7.3	46.6
IW92-07	12/13/2011	16:23	95.0	91.8	120	5.4	6.9	20.2	1.036	3.5	-86.3	9.5
IW92-08	12/14/2011	08:31	95.0	92.4	100	3.2	6.4	19.0	0.481	2.1	-40.1	7.8
PMW101-01A	12/6/2011	15:09	129.6	86.5	160	3.6	6.3	16.5	1.112	0.4	-46.5	0.0
PMW101-01B	12/6/2011	14:12	108.9	86.7	100	4.0	6.1	16.9	1.024	2.2	51.1	7.7
PMW101-02A	12/6/2011	13:06	128.0	87.5	140	3.5	6.1	16.2	1.014	0.3	-30.2	0.3
PMW101-02B	12/6/2011	11:56	108.3	87.7	120	5.2	6.2	16.2	0.831	0.9	-16.1	8.7
PMW101-03A	12/8/2011	14:43	130.1	87.8	120	3.2	6.4	17.6	1.600	4.8	-67.5	4.4
PMW101-03B	12/8/2011	15:42	110.1	87.7	100	4.0	6.4	16.7	1.734	0.4	-102.9	0.0
PMW101-05A	12/7/2011	11:47	115.7	87.4	120	14.4	6.0	16.4	1.376	0.5	64.6	1.5
PMW101-05B	12/7/2011	13:47	98.2	87.7	140	4.8	6.2	16.2	1.216	0.9	-30.2	7.4
PMW101-06A	12/9/2011	11:20	130.8	88.0	94	3.8	6.1	17.4	0.340	3.5	100.9	17.7
PMW101-06B	12/9/2011	10:20	110.2	88.1	80	3.5	6.0	15.7	0.272	2.4	106.4	10.1
PMW101-07A	12/9/2011	13:46	128.7	88.0	120	3.7	6.2	18.2	0.430	1.9	81.7	2.2
PMW101-07B	12/9/2011	12:50	108.7	88.2	120	4.9	6.0	18.5	0.196	7.8	144.4	2.9
PMW101-08A	12/9/2011	15:32	108.9	88.7	160	4.5	6.2	18.3	0.508	2.5	22.7	9.2
PMW101-08B	12/10/2011	09:50	108.9	89.0	260	8.3	6.0	16.1	0.132	2.2	130.6	2.3
PMW21-01	12/6/2011	9:02	100.9	89.1	220	4.0	6.0	15.3	0.978	0.7	55.7	0.9
PMW21-02	12/6/2011	9:54	102.1	88.1	80	3.3	6.0	14.6	0.908	0.7	20.2	0.0
PMW21-04	12/6/2011	10:46	100.2	87.3	120	3.6	6.1	15.6	0.970	0.7	-16.8	8.4
PMW85-01	12/12/2011	15:36	100.7	95.4	120	4.0	6.0	20.4	0.239	1.9	56.5	2.9
PMW85-04	12/13/2011	13:49	100.0	95.8	100	4.2	6.6	22.1	0.314	1.2	-70.9	7.9
PMW85-05	12/13/2011	15:06	101.0	94.8	100	4.1	5.7	21.2	0.176	1.6	64.8	2.3
PMW92-01	12/12/2011	09:10	99.0	92.8	120	6.0	6.4	18.8	0.694	1.8	-71.4	11.1
PMW92-02	12/12/2011	10:21	100.7	93.1	100	3.4	6.7	19.6	0.532	1.3	-120.3	0.9
PMW92-04	12/12/2011	13:00	98.5	93.0	120	3.4	6.1	20.8	0.257	1.5	-16.6	9.1
PMW92-05	12/12/2011	14:34	96.7	92.4	100	3.8	5.9	21.0	0.179	1.7	-41.9	13.1

Notes:

°C :	degrees Celsius	mS/cm:	milliSiemens per centimeter
DO:	Dissolved Oxygen	mV:	millivolts
ft, btoc:	feet below top of casing	NA:	not available
L:	liters	NTU:	nephelometric turbidity unit
mg/L:	milligrams per liter	ORP:	Oxidation Reduction Potential
mL/min:	milliliters per minute		

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location	Maximum	IW101-01A	IW101-01B	IW101-01C	IW101-02A	IW101-02B	IW101-02C	IW101-03A
	Date	Contaminant	12/6/2011	12/6/2011	12/6/2011	12/6/2011	12/6/2011	12/7/2011	12/7/2011
	Lab ID	Level	L11120274-01	L11120274-02	L11120274-03	L11120274-04	L11120274-05	L11120274-21	L11120274-22
Analyte	Units								
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
cis-1,2-Dichloroethene	µg/L	70	0.92 J	<1	<1	1.16	<1	0.302 J	0.415 J
Tetrachloroethene	µg/L	5	12.5	21.6	53.8	59.2	59.3	52	1.8
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	µg/L	5	0.363 J	<1	<1	0.3 J	<1	0.706 J	<1
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	<10	<10	<10	<10	32.3 J
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10	<10	<10	<10	<10	<10 UJ	<10
Methyl t-butyl ether (MTBE)	µg/L		<5	<5	2.56 J	3.28 J	3.88 J	4.44 J	0.671 J

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location	Maximum	IW101-03B	IW101-03C	IW101-04A	IW101-04B	IW101-04C	IW101-05A	IW101-05B
	Date	Contaminant	12/7/2011	12/8/2011	12/7/2011	12/8/2011	12/8/2011	12/9/2011	12/9/2011
	Lab ID	Level	L11120274-25	L11120348-07	L11120274-26	L11120348-08	L11120348-09	L11120348-14	L11120348-15
	Units								
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
cis-1,2-Dichloroethene	µg/L	70	<1	3.41	10.4	0.931 J	59.2	0.432 J	<1
Tetrachloroethene	µg/L	5	30.6	21.7	26.4	44.4	16.7	55.9	59.9
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	µg/L	5	0.464 J	39	1.86	1.57	31	<1	<1
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	0.473 J	<0.5	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	0.731 J	<1	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	2.81 J	<10	<10	<10	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10 UJ	<10	<10 UJ	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		5.99	1.24 J	1.01 J	1.2 J	1.19 J	2.33 J	3.16 J

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location	Maximum	IW101-05C	IW101-06A	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C
	Date	Contaminant	12/9/2011	12/9/2011	12/9/2011	12/10/2011	12/10/2011	12/10/2011	12/11/2011
	Lab ID	Level	L11120348-16	L11120348-17	L11120348-18	L11120403-03	L11120403-04	L11120403-05	L11120403-10
	Units								
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	0.133 J	<0.3	<0.3	<0.3	0.138 J
cis-1,2-Dichloroethene	µg/L	70	0.291 J	0.998 J	0.306 J	2.36	0.658 J	4.54	24.5
Tetrachloroethene	µg/L	5	58.6	0.35 J	17.8	18	8.4	19.6	40.8
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	µg/L	5	1.35	<1	4.95	46.4	17	52.1	113
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.369 J
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	<1	0.595 J
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	<10	<10	<10	5.63 J	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10	<10	<10	<10	<10	3.06 J	<10
Methyl t-butyl ether (MTBE)	µg/L		4.12 J	<5	3.72 J	<5	0.703 J	<5	<5

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location Date Lab ID Units	Maximum Contaminant Level	IW101-08A 12/10/2011 L11120403-06	IW101-08B 12/11/2011 L11120403-11	IW101-08C 12/11/2011 L11120403-12	IW101-09A 12/11/2011 L11120403-13	IW101-09B 12/12/2011 L11120403-15	IW101-09C 12/12/2011 L11120403-16	PMW101-01A 12/6/2011 L11120274-11
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
cis-1,2-Dichloroethene	µg/L	70	<1	1.8	4.46	<1	4.82	11.1	3.35
Tetrachloroethene	µg/L	5	0.493 J	12.1	16.8	<1	27.8	22.3	26.4
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	µg/L	5	0.834 J	34.3	50.6	0.254 J	78.4	64.8	1.25
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	56.6	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	0.497 J	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	<10	<10	<10	65.1	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10	<10	<10	<10	<10	129	<10 UJ
Methyl t-butyl ether (MTBE)	µg/L		<5	<5	<5	<5	<5	<5	0.592 J

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location	Maximum	PMW101-01B	PMW101-02A	PMW101-02B	PMW101-03A	PMW101-03B	PMW101-05A	PMW101-05B
	Date Lab ID Units	Contaminant Level	12/6/2011 L11120274-12	12/6/2011 L11120274-13	12/6/2011 L11120274-14	12/8/2011 L11120348-10	12/8/2011 L11120348-11	12/7/2011 L11120274-16	12/7/2011 L11120274-19
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.165 J
cis-1,2-Dichloroethene	µg/L	70	1.46	2.09	0.442 J	1.97	0.884 J	0.592 J	165
Tetrachloroethene	µg/L	5	45.4	45.4	25.5	36.5	40.4	64.9 J	16.6
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	µg/L	5	0.777 J	0.558 J	1.86	1.59	1.46	<1	26.4
Vinyl chloride	µg/L	2	<1	<1	<1	<1	0.595 J	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.02
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	<1	1.81
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10 UJ	<10 UJ	<10 UJ	<10	<10	<10 UJ	<10 UJ
Methyl t-butyl ether (MTBE)	µg/L		1.66 J	1.03 J	1.62 J	1.69 J	4.09 J	3.49 J	<5

Notes:
VOC samples analyzed using method 8260B
µg/L : micrograms per liter
RL: reporting limit
<: Not detected above RL

DQE Flags:
J: Estimated
UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location	Maximum	PMW101-06A	PMW101-06B	PMW101-07A	PMW101-07B	PMW101-08A	PMW101-08B	IW21-01A
	Date Lab ID Units	Contaminant Level	12/9/2011 L11120348-26	12/9/2011 L11120348-27	12/9/2011 L11120348-28	12/9/2011 L11120348-29	12/9/2011 L11120348-30	12/10/2011 L11120403-07	12/8/2011 L11120348-01
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	<0.3	<0.3	<0.3	0.205 J	<0.3
cis-1,2-Dichloroethene	µg/L	70	<1	<1	<1	1.35	0.452 J	21	10.6
Tetrachloroethene	µg/L	5	2.32	16.6	0.361 J	14.2	15.7	41.7	166
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	µg/L	5	<1	4.32	<1	28.9	0.386 J	127	27.1
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.274 J
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	0.386 J	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		0.781 J	3.76 J	<5	<5	<5	<5	70.9 J

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location	Maximum	IW21-01B	IW21-02A	IW21-02B	IW21-03A	IW21-03B	IW21-04A	IW21-04B
	Date	Contaminant	12/8/2011	12/8/2011	12/8/2011	12/9/2011	12/9/2011	12/9/2011	12/9/2011
	Lab ID	Level	L11120348-02	L11120348-03	L11120348-04	L11120348-20	L11120348-21	L11120348-22	L11120348-25
	Units								
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	<1	<1
Chloroform	µg/L	80	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
cis-1,2-Dichloroethene	µg/L	70	11.5	3.08	2.15	7.09	51.2	48.8 J	101
Tetrachloroethene	µg/L	5	104	32.5	31.6	213	197	135	40.9
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	0.554 J	0.837 J	<1	<1
Trichloroethene	µg/L	5	16	3	3.06	45.9	68.5	33.3 J	19
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	1.63	1.08	<0.5	<0.5	0.26 J	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	3.23 J	<10	<10	<10	<10	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10	<10	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		66.3 J	<5	<5	33.7 J	43.8 J	95.1	123 J

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location Date Lab ID Units	Maximum Contaminant Level	IW21-05A 12/10/2011 L11120403-01	IW21-05B 12/10/2011 L11120403-02	PMW21-01 12/6/2011 L11120274-08	PMW21-02 12/6/2011 L11120274-09	PMW21-04 12/6/2011 L11120274-10	IW92-01 12/12/2011 L11120403-17	IW92-02 12/12/2011 L11120403-18
Carbon tetrachloride	µg/L	5	<1	<1	<1	<1	<1	25.8	27.9
Chloroform	µg/L	80	<0.3	<0.3	0.137 J	<0.3	0.144 J	7.46	9.53
cis-1,2-Dichloroethene	µg/L	70	3.79	20.3	15.6	4.2	55.5	10.4	45.7
Tetrachloroethene	µg/L	5	4.19	132	280	118	211	189	191
trans-1,2-Dichloroethene	µg/L	100	<1	<1	0.251 J	<1	0.313 J	<1	<1
Trichloroethene	µg/L	5	2.62	35.5	50.1	30.1	69.3	6.71	9.78
Vinyl chloride	µg/L	2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Acetone	µg/L		<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MEK (2-Butanone)	µg/L		<10	<10	<10 UJ	<10 UJ	<10 UJ	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		3.75 J	42.5	49.4	29.1	56.7	<5	<5

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location Date Lab ID Units	Maximum Contaminant Level	IW92-03 12/12/2011 L11120403-19	IW92-04 12/13/2011 L11120490-01	IW92-05 12/13/2011 L11120490-02	IW92-06 12/13/2011 L11120490-03	IW92-07 12/13/2011 L11120490-04	IW92-08 12/14/2011 L11120490-12	PMW92-01 12/12/2011 L11120403-23
Carbon tetrachloride	µg/L	5	0.308 J	<1	<1	<1	0.34 J	2.37	<1
Chloroform	µg/L	80	0.442	<0.3	0.426	0.664	0.374	2.99	<0.3
cis-1,2-Dichloroethene	µg/L	70	143	193	77.5	201	127	87.8	107
Tetrachloroethene	µg/L	5	21.2	<1	0.946 J	0.335 J	3.17	8.86	1.43
trans-1,2-Dichloroethene	µg/L	100	<1	0.254 J	0.734 J	2.01	0.726 J	0.429 J	<1
Trichloroethene	µg/L	5	4.33	<1	0.363 J	<1	0.51 J	1.19	1.39
Vinyl chloride	µg/L	2	<1	<1	0.365 J	0.462 J	0.493 J	0.302 J	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	0.269 J	0.75	0.402 J	<0.5	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	<1	<1	22 J	<1
1,2-Dichloropropane	µg/L		<1	<1	<1	0.439 J	0.369 J	6.28	<1
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	<0.4	<0.4	5.75	<0.4
Acetone	µg/L		5.88 J	4.89 J	79 J	72.3	5.16 J	6.12 J	<10
Carbon disulfide	µg/L		<1	<1	<1	<1	1.05	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	0.361 J	<0.5
MEK (2-Butanone)	µg/L		4.2 J	4.92 J	4.79 J	47.5	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		<5	<5	<5	<5	<5	<5	<5

Notes:

VOC samples analyzed using method 8260B

µg/L : micrograms per liter

RL: reporting limit

<: Not detected above RL

DQE Flags:

J: Estimated

UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location Date Lab ID Units	Maximum Contaminant Level	PMW92-02 12/12/2011 L11120403-24	PMW92-04 12/12/2011 L11120403-25	PMW92-05 12/12/2011 L11120403-27	IW85-01 12/14/2011 L11120490-08	IW85-02 12/14/2011 L11120490-09	IW85-05 12/14/2011 L11120490-10	IW85-06 12/14/2011 L11120490-11
Carbon tetrachloride	µg/L	5	<1	<1	19.6	4.47	1.05	50.6	0.546 J
Chloroform	µg/L	80	<0.3	0.334	9.89	5.32	0.739	21.2	0.24 J
cis-1,2-Dichloroethene	µg/L	70	184	122	26.5	125	84.1	67.6	99.3
Tetrachloroethene	µg/L	5	<1	9.58	90.6	2.25	0.861 J	32.8	1.45
trans-1,2-Dichloroethene	µg/L	100	<1	<1	<1	0.58 J	<1	0.633 J	0.802 J
Trichloroethene	µg/L	5	<1	14.5	8.9	0.788 J	0.443 J	13.1	1.31
Vinyl chloride	µg/L	2	0.337 J	<1	<1	<1	0.325 J	<1	0.606 J
1,2-Dichloroethane	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	µg/L		<1	<1	<1	9.01	18.2	14.3	24.6
1,2-Dichloropropane	µg/L		<1	0.22 J	<1	1.62	1.73	0.476 J	6.59
1,3-Dichloropropane	µg/L		<0.4	<0.4	<0.4	2	2.41	0.21 J	6.17
Acetone	µg/L		<10	23.7	<10	12.9	9.66 J	6.07 J	5.32 J
Carbon disulfide	µg/L		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	µg/L		<0.5	<0.5	<0.5	0.145 J	0.281 J	<0.5	0.344 J
MEK (2-Butanone)	µg/L		<10	<10	<10	6.71 J	6.7 J	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		<5	<5	<5	<5	<5	<5	<5

Notes:
VOC samples analyzed using method 8260B
µg/L : micrograms per liter
RL: reporting limit
<: Not detected above RL

DQE Flags:
J: Estimated
UJ: Not detected, RL estimated

TABLE 4
ANALYTICAL RESULTS SUMMARY
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Analyte	Location Date Lab ID Units	Maximum Contaminant Level	PMW85-01 12/12/2011 L11120403-22	PMW85-04 12/13/2011 L11120490-05	PMW85-05 12/13/2011 L11120490-06
Carbon tetrachloride	µg/L	5	102	<1	77.6
Chloroform	µg/L	80	42.5	0.218 J	34.8
cis-1,2-Dichloroethene	µg/L	70	37.3	83.8	81.9
Tetrachloroethene	µg/L	5	57.2	35.5	79.1
trans-1,2-Dichloroethene	µg/L	100	<1	<1	0.464 J
Trichloroethene	µg/L	5	20.2	15.2	25.6
Vinyl chloride	µg/L	2	<1	<1	<1
1,2-Dichloroethane	µg/L		<0.5	<0.5	0.48 J
1,2,3-Trichloropropane	µg/L		11.4	53.9	82.9
1,2-Dichloropropane	µg/L		0.356 J	0.926 J	0.679 J
1,3-Dichloropropane	µg/L		<0.4	0.505	<0.4
Acetone	µg/L		<10	2.5 J	<10
Carbon disulfide	µg/L		<1	<1	<1
Chlorobenzene	µg/L		0.191 J	0.524	0.301 J
MEK (2-Butanone)	µg/L		<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L		<5	<5	<5

Notes:
VOC samples analyzed using method 8260B
µg/L : micrograms per liter
RL: reporting limit
<: Not detected above RL

DQE Flags:
J: Estimated
UJ: Not detected, RL estimated

TABLE 5
 PRIMARY CVOC RESULTS
 DECEMBER 2011 EBT BASELINE SAMPLE REPORT
 Main Installation - Defense Depot Memphis, Tennessee

VOC Analyte	MCL (µg/L)	Number of Locations with Analyte Above RL	Maximum Concentrations (µg/L)	Location of Maximum Concentration	Number of Locations with Analyte Above MCL
Carbon tetrachloride	5	9	102	PMW85-01	6
Chloroform	80	14	42.5	PMW85-01	0
cis-1,2-Dichloroethene	70	50	201	IW92-06	16
Tetrachloroethene	5	64	280	PMW21-01	57
trans-1,2-Dichloroethene	100	1	2.01	IW92-06	0
Trichloroethene	5	47	127	PMW101-08B	31
Vinyl chloride	2	0	0.606 J	IW85-06	0

Notes:

µg/L micrograms per liter

RL: reporting limit

MCL: Maximum Contaminant Level

TABLE 6
PCE REBOUND
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well	PCE µg/L Aug-06	PCE µg/L Mar-09	PCE µg/L Dec-11	Change	Well	PCE µg/L Aug-06	PCE µg/L Mar-09	PCE µg/L Dec-11	Change
TTA-1S					TTA-1N				
IW101-01A	47.5	<1	12.5	26%	IW21-01A	234	3.41	166	71%
IW101-01B	71.8	0.256	21.6	30%	IW21-01B	144	7.13	104	72%
IW101-01C	228	8.38	53.8	24%	IW21-02A	99.7	111	32.5	33%
IW101-02A	232	10.4	59.2	26%	IW21-02B	80.2	10.7	31.6	39%
IW101-02B	221	18.4	59.3	27%	IW21-03A	193	3.66	213	110%
IW101-02C	190	1.06	52	27%	IW21-03B	49.4	0.3	197	399%
IW101-03A	3.95	1.01	1.8		IW21-04A	276	8.75	135	49%
IW101-03B	89.9	16.1	30.6	34%	IW21-04B	286	0.383	40.9	14%
IW101-03C	59	2.35	21.7	37%	IW21-05A	83.6	<1	4.19	5%
IW101-04A	190	<1	26.4	14%	IW21-05B	41.5	2.09	132	318%
IW101-04B	182	0.328	44.4	24%	PMW21-01	156	23.5	280	179%
IW101-04C	169	0.89	16.7	10%	PMW21-02	108	49.5	118	109%
IW101-05A	63.1	5.19	55.9	89%	PMW21-03**	185	18.7	55	30%
IW101-05B	202	26.1	59.9	30%	PMW21-04	199	13.5	211	106%
IW101-05C	219	4.23	58.6	27%	PMW21-05**	6.37	61.2	19.5	
IW101-06A	6.84	1.05	0.35		TTA-2				
IW101-06B	47	6.28	17.8	38%	IW85-01	79.2	4.84	2.25	3%
IW101-06C	66.2	5.68	18	27%	IW85-02	48.7	3.62	0.861	2%
IW101-07A	5.16	1.1	8.4		IW85-05	76.4	1.87	32.8	43%
IW101-07B	38	6	19.6	52%	IW85-06	31	5.48	1.45	5%
IW101-07C	60.9	0.722	40.8	67%	IW92-01	160	0.264	189	118%
IW101-08A	0.907	<1	0.493		IW92-02	104	0.371	191	184%
IW101-08B	17.5	0.765	12.1	69%	IW92-03	184	<1	21.2	12%
IW101-08C	66.6	0.827	16.8	25%	IW92-04	170	0.722	<1	0%
IW101-09A	0.572	0.45	<1		IW92-05	194	1.43	0.946	0%
IW101-09B	45.8	0.395	27.8	61%	IW92-06	51.2	3.61	0.335	1%
IW101-09C	101	1.04	22.3	22%	IW92-07	196	0.684	3.17	2%
PMW101-01A	110	1.58	26.4	24%	IW92-08	156	1.79	8.86	6%
PMW101-01B	158	5.47	45.4	29%	PMW85-01	79.6	0.896	57.2	72%
PMW101-02A	257	5.21	45.4	18%	PMW85-04	79.5	1.3	35.5	45%
PMW101-02B	196	27	25.5	13%	PMW85-05	119	30.5	79.1	66%
PMW101-03A	100	0.885	36.5	37%	PMW92-01	73	<10	1.43	2%
PMW101-03B	144	10.4	40.4	28%	PMW92-02	157	<1	<1	0%
PMW101-04A**	199	22.6	59.6	30%	PMW92-03**	252	15.6	147	58%
PMW101-04B**	90.4	22.4	31.2	35%	PMW92-04	165	5.02	9.58	6%
PMW101-05A	194	3.8	64.9	33%	PMW92-05	223	33.9	90.6	41%
PMW101-05B	38.7	15.9	16.6	43%	PMW92-06**	179	3.88	135	75%
PMW101-06A	4.16	1.17	2.32						
PMW101-06B	23.3	<1	16.6	71%					
PMW101-07A	0.562	0.39	0.361						
PMW101-07B	53.6	14.4	14.2	26%					
PMW101-08A	0.735	36.3	15.7						
PMW101-08B	46.6	10.9	41.7	89%					

Notes:

** : LTM well

µg/L: micrograms per liter

PCE: tetrachloroethene

TABLE 7
TCE REBOUND
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well	TCE µg/L Aug-06	TCE µg/L Mar-09	TCE µg/L Dec-11	Change	Well	TCE µg/L Aug-06	TCE µg/L Mar-09	TCE µg/L Dec-11	Change
TTA-1S					TTA-1N				
IW101-01A	0.625	<1	0.363		IW21-01A	55.7	2.26	27.1	49%
IW101-01B	<1	<1	<1		IW21-01B	30.1	4	16	53%
IW101-01C	0.91	19.9	<1		IW21-02A	17	17.8	3	18%
IW101-02A	<1	3.05	0.3		IW21-02B	14.8	1.76	3.06	21%
IW101-02B	0.406	2.29	<1		IW21-03A	56.1	4.09	45.9	82%
IW101-02C	3.74	1.27	0.706		IW21-03B	23.4	1.32	68.5	293%
IW101-03A	<1	0.413	<1		IW21-04A	64.5	7.76	33.3	52%
IW101-03B	1.08	2.43	0.464		IW21-04B	56.4	0.956	19	34%
IW101-03C	78.5	11.4	39	50%	IW21-05A	30.8	0.464	2.62	9%
IW101-04A	0.312	<1	1.86		IW21-05B	16.7	1.22	35.5	213%
IW101-04B	0.278	0.464	1.57		PMW21-01	40.6	7.6	50.1	123%
IW101-04C	29.7	2.85	31	104%	PMW21-02	37.8	21.4	30.1	80%
IW101-05A	<1	1.28	<1		PMW21-03**	58	8.01	14.4	25%
IW101-05B	0.319	4.72	<1		PMW21-04	87.7	5.52	69.3	79%
IW101-05C	3.44	8.82	1.35		PMW21-05**	34.4	13	1.46	4%
IW101-06A	<1	0.502	<1		TTA-2				
IW101-06B	64.7	4.17	4.95	8%	IW85-01	26.3	1.79	0.788	3%
IW101-06C	204	33.4	46.4	23%	IW85-02	15.5	2.01	0.443	3%
IW101-07A	2.61	1.43	17		IW85-05	25.1	0.824	13.1	52%
IW101-07B	138	23.5	52.1	38%	IW85-06	9.93	2.72	1.31	
IW101-07C	207	1.94	113	55%	IW92-01	6.36	<1	6.71	
IW101-08A	0.983	<1	0.834		IW92-02	4.01	<1	9.78	
IW101-08B	51	1.82	34.3	67%	IW92-03	6.84	<1	4.33	
IW101-08C	240	3.42	50.6	21%	IW92-04	6.16	<2	0.5	
IW101-09A	0.321	0.328	0.254		IW92-05	6.1	0.335	0.363	
IW101-09B	96	0.454	78.4	82%	IW92-06	2.58	0.377	0.5	
IW101-09C	316	4.19	64.8	21%	IW92-07	9.2	0.282	0.51	
PMW101-01A	<1	<1	1.25		IW92-08	26.9	<5	1.19	4%
PMW101-01B	1.19	1.41	0.777		PMW85-01	26.1	<1	20.2	77%
PMW101-02A	0.322	<1	0.558		PMW85-04	25.6	<1	15.2	59%
PMW101-02B	4.73	21	1.86		PMW85-05	37.9	14.8	25.6	68%
PMW101-03A	<1	0.534	1.59		PMW92-01	2.87	<10	1.39	
PMW101-03B	2.41	3.31	1.46		PMW92-02	5.81	<1	0.5	
PMW101-04A**	0.26	6.83	2.11		PMW92-03**	11.5	5.99	15.1	131%
PMW101-04B**	23.2	2.39	3.23	14%	PMW92-04	7.8	0.916	14.5	
PMW101-05A	<1	1.81	<1		PMW92-05	17.1	7.02	8.9	52%
PMW101-05B	151	50	26.4	17%	PMW92-06**	39.7	2.98	29.8	75%
PMW101-06A	<1	0.607	<1						
PMW101-06B	16.2	<1	4.32	27%					
PMW101-07A	0.782 J	<1	<1						
PMW101-07B	187	29.2	28.9	15%					
PMW101-08A	<1	9.43	0.386						
PMW101-08B	232	44.4	127	55%					

Notes:

** LTM well

µg/L: micrograms per liter

TCE: trichloroethene

TABLE 8
CT REBOUND
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well	CT µg/L Aug-06	CT µg/L Mar-09	CT µg/L Dec-11	Change
TTA-2				
IW85-01	168	<1	4.47	3%
IW85-02	71.4	<1	1.05	1%
IW85-05	199	<1	50.6	25%
IW85-06	3.02	6.69	0.546	
IW92-01	22.7	<1	25.8	114%
IW92-02	13	<1	27.9	215%
IW92-03	30.5	<1	0.308	1%
IW92-04	30	<2	<1	0%
IW92-05	29.9	<1	<1	0%
IW92-06	8.77	<1	<1	
IW92-07	38.4	<1	0.34	1%
IW92-08	103	<5	2.37	2%
PMW85-01	222	<1	102	46%
PMW85-04	57.9	0.355	<1	0%
PMW85-05	155	5.13	77.6	50%
PMW92-01	8.92	<10	<1	
PMW92-02	19.8	<1	<1	0%
PMW92-03**	58.1	<1	<1	0%
PMW92-04	33.1	<1	<1	0%
PMW92-05	77.5	2.37	19.6	25%
PMW92-06**	182	<1	106	58%

Notes:

** LTM well

µg/L: micrograms per liter

CT: carbon tetrachloride

TABLE 9
RECOMMENDED EBT INJECTION LOCATIONS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis Tennessee

TTA-1N (MW-21 area)		TTA-1S (MW-101 area)		TTA-2		West-Central		Bldg 835	
Injection Well	Monitoring Well	Injection Well	Monitoring Well	Injection Well	Monitoring Well	Injection Well	Monitoring Well	Injection Well	Monitoring Well
IW21-01A	PMW21-01	IW101-02A	PMW101-04A	IW85-05	PMW85-01	MW-203A	MW-197A	MW-62	MW-212
IW21-01B	PMW21-02	IW101-02B	PMW101-04B	IW85-06	PMW92-03	MW-203B	MW-197B	MW-213	
IW21-02A		IW101-02C	PMW101-07A	IW92-01	PMW92-06				
IW21-02B		IW101-04A	PMW101-07B	IW92-02	MW-85				
IW21-03A		IW101-04B		IW92-03					
IW21-03B		IW101-04C		IW92-07					
IW21-04A		IW101-05A		IW92-08					
IW21-04B		IW101-05B		DR2-2					
MW-21		IW101-05C		DR2-5					
PMW21-04		IW101-07A		MW-113					
		IW101-07B							
		IW101-07C							
		DR1-5							
		DR1-5A							
		DR1-6							
		DR1-6A							
		PMW101-02A							
		PMW101-02B							

TABLE 10
PROPOSED WELL ABANDONMENT
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Well ID	Area	Date Completed	Northing	Easting	Ground Elevation (ft, msl)	Well Diameter (inches)	Top of Screen Depth (ft, bgs)	Screen Length (ft)
IW101-01A	TTA-1	6/22/06	276256.7	801113.2	291.3	4	122.6	15
IW101-01B	TTA-1	6/27/06	276253.7	801115.2	291.3	4	107.7	15
IW101-01C	TTA-1	6/28/06	276250.1	801117.9	291.5	4	92.7	15
IW101-03A	TTA-1	6/23/06	276164.6	801104.6	292.4	4	125.6	15
IW101-03B	TTA-1	6/27/06	276161.6	801106.5	292.5	4	110.0	15
IW101-03C	TTA-1	6/28/06	276158.1	801108.6	292.5	4	94.1	15
IW101-06A	TTA-1	6/19/06	276161.3	801127.0	292.8	4	124.2	15
IW101-06B	TTA-1	6/21/06	276157.4	801129.8	292.9	4	109.2	15
IW101-06C	TTA-1	6/22/06	276153.0	801133.1	292.7	4	94.7	15
IW101-08A	TTA-1	7/12/06	276128.3	801121.5	292.8	4	125.7	15
IW101-08B	TTA-1	7/17/06	276125.7	801124.7	292.9	4	108.4	15
IW101-08C	TTA-1	7/18/06	276122.9	801128.6	293.1	4	93.3	15
IW101-09A	TTA-1	7/13/06	276081.9	801109.6	292.9	4	125.4	15
IW101-09B	TTA-1	7/18/06	276076.8	801109.0	292.9	4	110.3	15
IW101-09C	TTA-1	7/19/06	276073.0	801108.5	293.0	4	95.3	15
IW21-05A	TTA-1	5/31/06	276574.9	800775.8	292.2	4	101.1	10
IW21-05B	TTA-1	6/1/06	276579.9	800772.7	292.3	4	90.4	10
IW85-01	TTA-2	7/24/06	276831.3	806201.3	305.2	4	88.6	10
IW85-02	TTA-2	7/27/06	276797.4	806222.5	305.3	4	91.6	10
IW85-04	TTA-2	7/26/06	276779.3	806187.6	305.5	4	71.7	10
IW92-04	TTA-2	7/27/06	276681.9	806489.6	304.4	4	83.9	10
IW92-05	TTA-2	8/2/06	276707.0	806449.3	304.3	4	83.8	10
IW92-06	TTA-2	8/1/06	276723.9	806409.1	304.3	4	84.7	10
PMW101-01A	TTA-1	6/9/06	276273.2	801114.5	291.2	2	121.2	20
PMW101-01B	TTA-1	6/12/06	276269.1	801119.3	291.2	2	98.4	20
PMW101-03A	TTA-1	6/2/06	276348.5	801198.4	292.0	2	119.6	20
PMW101-03B	TTA-1	6/5/06	276353.1	801194.1	291.8	2	99.6	20
PMW101-05A	TTA-1	6/5/06	276252.7	801184.9	291.8	2	105.2	20
PMW101-05B	TTA-1	6/5/06	276250.1	801189.8	292.1	2	85.3	20
PMW101-06A	TTA-1	6/6/06	276191.9	801187.4	292.7	2	120.6	20
PMW101-06B	TTA-1	6/7/06	276194.9	801184.0	292.4	2	99.5	20
PMW101-08A	TTA-1	7/9/06	276070.3	801119.0	293.3	2	120.0	20
PMW101-08B	TTA-1	7/10/06	276065.1	801121.3	293.5	2	98.5	20
PMW85-04	TTA-2	2/21/07	276763.5	806168.7	305.3	2	91.9	10
PMW85-05	TTA-2	2/22/07	276752.1	806222.5	305.3	2	93.4	10
PMW92-01	TTA-2	5/2/06	276635.3	806499.8	304.5	2	92.9	10
PMW92-02	TTA-2	5/3/06	276667.0	806476.5	304.4	2	95.0	10
PMW92-04	TTA-2	5/8/06	276690.6	806399.3	304.1	2	91.4	10
PMW92-05	TTA-2	5/9/06	276730.2	806346.4	304.3	2	88.6	10

Notes:

ft: feet
ft, bgs: feet below ground surface
ft, msl: feet mean sea level

FIGURES

- 1 Well Locations, TTA-1
- 2 Well Locations, TTA-2
- 3 Groundwater Elevations, TTA-1
- 4 Groundwater Elevations, TTA-2
- 5 PCE TTA-1 Isopleth Map
- 6 TCE TTA-1 Isopleth Map
- 7 PCE TTA-2 Isopleth Map
- 8 TCE TTA-2 Isopleth Map
- 9 CT TTA-2 Isopleth Map
- 10 PCE Isopleth Map, October 2011 LTM
- 11 TCE Isopleth Map, October 2011 LTM
- 12 TTA-1 Well Recommendations
- 13 TTA-2 Well Recommendations



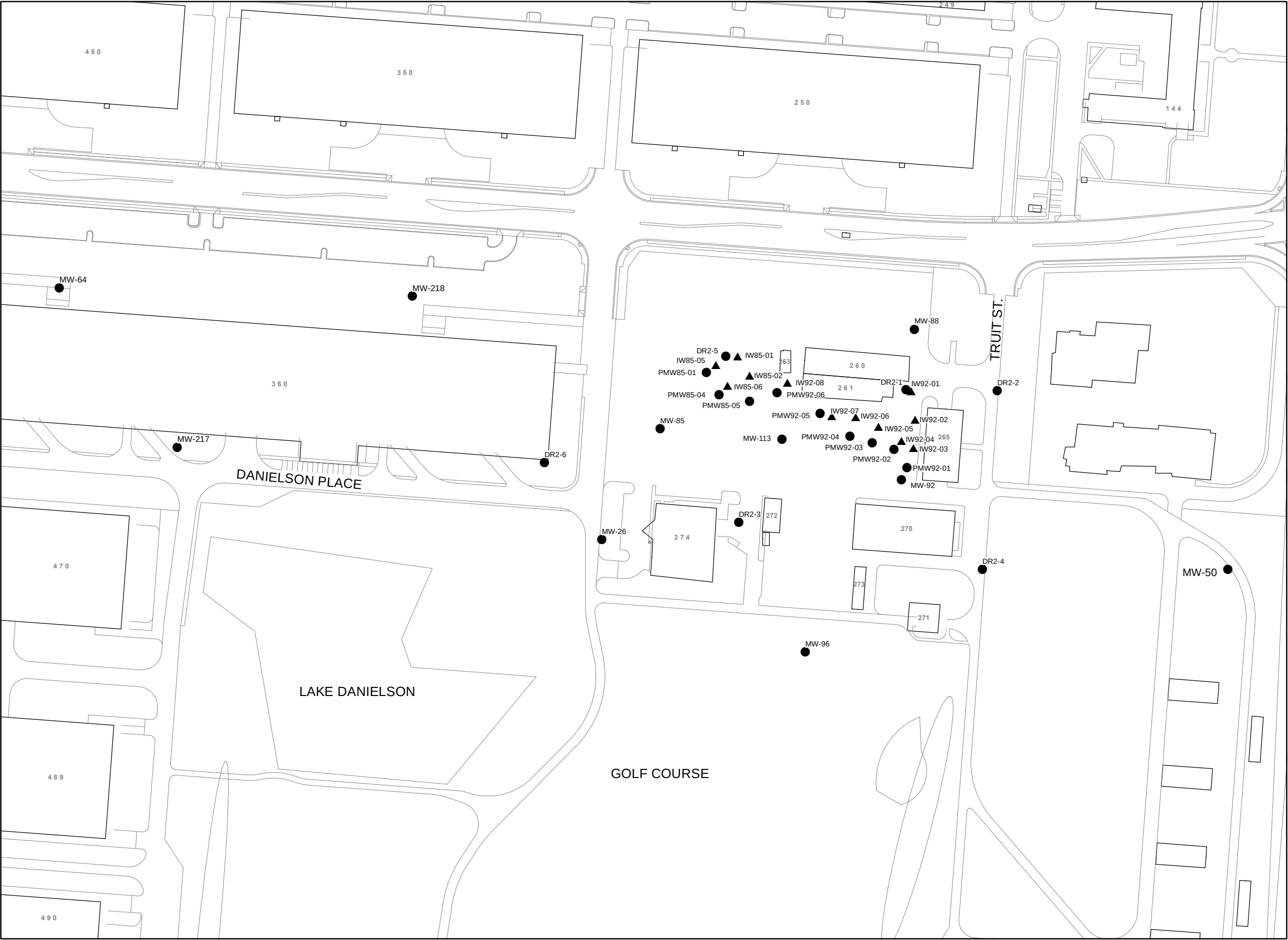


Figure 2

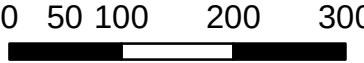
WELL LOCATIONS
TTA-2

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

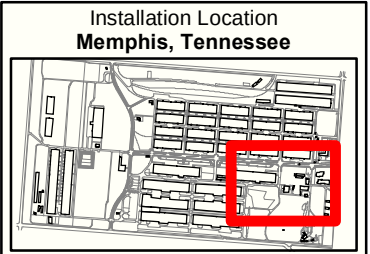
MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

- ▲ Injection Well
- Monitoring Well

Projection: NAD 1927 StatePlane Tennessee
Units: Feet



Feet



Date: February 2012
Edition: Rev 0



Path: G:\3202\016\EBT\EBT-10\Figure 3 - GROUNDWATER ELEVATIONS TTA-1.mxd

Well Type and Aquifer

- 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.

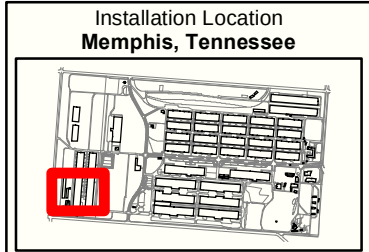
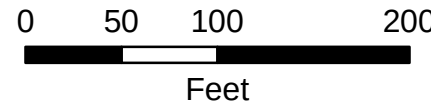


Figure 3

GROUNDWATER ELEVATIONS, TTA-1

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

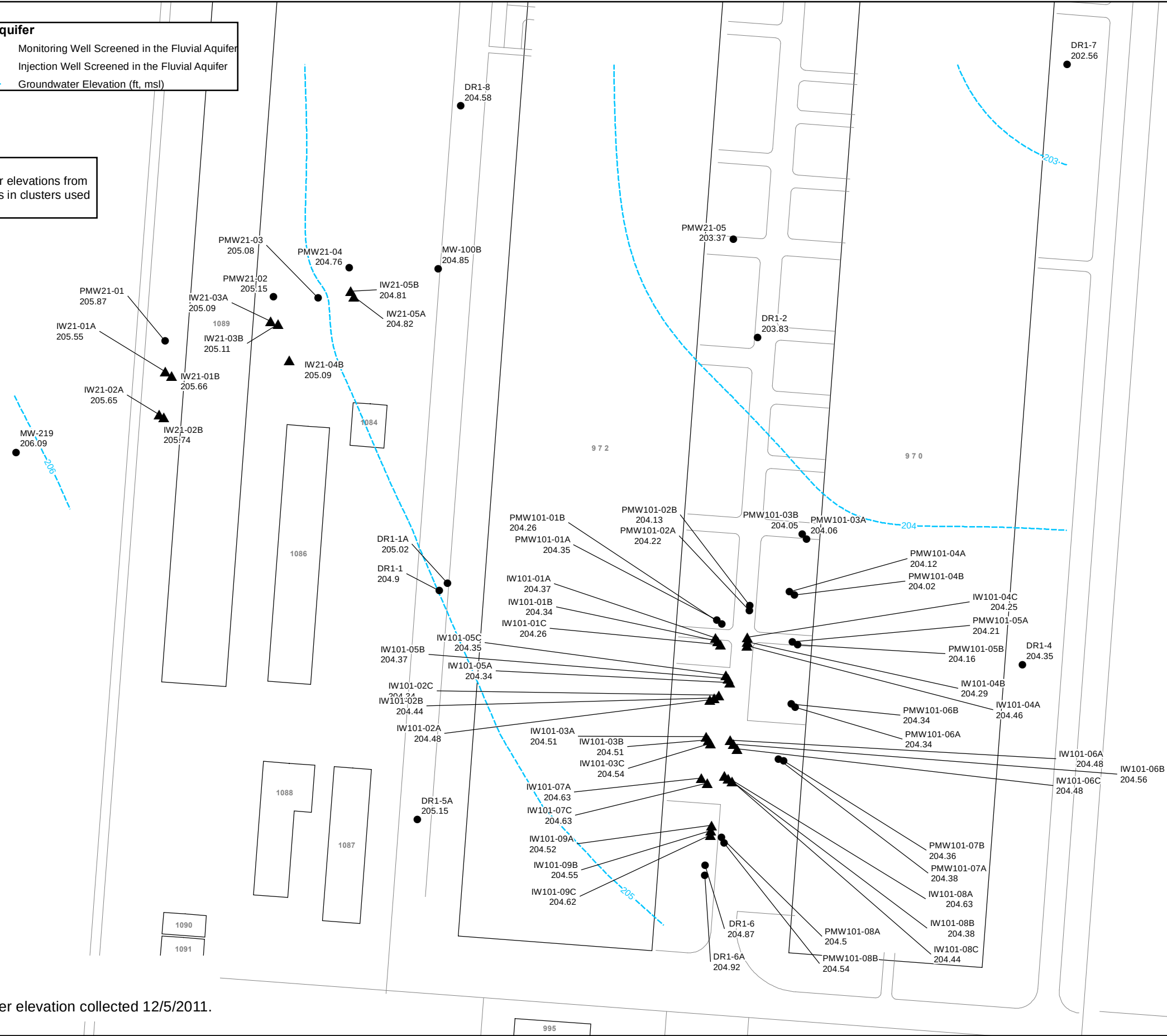


Date: February 2012
Edition: Rev 0



NOTES:

Groundwater elevation collected 12/5/2011.



Path: G:\3202\016\EBT\EBT-10\Figure 4 - GROUNDWATER ELEVATIONS TTA-2.mxd

Well Type and Aquifer

●

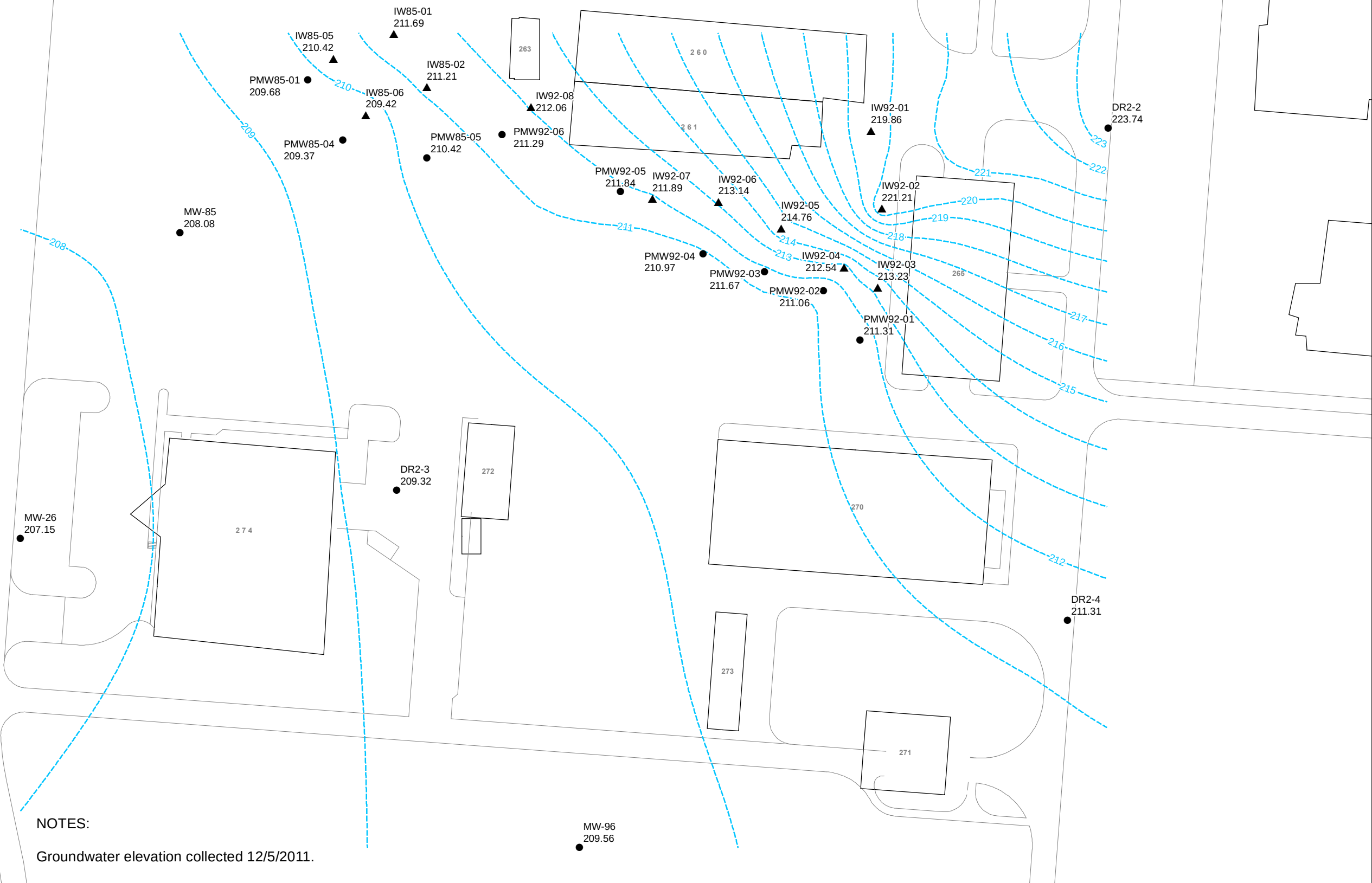
Monitoring Well Screened in the Fluvial Aquifer

▲

Injection Well Screened in the Fluvial Aquifer

- - -

Groundwater Elevation (ft. msl)



NOTES:

Groundwater elevation collected 12/5/2011.



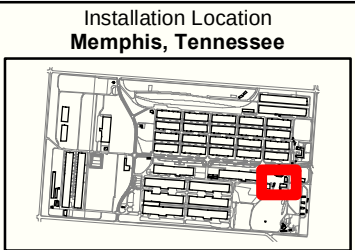
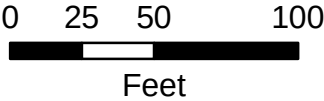
Figure 4

GROUNDWATER
ELEVATIONS,
TTA-2

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Projection: NAD 1927 StatePlane Tennessee
Units: Feet



Date: February 2012
Edition: Rev 0



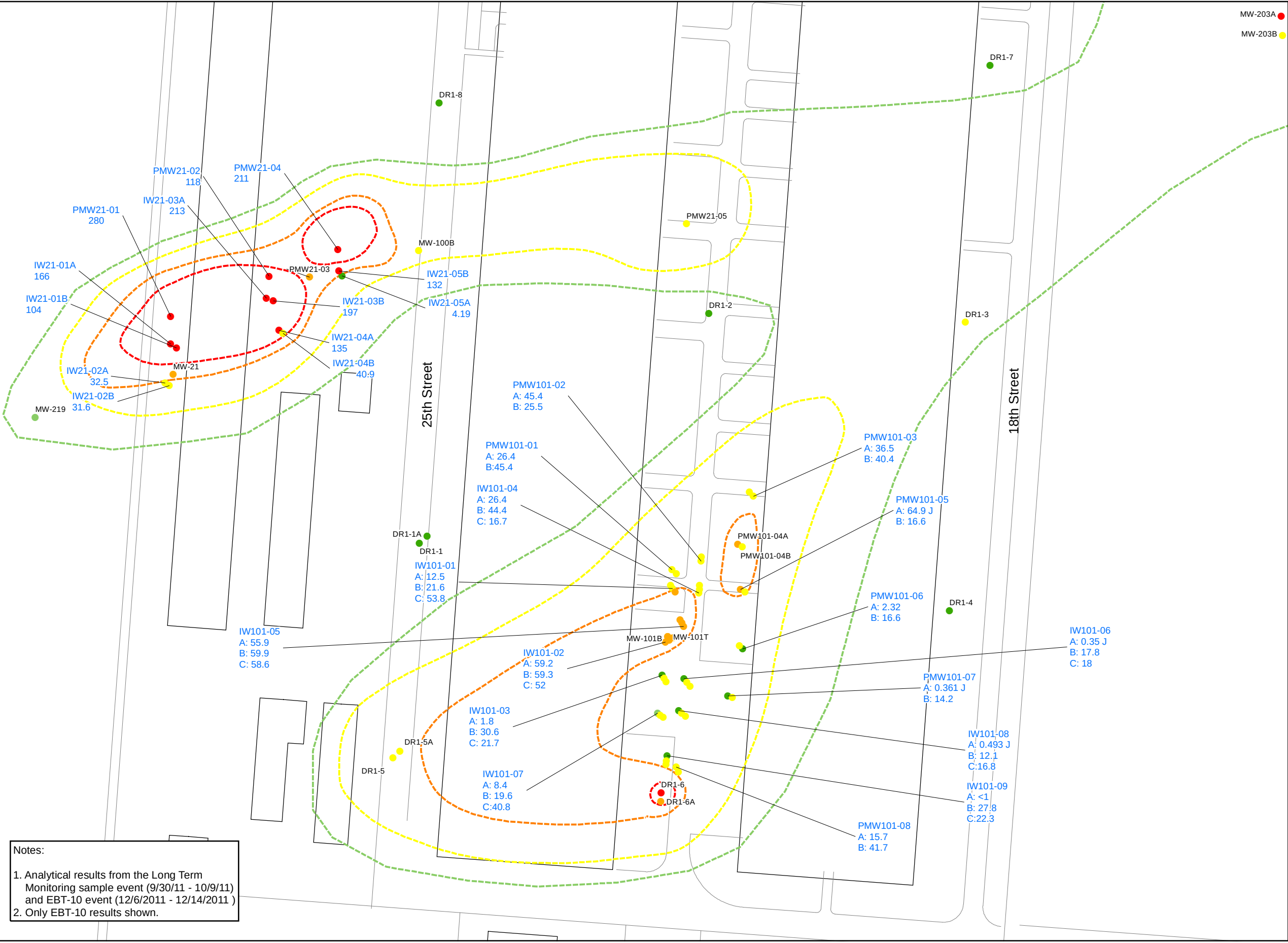
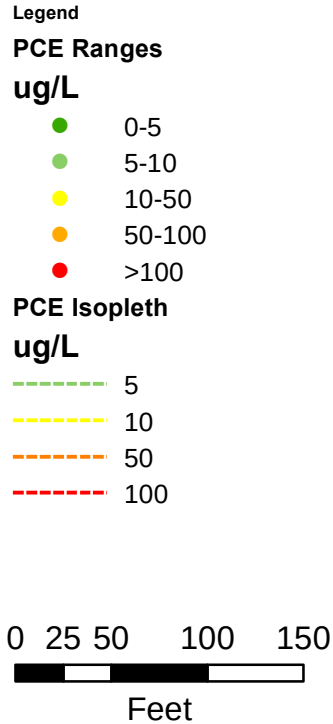


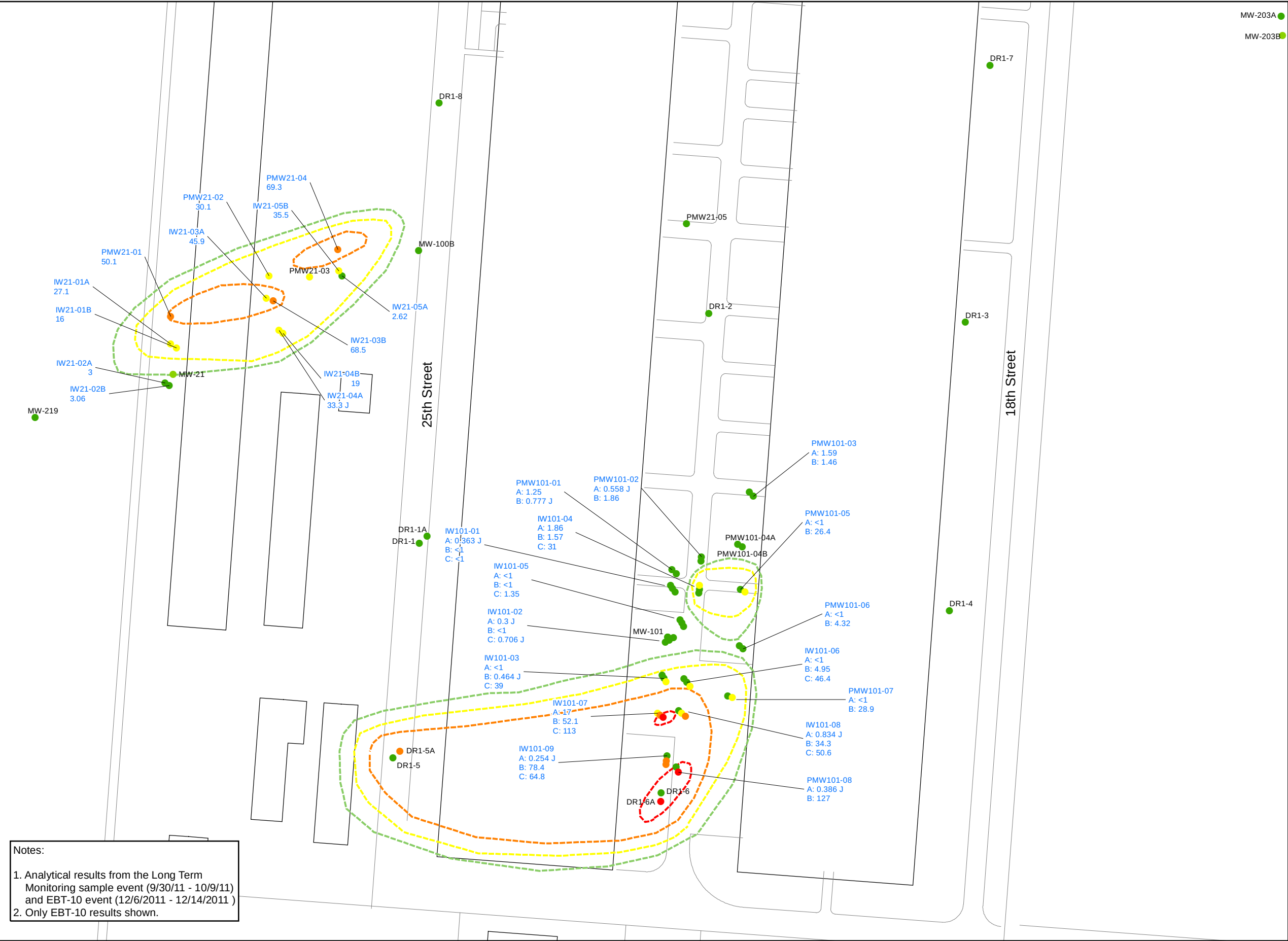
Figure 5

PCE TTA-1 ISOPLETH MAP

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE





Notes:

1. Analytical results from the Long Term Monitoring sample event (9/30/11 - 10/9/11) and EBT-10 event (12/6/2011 - 12/14/2011)
2. Only EBT-10 results shown.

Figure 6

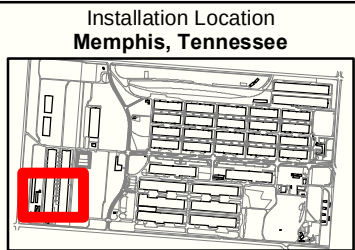
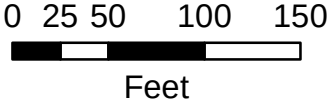
TCE TTA-1

ISOPLETH MAP

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

- Legend**
- TCE Ranges**
- ug/L
- 0 - 5
 - 5 - 10
 - 10 - 50
 - 50 - 100
 - 100 - 300
- TCE Isopleth**
- ug/L
- 5
 - 10
 - 50
 - 100



Date: February 2012
Edition: Rev 0



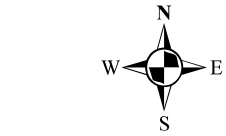
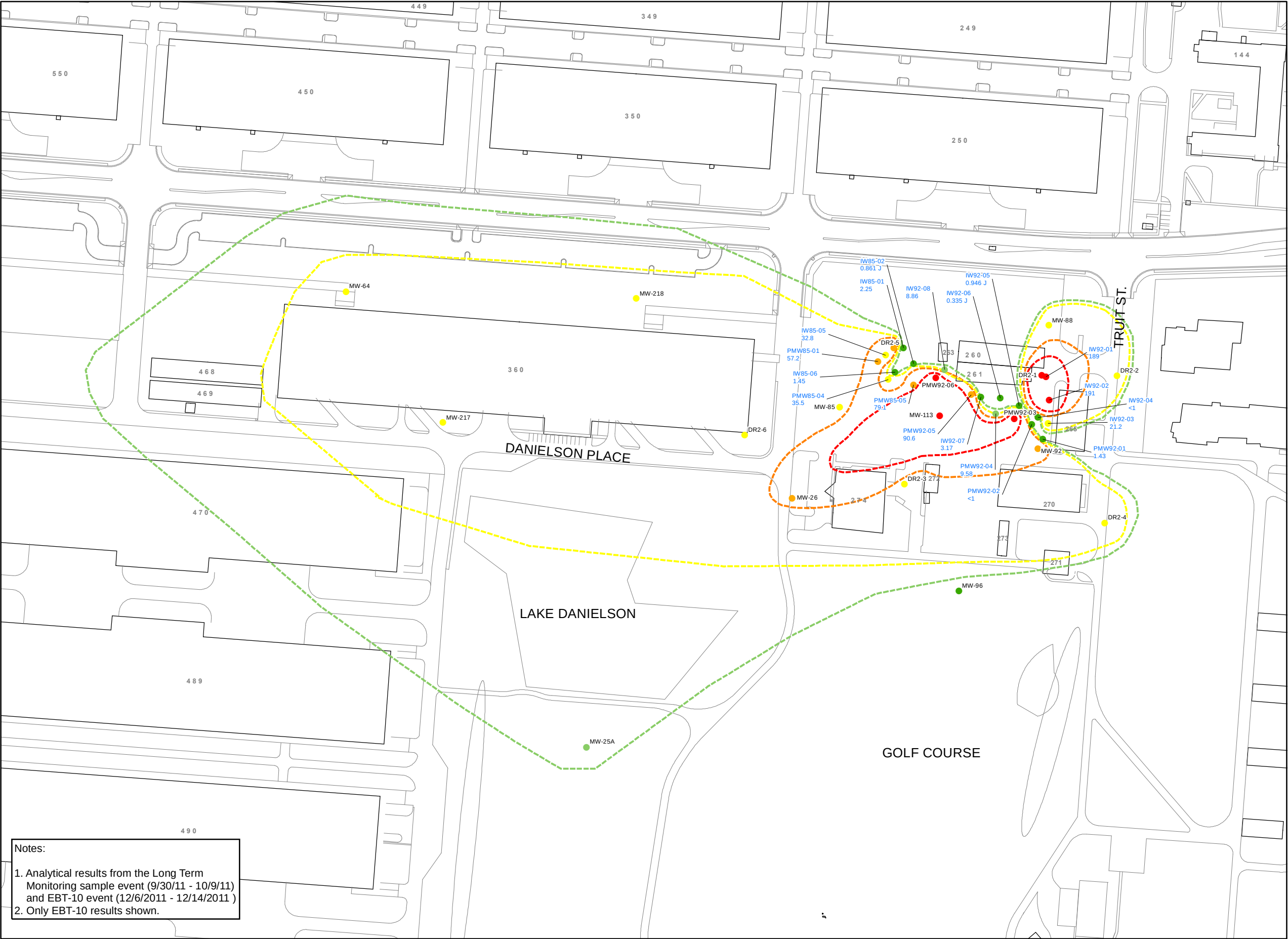


Figure 7
PCE TTA-2
ISOPLETH MAP

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Legend

PCE Ranges

ug/L

- 0-5
- 5-10
- 10-50
- 50-100
- >100

PCE Isopleth

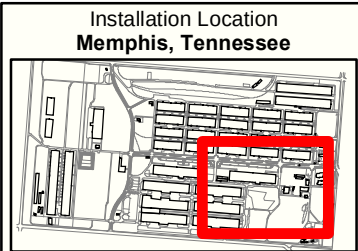
ug/L

- 5
- 10
- 50
- 100

0 50 100 200 300

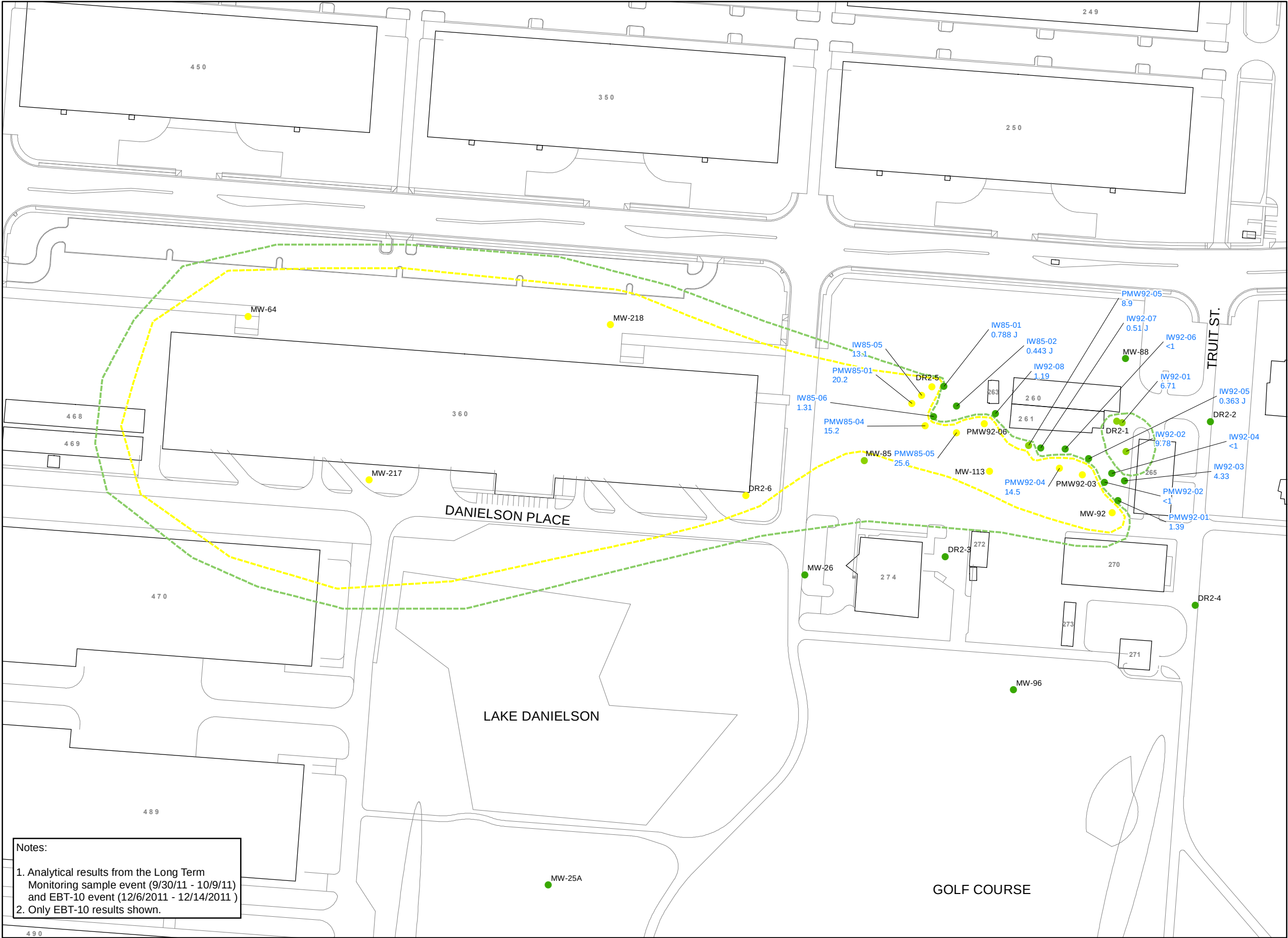


Feet



Date: February 2012
Edition: Rev 0





Notes:

1. Analytical results from the Long Term Monitoring sample event (9/30/11 - 10/9/11) and EBT-10 event (12/6/2011 - 12/14/2011)
2. Only EBT-10 results shown.



Figure 8

**TCE TTA-2
ISOPLETH MAP**

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

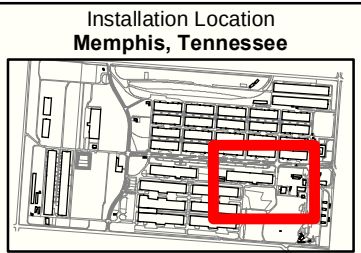
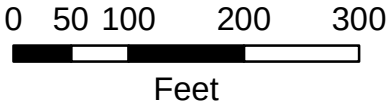
Legend

**TCE Ranges
ug/L**

- 0 - 5
- 5 - 10
- 10 - 50
- 50 - 100
- 100 - 300

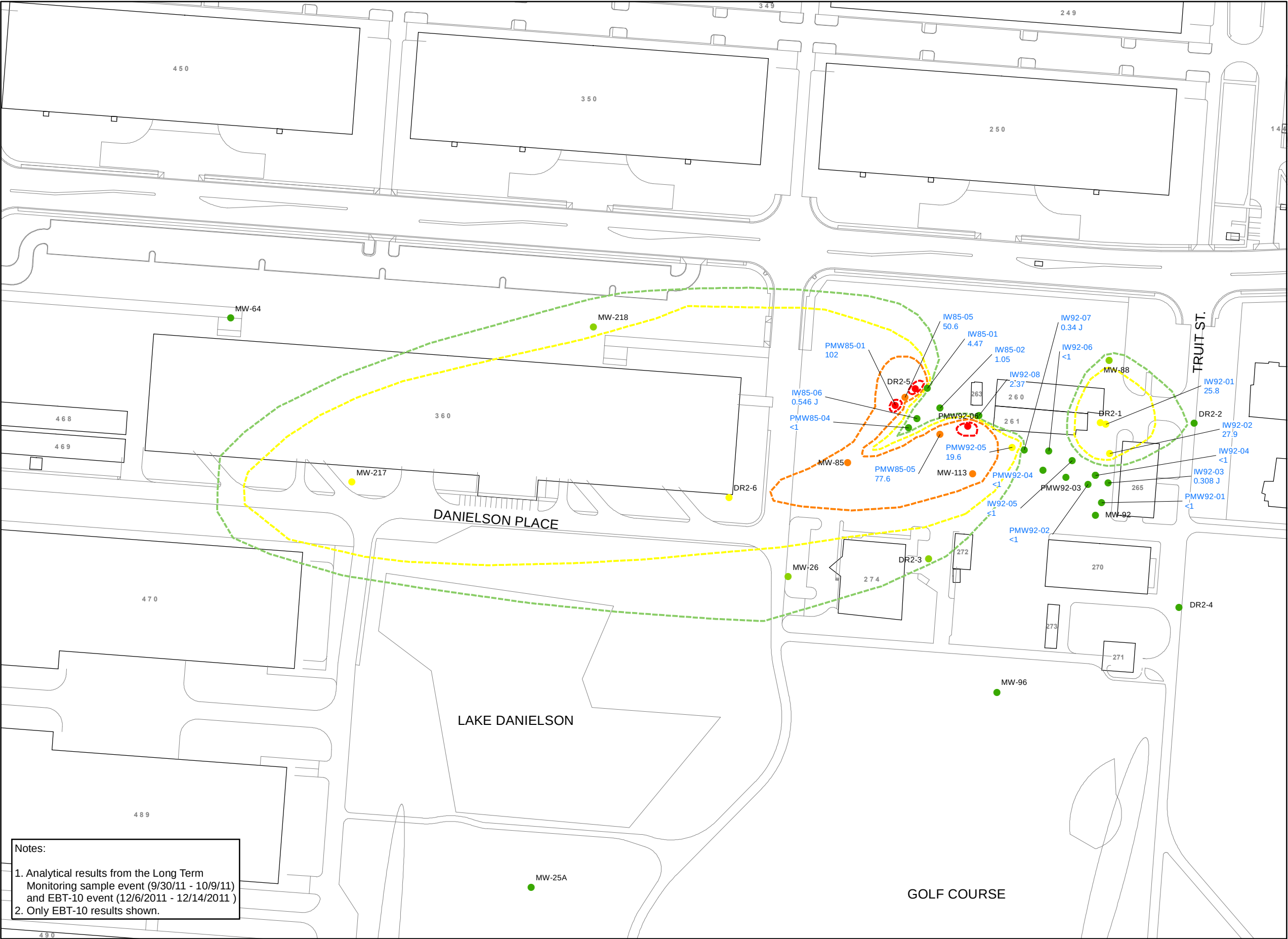
**TCE Isopleth
ug/L**

- 5
- 10
- 50
- 100



Date: February 2012
Edition: Rev 0





Notes:

1. Analytical results from the Long Term Monitoring sample event (9/30/11 - 10/9/11) and EBT-10 event (12/6/2011 - 12/14/2011)
2. Only EBT-10 results shown.



Figure 9

CT TTA-2
ISOPLETH MAP

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

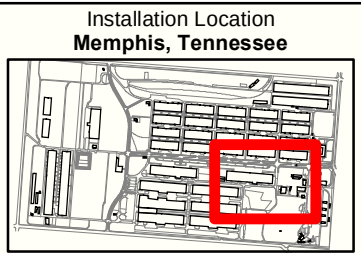
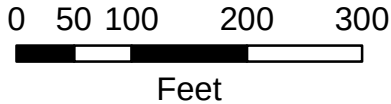
MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Legend
CT Ranges
ug/L

- 0-5
- 5-10
- 10-50
- 20-100
- 100-200

CT Isopleth
ug/L

- 5
- 10
- 50
- 100



Date: February 2012
Edition: Rev 0





Figure 10

**PCE ISOPLETH MAP,
OCTOBER 2011 LTM**

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Legend

PCE Ranges

ug/L

- 0 - 5
- 5 - 10
- 10 - 50
- 50 - 100
- >100

PCE Isopleth

ug/L

- 5
- 10
- 50
- 100

- Clay Elevation Exceeds Groundwater Elevation
- Potentiometric surface of the Fluvial Aquifer 1-ft. contour
- Potentiometric surface of the Fluvial Aquifer 5-ft. contour
- Potentiometric surface of the Intermediate Aquifer 5-ft. contour

Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 200 400 800

Feet

Installation Location
Memphis, Tennessee



Date: December 2011
Edition: Rev 0

HDR

Notes:

- Analytical results from the Long Term Monitoring sample event (9/30/11 - 10/9/11).

Path: G:\3202\016\EBT\EBT-10\Figure 10 - PCE ISOPLETH Oct 2011.mxd



Figure 11

**TCE ISOPLETH MAP,
OCTOBER 2011 LTM**

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Legend

TCE Ranges

ug/L

- 0 - 5
- 5 - 10
- 10 - 50
- 50 - 100
- 100 - 300

TCE Isopleth

ug/L

- 5
- 10
- 50
- 100

Clay Elevation Exceeds Groundwater Elevation

- Potentiometric surface of the Fluvial Aquifer 1-ft. contour
- Potentiometric surface of the Fluvial Aquifer 5-ft. contour
- Potentiometric surface of the Intermediate Aquifer 5-ft. contour

Projection: NAD 1927 StatePlane Tennessee
Units: Feet

0 200 400 800
Feet

Installation Location
Memphis, Tennessee



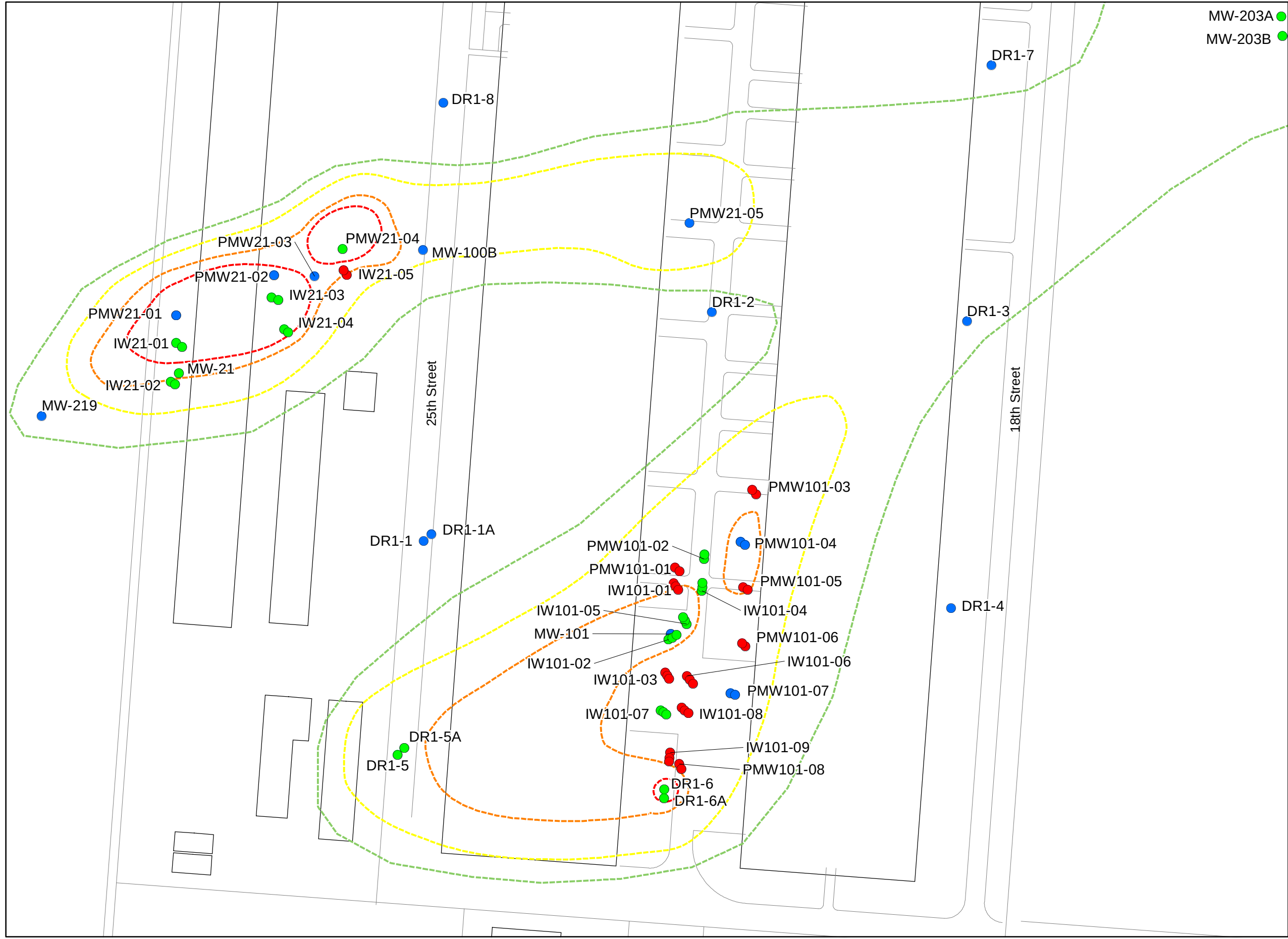
Date: December 2011
Edition: Rev 0

HDR

Notes:

- Analytical results from the Long Term Monitoring sample event (9/30/11 - 10/9/11).

Path: G:\3202\016\EBT\EBT-10\Figure 11 - TCE ISOPLETH Oct2011.mxd



N
W E
S

Figure 12

TTA-1 WELL RECOMMENDATIONS

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

Legend

- Injection
- Monitor
- Abandon

PCE Isopleth ug/L

- 5
- 10
- 50
- 100

0 25 50 100 150
Feet

Installation Location
Memphis, Tennessee

Date: February 2012
Edition: Rev 0

Path: G:\3202\016\EBT\EBT-10\Figure 13 Well Rec TTA-2.mxd

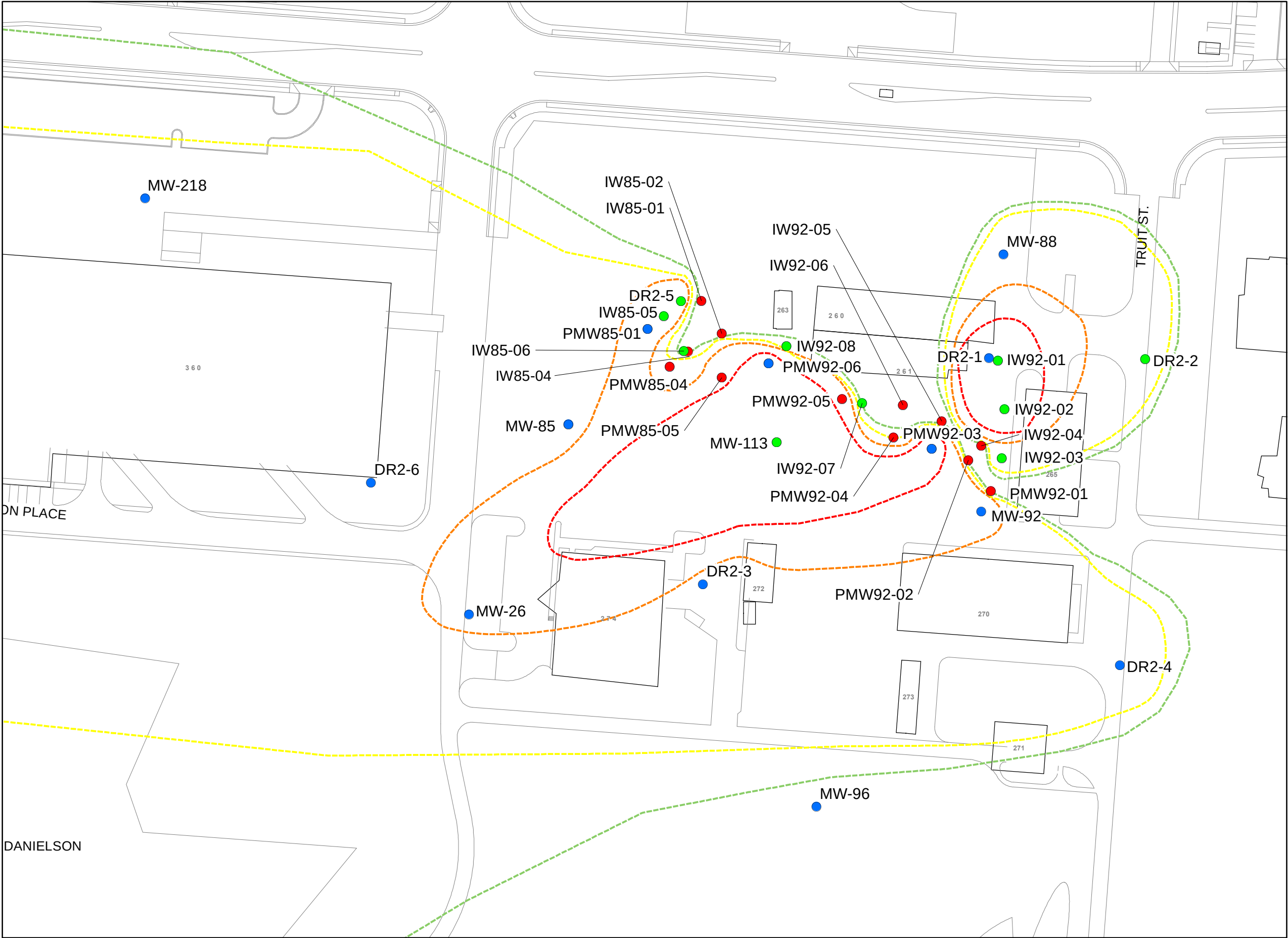


Figure 13

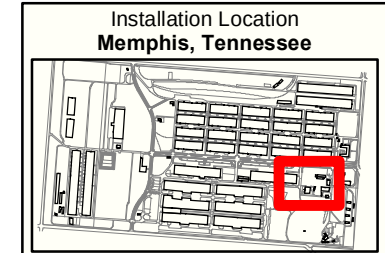
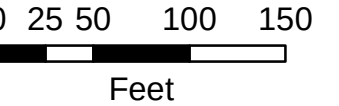
TTA-2 WELL RECOMMENDATIONS

DECEMBER 2011
EBT BASELINE
SAMPLE REPORT

MAIN INSTALLATION
DEFENSE DEPOT
MEMPHIS, TENNESSEE

- Legend**
- Injection (Green dot)
 - Monitor (Blue dot)
 - Abandon (Red dot)

- PCE Isopleth ug/L**
- 5 (Green dashed line)
 - 10 (Yellow dashed line)
 - 50 (Orange dashed line)
 - 100 (Red dashed line)



APPENDIX A

Results of Laboratory Analyses

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW101-01A	IW101-01A	IW101-01B	IW101-01C	IW101-02A	IW101-02B
Sample ID	IW101-01A-EBT-10	IW101-01A DUP2	IW101-01B-EBT-10	IW101-01C-EBT-10	IW101-02A-EBT-10	IW101-02B-EBT-10
Date	12/6/2011	12/6/2011	12/6/2011	12/6/2011	12/6/2011	12/6/2011
Lab ID	L11120274-01	L11120274-06	L11120274-02	L11120274-03	L11120274-04	L11120274-05
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	0.92 J	0.857 J	<1	1.16	<1
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m-,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	<5	<5	<5	2.56 J	3.88 J
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	12.5	12.7	21.6	53.8	59.3
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	0.363 J	0.308 J	<1	0.3 J	<1
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW101-02C	IW101-03A	IW101-03B	IW101-03C	IW101-04A	IW101-04B
Sample ID	IW101-02C-EBT-10	IW101-03A-EBT-10	IW101-03B-EBT-10	IW101-03C-EBT-10	IW101-04A-EBT-10	IW101-04B-EBT-10
Date	12/7/2011	12/7/2011	12/7/2011	12/8/2011	12/7/2011	12/8/2011
Lab ID	L11120274-21	L11120274-22	L11120274-25	L11120348-07	L11120274-26	L11120348-08
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	32.3 J	<10	2.81 J	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	0.302 J	0.415 J	<1	3.41	10.4
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10 UJ	<10	<10 UJ	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	4.44 J	0.671 J	5.99	1.24 J	1.01 J
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	52	1.8	30.6	21.7	44.4
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	0.706 J	<1	0.464 J	39	1.86
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW101-04B	IW101-04C	IW101-05A	IW101-05B	IW101-05C	IW101-06A
Sample ID	IW101-04B DUP3	IW101-04C-EBT-10	IW101-05A-EBT-10	IW101-05B-EBT-10	IW101-05C-EBT-10	IW101-06A-EBT-10
Date	12/8/2011	12/8/2011	12/9/2011	12/9/2011	12/9/2011	12/9/2011
Lab ID	L11120348-12	L11120348-09	L11120348-14	L11120348-15	L11120348-16	L11120348-17
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	0.473 J	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	0.731 J	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	0.85 J	59.2	0.432 J	<1	0.291 J
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	1.14 J	1.19 J	2.33 J	3.16 J	4.12 J
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	42.6	16.7	55.9	59.9	58.6
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	1.41	31	<1	<1	<1
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW101-06B	IW101-06C	IW101-07A	IW101-07B	IW101-07C	IW101-07C
Sample ID	IW101-06B-EBT-10	IW101-06C-EBT-10	IW101-07A-EBT-10	IW101-07B-EBT-10	IW101-07C-EBT-10	IW101-07C DUP4
Date	12/9/2011	12/10/2011	12/10/2011	12/10/2011	12/11/2011	12/11/2011
Lab ID	L11120348-18	L11120403-03	L11120403-04	L11120403-05	L11120403-10	L11120403-14
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	0.221 J
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2 UJ	<2	<2	<2 UJ
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	0.369 J	0.35 J
1,2-Dichloropropane	µg/L	<1	<1	<1	0.595 J	0.497 J
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	5.63 J	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	0.133 J	<0.3	<0.3	0.138 J	0.178 J
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	0.306 J	2.36	0.658 J	24.5	22.9
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	3.06 J	<10
Methyl t-butyl ether (MTBE)	µg/L	3.72 J	<5	0.703 J	<5	<5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	17.8	18	8.4	19.6	38.2
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	4.95	46.4	17	52.1	117
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW101-08A	IW101-08B	IW101-08C	IW101-09A	IW101-09B	IW101-09C
Sample ID	IW101-08A-EBT-10	IW101-08B-EBT-10	IW101-08C-EBT-10	IW101-09A-EBT-10	IW101-09B-EBT-10	IW101-09C-EBT-10
Date	12/10/2011	12/11/2011	12/11/2011	12/11/2011	12/12/2011	12/12/2011
Lab ID	L11120403-06	L11120403-11	L11120403-12	L11120403-13	L11120403-15	L11120403-16
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	0.27 J
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	0.76 J
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2 UJ	<2 UJ	<2 UJ	<2 UJ
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1	0.497 J
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10	65.1
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	0.241 J
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	<1	1.8	4.46	<1	4.82
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10	129
Methyl t-butyl ether (MTBE)	µg/L	<5	<5	<5	<5	<5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	0.493 J	12.1	16.8	<1	27.8
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	0.834 J	34.3	50.6	0.254 J	78.4
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	56.6

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	PMW101-01A	PMW101-01A	PMW101-01B	PMW101-02A	PMW101-02B
Sample ID	PMW101-01A-EBT-10	PMW101-01A DUP5	PMW101-01B-EBT-10	PMW101-02A-EBT-10	PMW101-02B-EBT-10
Date	12/6/2011	12/6/2011	12/6/2011	12/6/2011	12/6/2011
Lab ID	L11120274-11	L11120274-15	L11120274-12	L11120274-13	L11120274-14
Analyte	Units				
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	3.35	3.26	1.46	0.442 J
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10 UJ	<10 UJ	<10 UJ	<10 UJ
Methyl t-butyl ether (MTBE)	µg/L	0.592 J	<5	1.66 J	1.62 J
Methylene chloride	µg/L	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1
Tetrachloroethene	µg/L	26.4	27.5	45.4	25.5
Toluene	µg/L	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1
Trichloroethene	µg/L	1.25	1.2	0.777 J	1.86
Trichlorofluoromethane	µg/L	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

	Location	PMW101-03A	PMW101-03B	PMW101-05A	PMW101-05B	PMW101-06A
Sample ID	Sample ID	PMW101-03A-EBT-10	PMW101-03B-EBT-10	PMW101-05A-EBT-10	PMW101-05B-EBT-10	PMW101-06A-EBT-10
Date	Date	12/8/2011	12/8/2011	12/7/2011	12/7/2011	12/9/2011
Lab ID	Lab ID	L11120348-10	L11120348-11	L11120274-16	L11120274-19	L11120348-26
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	0.374 J	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	1.02	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	1.81	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10	<10
Benzene	µg/L	<0.4	<0.4	<0.4	0.275 J	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	0.165 J	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	1.97	0.884 J	0.592 J	165	<1
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10 UJ	<10 UJ	<10
Methyl t-butyl ether (MTBE)	µg/L	1.69 J	4.09 J	3.49 J	<5	0.781 J
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	36.5	40.4	64.9 J	16.6	2.32
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	1.59	1.46	<1	26.4	<1
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	0.595 J	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	PMW101-06B	PMW101-07A	PMW101-07A	PMW101-07B	PMW101-08A
Sample ID	PMW101-06B-EBT-10	PMW101-07A-EBT-10	PMW101-07A DUP6	PMW101-07B-EBT-10	PMW101-08A-EBT-10
Date	12/9/2011	12/9/2011	12/9/2011	12/9/2011	12/9/2011
Lab ID	L11120348-27	L11120348-28	L11120348-31	L11120348-29	L11120348-30
Analyte	Units				
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	<1	<1	1.35	0.452 J
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	3.76 J	<5	<5	<5
Methylene chloride	µg/L	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1
Tetrachloroethene	µg/L	16.6	0.361 J	0.337 J	15.7
Toluene	µg/L	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1
Trichloroethene	µg/L	4.32	<1	<1	0.386 J
Trichlorofluoromethane	µg/L	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	PMW101-08B	IW21-01A	IW21-01A	IW21-01B	IW21-02A	IW21-02B
Sample ID	PMW101-08B-EBT-10	IW21-01A-EBT-10	IW21-01A DUP1	IW21-01B-EBT-10	IW21-02A-EBT-10	IW21-02B-EBT-10
Date	12/10/2011	12/8/2011	12/8/2011	12/8/2011	12/8/2011	12/8/2011
Lab ID	L11120403-07	L11120348-01	L11120348-05	L11120348-02	L11120348-03	L11120348-04
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	0.235 J	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	0.274 J	0.306 J	<0.5	1.63
1,2-Dichloropropane	µg/L	0.386 J	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	3.23 J	<10
Benzene	µg/L	0.148 J	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	0.205 J	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	21	10.6	10.6	11.5	3.08
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	<5	70.9 J	71.1 J	66.3 J	<5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	41.7	166	168	104	32.5
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	127	27.1	27.8	16	3
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW21-03A	IW21-03B	IW21-04A	IW21-04B	IW21-05A	IW21-05B
Sample ID	IW21-03A-EBT-10	IW21-03B-EBT-10	IW21-04A-EBT-10	IW21-04B-EBT-10	IW21-05A-EBT-10	IW21-05B-EBT-10
Date	12/9/2011	12/9/2011	12/9/2011	12/9/2011	12/10/2011	12/10/2011
Lab ID	L11120348-20	L11120348-21	L11120348-22	L11120348-25	L11120403-01	L11120403-02
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2 UJ	<2 UJ
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	0.26 J	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	<1	<1	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	7.09	51.2	48.8 J	101	20.3
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m-,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	33.7 J	43.8 J	95.1	123 J	42.5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	213	197	135	40.9	132
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	0.554 J	0.837 J	<1	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	45.9	68.5	33.3 J	19	35.5
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	PMW21-01	PMW21-02	PMW21-04	IW92-01	IW92-02	IW92-03
Sample ID	PMW21-01-EBT-10	PMW21-02-EBT-10	PMW21-04-EBT-10	IW92-01-EBT-10	IW92-02-EBT-10	IW92-03-EBT-10
Date	12/6/2011	12/6/2011	12/6/2011	12/12/2011	12/12/2011	12/12/2011
Lab ID	L11120274-08	L11120274-09	L11120274-10	L11120403-17	L11120403-18	L11120403-19
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	<10	<10	<10	5.88 J
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	25.8	27.9	0.308 J
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	0.137 J	<0.3	0.144 J	7.46	9.53
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	15.6	4.2	55.5	10.4	45.7
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10 UJ	<10 UJ	<10 UJ	<10	4.2 J
Methyl t-butyl ether (MTBE)	µg/L	49.4	29.1	56.7	<5	<5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	280	118	211	189	21.2
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	0.251 J	<1	0.313 J	<1	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	50.1	30.1	69.3	6.71	9.78
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	<1	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW92-04	IW92-05	IW92-06	IW92-07	IW92-08	PMW92-01
Sample ID	IW92-04-EBT-10	IW92-05-EBT-10	IW92-06-EBT-10	IW92-07-EBT-10	IW92-08-EBT-10	PMW92-01-EBT-10
Date	12/13/2011	12/13/2011	12/13/2011	12/13/2011	12/14/2011	12/12/2011
Lab ID	L11120490-01	L11120490-02	L11120490-03	L11120490-04	L11120490-12	L11120403-23
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	22 J	<1
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	0.185 J	<1
1,2-Dichloroethane	µg/L	<0.5	0.269 J	0.75	0.402 J	<0.5
1,2-Dichloropropane	µg/L	<1	<1	0.439 J	0.369 J	<1
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	5.75	<0.4
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	2.65 J	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	4.89 J	79 J	72.3	5.16 J	<10
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	1.05	<1
Carbon tetrachloride	µg/L	<1	<1	<1	0.34 J	<1
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	0.426	0.664	0.374	<0.3
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	193	77.5	201	127	87.8
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	4.92 J	4.79 J	47.5	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	<5	<5	<5	<5	<5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	<1	0.946 J	0.335 J	3.17	8.86
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	0.254 J	0.734 J	2.01	0.726 J	<1
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	<1	0.363 J	<1	0.51 J	1.39
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	0.365 J	0.462 J	0.493 J	0.302 J

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	PMW92-02	PMW92-04	PMW92-05	IW85-01	IW85-01	IW85-02
Sample ID	PMW92-02-EBT-10	PMW92-04-EBT-10	PMW92-05-EBT-10	IW85-01-EBT-10	IW85-01 DUP7	IW85-02-EBT-10
Date	12/12/2011	12/12/2011	12/12/2011	12/12/2011	12/14/2011	12/14/2011
Lab ID	L11120403-24	L11120403-25	L11120403-27	L11120490-08	L11120490-13	L11120490-09
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	<1	<1	<1	9.62 J	18.2
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	<1	<1	<1	0.171 J
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	<1	0.22 J	<1	1.62	1.81
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	<0.4	<0.4	<0.4	2	2.41
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	<10	23.7	<10	12.9	11.7 J
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	<1	<1	19.6	4.47	5.89
Chlorobenzene	µg/L	<0.5	<0.5	<0.5	0.145 J	0.161 J
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	<0.3	0.334	9.89	5.32	6.04
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	184	122	26.5	125	133
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	6.71 J	5.76 J
Methyl t-butyl ether (MTBE)	µg/L	<5	<5	<5	<5	<5
Methylene chloride	µg/L	<1	<1	0.254 J	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	<1	9.58	90.6	2.25	2.78
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	<1	<1	<1	0.58 J	0.473 J
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	<1	14.5	8.9	0.788 J	1.02
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	0.337 J	<1	<1	<1	0.306 J

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated

Table A-1
ANALYTICAL RESULTS
DECEMBER 2011 EBT BASELINE SAMPLE REPORT
Main Installation - Defense Depot Memphis, Tennessee

Location	IW85-05	IW85-06	PMW85-01	PMW85-01	PMW85-04	PMW85-05
Sample ID	IW85-05-EBT-10	IW85-06-EBT-10	PMW85-01-EBT-10	PMW85-01 DUP8	PMW85-04-EBT-10	PMW85-05-EBT-10
Date	12/14/2011	12/14/2011	12/12/2011	12/12/2011	12/13/2011	12/13/2011
Lab ID	L11120490-10	L11120490-11	L11120403-22	L11120403-26	L11120490-05	L11120490-06
Analyte	Units					
1,1,1,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethane	µg/L	<1	<1	<1	<1	<1
1,1-Dichloroethene	µg/L	<1	<1	<1	<1	<1
1,1-Dichloropropene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	µg/L	14.3	24.6	11.4	10.5	53.9
1,2,4-Trichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	µg/L	<2	<2	<2	<2	<2
1,2-Dibromoethane	µg/L	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L	<1	0.173 J	<1	<1	0.214 J
1,2-Dichloroethane	µg/L	<0.5	<0.5	<0.5	<0.5	0.48 J
1,2-Dichloropropane	µg/L	0.476 J	6.59	0.356 J	0.349 J	0.926 J
1,3,5-Trimethylbenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L	<1	<1	<1	<1	<1
1,3-Dichloropropane	µg/L	0.21 J	6.17	<0.4	<0.4	0.505
1,4-Dichlorobenzene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorohexane	µg/L	<1	<1	<1	<1	<1
2,2-Dichloropropane	µg/L	<1	<1	<1	<1	<1
2-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
2-Hexanone	µg/L	<10	<10	<10	<10	<10
4-Chlorotoluene	µg/L	<1	<1	<1	<1	<1
Acetone	µg/L	6.07 J	5.32 J	<10	<10	2.5 J
Benzene	µg/L	<0.4	<0.4	<0.4	<0.4	0.166 J
Bromobenzene	µg/L	<1	<1	<1	<1	<1
Bromochloromethane	µg/L	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	<1	<1	<1	<1	<1
Bromomethane	µg/L	<1	<1	<1	<1	<1
Carbon disulfide	µg/L	<1	<1	<1	<1	<1
Carbon tetrachloride	µg/L	50.6	0.546 J	102	103	77.6
Chlorobenzene	µg/L	<0.5	0.344 J	0.191 J	0.203 J	0.524
Chloroethane	µg/L	<1	<1	<1	<1	<1
Chloroform	µg/L	21.2	0.24 J	42.5	43.3	0.218 J
Chloromethane	µg/L	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	µg/L	67.6	99.3	37.3	38.4	83.8
cis-1,3-Dichloropropene	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
Hexachlorobutadiene	µg/L	<0.6	<0.6	<0.6	<0.6	<0.6
Isopropylbenzene	µg/L	<1	<1	<1	<1	<1
m,p-Xylene	µg/L	<2	<2	<2	<2	<2
MEK (2-Butanone)	µg/L	<10	<10	<10	<10	<10
Methyl t-butyl ether (MTBE)	µg/L	<5	<5	<5	<5	<5
Methylene chloride	µg/L	<1	<1	<1	<1	<1
MIBK (methyl isobutyl ketone)	µg/L	<10	<10	<10	<10	<10
Naphthalene	µg/L	<1	<1	<1	<1	<1
n-Butylbenzene	µg/L	<1	<1	<1	<1	<1
n-Propylbenzene	µg/L	<1	<1	<1	<1	<1
o-Xylene	µg/L	<1	<1	<1	<1	<1
p-Isopropyltoluene	µg/L	<1	<1	<1	<1	<1
sec-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Styrene	µg/L	<1	<1	<1	<1	<1
tert-Butylbenzene	µg/L	<1	<1	<1	<1	<1
Tetrachloroethene	µg/L	32.8	1.45	57.2	58.8	35.5
Toluene	µg/L	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	µg/L	0.633 J	0.802 J	<1	<1	0.464 J
trans-1,3-Dichloropropene	µg/L	<1	<1	<1	<1	<1
Trichloroethene	µg/L	13.1	1.31	20.2	20	15.2
Trichlorofluoromethane	µg/L	<1	<1	<1	<1	<1
Vinyl chloride	µg/L	<1	0.606 J	<1	<1	<1

Notes:

<: Not detected above Reporting Limit (RL)

µg/L : micrograms per liter

DQE Flags:

J: Estimated

UJ: Not detected, reporting limit estimated