



August 17, 2012

Byung Maeng  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue WA 98008-5452

**RE: MAY 2012 SEMIANNUAL GROUNDWATER MONITORING RESULTS  
BOEING DEVELOPMENTAL CENTER, TUKWILA, WASHINGTON**

Dear Byung:

This letter transmits the semiannual groundwater monitoring report indicated above on behalf of The Boeing Company for the period following the November 2011 semiannual sampling event (and corresponding report) through the semiannual event in May 2012. This letter also provides a brief summary of the data and of remedial activities performed at the site during the reporting period. Remedial actions are underway in Solid Waste Management Unit (SWMU)-20, SWMU-17, and Area of Concern (AOC)-05. All other SWMUs and AOCs identified in the 1994 RFA have been excluded from further investigation based on determinations that they do not pose a threat to human health or the environment.

Groundwater monitoring at the Boeing Developmental Center is documented in the attached report and consists of quarterly monitoring performed in February/May 2012 at SWMU-17 and AOC-05, and semiannual monitoring performed in May 2012 at SWMU-20. Analytical data for SWMU-20, SWMU-17, and AOC-05 are enclosed for your review and include sample results summary tables and laboratory data packages. Summary figures, historical analytical summary data, and volatile organic compounds (VOCs) concentration trend charts are provided for key constituents present in SWMU-20. Included for AOC-05 are cumulative tables for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and xylenes (BTEX); and conventional parameters; as well as trend plots for TPH-Gasoline (TPH-G) and BTEX, and nitrate. Tables of current data and cumulative data are provided for SWMU-17. In response to the Washington State Department of Ecology's (Ecology) request, well location figures are provided for AOC-05 and SWMU-17; these figures will be included with future reports.

At SWMU-20, *in situ* anaerobic bioremediation continues for treatment of tetrachloroethene (PCE), trichloroethene (TCE), and breakdown products following the last electron donor injection performed in August 2008. Groundwater monitoring results indicate that treatment continues to be enhanced at and near injection wells, as indicated by the persistence of sulfate-reducing to methanogenic

aquifer redox conditions, total organic carbon (TOC) levels generally above 10 milligrams per liter (mg/L), and the detection of end product ethane at several wells (see SWMU-20 Cleanup Action Summary table). At all source-zone wells, PCE and TCE remain below detection levels and breakdown products cis-1,2-dichloroethene (cDCE) and vinyl chloride (VC) are either below detection levels or at very low concentrations. All cDCE and VC detections at source zone wells are 2 microgram per liter ( $\mu\text{g}/\text{L}$ ) or less, with the exception of well MW-06B where VC was detected at 6.0  $\mu\text{g}/\text{L}$ . Following the successful source zone bioremediation that resulted from donor injection to source-zone wells, the highest PCE and TCE concentrations now present are at wells located crossgradient (north) (MW-13A and MW-17A) or upgradient (east) (MW-16A) of the treated source zone (see SWMU-20 Non-Source Zone Wells Summary table). Concentrations have been relatively low at these wells (PCE/TCE less than 4  $\mu\text{g}/\text{L}$ ) and generally decreasing (MW-13A and MW-17A) or stable (MW-16A). TCE at MW-13A was less than 1  $\mu\text{g}/\text{L}$  for two consecutive events in November 2011 and May 2012, the lowest results since sampling began in 2004. Semiannual monitoring will continue in SWMU-20 to evaluate potential source zone rebound and trends at crossgradient wells. Additional injections within SWMU-20 are not anticipated at this time.

At AOC-05, *in situ* anaerobic bioremediation continues for treatment of TPH-G and BTEX. The most recent injection of nitrate electron acceptor solution took place (at well BDC-103 only) in February 2012. At downgradient wells BDC-101 and BDC-102, and at previously impacted well BDC-104, TPH G and BTEX remain below detection limits. At BDC-103, the February injection resulted in decreased TPH-G and BTEX concentrations. This follows a substantial rebound in the concentrations of these contaminants observed in November 2011 (prior reporting period) that coincided with a decrease in nitrate to below reporting limits. Nitrate concentrations were below the 10 mg/L action level at downgradient wells BDC-101 and BDC-102 in November 2011 and February 2012, then increased above the action level in May following the most recent injection. Nitrate remained below the action level at the group of farther downgradient wells (MW-17A, MW-18A [ND]), and MW-21A), with the exception of BDC-05-4, which was inadvertently not sampled for nitrate. Additional nitrate injections will continue, as needed, to treat remaining sorbed- and non-aqueous phase liquid-phase (NAPL) contamination that can lead to rebound in aqueous-phase concentrations. Groundwater sampling at AOC-05 wells will continue on a quarterly basis to evaluate contaminant treatment and nitrate consumption. Semiannual monitoring for nitrate at farther downgradient wells will also continue until nitrate remains below 10 mg/L for two consecutive semiannual events at downgradient wells BDC-101 and BDC-102.

At SWMU-17, groundwater monitoring results from February and May 2012 show that *in situ* anaerobic bioremediation has been enhanced following the August 2011 electron donor injection. PCE and TCE concentrations at all injection wells (well type indicated in data table) have decreased since

November 2011, and are below detection levels at many wells. At well BDC-05-10, which had the highest concentration of PCE and the second highest concentration of TCE of all SWMU-17 wells during July 2011 baseline sampling, PCE and TCE were below reporting limits in May 2012, representing reductions of greater than 97 and 96 percent from baseline, respectively. PCE and/or TCE concentrations have also been reduced from baseline at downgradient wells BDC-05-19 and BDC-05-20. Enhanced desorption of contaminant mass is evidenced by elevated concentrations of breakdown product cDCE at various wells (max 250 µg/L at BDC-05-09). Complete reductive dechlorination is evidenced by detection of end product ethene at several wells. Enhanced aquifer redox conditions are generally indicated at SWMU-17 wells by decreased sulfate and increased methane concentrations compared to baseline. TOC remains elevated at all injection wells (34 to 839 mg/L) and at some downgradient and crossgradient monitoring wells. Quarterly and semiannual monitoring will continue for evaluation of treatment progress. Additional injections within SWMU-17 are not necessary at this time.

As requested by Ecology, Boeing and Landau Associates are beginning work on proposed cleanup levels for the site. We plan to start with screening levels presented in the 2002 Summary Report and update this with proposed cleanup levels. We anticipate submittal of a technical memorandum and further discussions with Ecology later this year.

Please call or email me if you have any questions or if you would like to discuss any of the sampling results in more detail.

LANDAU ASSOCIATES, INC.



Clinton L. Jacob, P.E., L.G.  
Principal Engineer

CLJ/tam

Enclosures: Developmental Center Groundwater Monitoring – May 2012

SWMU-20 Data Tables, Maps, and Trend Charts  
SWMU-17 Data Tables and Map  
AOC-05 Data Table, Trend Charts, and Map  
Groundwater Elevation Information  
Groundwater Sample Collection Forms and Analytical Data (CD)

cc: James Bet, Boeing EHS Remediation (elec. w/o data)  
Susanne McIlveen, Boeing Defense, Space & Security, EHS Manager (elec. w/o data)

***DEVELOPMENTAL CENTER***  
***GROUNDWATER MONITORING***  
***MAY 2012***

***DEVELOPMENTAL CENTER  
GROUNDWATER MONITORING  
MAY 2012***

**SWMU-20 VOA/CONVENTIONALS DATA TABLES**

**SWMU-20 SUMMARY DATA**

- **SWMU-20 VOC SUMMARY MAPS**
- **SWMU-20 ANALYTICAL RESULTS SUMMARY  
(January 1994 through Present)**
- **SWMU-20 VOC CONCENTRATION TREND CHARTS  
(January 1994 through Present)**
- **SWMU-20 CLEANUP ACTION SUMMARY – SOURCE  
ZONE**
- **SWMU-20 CLEANUP ACTION SUMMARY – NON-  
SOURCE ZONE**

**SWMU-20 VOA/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
MAY 2012**

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Sample Name:	DC-MW-6A	DC-MW-6B	DC-MW-9A	DC-MW-10A	DC-MW-10C	DC-MW-11A	DC-MW-12A
Lab SDG:	1309315	1309315	1309315	1309315	1309315	1309315	1309315
Lab Sample ID:	6654126	6654128	6654111	6654109	6654108	6654107	6654106
Sample Date:	05/15/2012	05/15/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012
<b>Test ID: VOA SW8260C (µg/L)</b>							
Acetone	5.0 U						
Acrolein	25 U						
Acrylonitrile	5.0 U						
<b>Benzene</b>	0.2 U						
Bromobenzene	0.5 U						
<b>Bromochloromethane</b>	0.5 U						
Bromodichloromethane	0.5 U						
Bromoform	0.5 U						
Bromomethane	0.5 U						
2-Butanone	5.0 U						
n-Butylbenzene	0.5 U						
sec-Butylbenzene	0.5 U						
tert-Butylbenzene	0.5 U						
Carbon Disulfide	0.5 U						
Carbon Tetrachloride	0.2 U						
Chlorobenzene	0.5 U						
Chloroethane	0.5 U						
Chloroform	0.2 U						
Chloromethane	0.5 U						
2-Chlorotoluene	0.5 U						
4-Chlorotoluene	0.5 U						
1,2-Dibromo-3-chloropropane	0.5 U						
Dibromochloromethane	0.5 U						
Dibromomethane	0.5 U						
trans-1,4-Dichloro-2-butene	5.0 U						
1,2-Dichlorobenzene	0.5 U						
1,3-Dichlorobenzene	0.5 U						
1,4-Dichlorobenzene	0.5 U						
1,1-Dichloroethane	0.5 U						
1,2-Dichloroethane	0.2 U						
<b>1,1-Dichloroethene</b>	0.2 U						
<b>cis-1,2-Dichloroethene</b>	0.4 U	0.5 U	0.2 U	0.2 U	5.4 U	24 U	0.2 U
<b>trans-1,2-Dichloroethene</b>	0.2 U	0.2 U	0.8 U	0.3 U	0.3 U	0.9 U	0.2 U
1,2-Dichloropropane	0.5 U						
1,3-Dichloropropane	0.5 U						
<b>2,2-Dichloropropane</b>	0.5 U						
1,1-Dichloropropene	0.5 U						
cis-1,3-Dichloropropene	0.2 U						
trans-1,3-Dichloropropene	0.2 U						
Ethylbenzene	0.5 U						
Ethylene Dibromide	0.5 U						
Hexachlorobutadiene	0.5 U						
2-Hexanone	5.0 U						
Isopropylbenzene	0.5 U						
4-Isopropyltoluene	0.5 U						
Methyl Iodide	0.5 U						
4-Methyl-2-Pentanone (MIBK)	5.0 U						
Methylene Chloride	0.5 U						
<b>Naphthalene</b>	0.5 U	0.5 U	9.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene	0.5 U						
Styrene	0.5 U						
1,1,2-Tetrachloroethane	0.5 U						
1,1,2,2-Tetrachloroethane	0.2 U						
<b>Tetrachloroethene</b>	0.2 U						
Toluene	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U						
1,2,3-Trichlorobenzene	0.5 U						
1,2,4-Trichlorobenzene	0.5 U						
1,1,1-Trichloroethane	0.5 U						
1,1,2-Trichloroethane	0.2 U						
<b>Trichloroethene</b>	0.2 U	0.7 U	0.2 U				
Trichlorofluoromethane	0.5 U						
1,2,3-Trichloropropane	1.0 U						
<b>1,2,4-Trimethylbenzene</b>	0.5 U						
1,3,5-Trimethylbenzene	0.5 U						
Vinyl Acetate	0.5 U						
<b>Vinyl Chloride</b>	1.2 U	6.0 U	0.2 U	0.4 U	4.0 U	0.4 U	0.2 U
m,p-Xylene	0.5 U						
o-Xylene	0.5 U						

**SWMU-20 VOA/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
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Sample Name:	DC-MW-6A	DC-MW-6B	DC-MW-9A	DC-MW-10A	DC-MW-10C	DC-MW-11A	DC-MW-12A
Lab SDG:	1309315	1309315	1309315	1309315	1309315	1309315	1309315
Lab Sample ID:	6654126	6654128	6654111	6654109	6654108	6654107	6654106
Sample Date:	05/15/2012	05/15/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012
<b>NATURAL ATTENUATION PARAMETERS</b>							
<b>Method Modified RSK175 (µg/L)</b>							
Methane	13000	2200	22000	20,000			
Ethane	1.0 U	1.3 J	13	1.0 U			
Ethene	1.0 U	1.0 U	1.0 U	1.0 U			
<b>Conventional Parameters</b>							
Sulfate (mg/L) (EPA 300.0)	4.3	10.9	0.40 J	0.32 J			
Total Organic Carbon (mg/L) (SM20 5310C)	11.6	11.4	30.5	38.0			

**SWMU-20 VOA/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
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Sample Name:	DC-MW-13A	DC-MW-13C	DC-MW-14A	DC-MW-14C	DC-MW-15A	DC-MW-15C	DC-MW-16A
Lab SDG:	1309315	1309315	1309315	1309315	1309315	1309315	1309315
Lab Sample ID:	6654113	6654114	6654122	6654121	6654120	6654119	6654115
Sample Date:	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012
<b>Test ID: VOA SW8260C (µg/L)</b>							
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U
Acrolein	25 U	25 U	25 U	25 U	130 U	25 U	25 U
Acrylonitrile	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U
<b>Benzene</b>	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
Bromobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
<b>Bromochloromethane</b>	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U
n-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
sec-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Carbon Disulfide	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Chloroform	0.8	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
2-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
4-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Dibromomethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
<b>1,1-Dichloroethene</b>	0.2 U	0.2 U	0.3	0.2 U	1.0 U	0.2 U	0.5
<b>trans-1,2-Dichloroethene</b>	0.2 U	0.3	0.2 U	0.2 U	1.0 U	0.4	0.2 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
<b>2,2-Dichloropropane</b>	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Ethylene Dibromide	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
4-Isopropyltoluene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Methyl Iodide	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
<b>Naphthalene</b>	0.5 U	0.5 U	0.5 U	0.5 U	170	0.5 U	0.5 U
n-Propylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
<b>Tetrachloroethene</b>	2.3	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	1.6
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U
<b>Trichloroethene</b>	0.8	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	1.7
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
<b>1,2,4-Trimethylbenzene</b>	0.5 U	0.8	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
Vinyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
<b>Vinyl Chloride</b>	0.2 U	0.3	0.2	0.2 U	1.2	0.2 U	0.2 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U

**SWMU-20 VOA/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
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Sample Name:	DC-MW-13A	DC-MW-13C	DC-MW-14A	DC-MW-14C	DC-MW-15A	DC-MW-15C	DC-MW-16A	
Lab SDG:	1309315	1309315	1309315	1309315	1309315	1309315	1309315	
Lab Sample ID:	6654113	6654114	6654122	6654121	6654120	6654119	6654115	
Sample Date:	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	05/14/2012	
<b>NATURAL ATTENUATION PARAMETERS</b>								
<b>Method Modified RSK175 (µg/L)</b>								
Methane			16000					
Ethane			8.7					
Ethene			1.0	U				
<b>Conventional Parameters</b>								
Sulfate (mg/L) (EPA 300.0)			3.4					
Total Organic Carbon (mg/L) (SM20 5310C)			5.9					

**SWMU-20 VOA/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
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Sample Name:	DC-MW-16C	DC-MW17A	DC-MW-20C	DC-MW-22A	TRIP BLANK
Lab SDG:	1309315	1309315	1309315	1309315	1309315
Lab Sample ID:	6654116	6654117	6654118	6654124	6654130
Sample Date:	05/14/2012	05/14/2012	05/14/2012	05/14/2012	04/25/2012
<b>Test ID: VOA SW8260C (µg/L)</b>					
Acetone	5.0 U				
Acrolein	25 U				
Acrylonitrile	5.0 U				
<b>Benzene</b>	0.2 U	0.2 U	0.4	0.4	0.2 U
Bromobenzene	0.5 U				
<b>Bromo-chloromethane</b>	0.5 U				
Bromodichloromethane	0.5 U				
Bromoform	0.5 U				
Bromomethane	0.5 U				
2-Butanone	5.0 U				
n-Butylbenzene	0.5 U				
sec-Butylbenzene	0.5 U				
tert-Butylbenzene	0.5 U				
Carbon Disulfide	0.5 U				
Carbon Tetrachloride	0.2 U				
Chlorobenzene	0.5 U				
Chloroethane	0.5 U				
Chloroform	0.2 U	0.9	0.2 U	0.2 U	0.2 U
Chloromethane	0.5 U				
2-Chlorotoluene	0.5 U				
4-Chlorotoluene	0.5 U				
1,2-Dibromo-3-chloropropane	0.5 U				
Dibromochloromethane	0.5 U				
Dibromomethane	0.5 U				
trans-1,4-Dichloro-2-butene	5.0 U				
1,2-Dichlorobenzene	0.5 U				
1,3-Dichlorobenzene	0.5 U				
1,4-Dichlorobenzene	0.5 U				
1,1-Dichloroethane	0.5 U				
1,2-Dichloroethane	0.2 U				
<b>1,1-Dichloroethene</b>	0.2	0.2 U	0.2 U	0.2 U	0.2 U
<b>cis-1,2-Dichloroethene</b>	4.8	0.5	1.2	0.6	0.2 U
<b>trans-1,2-Dichloroethene</b>	0.2	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.5 U				
1,3-Dichloropropane	0.5 U				
<b>2,2-Dichloropropane</b>	0.5 U				
1,1-Dichloropropene	0.5 U				
cis-1,3-Dichloropropene	0.2 U				
trans-1,3-Dichloropropene	0.2 U				
Ethylbenzene	0.5 U	0.5 U	0.5 U	2.5	0.5 U
Ethylene Dibromide	0.5 U				
Hexachlorobutadiene	0.5 U				
2-Hexanone	5.0 U				
Isopropylbenzene	0.5 U				
4-Isopropyltoluene	0.5 U				
Methyl Iodide	0.5 U				
4-Methyl-2-Pentanone (MIBK)	5.0 U				
Methylene Chloride	0.5 U				
<b>Naphthalene</b>	0.5 U	0.5 U	0.5 U	15	0.5 U
n-Propylbenzene	0.5 U				
Styrene	0.5 U				
1,1,1,2-Tetrachloroethane	0.5 U				
1,1,2,2-Tetrachloroethane	0.2 U				
<b>Tetrachloroethene</b>	0.2 U	3.1	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	1.3	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U				
1,2,3-Trichlorobenzene	0.5 U				
1,2,4-Trichlorobenzene	0.5 U				
1,1,1-Trichloroethane	0.5 U				
1,1,2-Trichloroethane	0.2 U				
<b>Trichloroethene</b>	0.2 U	2.0	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.5 U				
1,2,3-Trichloropropane	1.0 U				
<b>1,2,4-Trimethylbenzene</b>	0.5 U	0.5 U	0.5 U	8.1	0.5 U
1,3,5-Trimethylbenzene	0.5 U				
Vinyl Acetate	0.5 U				
<b>Vinyl Chloride</b>	4.2	0.2 U	1.5	2.0	0.2 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	1.4	0.5 U
<b>o-Xylene</b>	0.5 U	0.5 U	0.5 U	4.0	0.5 U

**SWMU-20 VOA/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
MAY 2012**

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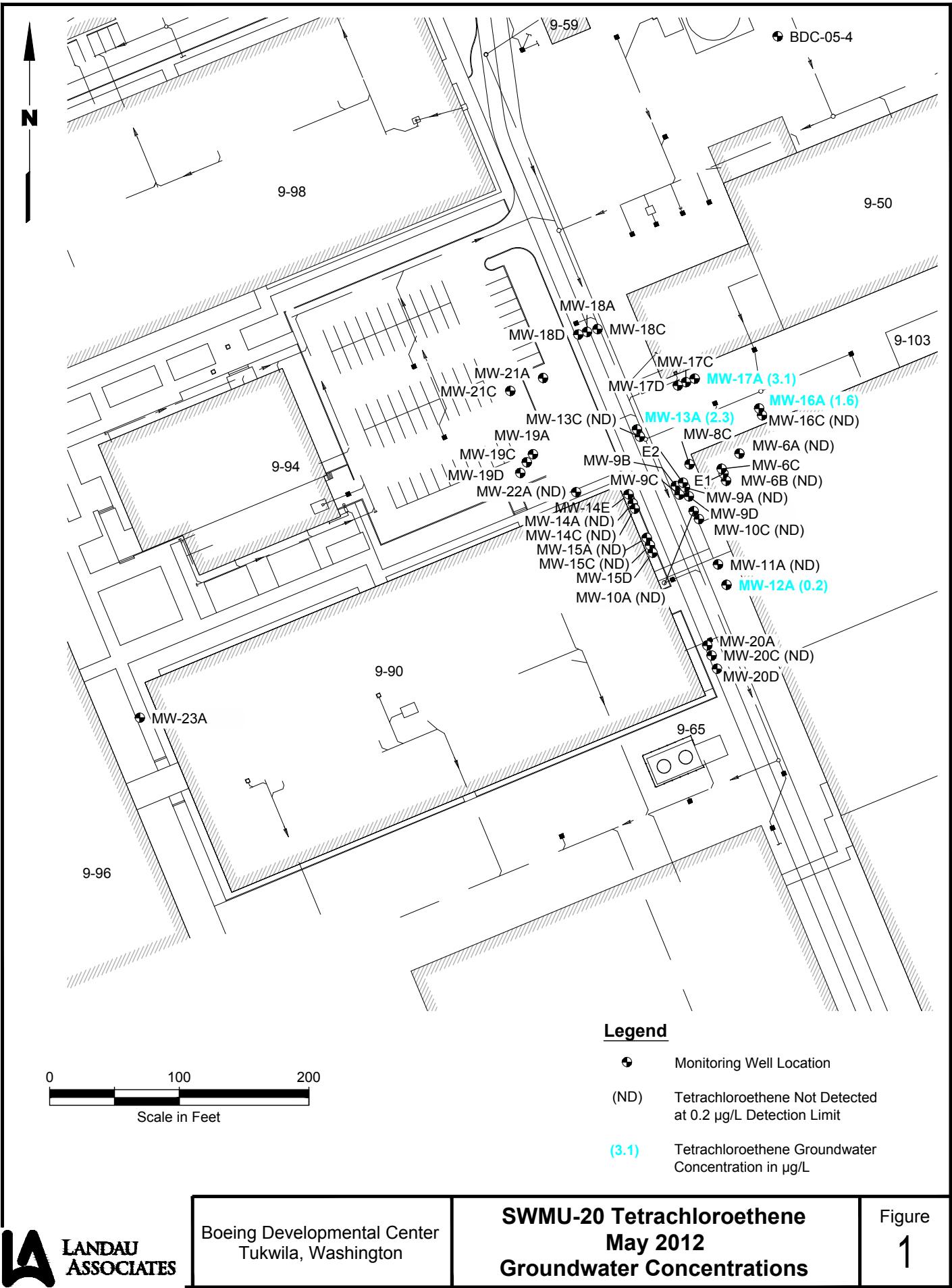
Sample Name:	DC-MW-16C	DC-MW17A	DC-MW-20C	DC-MW-22A	TRIP BLANK	
Lab SDG:	1309315	1309315	1309315	1309315	1309315	
Lab Sample ID:	6654116	6654117	6654118	6654124	6654130	
Sample Date:	05/14/2012	05/14/2012	05/14/2012	05/14/2012	04/25/2012	
<b>NATURAL ATTENUATION PARAMETERS</b>						
<b>Method Modified RSK175 (µg/L)</b>						
Methane				5100		
Ethane				3.3 J		
Ethene				1.0 U		
<b>Conventional Parameters</b>						
Sulfate (mg/L) (EPA 300.0)				0.30 U		
Total Organic Carbon (mg/L) (SM20 5310C)				25.4		

U = Indicates compound was analyzed for, but was not detected at the given detection limit.

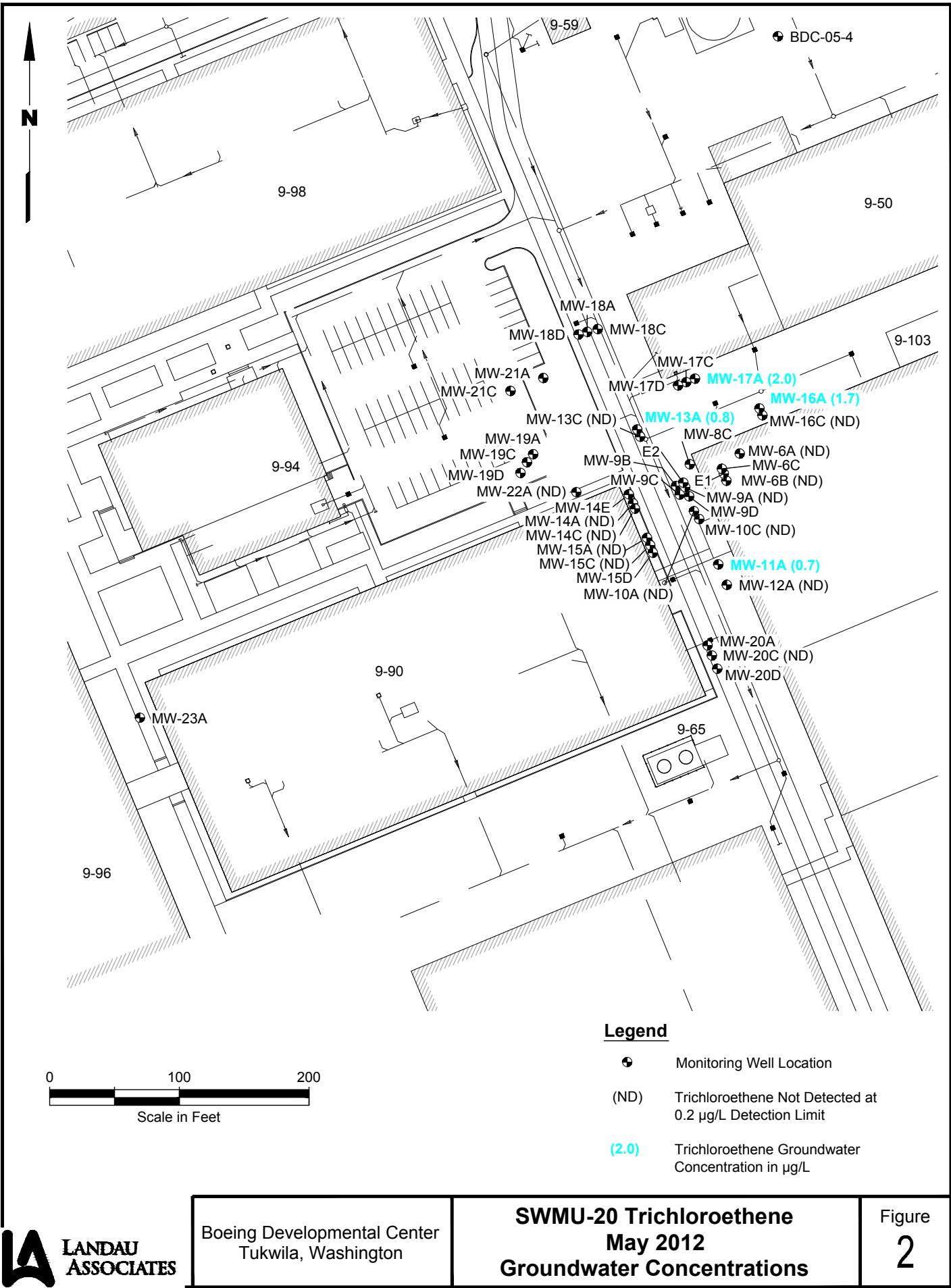
J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

µg/L = micrograms per liter

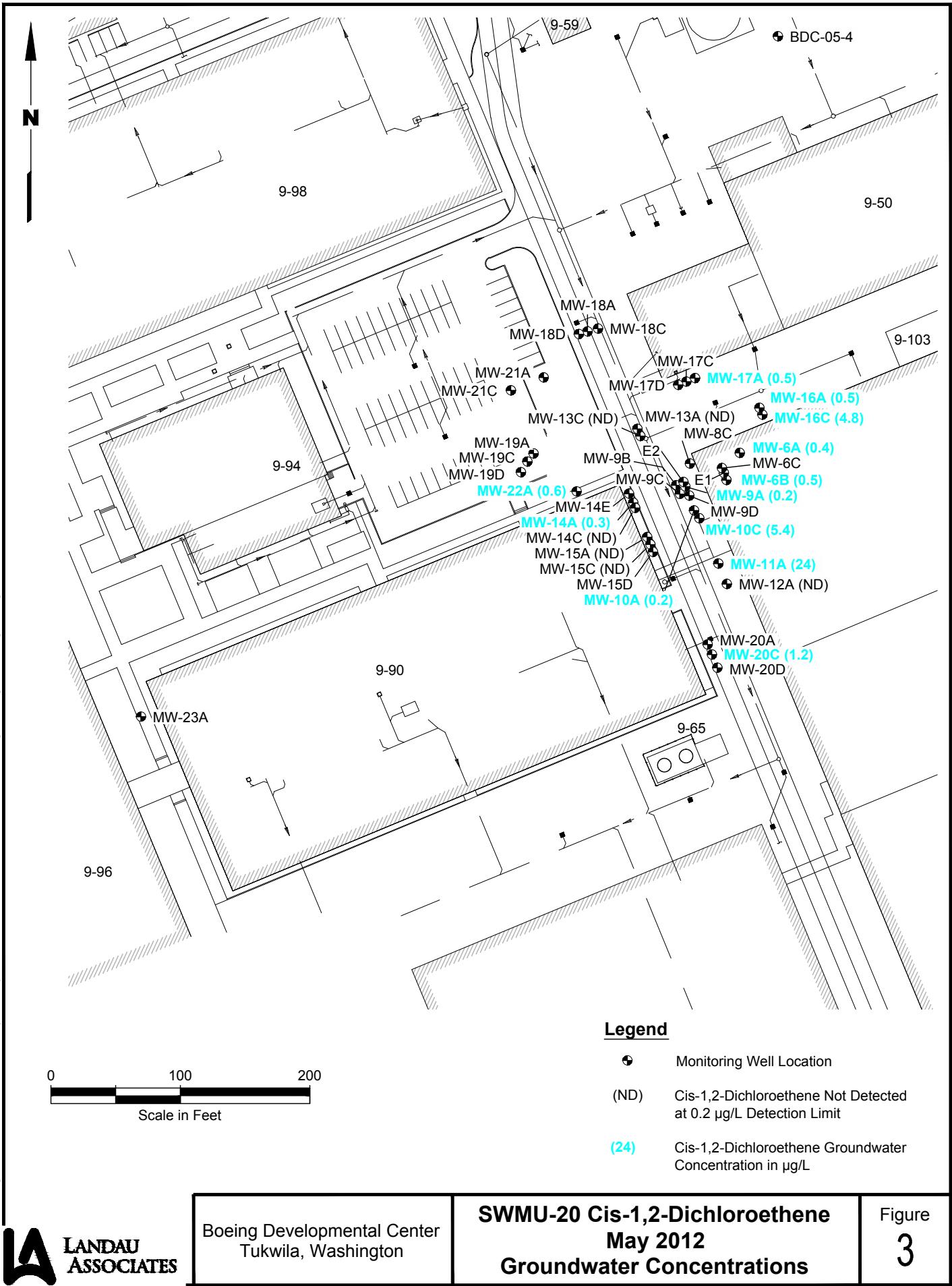
mg/L = milligrams per liter

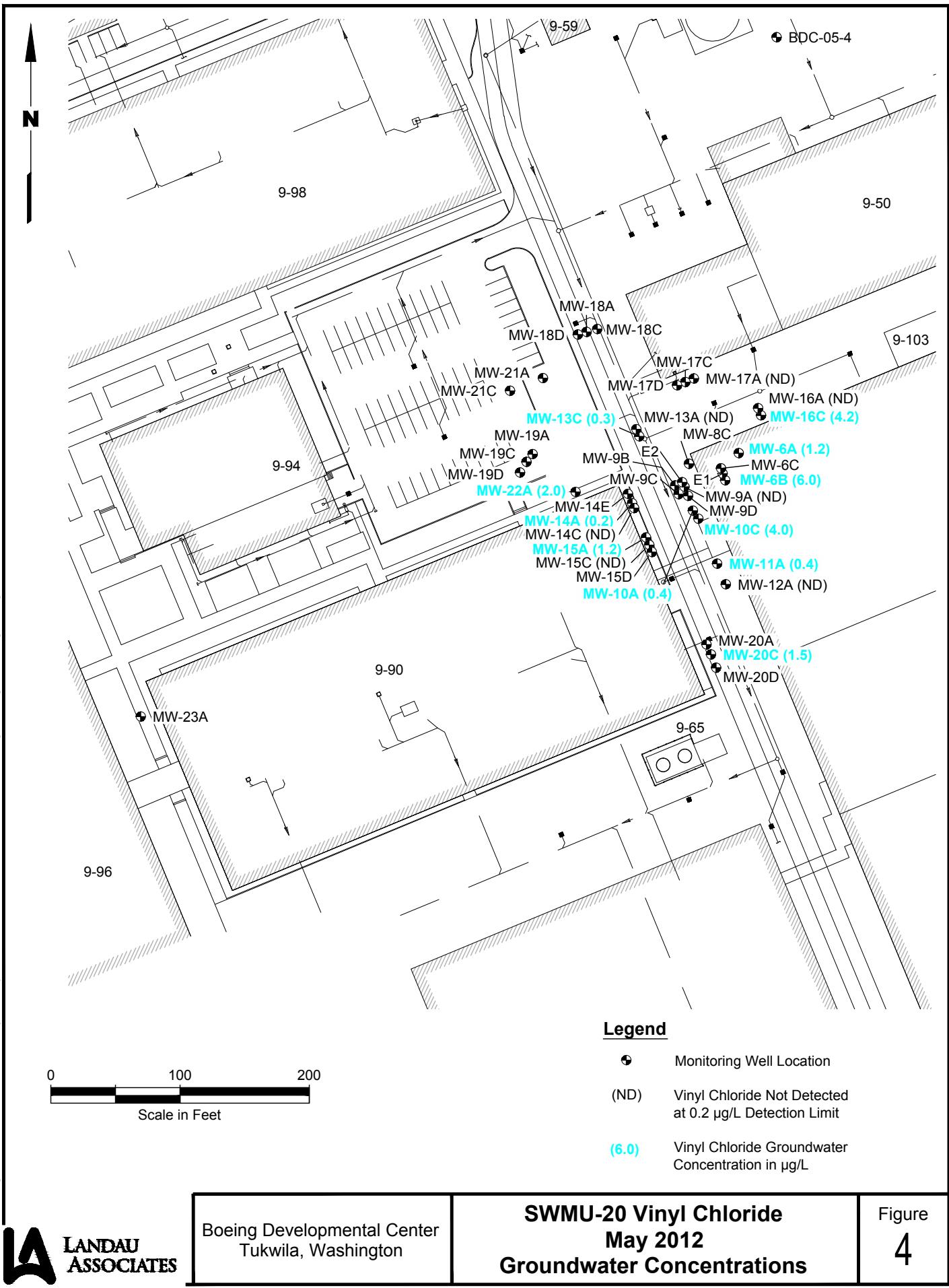


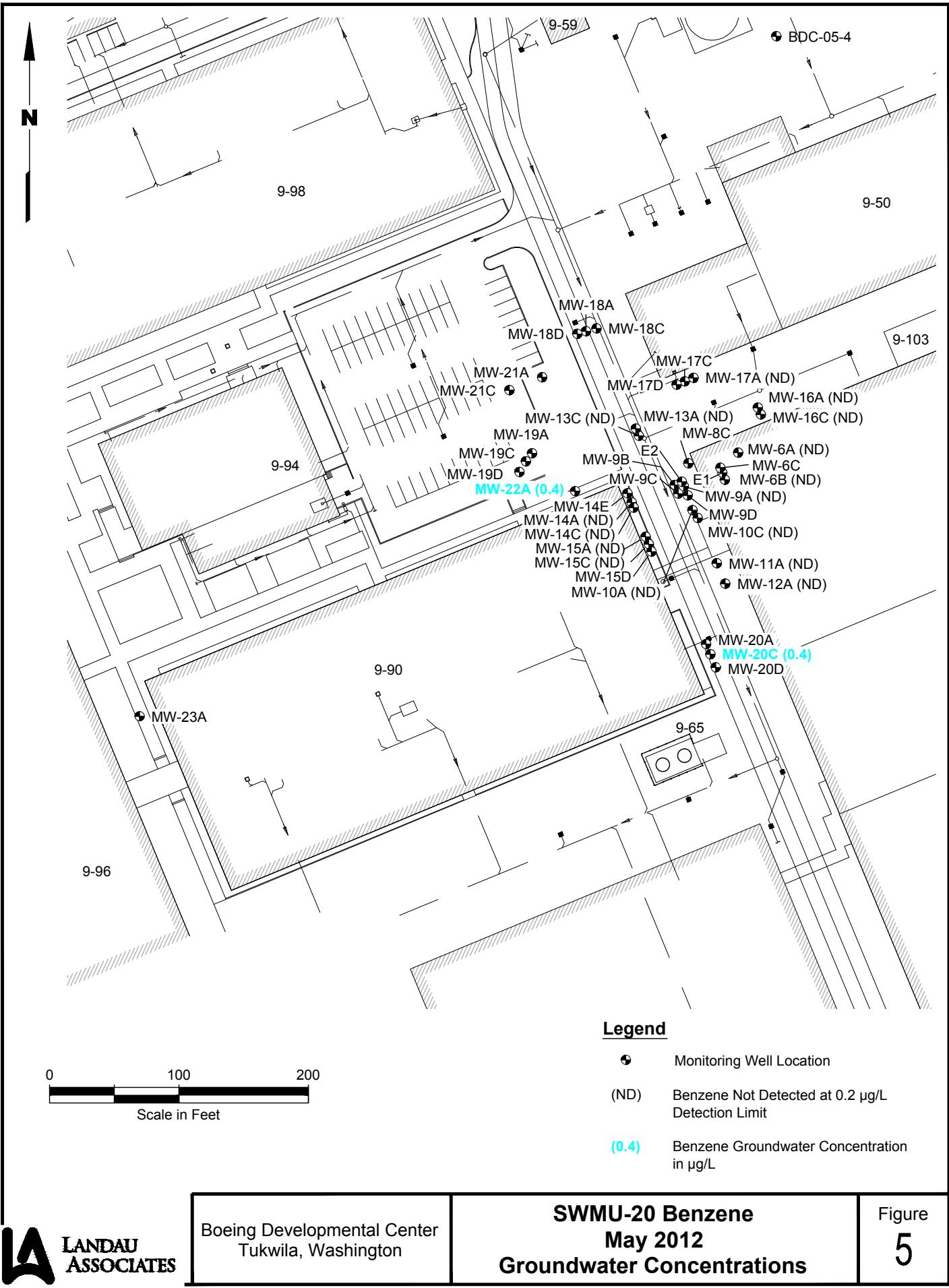
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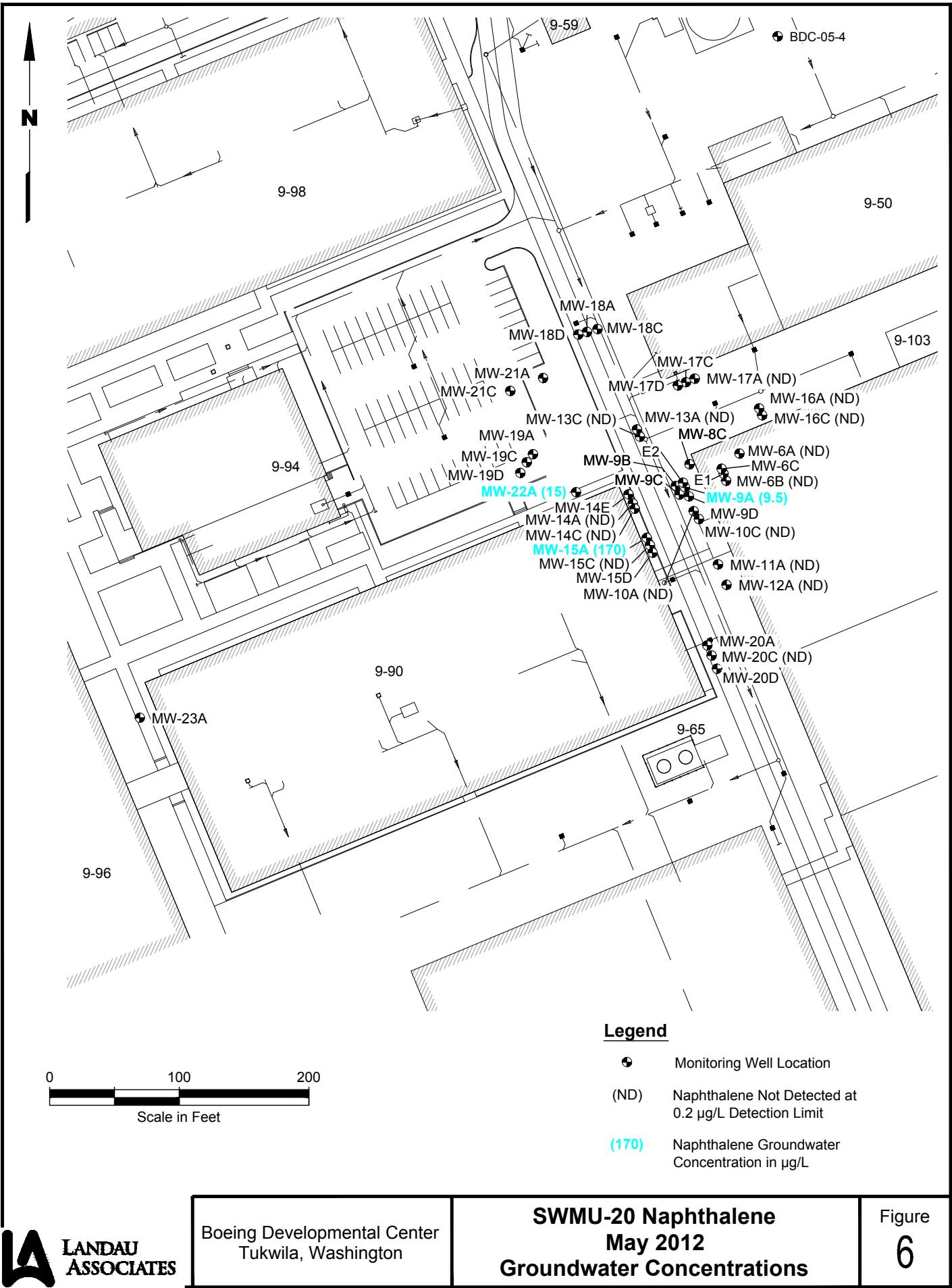


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Boeing Developmental Center  
Tukwila, Washington

**SWMU-20 Naphthalene  
May 2012  
Groundwater Concentrations**

**Figure  
6**

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**TETRACHLOROETHENE (µg/L)**

	Jan-94	May-95	Oct-95	Feb-96	May-96	Aug-96	Nov-96	Feb-97	May-97	Aug-97	Nov-97	Jun-98	Oct-98	Jun-99	Jun-00	Dec-00	Jun-01	Dec-01	Jun-02	Dec-02	Jun-03	Nov-03	May-04	Aug-04	Oct-04	Feb-05	Mar-05	May-05	Aug-05	Nov-05	Feb-06	
06A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.0	<1.0	<1.0	nt	nt	<1.0	<1.0	<1.0	<1.0	
06B	<b>27</b>	<b>5.87</b>	<b>14.4</b>	<b>9.62 J</b>	<b>26.18</b>	<b>13.7</b>	<b>14.3</b>	<b>21.5</b>	<b>21.3</b>	<b>17</b>	<b>16.9</b>	<b>18.9</b>	<b>16.3</b>	<b>22.6</b>	<b>2.3</b>	<b>6</b>	<b>10.19</b>	<b>2.6</b>	<b>2.4</b>	<b>10</b>	<b>7.9</b>	<b>3.9</b>	<b>9.5</b>	<b>1.9</b>	<1.0	nt	<2.0	<1.0	<1.0	<1.0		
06C	<b>22</b>	<1.00	<10.00	<10.00	<1.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		
08C	<b>16</b>	<1.00	<5.00	<5.00	<3.33	<10.00	<b>13.5</b>	<5.00	<4.00	<4.00	<4.00	<b>7.8</b>	<5.00	<1.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt	
09A	<b>420</b>	<b>2568.25</b>	<b>1589</b>	<b>1970</b>	<b>785.7</b>	<b>114</b>	<b>272</b>	<b>98</b>	<b>76</b>	<b>96.9</b>	<b>56.6</b>	<b>39.4</b>	<b>94</b>	<b>5.1</b>	<b>38</b>	<b>40</b>	<b>36.6</b>	<b>12.65</b>	<b>16</b>	<b>14</b>	<b>540</b>	<b>1800</b>	<b>1000</b>	<b>150</b>	<3.0	<5.0	<10	nt	<1.0	<1.0	<1.0	<1.0
09B	<b>820</b>	<b>1972.65</b>	<b>668.1</b>	<b>1266</b>	<b>934.6</b>	<b>78.9</b>	<b>75.9</b>	<b>44.3</b>	<b>35</b>	<b>10.9</b>	<b>21.5</b>	<b>31.3</b>	<10.00	<b>6.74</b>	<b>3.6</b>	<2.00	<b>6.62</b>	<b>1.18</b>	<b>2.1</b>	<1.0	<1.0	<b>1.0</b>	<b>250</b>	<3.0	<5.0	<5.0	<10	nt	<1.0	<1.0	<1.0	<1.0
09C	nd	<b>11.32</b>	<5.00	<10.00	<b>1.24</b>	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.00	<1.00	<1.00	<1.00	<1.00	
09D	<b>8.8</b>	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt	<1.00	nt	
10A	<b>180</b>	<b>635.8</b>	<b>754 E</b>	<b>468.85</b>	<b>242.1</b>	<b>114</b>	<b>342</b>	<b>67.5</b>	<b>77.8</b>	<b>76.5</b>	<b>70.3</b>	<b>72.5</b>	<b>86.4</b>	<b>38</b>	<b>21.5</b>	<b>16.6</b>	<b>21.63</b>	<b>30.3</b>	<b>11</b>	<b>24</b>	<b>24</b>	<b>34</b>	<b>58</b>	<b>29</b>	<b>14</b>	<b>15</b>	<b>4.7</b>	nt	<b>4.2</b>	<b>2.7</b>	<b>3.3</b>	<b>3.7</b>
10C	<b>6.9</b>	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt		
11A	<b>5.2</b>	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt			
12A	<b>3.9</b>	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt			
13A	<b>10</b>	<b>4.17</b>	<5.00	<5.00	<b>6.82</b>	<b>3</b>	<b>2.1</b>	<b>3.2</b>	<b>2.1</b>	<b>1.7</b>	<b>1.5</b>	<b>1.6</b>	<b>1.3</b>	<1.00	<1.00	<b>1.2</b>	<1.00	<1.00	<b>1.6</b>	<b>2.7</b>	<b>2.4</b>	<b>3.4</b>	<b>3.0</b>	<b>5.1</b>	nt	nt	<b>6.1</b>	nt	<b>6.0</b>	nt		
13C	<b>5.1</b>	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt			
14A	<b>410</b>	<b>4.42</b>	<5.00	<b>133.57</b>	<b>96.06</b>	<b>11.2</b>	<5.00	<4.00	<2.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.0	<10	<10	<3.0	<1.0	<1.0		
14C	<b>7.2</b>	<b>9.02</b>	<b>10.53</b>	<b>8.64 J</b>	<b>5.44</b>	<b>6.1</b>	<1.00	<10.00	<10.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt			
14E	nd	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	nt	<1.00	nt	<1.00	nt			
15A	<b>11</b>	<1.00	<5.00	<5.00	<2.00	<1.00	<4.00	<2.00	<2.00	<3.33	<10.00	<1.00	<10.00	<10.00	<10.00	<10.00	<10.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00			
15C	<b>13</b>	<1.00	<33.30	<5.00	<1.00	<b>1.1</b>	<1.00	<2.00	<10.00	<10.00	<10.00	<1.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		
15D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
16A	<b>1.6</b>	<b>1.10</b>	<5.00	<5.00	<1.00	<b>1.7</b>	<1.00	<b>1</b>																								

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**TETRACHLOROETHENE (µg/L)**

	May-06	Aug-06	Nov-06	Feb-07	May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	May-12
06A	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
06B	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
06C	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
08C	<10	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt
09A	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<b>1.9</b>	<10	<5.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2
09B	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
09C	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<3.0	nt	nt	nt	nt	nt
09D	<1.0	nt	<1.0	nt	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
10A	<b>1.8</b>	<b>1.6</b>	<0.2	<b>1.2</b>	<b>1.1</b>	<b>1.2</b>	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	
10C	<1.0	nt	<0.2	nt	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	
11A	<1.0	nt	<1.0	nt	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	
12A	<1.0	nt	<0.2	nt	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<b>0.2</b>	
13A	<b>7.1</b>	nt	<b>8.3</b>	nt	<b>8.2</b>	<b>6.4</b>	<b>8.7</b>	<b>6.5</b>	<b>7.7</b>	<b>9.2</b>	<b>9.4</b>	<b>3.6</b>	<b>3.9</b>	<b>1.6</b>	<b>2.3</b>
13C	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
14A	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14E	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
15A	<5.0	nt	<3.0	nt	<1.0	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<10	<0.2	<0.1
15C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
15D	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
16A	<b>1.0</b>	nt	<0.2	nt	<b>1.1</b>	<b>1.7</b>	<b>1.2</b>	<b>1.5</b>	<b>1.6</b>	<b>2.2</b>	<b>1.4</b>	<b>1.3</b>	<b>1.6</b>	<b>1.4</b>	<b>1.6</b>
16C	<1.0	nt	<b>1.2</b>	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
17A	<b>4.2</b>	nt	<b>2.2</b>	nt	<b>4.7</b>	<b>4.2</b>	<b>4.3</b>	<b>4.2</b>	<b>3.2</b>	<b>3.7</b>	<b>4.0</b>	<b>2.3</b>	<b>3.1</b>	<b>2.6</b>	<b>3.1</b>
17C	nt														
17D	nt														
18A	nt														
18C	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
18D	nt														
19A	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19D	nt														
20A	nt														
20C	<1.0	nt	<0.2	nt	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
20D	nt														
21A	nt														
21C	nt														
22A	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2
23A	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt

nd = Not Detected.

nt = Not Tested.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate approximate concentration of the analyte in the sample.

E = Estimated concentration calculated for an analyte response above the valid instruction calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Bold = Detected compound.

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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## TRICHLOROETHENE ( $\mu\text{g/L}$ )

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**TRICHLOROETHENE (µg/L)**

	May-06	Aug-06	Nov-06	Feb-07	May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	May-12
06A	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
06B	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2
06C	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
08C	<10	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt
09A	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<b>0.2</b>	<b>4.6</b>	<10	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2
09B	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
09C	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<3.0	nt	nt	nt	nt	nt
09D	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
10A	<b>3.7</b>	<b>1.6</b>	<0.2	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	<0.2
10C	<1.0	nt	<0.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2
11A	<b>1.1</b>	nt	<b>1.5</b>	nt	<b>1.5</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<1.0	<b>1.0</b>	<b>1.1</b>	<1.0	<1.0	<b>0.5</b>	<b>0.7</b>
12A	<1.0	nt	<b>0.7</b>	nt	<1.0	<1.0	<b>0.6</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.6</b>	<0.2
13A	<b>4.6</b>	nt	<b>6.5</b>	nt	<b>7.0</b>	<b>4.2</b>	<b>6.8</b>	<b>3.7</b>	<b>5.6</b>	<b>6.0</b>	<b>5.3</b>	<b>2.8</b>	<b>2.4</b>	<1.0	<b>0.8</b>
13C	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
14A	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14E	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
15A	<5.0	nt	<3.0	nt	<1.0	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<10	<0.2	<1.0
15C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
15D	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
16A	<b>1.4</b>	nt	<b>0.8</b>	nt	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>	<b>1.1</b>	<b>1.4</b>	<b>1.3</b>	<b>1.7</b>
16C	<1.0	nt	<b>2.3</b>	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
17A	<b>4.4</b>	nt	<b>6.3</b>	nt	<b>5.3</b>	<b>4.3</b>	<b>5.1</b>	<b>5.2</b>	<b>4.9</b>	<b>4.5</b>	<b>3.1</b>	<b>4.8</b>	<b>2.2</b>	<b>2.8</b>	<b>2.0</b>
17C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
17D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18C	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
18D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19A	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20C	<1.0	nt	<b>0.2</b>	nt	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
20D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
22A	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
23A	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt

nd = Not Detected.

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Bold = Detected compound.

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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## CIS-1,2-DICHLOROETHENE ( $\mu\text{g/L}$ )

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**CIS-1,2-DICHLOROETHENE (µg/L)**

	May-06	Aug-06	Nov-06	Feb-07	May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	May-12
06A	<1.0	<1.0	<b>0.4</b>	<1.0	<1.0	<0.2	<1.0	<b>1.7</b>	<4.0	<b>1.9</b>	<b>1.3</b>	<1.0	<1.0	<b>0.3</b>	<b>0.4</b>
06B	<1.0	<1.0	<b>1.4</b>	<b>3.8</b>	<b>1.4</b>	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<b>0.5</b>	
06C	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
08C	<10	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt
09A	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<b>110</b>	<b>160</b>	<10	<5.0	<1.0	<1.0	<2.0	<b>0.2</b>	<b>0.2</b>
09B	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
09C	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt
09D	<1.0	nt	<1.0	nt	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
10A	<b>63</b>	<b>38</b>	<b>7.4</b>	<b>32</b>	<b>28</b>	<b>22</b>	<b>1.6</b>	<2.0	<1.0	<1.0	<1.0	<2.0	<b>0.2</b>	<b>0.2</b>	
10C	<b>1.5</b>	nt	<b>1.9</b>	nt	<b>6.7</b>	<b>7.2</b>	<b>15</b>	<b>8.5</b>	<1.0	<1.0	<1.0	<b>3.5</b>	<b>5.8</b>	<b>3.7</b>	<b>5.4</b>
11A	<b>20</b>	nt	<b>24</b>	nt	<b>26</b>	<b>27</b>	<b>26</b>	<b>33</b>	<b>26</b>	<b>30</b>	<b>26</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>24</b>
12A	<b>1.5</b>	nt	<b>4.4</b>	nt	<b>2.4</b>	<b>3.2</b>	<b>3.2</b>	<b>4.7</b>	<b>1.4</b>	<b>4.7</b>	<1.0	<b>4.3</b>	<1.0	<b>3.1</b>	<0.2
13A	<1.0	nt	<b>0.3</b>	nt	<b>0.4</b>	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
13C	<1.0	nt	<b>0.8</b>	nt	<b>0.8</b>	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
14A	<b>2.1</b>	<b>3.0</b>	<1.0	<1.0	<b>1.5</b>	<b>1.6</b>	<b>1.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.6</b>	<b>0.3</b>	
14C	<1.0	nt	<0.2	nt	<1.0	<b>1.1</b>	<b>1.4</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14E	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
15A	<5.0	nt	<3.0	nt	<b>1.4</b>	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<10	<b>0.3</b>	<1.0
15C	<1.0	nt	<0.2	nt	<1.0	<1.0	<b>1.8</b>	<b>1.9</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
15D	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
16A	<b>2.3</b>	nt	<b>4.2</b>	nt	<b>1.9</b>	<b>1.2</b>	<b>1.2</b>	<b>1.0</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.5</b>	<b>0.5</b>
16C	<b>5.2</b>	nt	<b>2.0</b>	nt	<b>8.8</b>	<b>7</b>	<b>7.8</b>	<b>5.3</b>	<b>5.0</b>	<b>4.9</b>	<b>3.7</b>	<b>3.3</b>	<b>3.7</b>	<b>3.3</b>	<b>4.8</b>
17A	<1.0	nt	<b>1.0</b>	nt	<b>1.0</b>	<1.0	<b>0.8</b>	<b>1.2</b>	<b>1.4</b>	<b>1.1</b>	<1.0	<b>2.3</b>	<b>1.5</b>	<b>1.0</b>	<b>0.5</b>
17C	nt														
17D	nt														
18A	nt														
18C	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
18D	nt														
19A	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19C	<1.0	nt	<b>0.3</b>	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19D	nt														
20A	nt														
20C	<b>1.8</b>	nt	<b>2.1</b>	nt	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>	<b>1.7</b>	<b>1.3</b>	<b>1.4</b>	<b>1.1</b>	<b>1.3</b>	<b>1.2</b>
20D	nt														
21A	nt														
21C	nt														
22A	<b>2.4</b>	<b>1.8</b>	<b>2.2</b>	<b>2.5</b>	<b>2.5</b>	<b>2</b>	<b>2.6</b>	<b>2.2</b>	<b>2.5</b>	<b>2.1</b>	<b>1.7</b>	<b>1.2</b>	<b>1.1</b>	<b>0.9</b>	<b>0.6</b>
23A	<1.0	<1.0	<0.2	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt

nd = Not Detected.

nt = Not Tested.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate approximate concentration of the analyte in the sample.

E = Estimated concentration calculated for an analyte response above the valid instruction calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Bold = Detected compound.

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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## VINYL CHLORIDE ( $\mu\text{g/L}$ )

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**VINYL CHLORIDE ( $\mu\text{g/L}$ )**

	May-06	Aug-06	Nov-06	Feb-07	May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	May-12
06A	<b>1.6</b>	<b>1.5</b>	<b>2.1</b>	<b>6.7</b>	<b>2.9</b>	<b>1.2</b>	<b>1.4</b>	<1.0	<4.0	<1.0	<b>1.9</b>	<b>1.7</b>	<b>1.4</b>	<b>0.8</b>	<b>1.2</b>
06B	<b>1.3</b>	<b>1.1</b>	<b>2.6</b>	<b>9.5</b>	<b>6.5</b>	<b>1</b>	<1.0	<1.0	<1.0	<1.0	<b>4.2</b>	<b>5.4</b>	<b>5.2</b>	<b>0.8</b>	<b>6.0</b>
06C	<1.0	<1.0	<0.2	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
08C	<10	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt
09A	<1.0	<b>1.2</b>	<b>1.1</b>	<1.0	<b>2.8</b>	<1.0	<b>85</b>	<b>42</b>	<10	<5.0	<1.0	<1.0	<2.0	<0.2	<0.2
09B	<1.0	<1.0	<b>0.5</b>	<1.0	<1.0	<b>0.4</b>	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
09C	<1.0	<1.0	<0.2	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt
09D	<1.0	nt	<1.0	nt	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
10A	<b>19</b>	<b>20</b>	<b>9.2</b>	<b>35</b>	<b>44</b>	<b>78</b>	<b>180</b>	<b>5.0</b>	<2.0	<1.0	<1.0	<1.0	<2.0	<b>0.4</b>	<b>0.4</b>
10C	<b>2.2</b>	nt	<b>2.6</b>	nt	<b>5.8</b>	<b>5.6</b>	<b>6.9</b>	<b>7.5</b>	<1.0	<1.0	<1.0	<b>4.4</b>	<b>4.7</b>	<b>4.3</b>	<b>4.0</b>
11A	<1.0	nt	<1.0	nt	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.4</b>	<b>0.4</b>
12A	<1.0	nt	<0.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
13A	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
13C	<b>2.2</b>	nt	<b>3.4</b>	nt	<b>4.4</b>	<b>2</b>	<b>0.6</b>	<b>2.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.3</b>
14A	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<b>0.2</b>
14C	<1.0	nt	<b>1.0</b>	nt	<b>2.5</b>	<b>11</b>	<b>22</b>	<b>4.3</b>	<b>1.1</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
14E	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
15A	<5.0	nt	<3.0	nt	<b>2.6</b>	<b>1.3</b>	<3.0	<2.0	<3.0	<b>1.4</b>	<b>1.6</b>	<b>1.4</b>	<10	<b>1.0</b>	<b>1.2</b>
15C	<1.0	nt	<0.2	nt	<b>2.2</b>	<b>2.5</b>	<b>6.6</b>	<b>6.6</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
15D	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
16A	<1.0	nt	<0.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
16C	<b>6.3</b>	nt	<0.2	nt	<b>10</b>	<b>8.9</b>	<b>7.9</b>	<b>8.8</b>	<b>6.3</b>	<b>5.6</b>	<b>3.4</b>	<b>2.8</b>	<b>3.2</b>	<b>2.5</b>	<b>4.2</b>
17A	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
17C	nt														
17D	nt														
18A	nt														
18C	<1.0	nt	<0.2	nt	<b>0.2</b>	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
18D	nt														
19A	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19D	nt														
20A	nt														
20C	<b>1.6</b>	nt	<b>1.5</b>	nt	<b>1.8</b>	<b>1.3</b>	<b>2.5</b>	<b>2.7</b>	<b>2.0</b>	<b>2.3</b>	<b>1.8</b>	<b>1.4</b>	<b>1.8</b>	<b>2.1</b>	<b>1.5</b>
20D	nt														
21A	nt														
21C	nt														
22A	<b>1.7</b>	<b>2.4</b>	<b>2.4</b>	<b>2.3</b>	<b>2.7</b>	<b>1.3</b>	<b>1.9</b>	<b>3.1</b>	<b>2.5</b>	<b>1.8</b>	<b>1.7</b>	<b>2.7</b>	<b>2.2</b>	<b>1.7</b>	<b>2.0</b>
23A	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt

nd = Not Detected.

nt = Not Tested.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate approximate concentration of the analyte in the sample.

E = Estimated concentration calculated for an analyte response above the valid instruction calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Bold = Detected compound.

**SWMU-20 ANALYTICAL RESULTS SUMMARY**  
**DEVELOPMENTAL CENTER GROUNDWATER MONITORING**  
**JANUARY 1994 THROUGH PRESENT**

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**BENZENE (µg/L)**

	Jan-94	May-95	Oct-95	Feb-96	May-96	Aug-96	Nov-96	Feb-97	May-97	Aug-97	Nov-97	Jun-98	Oct-98	Jun-99	Nov-99	Jun-00	Dec-00	Jun-01	Dec-01	Jun-02	Dec-02	Jun-03	Nov-03	May-04	Aug-04	Oct-04	Feb-05	Mar-05	May-05	Aug-05	Nov-05	Feb-06	
06A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.0	<1.0	<1.0	<1.0		
06B	nd	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.3	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00			
06C	nd	<b>8.64</b>	<b>230.09</b>	<b>29.96</b>	<b>13.7</b>	<b>5.6</b>	<b>2.9</b>	<b>3.4</b>	<b>4.6</b>	<b>4.1</b>	<b>4.2</b>	<b>4.2</b>	<b>5.7</b>	<b>2.8</b>	<b>2.7</b>	<1.00	<b>2.76</b>	<b>1.94</b>	<b>1.7</b>	<1.00	<1.00	<b>2.2</b>	<1.00	<1.00	<b>1.9</b>	<b>1.2</b>	nt	<b>1.7</b>	<b>1.9</b>	<b>1.9</b>	<b>1.3</b>		
08C	nd	<b>225.74</b>	<b>135.58</b>	<b>104.73</b>	<b>104.6</b>	<b>31.8</b>	<b>121</b>	<b>27.5</b>	<b>6.1</b>	<4.00	<4.00	13.6	<5.00	<1.00	<2.00	<b>15.8</b>	<2.00	<1.00	<1.0	<b>5.4</b>	<b>4.4</b>	<3.0	<5.0	<b>2.0</b>	nt	<b>1.3</b>	nt	<1.0	nt	<1.0	nt		
09A	nd	<1.00	<5.00	<500.00	<50.00	<3.33	<10.00	<4.00	<5.00	<1.00	<4.00	<1.00	<10.00	<1.00	<10.00	<5.00	<1.00	<1.0	<1.0	<1.0	<1.0	<15	<20	<20	<3.0	<5.0	<10	nt	<1.0	<1.0	<1.0	<1.0	
09B	nd	<b>19.76</b>	<33.30	<50.00	<10.00	<b>2.5</b>	<1.00	<1.00	<b>7.5</b>	<b>3.1</b>	<b>3.3</b>	<3.33	<10.00	<2.00	<2.00	<1.00	<b>1.2</b>	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<5.0	<5.0	<10	nt	<1.0	<1.0	<1.0	<1.0
09C	nd	<1.00	<5.00	<10.00	<1.00	<b>9.6</b>	<b>2.4</b>	<b>6.3</b>	<b>9.3</b>	<b>4.8</b>	<b>3.6</b>	<b>1.7</b>	<b>2.5</b>	<b>1.7</b>	<1.00	<b>1.5</b>	<b>1.36</b>	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
09D	nd	<1.00	<5.00	<50.00	<10.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		
10A	nd	<1.00	<5.00	<50.00	<10.00	<1.00	<3.33	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		
10C	nd	1.15	<5.00	<5.00	<b>1.33</b>	<b>1.4</b>	<b>1.5</b>	<b>1.4</b>	<b>1.2</b>	<b>1.3</b>	<b>1.3</b>	<b>1.1</b>	<b>1.1</b>	<1.00	<b>1.4</b>	<b>1.23</b>	<1.00	<b>1.3</b>	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	<1.0	nt	<1.0		
11A	nd	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	<1.0	nt	<1.0			
12A	nd	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	<1.0	nt	<1.0			
13A	nd	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	<1.0	nt	<1.0			
13C	nd	<b>4.88</b>	<b>69.66</b>	<b>33.56</b>	<b>25.76</b>	<b>75</b>	<b>34.1</b>	<b>36.5</b>	<b>20.5</b>	<b>7.6</b>	<b>6.8</b>	<b>3.9</b>	<b>3</b>	<1.00	<b>2</b>	<b>2.31</b>	<b>1.16</b>	<1.00	<1.00	<b>3.6</b>	<b>6.9</b>	<b>2.7</b>	<b>4.2</b>	nt	<b>1.3</b>	nt	nt	<b>1.9</b>	nt	<b>3.0</b>	nt		
14A	nd	<1.00	<5.00	<20.00	<1.00	<10.00	<5.00	<4.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.0	nt	<10	<10	<3.0	<1.0	
14C	nd	<1.00	<5.00	<5.00	<b>26.44</b>	<b>22</b>	<b>11.7</b>	<10.00	<10.00	<b>4.3</b>	<b>2.8</b>	<b>4.64</b>	<b>2.5</b>	<b>1.2</b>	<b>1.4</b>	<b>1.33</b>	<1.00	<1.0	<1.0	<b>1.1</b>	<1.0	<1.0	<1.0	nt	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	
14E	nd	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00			
15A	nd	<1.00	<5.00	<5.00	<2.00	<1.00	<1.00	<4.00	<2.00	<1.00	<2.00	<3.33	<10.00	<1.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00			
15C	nd	<1.00	<33.30	<5.00	<1.00	<3.33	<1.00	<2.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00			
15D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00			
16A	nd	<1.00																															

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**BENZENE (µg/L)**

	May-06	Aug-06	Nov-06	Feb-07	May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	May-12
06A	<1.0	<1.0	<b>0.4</b>	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
06B	<1.0	<1.0	<0.2	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
06C	<b>1.3</b>	<b>1.2</b>	<b>1.2</b>	<1.0	<1.0	<b>0.9</b>	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt
08C	<10	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt
09A	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	<1.0	<10	<5.0	<1.0	<1.0	<2.0	<0.2	<0.2
09B	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
09C	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<3.0	nt	nt	nt	nt	nt
09D	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
10A	<1.0	<1.0	<b>0.3</b>	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	
10C	<1.0	nt	<b>0.2</b>	nt	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	
11A	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
12A	<1.0	nt	<0.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
13A	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
13C	<b>2.1</b>	nt	<b>2.1</b>	nt	<b>1.2</b>	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
14A	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
14E	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
15A	<5.0	nt	<3.0	nt	<1.0	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<10	<b>0.4</b>	<1.0
15C	<1.0	nt	<b>0.4</b>	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
15D	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
16A	<1.0	nt	<0.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
16C	<1.0	nt	<0.2	nt	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2
17A	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2
17C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
17D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18C	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
18D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19A	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19C	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt
19D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20C	<1.0	nt	<b>0.5</b>	nt	<b>0.6</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.4</b>
20D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
22A	<1.0	<1.0	<b>0.4</b>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>0.2</b>	<b>0.4</b>
23A	<1.0	<1.0	<0.2	<1.0	<1.0	<b>0.2</b>	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt

nd = Not Detected.

nt = Not Tested.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate approximate concentration of the analyte in the sample.

E = Estimated concentration calculated for an analyte response above the valid instruction calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Bold = Detected compound.

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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## NAPHTHALENE ( $\mu\text{g/L}$ )

**SWMU-20 ANALYTICAL RESULTS SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
JANUARY 1994 THROUGH PRESENT**

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**NAPHTHALENE (µg/L)**

	May-06	Aug-06	Nov-06	Feb-07	May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	May-12
06A	<5.0	<5.0	<0.5	<5.0	<0.5	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5
06B	<5.0	<5.0	<b>0.6</b>	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5
06C	<5.0	<5.0	<b>5.0</b>	<5.0	<5.0	<b>4.6</b>	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt
08C	<b>910</b>	nt	<b>440</b>	nt	<b>500</b>	<b>540</b>	<b>180</b>	<b>1100</b>	<b>62</b>	<b>65</b>	nt	nt	nt	nt	nt
09A	<5.0	<5.0	<0.5	<5.0	<5.0	<0.5	<5.0	<50	<25	<5.0	<5.0	<5.0	<b>5.3</b>	<b>9.5</b>	
09B	<5.0	<5.0	<0.5	<5.0	<5.0	<b>0.6</b>	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	
09C	<5.0	<5.0	<b>14</b>	<b>18</b>	<b>5.5</b>	<5.0	<b>6.7</b>	<5.0	<b>56</b>	<b>69</b>	nt	nt	nt	nt	
09D	<5.0	nt	<2.5	nt	<5.0	<0.5	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	
10A	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	
10C	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<b>100</b>	39	12	<5.0	<5.0	<0.5	<0.5	
11A	<5.0	nt	<5.0	nt	<5.0	<5.0	<0.5	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
12A	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
13A	<5.0	nt	<0.5	nt	<0.5	<5.0	<0.5	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
13C	<5.0	nt	<b>16</b>	nt	<b>16</b>	<5.0	<b>0.5</b>	<5.0	<5.0	<b>22</b>	<b>6.5</b>	<5.0	<5.0	<0.5	
14A	<10	<5.0	<b>7.0</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>0.5</b>	<0.5	
14C	<5.0	nt	<b>6.3</b>	nt	<b>6.2</b>	<5.0	<5.0	<5.0	<5.0	<b>15</b>	<5.0	<5.0	<0.5	<0.5	
14E	<5.0	nt	<0.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	
15A	<b>220</b>	nt	<b>180</b>	nt	<b>72</b>	<b>170</b>	<b>180</b>	<b>230</b>	<b>170</b>	<b>190</b>	<b>310</b>	<b>240</b>	<b>210</b>	<b>190</b>	<b>170</b>
15C	<5.0	nt	<0.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
15D	<5.0	nt	<2.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	
16A	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
16C	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
17A	<5.0	nt	<0.5	nt	<0.5	<5.0	<0.5	<5.0	<5.0	nt	<5.0	<5.0	<0.5	<0.5	
17C	nt	nt	nt	nt	nt	nt	nt								
17D	nt	nt	nt	nt	nt	nt	nt								
18A	nt	nt	nt	nt	nt	nt	nt								
18C	<5.0	nt	<0.5	nt	<b>0.6</b>	<5.0	<0.5	<b>86</b>	<b>47</b>	<5.0	nt	nt	nt	nt	
18D	nt	nt	nt	nt	nt	nt	nt								
19A	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	
19C	<5.0	nt	<b>0.5</b>	nt	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	
19D	nt	nt	nt	nt	nt	nt	nt								
20A	nt	nt	nt	nt	nt	nt	nt								
20C	<5.0	nt	<b>0.8</b>	nt	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	
20D	nt	nt	nt	nt	nt	nt	nt								
21A	nt	nt	nt	nt	nt	nt	nt								
21C	nt	nt	nt	nt	nt	nt	nt								
22A	<b>120</b>	<b>200</b>	<b>140</b>	<b>110</b>	<b>100</b>	<b>25</b>	<b>41</b>	<b>32</b>	<b>51</b>	<b>15</b>	<b>14</b>	<b>16</b>	<b>20</b>	<b>12</b>	<b>15</b>
23A	<b>69</b>	<b>140</b>	<b>9.0</b>	<b>26</b>	<b>36</b>	<b>6.1</b>	<b>5.3</b>	<5.0	<b>9.8</b>	<5.0	nt	nt	nt	nt	

nd = Not Detected.

nt = Not Tested.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate approximate concentration of the analyte in the sample.

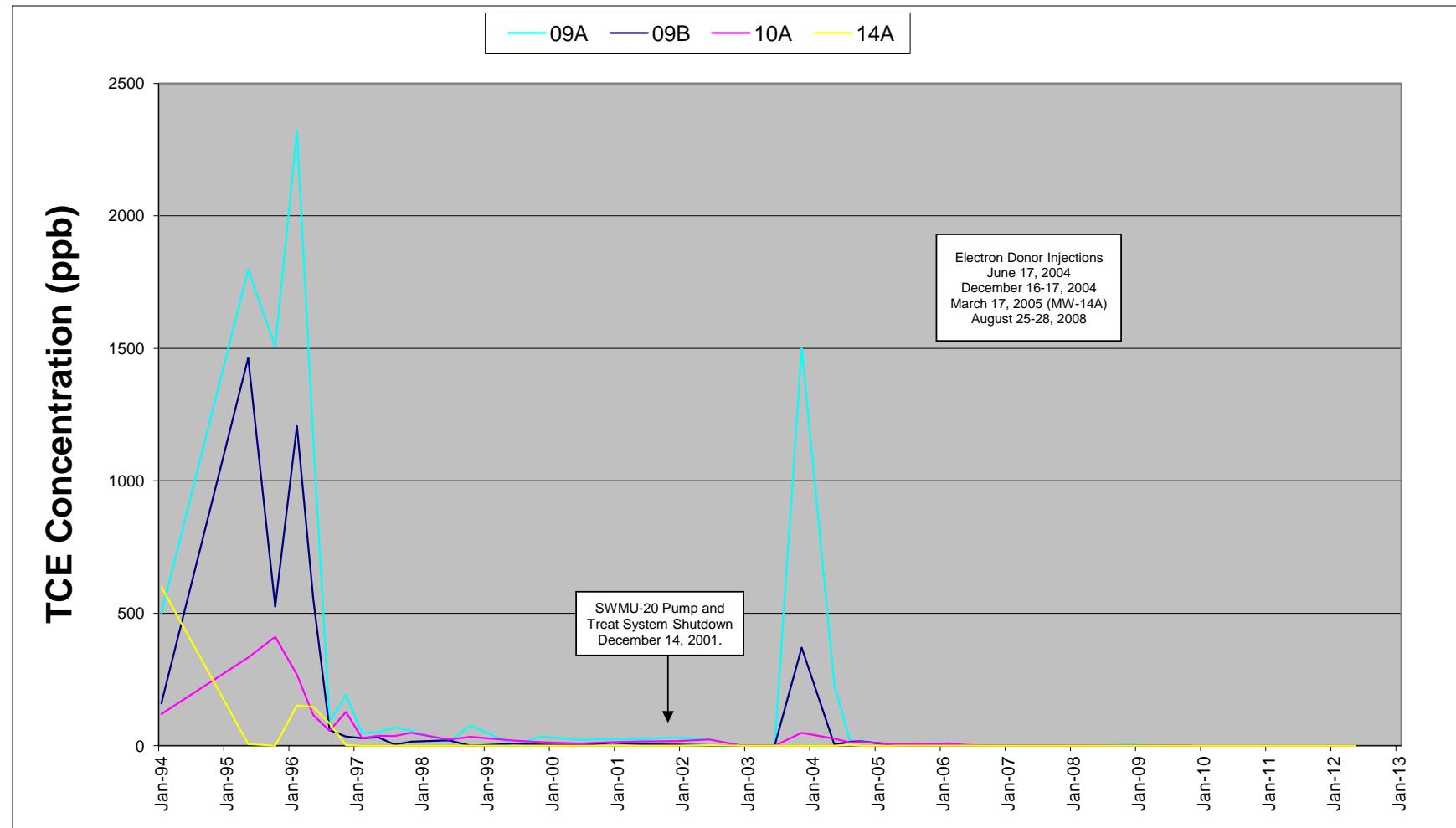
E = Estimated concentration calculated for an analyte response above the valid instruction calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Bold = Detected compound.

# DEVELOPMENTAL CENTER WELLS

## TRICHLOROETHENE CONCENTRATIONS

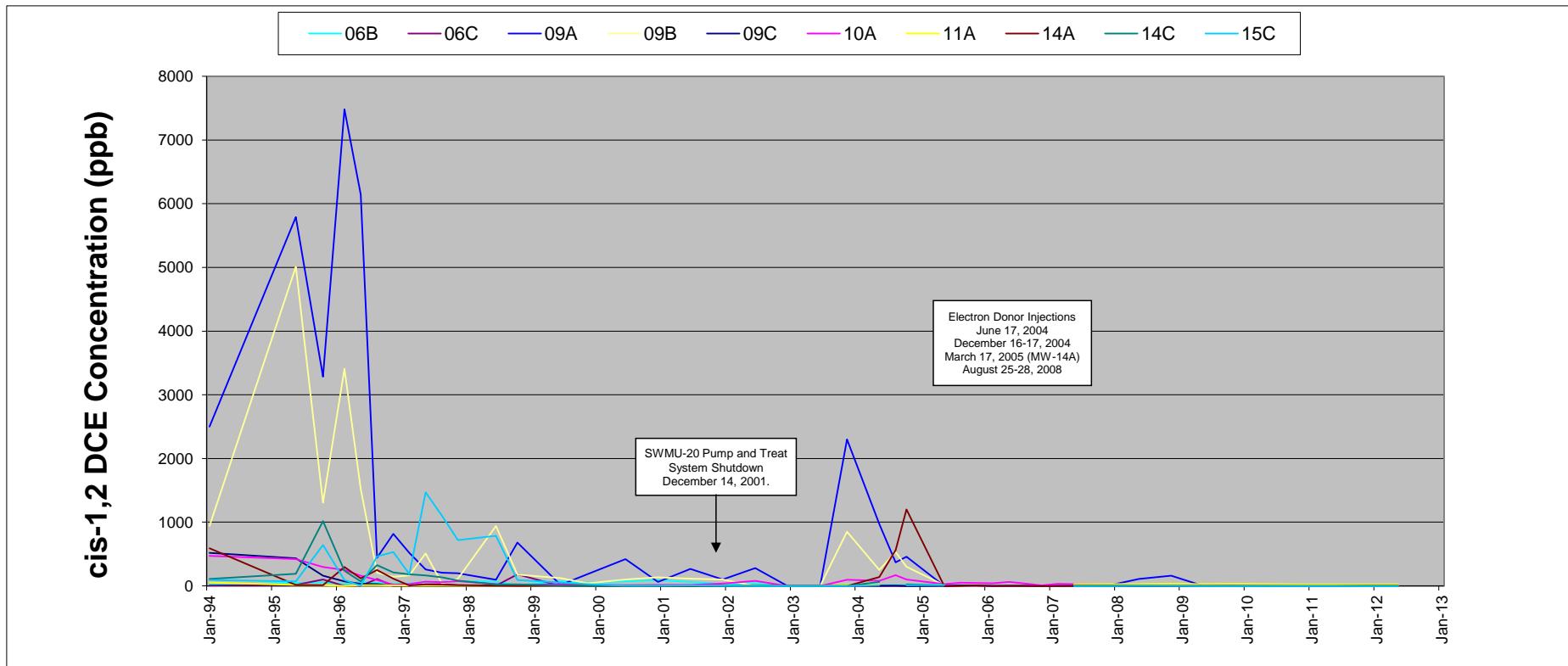
### (Wells with TCE Historically Detected over 50 ppb)



# DEVELOPMENTAL CENTER WELLS

## CIS-1,2 DICHLOROETHENE CONCENTRATIONS

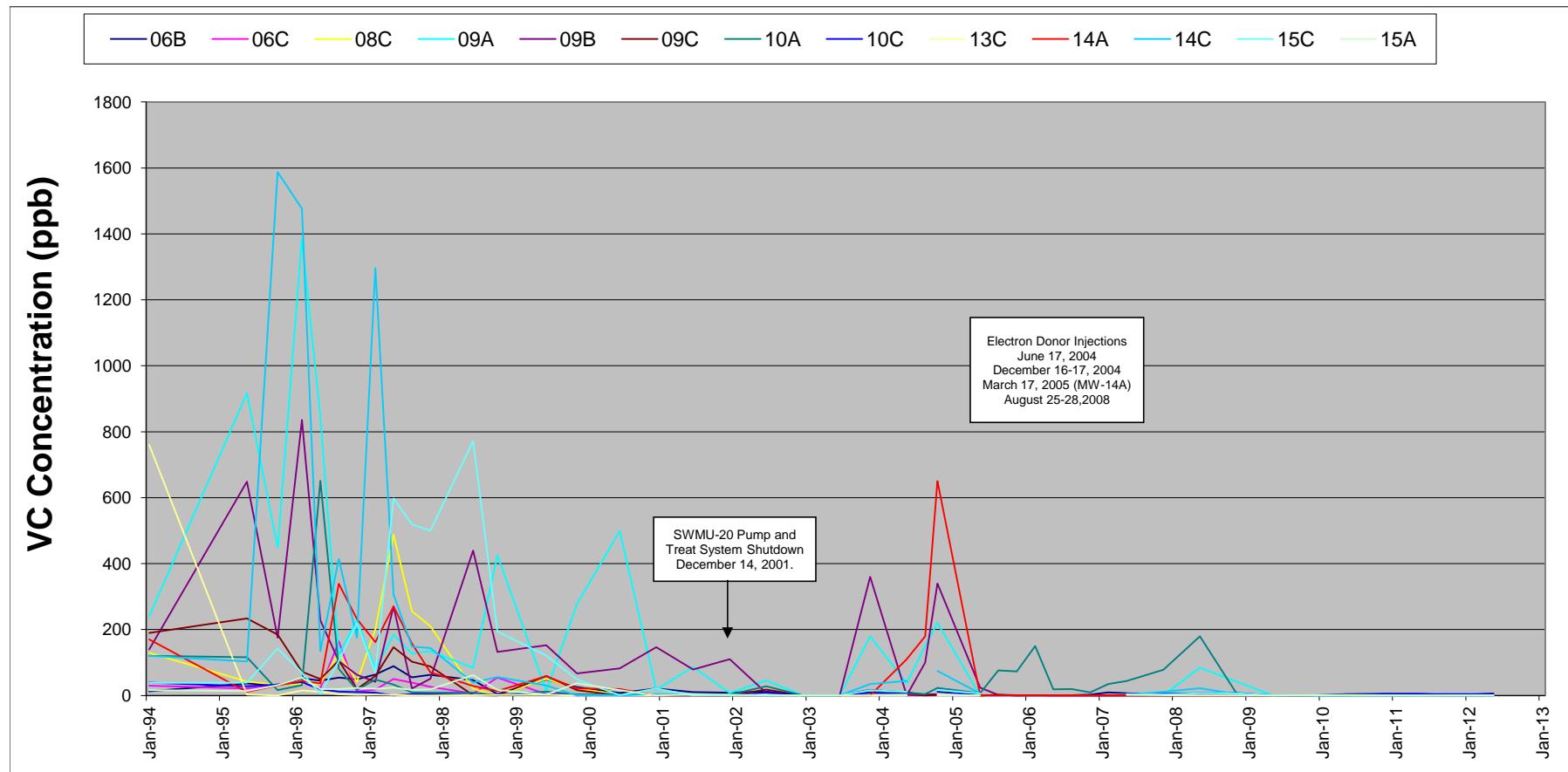
### (Wells with cis-1,2 DCE Historically Detected over 50 ppb)



# DEVELOPMENTAL CENTER WELLS

## VINYL CHLORIDE CONCENTRATIONS

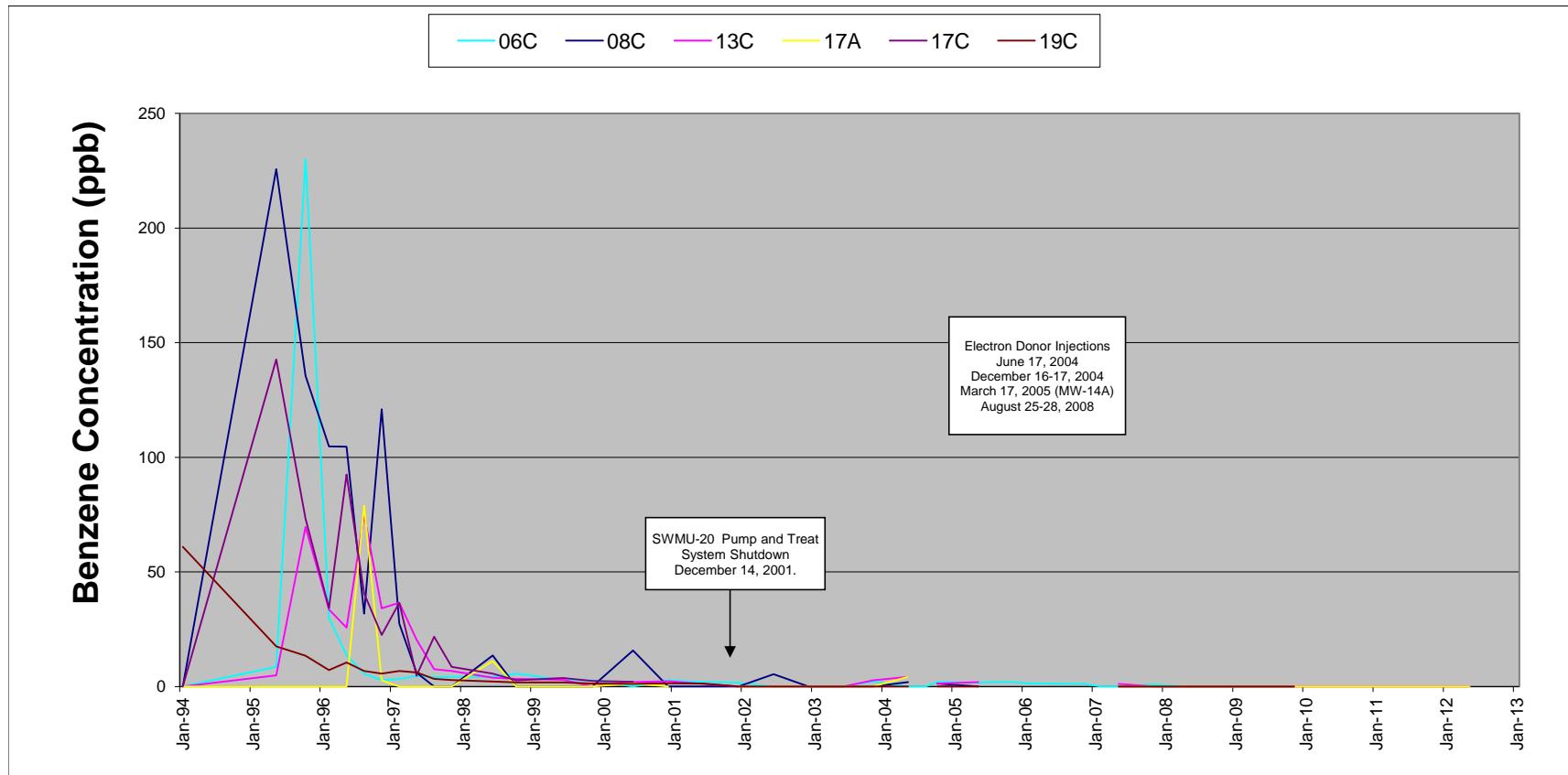
### (Wells with VC Historically Detected over 50 ppb)



# DEVELOPMENTAL CENTER WELLS

## BENZENE CONCENTRATIONS

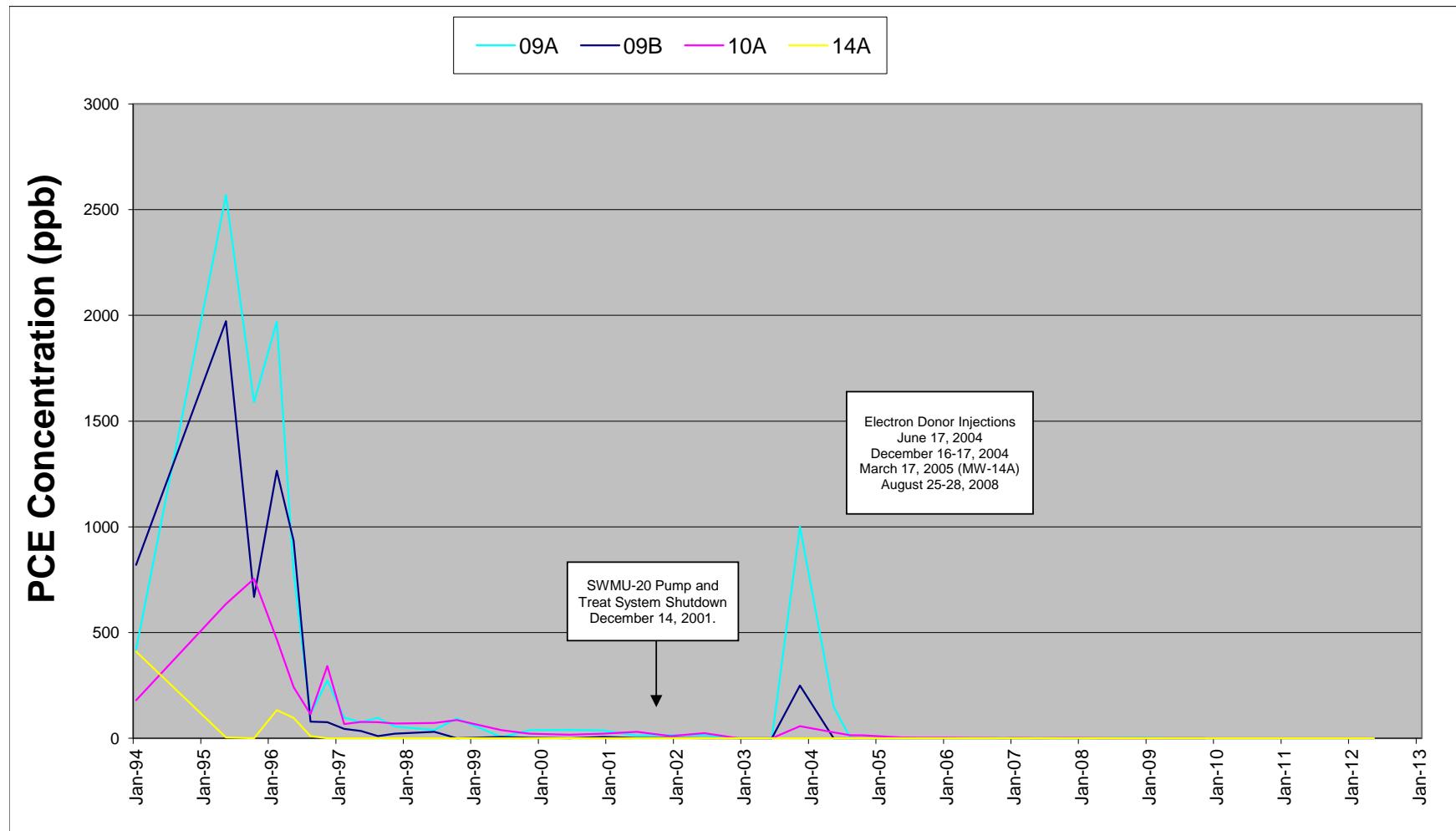
### (Wells with Benzene Historically Detected over 50 ppb)



# DEVELOPMENTAL CENTER WELLS

## TETRACHLOROETHENE CONCENTRATIONS

### (Wells with PCE Historically Detected over 50 ppb)



**SWMU-20 CLEANUP ACTION SUMMARY - SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds					Aquifer Redox Conditions				Donor Parameters		Notes		
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
06A (c)	06/15/2004	-2				<1.0	1.0	23	4.0	<0.50	<0.50	6.34	-19.6	0.8	58.9	<0.50	6.5	18.8	---
06A (c)	08/23/2004	67				<1.0	<1.0	45	5.9	<0.50	<0.50	0.46	92	3.5	40.7	21	7.0	288	Hazy brown
06A (c)	10/19/2004	124	-58			<1.0	<1.0	2.6	31	<0.50	<0.50	0.70	54	3.0	44.8	530	6.8	80.8	---
06A (c)	02/22/2005	250	68			<1.0	<1.0	3.3	<1.0	<0.50	<0.50	1.15	187	2.4	<0.1	130	6.8	244	---
06A (c)	05/16/2005	333	151			<1.0	<1.0	2.6	<1.0	<0.50	<0.50	1.25	58	3.0	0.1	10000	6.9	145	---
06A (c)	08/22/2005	431	249			<1.0	<1.0	1.6	<1.0	<0.50	<0.50	1.26	212	2.7	3.1	390	6.8	54.2	Clear, with yellow tint
06A (c)	11/14/2005	515	333			<1.0	<1.0	1.3	1.2	<0.50	<0.50	0.93	108	3.0	0.1	3700	6.9	31.8	---
06A (c)	02/22/2006	615	433			<1.0	<1.0	1.4	4.8	<11.4	<12.3	0.80	186	2.6	60.4	10100	6.4	15.5	---
06A (c)	05/18/2006	700	518			<1.0	<1.0	1.6	<11	<12	<12	6.41	1	3.0	20.9	16000	6.6	23.9	---
06A (c)	08/16/2006	790	608			<1.0	<1.0	1.5	<1.1	<1.2	<1.2	0.89	240	2.2	23.1	18800	6.5	23.2	---
06A (c)	11/29/2006	895	713			<0.2	<0.2	0.4	2.1	<1.1	<1.2	2.09	102	2.6	33.1	20200	6.5	31.4	---
06A (c)	02/23/2007	981	799			<1.0	<1.0	<1.0	6.7	<1.1	<1.2	0.65	-97	4.5	26.2	17400	6.5	24.6	---
06A (c)	05/24/2007	1071	889			<1.0	<1.0	<1.0	2.9	<1.1	2.0	0.56	184	4.0	21.0	18300	6.7	21.5	---
06A (c)	11/30/2007	1261	1079			<0.2	<0.2	<0.2	1.2	<1.1	2.2	0.80	173	3.0	29.1	21900	6.7	22.6	---
06A (c)	05/21/2008	1434	1252	-96		<1.0	<1.0	<1.0	1.4	<1.1	1.3	2.11	-82	2.5	21.0	13200	6.9	20.1	---
06A (c)	11/25/2008	1622	1440	92		<1.0	<1.0	1.7	<1.0	<1.1	<1.2	1.71	-73	3.4	0.1	19700	6.5	150	---
06A (c)	05/20/2009	1798	1616	268		<4.0	<4.0	<4.0	<4.0	<1.1	<1.2	0.52	-45	4.0	<0.5	19500	6.8	38.2	---
06A (c)	11/19/2009	1981	1799	451		<1.0	<1.0	1.9	<1.0	<1.1	<1.2	2.66	6	2.8	0.8	20100	6.2	25.4	---
06A (c)	5/24/2010	2167	1985	637		<1.0	<1.0	1.3	1.9	<1.1	<1.2	3.56	448	2.0	16	19900	6.6	19.3	---
06A (c)	11/11/2010	2338	2156	808		<1.0	<1.0	<1.0	1.7	<1.1	<1.2	4.75	106	2.6	0.4	24700	7.0	20.2	---
06A (c)	5/4/2011	2512	2330	982		<1.0	<1.0	<1.0	1.4	<1.1	<1.2	2.14	22	2.5	<0.2	21400	7.1	13.6	---
06A (c)	11/13/2011	2705	2523	1175		<0.2	<0.2	0.3	0.8	<1.1	<1.2	5.80	-54	1.0	0.3	6370	7.2	12.7	---
06A (c)	5/15/2012	2889	2707	1359		<0.2	<0.2	0.4	1.2	<1.0	<1.0	0.08	66	2.0	4.3	13000	6.7	11.6	---
06B	05/04/2004	-44				9.5	3.2	10	9.4	<0.50	<0.50	0.36	179	4.5	18.7	130	6.8	25.6	Clear, yellow tint
06B	08/23/2004	67				1.9	1.2	13	2.3	<0.50	<0.50	0.45	115	3.2	33.8	1100	6.9	177	Yellow-brown tint (nearly clear)
06B	10/19/2004	124	-58			<1.0	<1.0	10	3.6	<0.50	<0.50	0.61	217	3.5	14.8	590	6.7	53.6	Yellow tint
06B	02/22/2005	250	68			<1.0	<1.0	11	<1.0	<0.50	<0.50	0.79	224	2.6	<0.5	3800	6.9	968	---
06B	05/16/2005	333	151			<2.0	<2.0	5.5	<2.0	<0.50	<0.50	1.51	133	3.5	<0.5	2300	6.9	336	Clear, yellow-brown tint
06B	08/22/2005	431	249			<1.0	<1.0	1.8	1.6	<0.50	<0.50	1.21	217	2.8	<0.1	440	6.9	100	Clear, with yellow tint
06B	11/14/2005	515	333			<1.0	<1.0	1.1	1.3	<0.50	<0.50	1.05	241	2.8	<0.1	2900	6.9	64.4	---
06B	02/22/2006	615	433			<1.0	<1.0	<1.0	1.4	53.5	<12.3	0.74	184	2.6	14.8	13000	6.4	30.4	---
06B	05/18/2006	700	518			<1.0	<1.0	<1.0	1.3	<11	<12	2.25	52	3.2	13.6	16000	6.6	25.9	---
06B	08/16/2006	790	608			<1.0	<1.0	<1.0	1.1	<1.1	<1.2	0.82	225	2.4	12.9	21700	6.5	14.7	---
06B	11/29/2006	895	713			<0.2	<0.2	1.4	2.6	<1.1	<1.2	1.82	111	2.4	10.9	22000	6.5	25.2	---
06B	02/23/2007	981	799			<1.0	<1.0	3.8	9.5	<1.1	<1.2	0.75	-66	5.0	25.0	17700	6.5	21.1	---
06B	05/24/2007	1071	889			<1.0	<1.0	1.4	6.5	<1.1	<1.2	0.58	151	3.0	11.3	18500	6.6	21.4	---
06B	11/30/2007	1261	1079			<0.2	<0.2	<0.2	1.0	<1.1	4.0	0.83	135	4.0	26.3	24900	6.4	26.5	---
06B	05/21/2008	1434	1252	-96		<1.0	<1.0	<1.0	<1.0	<1.1	4.9	2.66	-61	3.4	21.1	12700	6.7	20.4	---
06B	11/25/2008	1622	1440	92		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	2.53	-68	2.4	0.2	18400	6.6	19.6	---
06B	05/20/2009	1798	1616	268		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.33	-36	4.0	<0.5	25300	6.9	20.9	---
06B	11/19/2009	1981	1799	451		<1.0	<1.0	<1.0	<1.0	<1.1	6.7	1.01	10	2.8	0.1	22500	6.9	20.0	---
06B	5/24/2010	2167	1985	637		<1.0	<1.0	<1.0	4.2	<1.1	1.6	3.05	417	2.0	3.0	7110	7.0	19.1	---
06B	11/11/2010	2338	2156	808		<1.0	<1.0	<1.0	5.4	<1.1	1.4	3.40	112	2.0	8.6	4600	7.1	15.8	---
06B	5/4/2011	2512	2330	982		<1.0	<1.0	<1.0	5.2	<1.1	<1.2	2.55	57	2.2	19.7	2120	7.1	12.6	---
06B	11/13/2011	2705	2523	1175		<0.2	<0.2	<0.2	0.8	<1.1	<1.2	6.10	-34	1.5	0.3	2260	7.3	14.8	---
06B	5/15/2012	2889	2707	1359		<0.2	<0.2	0.5	6.0	<1.0	1.3	0.14	71	1.8	10.9	2200	6.6	11.4	---

**SWMU-20 CLEANUP ACTION SUMMARY - SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds					Aquifer Redox Conditions					Donor Parameters		Notes	
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
06C	05/04/2004	-44				<1.0	<1.0	<1.0	<1.0	<0.50	<b>0.6</b>	0.40	93	5.0	20.7	360	6.7	29.0	---
06C	08/23/2004	67				<1.0	<1.0	<b>1.4</b>	<1.0	<b>5.7</b>	<b>5.9</b>	0.63	95	2.5	42.7	3100	6.3	1560	White froth on surface of purge water
06C	10/19/2004	124	-58			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	2.00	206	3.0	18.1	450	6.3	464	Yellow tint
06C	02/22/2005	250	68			<1.0	<1.0	<b>3.6</b>	<1.0	<0.50	<0.50	0.82	198	2.6	<0.5	2400	6.9	858	---
06C	05/16/2005	333	151			<1.0	<1.0	<b>1.1</b>	<1.0	<0.50	<0.50	1.94	98	3.0	0.2	2700	7.0	111	Clear, with yellow tint
06C	08/22/2005	431	249			<1.0	<1.0	<b>1.1</b>	<1.0	<0.50	<0.50	1.36	194	2.8	<0.1	510	7.0	68.7	Clear, with yellow tint
06C	11/14/2005	515	333			<1.0	<1.0	<b>1.1</b>	<1.0	<0.50	<0.50	1.07	258	2.0	<0.1	2900	7.0	48.3	---
06C	02/22/2006	615	433			<1.0	<1.0	<1.0	<1.0	<b>47.7</b>	<12.3	0.88	247	1.4	47.5	12300	6.6	93.4	---
06C	05/18/2006	700	518			<1.0	<1.0	<1.0	<1.0	<11	<12	4.88	129	2.0	30.6	15000	6.6	36.6	---
06C	08/16/2006	790	608			<1.0	<1.0	<1.0	<1.0	<1.1	<b>2.3</b>	0.93	231	1.6	31.8	18900	6.6	13.4	---
06C	11/29/2006	895	713			<0.2	<0.2	<b>0.3</b>	<0.2	<1.1	<b>1.4</b>	2.25	192	1.8	27.3	20600	6.6	46.4	---
06C	02/23/2007	981	799			<1.0	<1.0	<1.0	<1.0	<1.1	<b>1.7</b>	1.08	-46	4.0	25.9	18900	6.4	39.0	---
06C	05/24/2007	1071	889			<1.0	<1.0	<1.0	<1.0	<1.1	<b>2.0</b>	0.72	216	3.5	20.8	20800	6.5	34.0	---
06C	11/30/2007	1261	1079			<0.2	<0.2	<b>0.2</b>	<1.1	<1.1	<b>2.8</b>	1.58	174	4.2	32.6	30500	6.2	40.2	---
06C	05/21/2008	1434	1252		-96	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	2.91	-16	2.5	21.0	23800	6.3	31.9	---
06C	11/25/2008	1622	1440		92	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	3.39	-66	2.6	<0.1	28700	6.8	634	---
06C	05/20/2009	1798	1616		268	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.66	-28	3.5	<0.8	20600	6.9	39.2	---
06C	11/19/2009	1981	1799		451	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	1.89	26	NM	<0.1	25600	6.2	42.8	---
09A	05/03/2004	-45				<b>150</b>	<b>230</b>	<b>970</b>	<b>37</b>	<0.50	<0.50	0.46	287	1.0	64.2	8.4	6.7	16.2	Clear, yellow tint
09A	08/23/2004	67				<3.0	11	<b>370</b>	<b>150</b>	<b>4.2</b>	<0.50	0.40	143	2.6	51.8	4.7	7.1	56.8	Clear with black tint, H <sub>2</sub> S odor
09A	10/19/2004	124	-58			<5.0	<b>19</b>	<b>460</b>	<b>220</b>	<b>2.7</b>	<0.50	0.53	219	4.0	77.4	17	6.9	19.6	Clear, slightly yellow tint
09A	02/21/2005	249	67			<10	<10	<b>41</b>	<b>37</b>	<b>1.9</b>	<0.50	0.78	169	2.0	<0.5	1500	7.1	2110	Hazy, yellow color
09A	05/11/2005	328	146			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	1.53	141	2.0	<0.5	1700	7.2	1260	Hazy, yellow-brown tint
09A	08/22/2005	431	249			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	1.58	141	2.8	<0.1	460	6.8	156	Clear, yellow-brown tint
09A	11/14/2005	515	333			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	1.07	238	2.0	<0.1	2600	6.9	62.8	---
09A	02/21/2006	614	432			<1.0	<1.0	<1.0	<1.0	<11.4	<12.3	0.94	332	2.6	0.2	5650	6.3	58.8	---
09A	05/15/2006	697	515			<1.0	<1.0	<1.0	<1.0	<11	<12	1.35	193	2.2	63.4	15000	6.4	44.4	---
09A	08/16/2006	790	608			<1.0	<1.0	<1.0	<1.0	<1.1	<b>2.1</b>	1.55	175	2.0	56.8	16800	6.4	50.0	---
09A	11/27/2006	893	711			<0.2	<0.2	<b>0.3</b>	<b>1.1</b>	<b>1.9</b>	<b>6.3</b>	2.09	211	3.2	52.5	15200	6.6	51.0	---
09A	02/22/2007	980	798			<1.0	<1.0	<1.0	<1.0	<1.1	<b>7.8</b>	0.65	-107	4.6	0.3	15300	6.4	48.8	---
09A	05/22/2007	1069	887			<1.0	<1.0	<1.0	<b>2.8</b>	<1.1	<b>4.8</b>	0.75	91	2.6	0.1	16700	6.6	43.1	---
09A	11/29/2007	1260	1078			<1.0	<1.0	<1.0	<1.0	<1.1	<b>24.5</b>	1.01	147	3.8	45.4	27600	6.4	40.6	---
09A	05/19/2008	1432	1250		-98	<0.2	<b>0.2</b>	<b>110</b>	<b>85</b>	<b>7.8</b>	<b>35.6</b>	2.26	-82	3.0	29.4	17100	6.7	31.0	---
09A	11/24/2008	1621	1439		91	<b>1.9</b>	<b>4.6</b>	<b>160</b>	<b>42</b>	<b>4.0</b>	<b>2.1</b>	2.61	-52	3.0	<2.0	13700	6.2	5600	---
09A	05/18/2009	1796	1614		266	<10	<10	<10	<1.1	<1.2	0.44	-88	2.5	<2.0	18100	7.1	1620	---	
09A	11/16/2009	1978	1796		448	<5.0	<1.0	<5.0	<5.0	<1.1	<1.2	1.23	-61	2.6	<1.0	16600	6.6	403	---
09A	5/20/2010	2163	1981		633	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	11.09	515	2.2	<1.0	18700	7.0	72.8	Duffy: Interference w/DO sensor?
09A	11/10/2010	2337	2155		807	<1.0	<1.0	<1.0	<1.0	<1.1	<b>2.0</b>	3.92	118	2.2	0.3	24400	7.0	70.0	---
09A	5/3/2011	2511	2329		981	<2.0	<2.0	<2.0	<2.0	<1.1	<b>2.0</b>	2.55	33	2.0	<0.2	17800	6.9	44.4	---
09A	11/13/2011	2705	2523		1175	<0.2	<0.2	<b>0.2</b>	<0.2	<1.1	<b>1.2</b>	2.23	-66	1.2	0.4	11800	7.0	39.4	---
09A	5/14/2012	2888	2706		1358	<0.2	<0.2	<b>0.2</b>	<0.2	<1.0	<b>13</b>	0.57	91	1.5	0.40	22000	6.4	30.5	---
09B	05/03/2004	-45				<3.0	<b>4.2</b>	<b>250</b>	<3.0	<0.50	<0.50	0.37	269	4.0	61.4	2.7	6.8	20.7	Clear, yellow tint
09B	08/23/2004	67				<5.0	<b>16</b>	<b>530</b>	<b>100</b>	<b>0.76</b>	<0.50	0.34	174	1.4	73.0	23	7.4	29.7	Clear, yellow-brown tint, H <sub>2</sub> S odor
09B	10/19/2004	124	-58			<5.0	<b>17</b>	<b>300</b>	<b>340</b>	<b>1.4</b>	<0.50	0.30	219	1.0	59.6	29	7.5	24.3	Clear with yellow color
09B	02/21/2005	249	67			<10	<10	<b>890</b>	<b>520</b>	<b>1.7</b>	<0.50	0.56	160	2.8	1.0	2000	6.8	608	Hazy, tan brown color
09B	05/11/2005	328	146			<1.0	<1.0	<b>12</b>	<b>24</b>	<0.50	<0.50	1.48	158	3.5	0.4	9600	7.0	219	Hazy, yellow-brown tint
09B	08/22/2005	431	249			<1.0	<1.0	<1.0	<b>1.7</b>	<0.50	<0.50	1.45	224	2.5	<0.1	400	6.7	17.6	Clear, with yellow-brown tint

**SWMU-20 CLEANUP ACTION SUMMARY - SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds					Aquifer Redox Conditions				Donor Parameters		Notes		
						PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection														
09B	11/14/2005	515	333			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	1.24	235	1.4	<0.1	3100	6.8	51.2	---
09B	02/21/2006	614	432			<1.0	<1.0	<1.0	<b>1.3</b>	<11.4	<12.3	0.90	329	2.8	<0.1	8730	6.3	46.4	---
09B	05/15/2006	697	515			<1.0	<1.0	<1.0	<1.0	<11	<12	1.11	191	1.8	33.9	17000	6.3	45.6	---
09B	08/16/2006	790	608			<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.94	188	1.6	55.4	19300	6.3	250	---
09B	11/27/2006	893	711			<0.2	<0.2	<b>0.3</b>	<b>0.5</b>	<1.1	<1.2	1.76	190	2.8	50.2	21800	6.5	78.2	---
09B	02/22/2007	980	798			<1.0	<1.0	<1.0	<1.0	<1.1	<b>1.6</b>	0.67	-80	3.5	0.2	16100	6.3	64.0	---
09B	05/22/2007	1069	887			<1.0	<1.0	<1.0	<1.0	<1.1	<b>1.4</b>	0.76	154	3.0	<0.1	18700	6.5	35.3	---
09B	11/29/2007	1260	1078			<1.0	<1.0	<1.0	<1.0	<1.1	<b>3.8</b>	1.29	238	2.2	58.3	29800	6.2	44.5	---
09B	05/19/2008	1432	1250			<0.2	<0.2	<b>0.2</b>	<b>0.4</b>	<1.1	<b>3.0</b>	2.34	-78	3.4	39.1	12900	6.4	37.3	---
09B	11/24/2008	1621	1439			<1.0	<1.0	<1.0	<1.0	<1.1	<b>17.6</b>	2.22	-47	3.0	<1.0	27000	6.7	27.0	---
09B	05/18/2009	1796	1614			<1.0	<1.0	<1.0	<1.0	<1.1	<b>6.9</b>	0.38	-38	3.5	<0.5	19700	6.9	37.1	---
09B	11/16/2009	1978	1796			<1.0	<1.0	<1.0	<1.0	<1.1	<b>16.1</b>	1.27	12	3.5	<0.1	24500	6.2	28.1	---
09C	05/03/2004	-45				<1.0	<1.0	<b>4.0</b>	<b>3.3</b>	1.9	<b>0.7</b>	0.33	229	4.0	19.1	350	6.8	28.5	Clear, yellow tint
09C	08/23/2004	67				<1.0	<1.0	<b>1.7</b>	<1.0	<b>1.1</b>	<b>2.8</b>	0.47	114	2.6	23.2	610	6.7	302	Clear, H2S odor
09C	10/19/2004	124	-58			<1.0	<1.0	<b>1.5</b>	<b>1.1</b>	<0.50	0.60	0.60	185	3.0	12.2	620	7.0	99.6	Near clear, yellow tint
09C	02/21/2005	249	67			<1.0	<1.0	<b>1.7</b>	<1.0	<0.50	<b>1.6</b>	0.60	154	2.0	<0.1	3500	6.6	300	Clear with yellow tint
09C	05/11/2005	328	146			<1.0	<1.0	<b>1.2</b>	<1.0	<0.50	<0.50	1.34	138	2.5	<0.1	2700	6.4	44.6	Yellow-brown tint
09C	08/22/2005	431	249			<1.0	<1.0	<b>7.6</b>	<b>2.2</b>	<0.50	<0.50	1.31	230	2.5	<0.1	360	6.7	52.0	---
09C	11/14/2005	515	333			<1.0	<1.0	<b>1.2</b>	<1.0	<0.50	<0.50	1.41	228	2.4	<0.1	7300	6.9	50.6	---
09C	02/21/2006	614	432			<1.0	<1.0	<1.0	<1.0	<11.4	<12.3	0.78	326	2.4	<0.1	10300	6.5	44.2	---
09C	05/15/2006	697	515			<1.0	<1.0	<1.0	<1.0	<11	<12	1.01	192	2.0	27.9	21000	7.0	42.1	---
09C	08/16/2006	790	608			<1.0	<1.0	<1.0	<1.0	<1.1	<b>1.6</b>	0.80	199	1.2	28.8	22900	6.5	33.0	---
09C	11/27/2006	893	711			<0.2	<0.2	<0.2	<0.2	<1.1	<b>9.1</b>	1.40	289	2.4	26.7	23500	6.5	44.0	---
09C	02/22/2007	980	798			<1.0	<1.0	<1.0	<1.0	<1.1	<b>3.9</b>	0.75	-32	3.6	0.2	17700	6.5	33.8	---
09C	05/22/2007	1069	887			<1.0	<1.0	<1.0	<1.0	<1.1	<b>5.4</b>	0.52	123	3.5	<0.1	20600	6.6	25.4	---
09C	11/29/2007	1260	1078			<1.0	<1.0	<1.0	<1.0	<1.1	<b>5.4</b>	0.81	147	3.6	27.3	30000	6.5	27.1	---
09C	05/19/2008	1432	1250			<0.2	<0.2	<0.2	<b>0.2</b>	<1.1	<b>15.2</b>	2.11	-57	4.6	18.6	22800	6.5	22.3	---
09C	11/24/2008	1621	1439			<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	2.92	-44	1.8	<2.0	17700	6.6	334	---
09C	05/18/2009	1796	1614			<1.0	<1.0	<1.0	<1.0	<1.1	<b>4.3</b>	0.45	-44	3.5	<0.5	21400	7.0	24.0	---
09C	11/16/2009	1978	1796			<3.0	<3.0	<3.0	<3.0	<1.1	<b>1.9</b>	1.27	-7	3.0	<0.1	22400	6.4	20.7	---
10A	05/03/2004	-45				<b>29</b>	<b>27</b>	<b>80</b>	<b>6.4</b>	<0.50	<0.50	0.60	108	2.0	37.8	2.8	6.8	20.0	Clear, yellow tint
10A	08/23/2004	67				<b>14</b>	<b>12</b>	<b>170</b>	<b>4.0</b>	<0.50	<0.50	0.49	181	3.5	38.9	1.1	7.0	59.6	Clear, black tint
10A	10/19/2004	124	-58			<b>15</b>	<b>15</b>	<b>100</b>	<b>23</b>	<0.50	<0.50	0.66	224	4.0	37.8	2.7	7.0	24.0	Clear
10A	02/21/2005	249	67			<b>4.7</b>	<b>4.8</b>	<b>24</b>	<b>6.8</b>	<0.50	<b>0.54</b>	0.53	166	3.6	24.3	430	7.0	22.4	Clear, yellow color
10A	05/11/2005	328	146			<b>4.2</b>	<b>5.4</b>	<b>26</b>	<b>7.2</b>	<0.50	<0.50	0.95	47	3.0	27.9	540	7.2	25.9	Clear, yellow-brown tint
10A	08/22/2005	431	249			<b>2.7</b>	<b>6.3</b>	<b>48</b>	<b>76</b>	<0.50	<0.50	0.73	177	2.0	48.8	240	7.0	31.4	Clear, with yellow-brown tint
10A	11/14/2005	515	333			<b>3.3</b>	<b>6.7</b>	<b>47</b>	<b>73</b>	<0.50	<0.50	0.91	178	2.0	50.6	370	7.1	34.1	---
10A	02/21/2006	614	432			<b>3.7</b>	<b>9.6</b>	<b>42</b>	<b>150</b>	<11.4	<12.3	0.54	320	2.0	53.9	1130	6.8	45.8	---
10A	05/15/2006	697	515			<b>1.8</b>	<b>3.7</b>	<b>63</b>	<b>19</b>	<11	<12	0.67	190	1.8	57.4	3100	6.8	49.2	---
10A	08/16/2006	790	608			<b>1.6</b>	<b>1.6</b>	<b>38</b>	<b>20</b>	<1.1	<1.2	1.50	201	1.4	57.5	1620	6.7	50.8	---
10A	11/27/2006	893	711			<0.2	<0.2	<b>7.4</b>	<b>9.2</b>	<b>2.6</b>	<b>2.6</b>	2.67	201	3.0	57.9	1650	6.9	56.0	---
10A	02/22/2007	980	798			<b>1.2</b>	<1.0	<b>32</b>	<b>35</b>	<1.1	<1.2	0.57	-176	4.6	20.4	1370	6.8	56.4	---
10A	05/22/2007	1069	887			<b>1.1</b>	<1.0	<b>28</b>	<b>44</b>	<1.1	<b>1.4</b>	0.88	73	3.0	10.2	2590	6.9	47.3	---
10A	11/29/2007	1260	1078			<b>1.2</b>	<1.0	<b>22</b>	<b>78</b>	<b>4.4</b>	<b>3.7</b>	0.80	106	4.2	47.9	4810	6.9	47.8	---
10A	05/19/2008	1432	1250			<1.0	<1.0	<b>22</b>	<b>180</b>	<b>7.9</b>	<b>4.4</b>	2.19	-177	4.0	32.5	4870	7.0	33.3	---
10A	11/24/2008	1621	1439			<1.0	<1.0	<b>1.6</b>	<b>5.0</b>	<1.1	<1.2	2.29	-87	3.4	1.3	16900	7.1	1200	---
10A	05/18/2009	1796	1614			<2.0	<2.0	<2.0	<2.0	<1.1	<1.2	0.66	-80	3.3	<1.0	17900	6.9	168	---

**SWMU-20 CLEANUP ACTION SUMMARY - SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds					Aquifer Redox Conditions				Donor Parameters		Notes		
						PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection														
10A	11/16/2009	1978	1796		448	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	3.14	-40	4.2	<1.0	18200	6.3	69.2	---
10A	5/20/2010	2163	1981		633	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	16.23	341	3.0	<1.0	17600	6.8	60.4	Duffy: Replace DO electric membrane
10A	11/10/2010	2337	2155		807	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	4.09	67	2.4	0.5	22800	6.9	56.8	---
10A	5/3/2011	2511	2329		981	<2.0	<2.0	<2.0	<2.0	<1.1	<1.2	2.47	-21	2.5	<0.2	20700	6.9	41.6	---
10A	11/13/2011	2705	2523		1175	<0.2	<0.2	<b>0.2</b>	<b>0.4</b>	<1.1	<1.2	2.45	-38	2.0	0.3	15400	7.1	33.8	---
10A	5/14/2012	2888	2706		1358	<0.2	<0.2	<b>0.2</b>	<b>0.4</b>	<1.0	<1.0	0.57	88	2.5	0.32	20000	6.4	38.0	---
14A	05/04/2004	-44				<1.0	<1.0	<b>140</b>	<b>110</b>	<0.50	<0.50	0.53	-8	7.5	38.9	590	6.8	20.7	Clear, yellow tint
14A	08/23/2004	67				<1.0	<b>2.9</b>	<b>560</b>	<b>180</b>	<b>0.89</b>	<b>0.67</b>	0.54	162	3.2	30.1	810	6.8	22.6	---
14A	10/19/2004	124	-58			<5.0	<b>39</b>	<b>1200</b>	<b>650</b>	<0.50	<0.50	0.64	69	3.0	43.3	350	6.9	20.6	---
14A	02/21/2005	249	67	-24		<5.0	<5.0	<b>300</b>	<b>1000</b>	<b>13</b>	<b>2.7</b>	0.41	101	1.8	3.8	1700	6.9	44.0	Clear, yellow tint
14A	05/16/2005	333	151	60		<10	<10	<10	<10	<0.50	<0.50	5.90	45	4.0	<2.0	590	6.4	8620	---
14A	08/22/2005	431	249	158		<10	<10	<10	<10	<0.50	<0.50	1.62	234	3.0	<2.0	220	6.8	5380	Clear, yellow-brown
14A	11/15/2005	516	334	243		<3.0	<3.0	<b>6.0</b>	<b>3.0</b>	<0.50	<0.50	1.26	257	2.0	<0.1	2500	6.4	602	---
14A	02/21/2006	614	432	341		<1.0	<1.0	<1.0	<1.0	<11.4	<12.3	1.36	335	2.0	<0.1	5400	7.4	180	---
14A	05/17/2006	699	517	426		<2.0	<2.0	<b>2.1</b>	<2.0	<11	<12	1.78	76	2.8	12.0	9400	6.4	67.1	---
14A	08/16/2006	790	608	517		<1.0	<1.0	<b>3.0</b>	<1.0	<1.1	<1.2	1.16	240	1.2	16.5	6320	6.5	66.0	---
14A	11/29/2006	895	713	622		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	1.57	248	2.8	11.8	11100	6.3	72.0	---
14A	02/22/2007	980	798	707		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.89	-56	7.0	0.2	7670	6.2	34.9	---
14A	05/23/2007	1070	888	797		<1.0	<1.0	<b>1.5</b>	<1.0	<1.1	<1.2	1.11	165	3.0	8.6	10100	6.3	27.5	---
14A	12/03/2007	1264	1082	991		<1.0	<1.0	<b>1.6</b>	<1.0	<1.1	<1.2	2.29	-86	3.2	15.9	14500	6.4	55.6	---
14A	05/20/2008	1433	1251	1160	-97	<1.0	<1.0	<b>1.2</b>	<1.0	<1.1	<1.2	3.45	-88	3.6	<0.1	12100	6.3	26.3	---
14A	11/24/2008	1621	1439	1348	91	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	2.79	-70	3.0	194	14500	6.1	8.68	---
14A	05/20/2009	1798	1616	1525	268	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.41	-95	3.5	20.0	14400	6.3	9.83	---
14A	11/17/2009	1979	1797	1706	449	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.81	-18	3.2	165	15800	5.7	6.22	---
14A	5/24/2010	2167	1985	1894	637	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	4.29	311	2.8	5.1	14600	6.4	8.07	---
14A	11/10/2010	2337	2155	2064	807	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	2.47	171	2.6	38.6	14300	6.8	6.88	---
14A	5/5/2011	2513	2331	2240	983	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	2.96	83	1.8	8.4	15100	7.1	3.28	---
14A	11/13/2011	2705	2523	2432	1175	<0.2	<0.2	<b>0.6</b>	<0.2	<1.1	<1.2	2.04	-52	1.5	<0.1	7510	6.9	8.05	---
14A	5/14/2012	2888	2706	2615	1358	<0.2	<0.2	<b>0.3</b>	<b>0.2</b>	<1.0	<b>8.7</b>	0.13	62	2.6	3.4	16000	6.4	5.9	---
15A	05/03/2004	-45				<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
15A	10/26/2004	131	-51			<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
15A	05/16/2005	333	151			<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
15A	11/15/2005	516	334			<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
15A	05/17/2006	699	517			<5.0	<5.0	<5.0	<5.0	NA	NA	0.79	131	NA	NA	NA	6.7	NA	---
15A	11/29/2006	895	713			<3.0	<3.0	<3.0	<3.0	NA	NA	1.26	513	NA	NA	NA	6.6	NA	---
15A	05/23/2007	1070	888			<1.0	<1.0	<b>1.4</b>	<b>2.6</b>	NA	NA	1.19	144	NA	NA	NA	6.7	NA	---
15A	12/03/2007	1264	1082			<1.0	<1.0	<1.0	<b>1.3</b>	NA	NA	1.31	-105	NA	NA	NA	6.6	NA	---
15A	05/20/2008	1433	1251		-97	<3.0	<3.0	<3.0	<3.0	NA	NA	2.57	-135	NA	NA	NA	6.7	NA	---
15A	11/24/2008	1621	1439	91		<1.0	<1.0	<1.0	<2.0	NA	NA	2.07	-61	NA	NA	NA	6.8	NA	---
15A	05/19/2009	1797	1615	267		<3.0	<3.0	<3.0	<3.0	NA	NA	0.35	-33	NA	NA	NA	6.9	NA	---
15A	11/18/2009	1980	1798	450		<1.0	<1.0	<1.0	<b>1.4</b>	NA	NA	0.72	-0.1	NA	NA	NA	6.3	NA	---
15A	5/20/2010	2163	1981	633		<1.0	<1.0	<1.0	<b>1.6</b>	NA	NA	1.10	606	NA	NA	NA	6.8	NA	---
15A	11/10/2010	2337	2155	807		<1.0	<1.0	<1.0	<b>1.4</b>	NA	NA	2.42	118	NA	NA	NA	7.1	NA	---
15A	5/5/2011	2513	2331	983		<10	<10	<10	NA	NA	NA	4.83	-19	NA	NA	NA	7.2	NA	---
15A	11/13/2011	2705	2523	1175		<0.2	<0.2	<b>0.3</b>	<b>1.0</b>	NA	NA	4.01	-41	NA	NA	NA	7.3	NA	---
15A	5/14/2012	2888	2706	1358		<1.0	<1.0	<1.0	<b>1.2</b>	NA	NA	0.64	56	NA	NA	NA	6.7	NA	---



**SWMU-20 CLEANUP ACTION SUMMARY - SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds					Aquifer Redox Conditions				Donor Parameters		Notes		
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
23A	05/21/2008	1434	1252	1161	-96	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	3.12	-28	2.2	31.7	1570	6.1	29.6	---
23A	11/25/2008	1622	1440	1349	92	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	4.22	-68	1.8	<0.1	3270	6.8	39.0	---
23A	05/19/2009	1797	1615	1524	267	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.31	-3	3.2	0.1	2370	6.5	39.1	---
23A	11/18/2009	1980	1798	1707	450	<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.41	1	2.4	1.6	1970	6.5	30.9	---

PCE = Tetrachloroethene

TCE = Trichloroethene

cDCE = cis-1,2-Dichloroethene

VC = Vinyl Chloride

DO = Dissolved Oxygen

ORP = Oxidation Reduction Potential

TOC = Total Organic Carbon

Bold = Detect

µg/L = micrograms pr liter

mg/L = milligrams per liter

mV = millivolts

NA = Not analyzed

(a) Injections occurred on:

6/17/04 (6A, B, C; 9A, B, C)

12/16-17/04 (6A, 6B; 9A, 9B)

3/17/05 (14A)

8/25-28/08 (6A, 9A, 10A)

(b) Conducted at Well MW-14A only.

(c) MW-06A installed June 2004.

6/17/2004 for elapsed time relative to injection

12/16/2004 for elapsed time relative to injection

3/17/2005 for elapsed time relative to injection

8/25/2008 for elapsed time relative to injection

**SWMU-20 CLEANUP ACTION SUMMARY - NON SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds				
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	cDCE ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )	
MW-8C	5/3/2004	-45				<1.0	<1.0	<1.0	2.8	
MW-8C	10/25/2004	130	-52			<1.0	<1.0	<1.0	<b>3.5</b>	
MW-8C	5/12/2005	329	147			<1.0	<1.0	<1.0	<1.0	
MW-8C	11/14/2005	515	333			<1.0	<1.0	<1.0	<1.0	
MW-8C	5/15/2006	697	515			<10	<10	<10	<10	
MW-8C	11/27/2006	893	711			<5.0	<5.0	<5.0	<5.0	
MW-8C	5/21/2007	1068	886			<3.0	<3.0	<3.0	<3.0	
MW-8C	11/29/2007	1260	1078			<5.0	<5.0	<5.0	<5.0	
MW-8C	5/19/2008	1432	1250		-98	<5.0	<5.0	<5.0	<5.0	
MW-8C	11/23/2008	1620	1438			90	<5.0	<5.0	<5.0	
MW-8C	05/18/2009	1796	1614			266	<1.0	<1.0	<1.0	
MW-8C	11/16/2009	1978	1796			448	<3.0	<3.0	<3.0	
MW-9D	5/3/2004	-45				<1.0	<1.0	<1.0	<1.0	
MW-9D	10/19/2004	124	-58			<1.0	<1.0	<1.0	<1.0	
MW-9D	5/11/2005	328	146			<1.0	<1.0	<1.0	<1.0	
MW-9D	11/14/2005	515	333			<1.0	<1.0	<1.0	<1.0	
MW-9D	5/15/2006	697	515			<1.0	<1.0	<1.0	<1.0	
MW-9D	11/27/2006	893	711			<1.0	<1.0	<1.0	<1.0	
MW-9D	5/22/2007	1069	887			<1.0	<1.0	<1.0	<1.0	
MW-9D	11/29/2007	1260	1078			<1.0	<1.0	<1.0	<1.0	
MW-9D	5/19/2008	1432	1250		-98	<0.2	<0.2	<0.2	<0.2	
MW-9D	11/24/2008	1621	1439			91	<1.0	<1.0	<1.0	
MW-9D	05/18/2009	1796	1614			266	<1.0	<1.0	<1.0	
MW-9D	11/16/2009	1978	1796			448	<1.0	<1.0	<1.0	
MW-10C	5/3/2004	-45				<1.0	<1.0	<b>4.3</b>	<b>4.0</b>	
MW-10C	10/19/2004	124	-58			<1.0	<1.0	<b>6.4</b>	<b>11</b>	
MW-10C	5/11/2005	328	146			<1.0	<1.0	<b>4.0</b>	<b>1.9</b>	
MW-10C	11/14/2005	515	333			<1.0	<1.0	<1.0	<b>1.0</b>	
MW-10C	5/15/2006	697	515			<1.0	<1.0	<b>1.5</b>	<b>2.2</b>	
MW-10C	11/27/2006	893	711			<0.2	<0.2	<b>1.9</b>	<b>2.6</b>	
MW-10C	5/22/2007	1069	887			<1.0	<1.0	<b>6.7</b>	<b>5.8</b>	
MW-10C	11/29/2007	1260	1078			<1.0	<1.0	<b>7.2</b>	<b>5.6</b>	
MW-10C	5/19/2008	1432	1250		-98	<0.2	<0.2	<b>15</b>	<b>6.9</b>	
MW-10C	11/24/2008	1621	1439			91	<1.0	<1.0	<b>8.5</b>	<b>7.5</b>
MW-10C	05/18/2009	1796	1614			266	<1.0	<1.0	<1.0	<1.0
MW-10C	11/16/2009	1978	1796			448	<1.0	<1.0	<1.0	<1.0
MW-10C	5/20/2010	2163	1981			633	<1.0	<1.0	<1.0	<1.0
MW-10C	11/10/2010	2337	2155			807	<1.0	<1.0	<b>3.5</b>	<b>4.4</b>
MW-10C	5/3/2011	2511	2329			981	<1.0	<1.0	<b>5.8</b>	<b>4.7</b>
MW-10C	11/13/2011	2705	2523			1175	<0.2	<0.2	<b>3.7</b>	<b>4.3</b>
MW-10C	5/14/2012	2888	2706			1358	<0.2	<0.2	<b>5.4</b>	<b>4.0</b>
MW-11A	5/2/2004	-46				<1.0	<b>2.1</b>	<b>21</b>	<1.0	
MW-11A	10/25/2004	130	-52			<1.0	<b>2.0</b>	<b>20</b>	<1.0	
MW-11A	5/12/2005	329	147			<1.0	<b>2.0</b>	<b>20</b>	<1.0	
MW-11A	11/15/2005	516	334			<1.0	<b>2.0</b>	<b>22</b>	<1.0	
MW-11A	5/16/2006	698	516			<1.0	<b>1.1</b>	<b>20</b>	<1.0	
MW-11A	11/26/2006	892	710			<1.0	<b>1.5</b>	<b>24</b>	<1.0	
MW-11A	5/22/2007	1069	887			<1.0	<b>1.5</b>	<b>26</b>	<1.0	
MW-11A	11/27/2007	1258	1076			<1.0	<b>1.1</b>	<b>27</b>	<1.0	
MW-11A	5/19/2008	1432	1250		-98	<0.2	<b>1.2</b>	<b>26</b>	<b>0.2</b>	
MW-11A	11/23/2008	1620	1438			90	<1.0	<b>1.2</b>	<b>33</b>	<1.0

**SWMU-20 CLEANUP ACTION SUMMARY - NON SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds						
						1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE ( $\mu$ g/L)	TCE ( $\mu$ g/L)	cDCE ( $\mu$ g/L)
MW-11A	05/18/2009	1796	1614			266	<1.0	<1.0	<b>26</b>	<1.0		
MW-11A	11/17/2009	1979	1797			449	<1.0	<b>1.0</b>	<b>30</b>	<1.0		
MW-11A	5/19/2010	2162	1980			632	<1.0	<b>1.1</b>	<b>26</b>	<1.0		
MW-11A	11/8/2010	2335	2153			805	<1.0	<1.0	<b>22</b>	<1.0		
MW-11A	5/3/2011	2511	2329			981	<1.0	<1.0	<b>22</b>	<1.0		
MW-11A	11/13/2011	2705	2523			1175	<0.2	<b>0.5</b>	<b>23</b>	<b>0.4</b>		
MW-11A	5/14/2012	2888	2706			1358	<0.2	<b>0.7</b>	<b>24</b>	<b>0.4</b>		
MW-12A	5/2/2004	-46					<1.0	<1.0	<b>1.8</b>	<1.0		
MW-12A	10/25/2004	130	-52				<1.0	<1.0	<b>4.4</b>	<1.0		
MW-12A	5/12/2005	329	147				<1.0	<1.0	<b>2.0</b>	<1.0		
MW-12A	11/15/2005	516	334				<1.0	<1.0	<b>3.8</b>	<1.0		
MW-12A	5/16/2006	698	516				<1.0	<1.0	<b>1.5</b>	<1.0		
MW-12A	11/26/2006	892	710				<0.2	<b>0.7</b>	<b>4.4</b>	<0.2		
MW-12A	5/22/2007	1069	887				<1.0	<1.0	<b>2.4</b>	<1.0		
MW-12A	11/27/2007	1258	1076				<1.0	<1.0	<b>3.2</b>	<1.0		
MW-12A	5/19/2008	1432	1250			-98	<0.2	<b>0.6</b>	<b>3.2</b>	<0.2		
MW-12A	11/23/2008	1620	1438			90	<1.0	<1.0	<b>4.7</b>	<1.0		
MW-12A	05/18/2009	1796	1614			266	<1.0	<1.0	<b>1.4</b>	<1.0		
MW-12A	11/17/2009	1979	1797			449	<1.0	<1.0	<b>4.7</b>	<1.0		
MW-12A	5/19/2010	2162	1980			632	<1.0	<1.0	<1.0	<1.0		
MW-12A	11/8/2010	2335	2153			805	<1.0	<1.0	<b>4.3</b>	<1.0		
MW-12A	5/3/2011	2511	2329			981	<1.0	<1.0	<1.0	<1.0		
MW-12A	11/13/2011	2705	2523			1175	<0.2	<b>0.6</b>	<b>3.1</b>	<0.2		
MW-12A	5/14/2012	2888	2706			1358	<b>0.2</b>	<0.2	<0.2	<0.2		
MW-13A	5/2/2004	-46					<b>5.1</b>	<b>4.6</b>	<1.0	<1.0		
MW-13A	10/25/2004	130	-52				<b>4.3</b>	<b>4.0</b>	<1.0	<1.0		
MW-13A	5/12/2005	329	147				<b>6.1</b>	<b>4.6</b>	<1.0	<1.0		
MW-13A	11/14/2005	515	333				<b>6.0</b>	<b>4.5</b>	<1.0	<1.0		
MW-13A	5/16/2006	698	516				<b>7.1</b>	<b>4.6</b>	<1.0	<1.0		
MW-13A	11/27/2006	893	711				<b>8.3</b>	<b>6.5</b>	<b>0.3</b>	<0.2		
MW-13A	5/21/2007	1068	886				<b>8.2</b>	<b>7.0</b>	<b>0.4</b>	<0.2		
MW-13A	11/28/2007	1259	1077			-98	<b>6.4</b>	<b>4.2</b>	<1.0	<1.0		
MW-13A	5/19/2008	1432	1250			90	<b>8.7</b>	<b>6.8</b>	<b>0.3</b>	<0.2		
MW-13A	11/23/2008	1620	1438			266	<b>6.5</b>	<b>3.7</b>	<1.0	<1.0		
MW-13A	05/18/2009	1796	1614			449	<b>7.7</b>	<b>5.6</b>	<1.0	<1.0		
MW-13A	11/17/2009	1979	1797			633	<b>9.2</b>	<b>6.0</b>	<1.0	<1.0		
MW-13A	5/20/2010	2163	1981			807	<b>9.4</b>	<b>5.3</b>	<1.0	<1.0		
MW-13A	11/10/2010	2337	2155			982	<b>3.6</b>	<b>2.8</b>	<1.0	<1.0		
MW-13A	5/4/2011	2512	2330			1165	<b>3.9</b>	<b>2.4</b>	<1.0	<1.0		
MW-13A	11/3/2011	2695	2513			1358	<b>1.6</b>	<1.0	<1.0	<1.0		
MW-13A	5/14/2012	2888	2706				<b>2.3</b>	<b>0.8</b>	<0.2	<0.2		
MW-13C	5/2/2004	-46					<1.0	<1.0	<1.0	<b>2.5</b>		
MW-13C	10/25/2004	130	-52				<1.0	<1.0	<1.0	<b>3.3</b>		
MW-13C	5/12/2005	329	147				<1.0	<1.0	<1.0	<1.0		
MW-13C	11/14/2005	515	333				<1.0	<1.0	<1.0	<b>3.8</b>		
MW-13C	5/16/2006	698	516				<1.0	<1.0	<1.0	<b>2.2</b>		
MW-13C	11/27/2006	893	711				<0.2	<0.2	<b>0.8</b>	<b>3.4</b>		
MW-13C	5/21/2007	1068	886				<0.2	<0.2	<b>0.8</b>	<b>4.4</b>		
MW-13C	11/28/2007	1259	1077				<1.0	<1.0	<1.0	<b>2</b>		
MW-13C	5/19/2008	1432	1250			-98	<0.2	<0.2	<b>0.2</b>	<b>0.6</b>		
MW-13C	11/23/2008	1620	1438			90	<1.0	<1.0	<1.0	<b>2.2</b>		
MW-13C	05/18/2009	1796	1614			266	<1.0	<1.0	<1.0	<1.0		

**SWMU-20 CLEANUP ACTION SUMMARY - NON SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds						
						1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE (µg/L)	TCE (µg/L)	cDCE (µg/L)
MW-13C	11/17/2009	1979	1797			449	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-13C	5/20/2010	2163	1981			633	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-13C	11/10/2010	2337	2155			807	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-13C	5/4/2011	2512	2330			982	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-13C	11/3/2011	2695	2513			1165	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-13C	5/14/2012	2888	2706			1358	<0.2	<0.2	<0.2	0.3	<0.2	<0.2
MW-14C	5/4/2004	-44					<1.0	<1.0	63	44		
MW-14C	10/26/2004	131	-51	-142			<1.0	<1.0	22	75		
MW-14C	5/16/2005	333	151	60			<1.0	<1.0	11	6.1		
MW-14C	11/15/2005	516	334	243			<1.0	<1.0	<1.0	1.8		
MW-14C	5/17/2006	699	517	426			<1.0	<1.0	<1.0	<1.0		
MW-14C	11/29/2006	895	713	622			<0.2	<0.2	<0.2	1.0		
MW-14C	5/23/2007	1070	888	797			<1.0	<1.0	<1.0	2.5		
MW-14C	12/3/2007	1264	1082	991			<1.0	<1.0	1.1	11		
MW-14C	5/20/2008	1433	1251	1160	-97		<1.0	<1.0	1.4	22		
MW-14C	11/24/2008	1621	1439	1348	91		<1.0	<1.0	<1.0	4.3		
MW-14C	05/20/2009	1798	1616	1525	268		<1.0	<1.0	<1.0	1.1		
MW-14C	11/17/2009	1979	1797	1706	449		<1.0	<1.0	<1.0	<1.0		
MW-14C	5/24/2010	2167	1985	1894	637		<1.0	<1.0	<1.0	<1.0		
MW-14C	11/10/2010	2337	2155	2064	807		<1.0	<1.0	<1.0	<1.0		
MW-14C	5/5/2011	2513	2331	2240	983		<1.0	<1.0	<1.0	<1.0		
MW-14C	11/13/2011	2705	2523	2432	1175		<0.2	<0.2	<0.2	<0.2		
MW-14C	5/14/2012	2888	2706	2615	1358		<0.2	<0.2	<0.2	<0.2		
MW-14E	5/4/2004	-44					<1.0	<1.0	<1.0	<1.0		
MW-14E	10/26/2004	131	-51	-142			<1.0	<1.0	<1.0	<1.0		
MW-14E	5/16/2005	333	151	60			<1.0	<1.0	<1.0	<1.0		
MW-14E	11/15/2005	516	334	243			<1.0	<1.0	<1.0	<1.0		
MW-14E	5/17/2006	699	517	426			<1.0	<1.0	<1.0	<1.0		
MW-14E	11/29/2006	895	713	622			<0.2	<0.2	<0.2	<0.2		
MW-14E	5/23/2007	1070	888	797			<1.0	<1.0	<1.0	<1.0		
MW-14E	12/3/2007	1264	1082	991			<1.0	<1.0	<1.0	<1.0		
MW-14E	5/20/2008	1433	1251	1160	-97		<1.0	<1.0	<1.0	<1.0		
MW-14E	11/24/2008	1621	1439	1348	91		<1.0	<1.0	<1.0	<1.0		
MW-14E	05/20/2009	1798	1616	1525	268		<1.0	<1.0	<1.0	<1.0		
MW-14E	11/17/2009	1979	1797	1706	449		<1.0	<1.0	<1.0	<1.0		
MW-15C	5/3/2004	-45					<1.0	<1.0	9.1	11		
MW-15C	10/26/2004	131	-51	-142			<1.0	<1.0	11	17		
MW-15C	5/16/2005	333	151	60			<1.0	<1.0	13	6.4		
MW-15C	11/15/2005	516	334	243			<1.0	<1.0	<1.0	<1.0		
MW-15C	5/17/2006	699	517	426			<1.0	<1.0	<1.0	<1.0		
MW-15C	11/29/2006	895	713	622			<0.2	<0.2	<0.2	<0.2		
MW-15C	5/23/2007	1070	888	797			<1.0	<1.0	<1.0	2.2		
MW-15C	12/3/2007	1264	1082	991			<1.0	<1.0	<1.0	2.5		
MW-15C	5/20/2008	1433	1251	1160	-97		<1.0	<1.0	1.8	6.6		
MW-15C	11/24/2008	1621	1439	1348	91		<1.0	<1.0	1.9	6.6		
MW-15C	05/19/2009	1797	1615	1525	267		<1.0	<1.0	<1.0	<1.0		
MW-15C	11/18/2009	1980	1798	1706	450		<1.0	<1.0	<1.0	<1.0		
MW-15C	5/20/2010	2163	1981	1894	633		<1.0	<1.0	<1.0	<1.0		
MW-15C	11/10/2010	2337	2155	2064	807		<1.0	<1.0	<1.0	<1.0		
MW-15C	5/5/2011	2513	2331	2240	983		<1.0	<1.0	<1.0	<1.0		
MW-15C	11/13/2011	2705	2523	2432	1175		<0.2	<0.2	<0.2	<0.2		
MW-15C	5/14/2012	2888	2706	2615	1358		<0.2	<0.2	<0.2	<0.2		

**SWMU-20 CLEANUP ACTION SUMMARY - NON SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE ( $\mu$ g/L)	TCE ( $\mu$ g/L)	cDCE ( $\mu$ g/L)	VC ( $\mu$ g/L)
MW-15D	5/3/2004	-45				<1.0	<1.0	<1.0	<1.0
MW-15D	10/26/2004	131	-51			<1.0	<1.0	<1.0	<1.0
MW-15D	5/16/2005	333	151			<1.0	<1.0	<1.0	<1.0
MW-15D	11/15/2005	516	334			<1.0	<1.0	<1.0	<1.0
MW-15D	5/17/2006	699	517			<1.0	<1.0	<1.0	<1.0
MW-15D	11/29/2006	895	713			<1.0	<1.0	<1.0	<1.0
MW-15D	5/23/2007	1070	888			<1.0	<1.0	<1.0	<1.0
MW-15D	12/3/2007	1264	1082			<1.0	<1.0	<1.0	<1.0
MW-15D	5/20/2008	1433	1251		-97	<1.0	<1.0	<1.0	<1.0
MW-15D	11/24/2008	1621	1439		91	<1.0	<1.0	<1.0	<1.0
MW-15D	05/19/2009	1797	1615		267	<1.0	<1.0	<1.0	<1.0
MW-15D	11/18/2009	1980	1798		450	<1.0	<1.0	<1.0	<1.0
MW-16A	5/2/2004	-46				1.2	1.2	2.3	<1.0
MW-16A	10/25/2004	130	-52			1.2	1.3	1.8	<1.0
MW-16A	5/12/2005	329	147			1.2	1.8	2.6	<1.0
MW-16A	11/15/2005	516	334			1.3	2.2	2.1	<1.0
MW-16A	5/16/2006	698	516			1.0	1.4	2.3	<1.0
MW-16A	11/26/2006	892	710			<0.2	0.8	4.2	<0.2
MW-16A	5/22/2007	1069	887			1.1	1.3	1.9	<1.0
MW-16A	11/28/2007	1259	1077			1.7	1.2	1.2	<1.0
MW-16A	5/19/2008	1432	1250		-98	1.2	1.3	1.2	<0.2
MW-16A	11/23/2008	1620	1438		90	1.5	1.4	1.0	<1.0
MW-16A	05/18/2009	1796	1614		266	1.6	1.6	<1.0	<1.0
MW-16A	11/16/2009	1978	1796		448	2.2	1.5	<1.0	<1.0
MW-16A	5/20/2010	2163	1981		633	1.4	1.4	<1.0	<1.0
MW-16A	11/10/2010	2337	2155		807	1.3	1.1	<1.0	<1.0
MW-16A	5/4/2011	2512	2330		982	1.6	1.4	<1.0	<1.0
MW-16A	11/13/2011	2705	2523		1175	1.4	1.3	0.5	<0.2
MW-16A	5/14/2012	2888	2706		1358	1.6	1.7	0.5	<0.2
MW-16C	5/2/2004	-46				<1.0	<1.0	1.7	5.4
MW-16C	10/25/2004	130	-52			<1.0	<1.0	2.4	8.5
MW-16C	5/12/2005	329	147			<1.0	<1.0	2.8	7.7
MW-16C	11/15/2005	516	334			<1.0	<1.0	4.6	12
MW-16C	5/16/2006	698	516			<1.0	<1.0	5.2	6.3
MW-16C	11/26/2006	892	710			1.2	2.3	2.0	<0.2
MW-16C	5/22/2007	1069	887			<1.0	<1.0	8.8	10
MW-16C	11/28/2007	1259	1077			<1.0	<1.0	7	8.9
MW-16C	5/19/2008	1432	1250		-98	<0.2	<0.2	7.8	7.9
MW-16C	11/23/2008	1620	1438		90	<1.0	<1.0	5.3	8.8
MW-16C	05/18/2009	1796	1614		266	<1.0	<1.0	5.0	6.3
MW-16C	11/16/2009	1978	1796		448	<1.0	<1.0	4.9	5.6
MW-16C	5/20/2010	2163	1981		633	<1.0	<1.0	3.7	3.4
MW-16C	11/10/2010	2337	2155		807	<1.0	<1.0	3.3	2.8
MW-16C	5/4/2011	2512	2330		982	<1.0	<1.0	3.7	3.2
MW-16C	11/13/2011	2705	2523		1175	<0.2	<0.2	3.3	2.5
MW-16C	5/14/2012	2888	2706		1358	<0.2	<0.2	4.8	4.2

**SWMU-20 CLEANUP ACTION SUMMARY - NON SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE ( $\mu$ g/L)	TCE ( $\mu$ g/L)	cDCE ( $\mu$ g/L)	VC ( $\mu$ g/L)
MW-17A	5/2/2004	-46				4.8	6.5	1.0	<1.0
MW-17A	10/25/2004	130	-52			5.2	4.8	1.2	<1.0
MW-17A	11/15/2005	516	334			4.0	5.4	1.1	<1.0
MW-17A	5/15/2006	697	515			4.2	4.4	<1.0	<1.0
MW-17A	11/27/2006	893	711			2.2	6.3	1.0	<0.2
MW-17A	5/21/2007	1068	886			4.7	5.3	1.0	<0.2
MW-17A	11/29/2007	1260	1078			4.2	4.3	<1.0	<1.0
MW-17A	5/19/2008	1432	1250		-98	4.3	5.1	0.8	<0.2
MW-17A	11/23/2008	1620	1438		90	4.2	5.2	1.2	<1.0
MW-17A	05/19/2009	1797	1615		267	3.2	4.9	1.4	<1.0
MW-17A	11/12/2009	1974	1792		444	3.7	4.5	1.1	<1.0
MW-17A	5/20/2010	2163	1981		633	4.0	3.1	<1.0	<1.0
MW-17A	11/8/2010	2335	2153		805	2.3	4.8	2.3	<1.0
MW-17A	5/3/2011	2511	2329		981	3.1	2.2	1.5	<1.0
MW-17A	11/3/2011	2695	2513		1165	2.6	2.8	1.0	<1.0
MW-17A	5/14/2012	2888	2706		1358	3.1	2.0	0.5	<0.2
MW-18A	5/2/2004	-46	-228			<1.0	<1.0	<1.0	<1.0
MW-18C	5/2/2004	-46				<1.0	<1.0	<1.0	<1.0
MW-18C	10/25/2004	130	-52			<1.0	<1.0	<1.0	<1.0
MW-18C	5/12/2005	329	147			<1.0	<1.0	<1.0	<1.0
MW-18C	11/15/2005	516	334			<1.0	<1.0	<1.0	<1.0
MW-18C	5/17/2006	699	517			<1.0	<1.0	<1.0	<1.0
MW-18C	11/27/2006	893	711			<0.2	<0.2	<0.2	<0.2
MW-18C	5/21/2007	1068	886			<0.2	<0.2	<0.2	0.2
MW-18C	11/28/2007	1259	1077			<1.0	<1.0	<1.0	<1.0
MW-18C	5/19/2008	1432	1250		-98	<0.2	<0.2	<0.2	0.2
MW-18C	11/23/2008	1620	1438		90	<1.0	<1.0	<1.0	<1.0
MW-18C	05/19/2009	1797	1615		267	<1.0	<1.0	<1.0	<1.0
MW-18C	11/17/2009	1979	1797		449	<1.0	<1.0	<1.0	<1.0
MW-19C	5/2/2004	-46				<1.0	<1.0	<1.0	<1.0
MW-19C	10/25/2004	130	-52			<1.0	<1.0	<1.0	<1.0
MW-19C	5/12/2005	329	147			<1.0	<1.0	<1.0	<1.0
MW-19C	11/15/2005	516	334			<1.0	<1.0	<1.0	<1.0
MW-19C	5/17/2006	699	517			<1.0	<1.0	<1.0	<1.0
MW-19C	11/27/2006	893	711			<0.2	<0.2	0.3	<0.2
MW-19C	5/22/2007	1069	887			<1.0	<1.0	<1.0	<1.0
MW-19C	11/29/2007	1260	1078			<1.0	<1.0	<1.0	<1.0
MW-19C	5/20/2008	1433	1251		-97	<1.0	<1.0	<1.0	<1.0
MW-19C	11/23/2008	1620	1438		90	<1.0	<1.0	<1.0	<1.0
MW-19C	05/19/2009	1797	1615		267	<1.0	<1.0	<1.0	<1.0
MW-19C	11/18/2009	1980	1798		450	<1.0	<1.0	<1.0	<1.0
MW-20C	5/3/2004	-45				<1.0	<1.0	1.4	2.4
MW-20C	10/25/2004	130	-52			<1.0	<1.0	1.7	4.6
MW-20C	5/12/2005	329	147			<1.0	<1.0	1.7	2.3
MW-20C	11/15/2005	516	334			<1.0	<1.0	2.1	2.9
MW-20C	5/17/2006	699	517			<1.0	<1.0	1.8	1.6
MW-20C	11/29/2006	895	713			<0.2	0.2	2.1	1.5
MW-20C	5/21/2007	1068	886			<0.2	<0.2	1.6	1.8
MW-20C	11/29/2007	1260	1078			<1.0	<1.0	1.6	1.3
MW-20C	5/20/2008	1433	1251		-97	<1.0	<1.0	1.6	2.5
MW-20C	11/23/2008	1620	1438		90	<1.0	<1.0	1.5	2.7

**SWMU-20 CLEANUP ACTION SUMMARY - NON SOURCE ZONE  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Well	Date	Elapsed Time from Injections (a) (days)				Volatile Organic Compounds			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	PCE ( $\mu\text{g/L}$ )	TCE ( $\mu\text{g/L}$ )	cDCE ( $\mu\text{g/L}$ )	VC ( $\mu\text{g/L}$ )
		MW-20C 05/19/2009	1797	1615		267	<1.0	1.4	<b>2.0</b>
MW-20C 11/18/2009		1980	1798		450	<1.0	<1.0	<b>1.7</b>	<b>2.3</b>
MW-20C 5/20/2010		2163	1981		633	<1.0	<1.0	<b>1.3</b>	<b>1.8</b>
MW-20C 11/8/2010		2335	2153		805	<1.0	<1.0	<b>1.4</b>	<b>1.4</b>
MW-20C 5/4/2011		2512	2330		982	<1.0	<1.0	<b>1.1</b>	<b>1.8</b>
MW-20C 11/3/2011		2695	2513		1165	<1.0	<1.0	<b>1.3</b>	<b>2.1</b>
MW-20C 5/14/2012		2888	2706		1358	<0.2	<0.2	<b>1.2</b>	<b>1.5</b>

PCE = Tetrachloroethene

(a) Injections occurred on:

TCE = Trichloroethene

6/17/04 (6A, B, C; 9A, B, C)

6/17/2004 for elapsed time relative to injection

cDCE = cis-1,2-Dichloroethene

12/16-17/04 (6A, 6B;9A,9B)

12/16/2004 for elapsed time relative to injection

VC = Vinyl Chloride

3/17/05 (14A)

3/17/2005 for elapsed time relative to injection

 $\mu\text{g/L}$  - micrograms per liter

8/25-28/08 (6A, 9A, 10A)

8/25/2008 for elapsed time relative to injection

Bold = Detect

(b) Conducted at Well MW-14A only.

*DEVELOPMENTAL CENTER*  
**GROUNDWATER MONITORING**  
**MAY 2012**

**SWMU-17 VOA/METALS/CONVENTIONALS DATA TABLES**

**SWMU-17 CLEANUP ACTION SUMMARY**

**SWMU-17 REMEDIAL ACTION INJECTION AND MONITORING WELLS**

**SWMU-17 VOA/METALS/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
FEBRUARY AND MAY 2012**

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Sample Name: LLI Sample ID: LLI SDG: Sample Date:	BDC-05-02 6553983/6555981	BDC-005-2 6645551	BDC-005-3 6643276	BDC-005-4 6645533	BDC-005-5 6643216	BDC-005-7 6645539	BDC-005-8 6643270	BDC-005-9 6645545
Test ID: VOA SW8260C (µg/L)								
Vinyl Chloride	4.0 UJ	2.0 UJ	0.3	0.2 U	0.2 U	0.9	0.2 U	3.9
cis-1,2-Dichloroethene	220 J	180 J	0.2 U	3.6	0.2 U	23	2.7	250
Trichloroethene	4.0 UJ	2.0 UJ	1.3	0.6	0.9	0.2 U	0.2 U	1.1
Tetrachloroethene	4.0 UJ	2.0 UJ	0.6	0.4	0.4	0.8	0.2 U	3.0
Test ID: Total Metals (mg/L)								
Arsenic (EPA 200.8)		0.0508	0.0019 J	0.0171	0.00095 U	0.0259	0.0214	0.0592
Copper (EPA 200.8)		0.0044	0.0032	0.0020 U	0.0031	0.0030	0.0067	0.0112
Test ID: Dissolved Metals (mg/L)								
Arsenic (EPA 200.8)		0.0486	0.0040	0.0158	0.00095 U	0.0237	0.0196	0.0522
Copper (EPA 200.8)		0.0020 U	0.0098	0.0020 U	0.0020 U	0.0020 U	0.0023	0.0020 U
Test ID: Conventional (mg/L)								
Nitrate (EPA 300.0)	0.5 UJ							
Sulfate (EPA 300.0)	1.5 U	0.83 J	10.3	21.5	22.1	0.41 J	0.42 J	0.49 J
Total Organic Carbon (SM20 5310C)	673	412	4.9	8.6	1.1	48.5	12.4	531
Test ID: Dissolved Gases; Mod RSK-175 (µg/L)								
Methane	8500	19000				27000		18000
Ethane	1.0 U	1.0 U				1.0 U		1.0 U
Ethene	1.0 U	1.0 U				1.0 U		1.0 U
Acetylene	1.0 U	1.0 U				1.0 U		1.0 U

**SWMU-17 VOA/METALS/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
FEBRUARY AND MAY 2012**

Page 2 of 5

Sample Name:	BDC-005-10	BDC-05-10-Dup	BDC-005-11	BDC-05-12	BDC-005-12	BDC-005-13	BDC-005-14	BDC-005-15
LLI Sample ID:	6643288	6643294	6643282	6553981/6555979	6643264	6643246	6643240	6643234
LLI SDG:	1307272	1307272	1307272	1290782/1291166	1307272	1307272	1307272	1307272
Sample Date:	5/6/2012	5/6/2012	5/6/2012	2/19/2012	5/6/2012	5/6/2012	5/6/2012	5/6/2012
Test ID: VOA SW8260C ( $\mu\text{g/L}$ )								
Vinyl Chloride	5.4	5.2	7.2	1.8	3.4	3.9	1.1	6.3
cis-1,2-Dichloroethene	120	120	44	53	39	13	3.0	49
Trichloroethene	1.0 U	1.0 U	0.5	0.4 U	0.2 U	0.2 U	0.4	2.0 U
Tetrachloroethene	1.0 U	1.0 U	0.2	0.4 U	0.2 U	0.2 U	0.2 U	2.0 U
Test ID: Total Metals (mg/L)								
Arsenic (EPA 200.8)	0.0516	0.0530	0.0378		0.0821	0.0512	0.0115	0.0571
Copper (EPA 200.8)	0.0119	0.0115	0.0090		0.0054	0.0034	0.0020 U	0.0088
Test ID: Dissolved Metals (mg/L)								
Arsenic (EPA 200.8)	0.0482	0.0441	0.0335		0.0714	0.0464	0.0094	0.0474
Copper (EPA 200.8)	0.0020 U	0.0020 U	0.0022		0.0020 U	0.0020 U	0.0020 U	0.0036
Test ID: Conventionals (mg/L)								
Nitrate (EPA 300.0)				0.5 UJ				
Sulfate (EPA 300.0)	0.43 J	0.44 J	0.50 J	1.5 U	0.77 J	0.43 J	0.62	0.30 U
Total Organic Carbon (SM20 5310C)	270	261	284	279	83.2	34.2	41.5	423
Test ID: Dissolved Gases; Mod RSK-175 ( $\mu\text{g/L}$ )								
Methane	19000	18000	18000	17000	21000	19000	23000	21000
Ethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethene	1.1 J	1.1 J	1.6 J	1.0 U	1.0 U	1.7 J	1.0 U	1.0 U
Acetylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**SWMU-17 VOA/METALS/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
FEBRUARY AND MAY 2012**

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Sample Name: LLI Sample ID: LLI SDG: Sample Date:	BDC-05-16 6553978/6555976	BDC-005-16 6643228	BDC-005-17 6643222	BDC-05-18 6553982/6555980	BDC-005-18 6643210	BDC-05-19 6553980/6555978	BDC-05-19-Dup 6553984/6555982	BDC-005-19 6643258
	1290782/1291166	1307272	1307272	1290782/1291166	1307272	1290782/1291166	1290782/1291166	1307272
	2/19/2012	5/6/2012	5/6/2012	2/19/2012	5/6/2012	2/19/2012	2/19/2012	5/6/2012
Test ID: VOA SW8260C (µg/L)								
Vinyl Chloride	7.4	24	5.6	0.2 U	0.2 U	14	14	23
cis-1,2-Dichloroethene	46	6.7	9.3	12	9.6	68	68	52
Trichloroethene	2.0 U	0.3	2.0 U	3.7	4.0	1.7	1.5	1.4
Tetrachloroethene	2.0 U	0.2 U	2.0 U	1.8	2.0	1.0 U	1.0 U	0.7
Test ID: Total Metals (mg/L)								
Arsenic (EPA 200.8)		0.0420	0.0576		0.0133			0.0575
Copper (EPA 200.8)		0.0027	0.0030		0.0020 U			0.0315
Test ID: Dissolved Metals (mg/L)								
Arsenic (EPA 200.8)		0.0387	0.0255		0.0126			0.0524
Copper (EPA 200.8)		0.0020 U	0.0020 U		0.0020 U			0.0077
Test ID: Conventionals (mg/L)								
Nitrate (EPA 300.0)	0.5 UJ			0.5 UJ		0.5 UJ	0.5 UJ	
Sulfate (EPA 300.0)	1.5 U	0.30 U	0.69 J	1.5 U	2.1	1.5 U	1.5 U	1.4
Total Organic Carbon (SM20 5310C)	1270	207	839	2.7	2.5	296	283	244
Test ID: Dissolved Gases; Mod RSK-175 (µg/L)								
Methane	18000	25000	15000	11000	7500	22000	19000	25000
Ethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethene	1.0 U	2.5 J	1.0 U	1.0 U	1.0 U	1.4 J	1.9 J	1.8 J
Acetylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

**SWMU-17 VOA/METALS/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
FEBRUARY AND MAY 2012**

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Sample Name: LLI Sample ID: LLI SDG: Sample Date:	BDC-05-20 6553977/6555975	BDC-005-20 6645563	BDC-05-21 6553976/6555974	BDC-005-21 6645557	BDC-05-22 6553975/6555973	BDC-005-22 6645569	BDC-05-23 6553974/6555972	BDC-005-23 6645575
	1290782/1291166	1307684	1290782/1291166	1307684	1290782/1291166	1307684	1290782/1291166	1307684
	2/19/2012	5/7/2012	2/19/2012	5/7/2012	2/19/2012	5/7/2012	2/19/2012	5/7/2012
Test ID: VOA SW8260C (µg/L)								
Vinyl Chloride	2.5	2.2	5.9	2.5	0.4	0.5	0.7	0.8
cis-1,2-Dichloroethene	17	14	0.7	0.8	13	11	4.7	5.4
Trichloroethene	2.9	1.8	0.3	0.4	2.0	2.0	0.6	0.7
Tetrachloroethene	0.2 U	0.2 U						
Test ID: Total Metals (mg/L)								
Arsenic (EPA 200.8)		0.0105		0.0101		0.0250		0.0081
Copper (EPA 200.8)		0.0020 U		0.0047		0.0021		0.0020 U
Test ID: Dissolved Metals (mg/L)								
Arsenic (EPA 200.8)		0.0109		0.0107		0.0226		0.0079
Copper (EPA 200.8)		0.0020 U		0.0020 U		0.0020 U		0.0020 U
Test ID: Conventional (mg/L)								
Nitrate (EPA 300.0)	0.5 UJ		0.5 UJ		0.5 UJ		0.5 UJ	
Sulfate (EPA 300.0)	1.5 U	2.3	1.5 U	1.9	17	19.4	8.9	15.8
Total Organic Carbon (SM20 5310C)	8.2	11.1	7.2	12.3	6.2	8.4	8.1	9.3
Test ID: Dissolved Gases; Mod RSK-175 (µg/L)								
Methane	16000	20000						
Ethane	1.0 U	1.0 U						
Ethene	1.0 U	1.0 U						
Acetylene	1.0 U	1.0 U						

**SWMU-17 VOA/METALS/CONVENTIONALS DATA  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING  
FEBRUARY AND MAY 2012**

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Sample Name:	BDC-05-24	BDC-005-24	Trip Blank	Trip Blank	Trip Blank
LLI Sample ID:	6553979/6555977	6643252	6553985	6643300	6645581
LLI SDG:	1290782/1291166	1307272	1290782	1307272	1307684
Sample Date:	2/19/2012	5/6/2012	2/19/2012	5/7/2012	5/7/2012
Test ID: VOA SW8260C ( $\mu\text{g/L}$ )					
Vinyl Chloride	0.8	1.0	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.7	2.8	0.2 U	0.2 U	0.2 U
Trichloroethene	0.2	1.3	0.2 U	0.2 U	0.2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Test ID: Total Metals (mg/L)					
Arsenic (EPA 200.8)		0.0057			
Copper (EPA 200.8)		0.0020 U			
Test ID: Dissolved Metals (mg/L)					
Arsenic (EPA 200.8)		0.0042			
Copper (EPA 200.8)		0.0020 U			
Test ID: Conventionals (mg/L)					
Nitrate (EPA 300.0)	0.5 UJ				
Sulfate (EPA 300.0)	1.5 U	0.85 J			
Total Organic Carbon (SM20 5310C)	9.8	9.1			
Test ID: Dissolved Gases; Mod RSK-175 ( $\mu\text{g/L}$ )					
Methane					
Ethane					
Ethene					
Acetylene					

U = Indicates compound was analyzed for, but was not detected at the given detection limit.

UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

$\mu\text{g/L}$  = micrograms per liter.

mg/L = milligrams per liter.



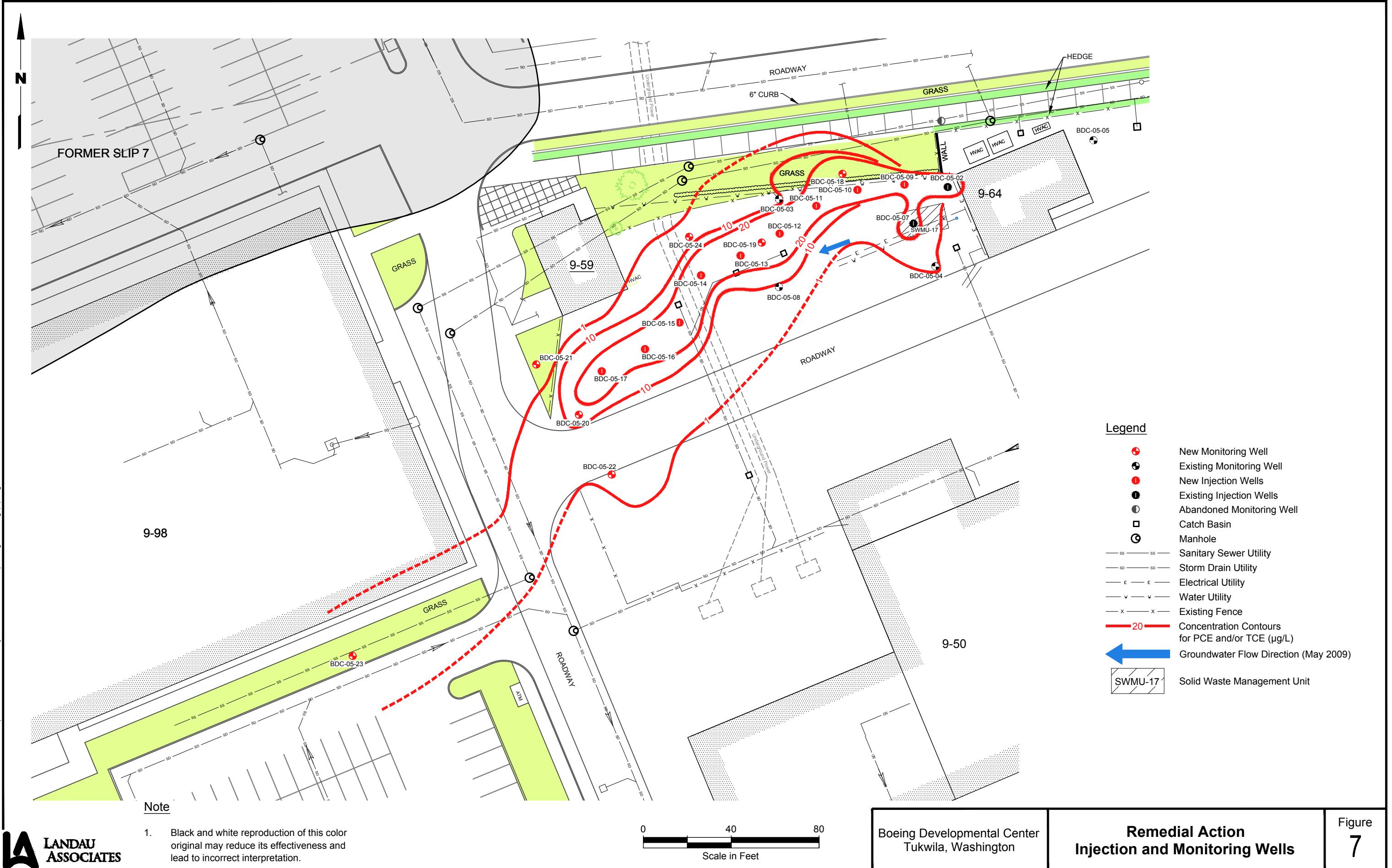






**SWMU-17 CLEANUP ACTION SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

		Pilot Injection	Full Injection #1	Volatile Organic Compounds (all units in ug/L)							Metals (mg/L)			Aquifer Redox Conditions					Donor Indicators		Comments		
		Elapsed Time From Injection (days)	Elapsed Time From Injection (days)	PCE	TCE	cDCE	VC	Ethene	Ethane	Acetylene	As, Tot	As, Dis	Cu, Tot	Cu, Dis	DO	Nitrate	Iron II	Sulfate	Methane	ORP	TOC	pH	
				(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	(mg/L)	(mg/L)	(mg/L)	(mV)	(mg/L)		
Preliminary Screening Level (Fresh Surface Water)		9	81	NA	525	NA	NA	NA	NA	NA	0.005	0.005	0.0034	0.0034									
Preliminary Screening Level (Marine Surface Water)		9	81	NA	525	NA	NA	NA	NA	NA	0.005	0.005	0.0089 (a)	0.0089 (a)									
Well	Date																						
BDC-05-20	7/31/2011	-18	<1.0	7.0	45	<1.0	<1.1	<1.2	<1.1	0.011	0.011	<0.002	<0.002	2.33	<0.1	1.5	7.4	0.2	-42	10.8	7.12		
(MW 23 ft DG)	11/3/2011	77	<1.0	5.7	25	1.0	<1.1	<1.2	<1.1	0.010	0.011	<0.002	<0.002	1.54	<0.1	1.0	6.0	4.6	11	8.3	7.14		
	2/19/2012	185	<0.2	2.9	17	2.5	<1.0	<1.0	<1.0					0.35	<0.5	1.5	<1.5	16.0	31	8.2	6.69		
	5/7/2012	263	<0.2	1.8	14	2.2	<1.0	<1.0	<1.0	0.011	0.011	<0.002	<0.002	0.69	1.8	2.3	20.0	20	11.1	6.66			
BDC-05-21	7/31/2011	-18	<1.0	1.0	1.3	14	2.6	<1.2	<1.1	0.006	0.006	<0.002	<0.002	2.98	<0.1	3.2	0.2	5.6	-31	6.4	7.33		
(MW 25 ft XG)	11/3/2011	77	<1.0	<1.0	1.0	4.7				0.005	0.005	<0.002	<0.002	1.95	<0.1	1.4	6.3		-12	5.2	7.29		
	2/19/2012	185	<0.2	0.3	0.7	5.9				0.010	0.011	0.005	<0.002	0.40	<0.5	1.4	<1.5	47	7.2	6.65			
	5/7/2012	263	<0.2	0.4	0.8	2.5								0.86	1.5	1.9		-35	12.3	6.76			
BDC-05-22	7/31/2011	-18	<1.0	1.1	9.6	1.0	<1.1	<1.2	<1.1	0.025	0.024	<0.002	<0.002	2.02	<0.1	2.2	14.0	5.1	-59	7.9	7.21		
(MW 30 ft XG)	11/3/2011	77	<1.0	2.1	10	<1.0				0.020	0.020	<0.002	<0.002	1.46	<0.1	0.8	18.1		19	6.1	7.08		
	2/19/2012	185	<0.2	2.0	13	0.4								0.43	<0.5	1.2	17.0		110	6.2	6.73		
	5/7/2012	263	<0.2	2.0	11	0.5				0.025	0.023	0.002	<0.002	0.81	1.6	19.4		32	8.4	6.68			
BDC-05-23	7/31/2011	-18	<1.0	<1.0	3.2	<1.0	<1.1	<1.2	<1.1	0.005	0.005	0.002	<0.002	2.72	<0.1	2.2	8.6	6.0	-101	9.1	7.47		
(MW 170ft DG)	11/3/2011	77	<1.0	<1.0	4.8	<1.0				0.005	0.006	<0.002	<0.002	1.45	<0.1	1.0	25.2		1	8.8	7.08		
	2/19/2012	185	<0.2	0.6	4.7	0.7								0.96	<0.5	1.2	8.9		162	8.1	6.33		
	5/7/2012	263	<0.2	0.7	5.4	0.8				0.008	0.008	<0.002	<0.002	0.07	2.0	15.8		45	9.3	6.70			
BDC-05-24	7/31/2011	-18	<1.0	<1.0	1.6	1.6	<1.1	<1.2	<1.1	0.003	0.003	<0.002	<0.002	1.67	<0.1	2.0	1.1	7.6	-7	10.0	7.06		
(MW 20 ft XG)	11/1/2011	75	<1.0	2.0	4.0	2.2				0.002	0.002	<0.002	<0.002	1.50	<0.1	1.6	0.3		-2.6	8.1	7.06		
	2/19/2012	185	<0.2	0.2	0.7	0.8								0.31	<0.5	1.8	<1.5		63	9.8	6.55		
	5/6/2012	262	<0.2	1.3	2.8	1.0				0.006	0.004	<0.002	<0.002	0.03		0.9		73	9.1	6.60			
PCE = Tetrachloroethene	Dis = Dissolved	IW = Injection Well																					
TCE = Trichloroethene	DO = Dissolved Oxygen	MW = Monitoring Well																					
cDCE = cis-1,2-Dichloroethene	ORP = Oxidation Reduction Potential	DG = Downgradient of injection wells																					
VC = Vinyl Chloride	TOC = Total Organic Carbon	UG = Upgradient of injection wells																					
As = Arsenic	NA = Not Applicable	XG = Crossgradient of injection wells																					
Cu = Copper	µg/L = micrograms pr liter	= No sample collected or sample not analyzed for specified constituent.																					
Tot = Total	mg/L = milligrams per liter																						
(a) Hardness dependent; hardness assumed to be 75.4 mg/L.																							
Injection Dates:																							
10/28/2008	Pilot Injection: BDC-05-02 only																						
8/18/2011	Full Injection #1: BDC-05-02, BDC-05-07, and BDC-05-09 through BDC-05-17; performed 8/15/11-8/18/11																						



***DEVELOPMENTAL CENTER  
GROUNDWATER MONITORING  
MAY 2012***

**AOC-05 DATA**

- **AOC-05 Cleanup Action Summary**
- **AOC-05 Cleanup Action Summary - Downgradient Monitoring**
- **AOC-05 TPH-G, BTEX, and Nitrate Concentration Trend Charts (June 2001 through Present)**
- **Site Plan**







**AOC-05 CLEANUP ACTION SUMMARY  
DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

		ORC	Pilot	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Full Scale	Volatile Organic Compounds (all units in µg/L)						Aquifer Redox Conditions						Donor Indicators		
			Injection	Injection	Injection 1	Injection 2	Injection 3	Injection 4	Injection 5	Injection 6	Injection 7	Total	TPH-G (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m,p-Xylene (µg/L)	o-Xylene (µg/L)	Xylenes (µg/L)	DO (mg/L)	Nitrate (mg-N/L)	Nitrite (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	ORP (mV)	TOC (mg/L)	pH	
Preliminary Groundwater Screening Levels (a)																		Comments											
Well	Date																												
BDC-104	2/18/2008	2113	396	-8								2.9	<1.0	<1.0	47	180	28	208	2.09	1.63	0.072	3.0	18.7	598					
BDC-104	3/27/2008	2151	434	30								3.2	<1.0	<1.0	22	220	52	272	1.34	161	0.1	0.5	52.2	259					
BDC-104	5/15/2008	2200	483	79	-40							1.0	<1.0	<1.0	7.0	26	22	48	1.24	28.7	0.7	0.4	26.6	94	6.69				
BDC-104	7/16/2008	2262	545	141	22							2.3	<1.0	2.9	3.3	110	50	160	1.56	196	0.4	0.0	74.7	-221	7.17				
BDC-104	9/15/2008	2323	606	202	83	-45						0.64	<1.0	2.6	<1.0	20	16	36	0.06	122	0.729	0.0	38.4	191					
BDC-104	11/20/2008	2389	672	268	149	21						<0.25	<1.0	<1.0	<1.0	1.4	4.1	5.5	0.96	67.2	<0.10	0.2	24.3	-27	7.46				
BDC-104	1/16/2009	2446	729	325	206	78						0.26	<1.0	<1.0	<1.0	<1.0	5.5	5.5	0.05	71.4	0.204	0.6	34.6	-164	6.86				
BDC-104	2/11/2009	2472	755	351	232	104						<0.25	<1.0	<1.0	<1.0	1.3	1.1	2.4	1.78	95.4	J	0.1	0.2	20.1	-75	6.68			
BDC-104	3/9/2009	2498	781	377	258	130						<0.25	<1.0	<1.0	<1.0	1.3	1.1	2.4	0	91.5	<0.1	0.0	19.2	20	6.67				
BDC-104	4/16/2009	2536	819	415	296	168						<0.25	<1.0	<1.0	<1.0	<1.0	1.6	1.6	0.34	67.2	<0.1	0.0	21.6	67	6.63				
BDC-104	5/14/2009	2564	847	443	324	196	-34					<0.25	<1.0	<1.0	<1.0	1.0	1.4	1.4	0.51	63.4	<0.1	0.0	20.1	6	6.70				
BDC-104	7/17/2009	2628	911	507	388	260	30					<0.25	<1.0	<1.0	<1.0	<1.0	1.0	1.41	21.0	0.5	1.0	30.8	-3	7.30					
BDC-104	9/9/2009	2682	965	561	442	314	84	-49				<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.63	39.8	0.1	0.8	41.6	61	7.20				
BDC-104	11/12/2009	2746	1029	625	506	378	148	15				<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.99	115	1.4	0.0	24.1	68	6.49				
BDC-104	2/17/2010	2843	1126	722	603	475	245	112				<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.73	119	0.1	0.0	111	868	6.93				
BDC-104	5/17/2010	2932	1215	811	692	564	334	201				<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.98	47.4	<1.0	0.6	30.5	482	6.74				
BDC-104	8/16/2010	3023	1306	902	783	655	425	292	-37			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.59	38.4	0.2	2.5	23.6	76	6.92				
BDC-104	11/8/2010	3107	1390	986	867	739	509	376	47			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.87	32.5	<0.1	0.0	18.6	115	7.23				
BDC-104	2/16/2011	3207	1490	1086	967	839	609	476	147			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.48	40.0	<0.1	0.4	24.1	423	6.71				
BDC-104	5/3/2011	3283	1566	1162	1043	915	685	552	223			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.19	31.3	<0.1	1.2	26.8	231	6.63				
BDC-104	8/1/2011	3373	1656	1252	1133	1005	775	642	313			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.10	11.7	<0.1	0.0	21.2	121	7.20				
BDC-104	11/1/2011	3465	1748	1344	1225	1097	867	734	405	-105		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.43	14.6	<0.1	0.0	18.7	-53	7.40				
BDC-104	2/19/2012	3575	1858	1454	1335	1207	977	844	515	5		<0.25	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	0.26	21.6	0.0	0.0	29.2	66	6.23				
BDC-104	5/3/2012	3649	1932	1528	1409	1281	1051	918	589	79		<0.25	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	0.06	19.4	1.5	26.5	207	6.78					

TPH-G = Total Petroleum Hydrocarbon-Gasoline

DO = Dissolved Oxygen

ORP = Oxidation Reduction Potential

TOC = Total Organic Carbon

NA = Not Applicable

µg/L = micrograms pr liter

mg/L = milligrams per liter

mV = millivolts

NA = Not Analyzed

= No sample collected or sample not analyzed for specified constituent.

Injection dates

5/7/2002 ORC

1/18/2007 Pilot-scale nitrate

2/26/2008 1st full scale injection

6/24/2008 2nd full scale injection

10/30/2008 3rd full scale injection

6/17/2009 4th full scale injection (start ammonium phosphate, 1/3 ammonium nitrate dose to both wells)

10/28/2009 5th full scale injection (103 full dose, 104 half dose)

9/22/2010 6th full scale injection (103 only full dose)

2/14/2012 7th full scale injection (103 only full dose)

**AOC-05 DOWNGRADIENT MONITORING**  
**AOC-05 ANAEROBIC BIOREMEDIATION REMEDIAL ACTION**  
**DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

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**SWMU-17**

Well	Date	Aquifer Redox Conditions					
		DO (mg/L)	Nitrate (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)	Methane (mg/L)	ORP (mV)
BDC-05-04	5/15/2006	12.3	2.6	33.4			
BDC-05-04	10/23/2008	2.45	7.6	0.1	31.0	0.29	73.5
BDC-05-04	11/2/2008	0.59	4.5	0.8	25.2	0.05	-16
BDC-05-04	12/16/2008	0.55	5.5	1.0	30.4	1.61	-98
BDC-05-04	1/16/2009	0.06	4.3	1.0	21.8	1.48	-192
BDC-05-04	2/11/2009	2.45	5.9	1.0	31.8	1.06	-54
BDC-05-04	3/9/2009	0.27	4.8	1.5	30.1	0.20	35
BDC-05-04	4/16/2009	1.48	5.9	1.4	33.6	<0.0007	68
BDC-05-04	5/13/2009	0.33	4.5	1.6	26.6	0.37	49
BDC-05-04	8/16/2009	0.86	5.4	2.2	30.6	<0.0007	93
BDC-05-04	11/13/2009	0.56	2.2	3.0	18.4	2.44	109
BDC-05-04	2/16/2010	0.88	<0.1	3.3	24.6	1.49	899
BDC-05-04	5/18/2010	0.75	<0.1	3.0	25.4	1.32	473
BDC-05-04	8/17/2010	1.00	<0.1	2.8	17.1	3.53	108
BDC-05-04	11/9/2010	2.21	<0.1	2.2	21.3	3.00	101
BDC-05-04	2/15/2011	2.50	<0.1	2.4	19.4	4.46	93
BDC-05-04	5/2/2011	1.69	<0.1	2.2	18.0	1.75	49
BDC-05-04	11/2/2011	1.52	<1.0	1.2	<1.0		-3
BDC-05-04	5/7/2012	0.16		2.0	21.5		98

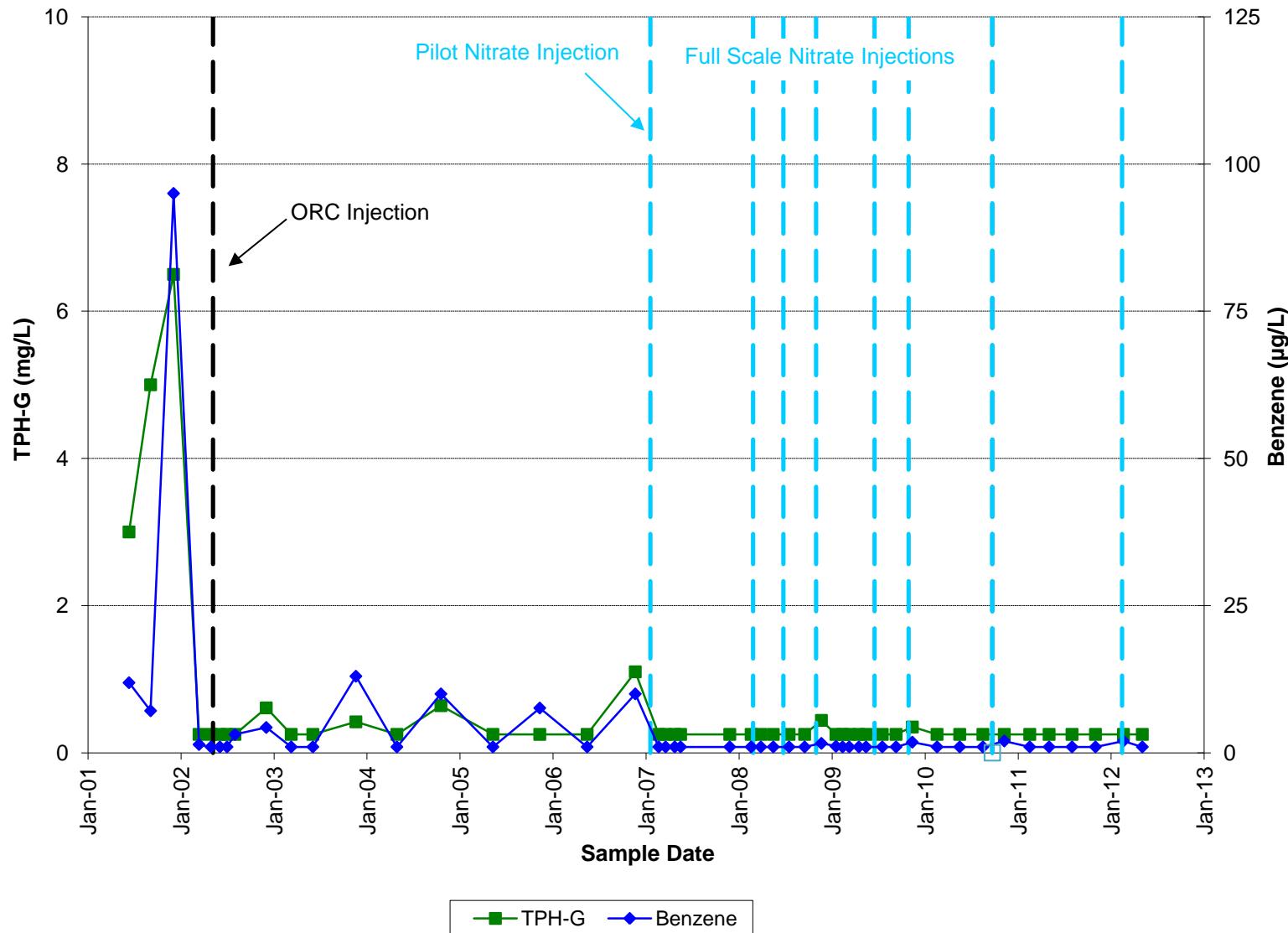
**AOC-05 DOWNGRADIENT MONITORING**  
**AOC-05 ANAEROBIC BIOREMEDIATION REMEDIAL ACTION**  
**DEVELOPMENTAL CENTER GROUNDWATER MONITORING**

Page 2 of 2

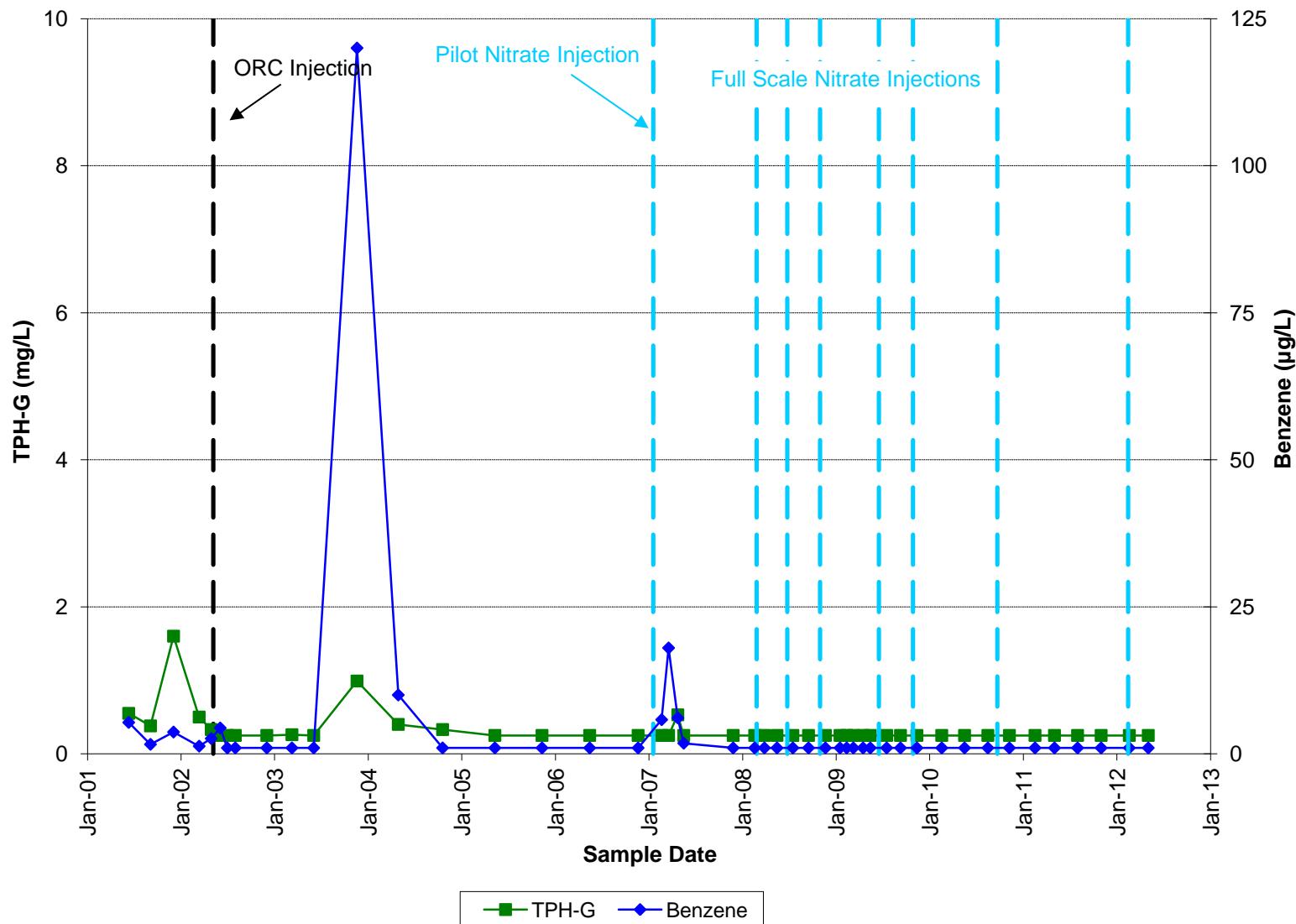
SWMU-20		Aquifer Redox Conditions		
		Nitrate (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)
Well	Date			
MW-17A	05/15/2006	Natural Redox Baseline Downgradient Monitoring Triggered	1.37	0.0
MW-17A	11/12/2009		0.9	27.0
MW-17A	5/17/2010		1.6	0.2
MW-17A	11/8/2010		0.1	21.0
MW-17A	5/3/2011		1.6	0.0
MW-17A	8/1/2011		0.5	19.8
MW-17A	11/1/2011		0.3	20.5
MW-17A	5/3/2012		4.4	23.2
MW-18A	05/15/2006	Natural Redox Baseline Downgradient Monitoring Triggered	0.154	0.4
MW-18A	11/12/2009		0.8	64.8
MW-18A	5/17/2010		1.0	0.4
MW-18A	11/8/2010		0.1	32.2
MW-18A	5/3/2011		<0.1	14.2
MW-18A	8/1/2011		1.1	31.5
MW-18A	11/1/2011		0.7	42.2
MW-18A	5/3/2012		<0.10	93.3
MW-21A	05/15/2006	Natural Redox Baseline Downgradient Monitoring Triggered	0.136	0.4
MW-21A	11/12/2009		<0.1	54.9
MW-21A	5/17/2010		0.2	0.0
MW-21A	11/8/2010		<0.1	11.9
MW-21A	5/3/2011		0.2	0.0
MW-21A	8/1/2011		0.1	5.9
MW-21A	11/1/2011		<0.1	52.1
MW-21A	5/3/2012		0.17	26.7

= Not Analyzed

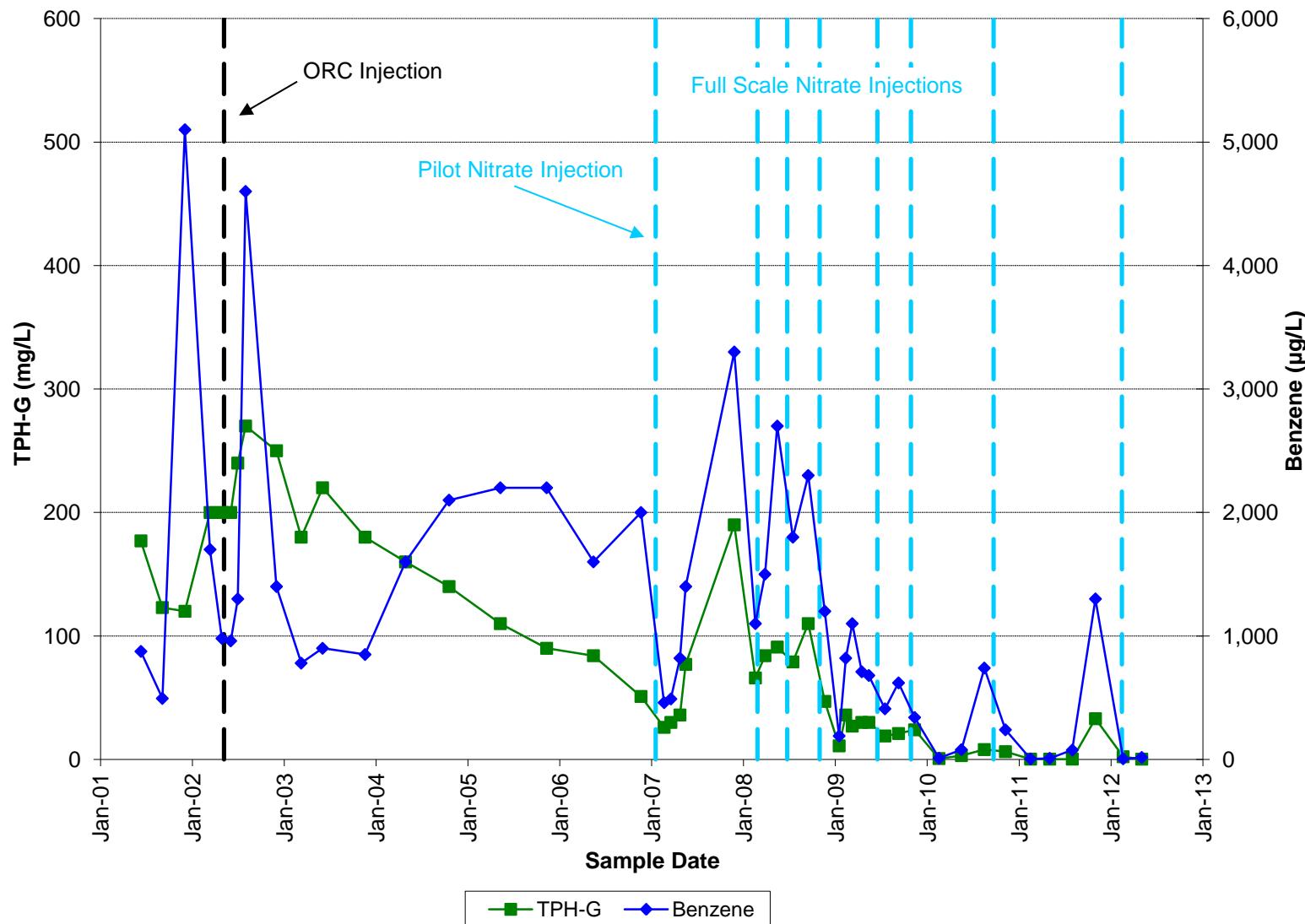
**BDC-101**  
**TPH-G and Benzene Concentrations Since 2001**



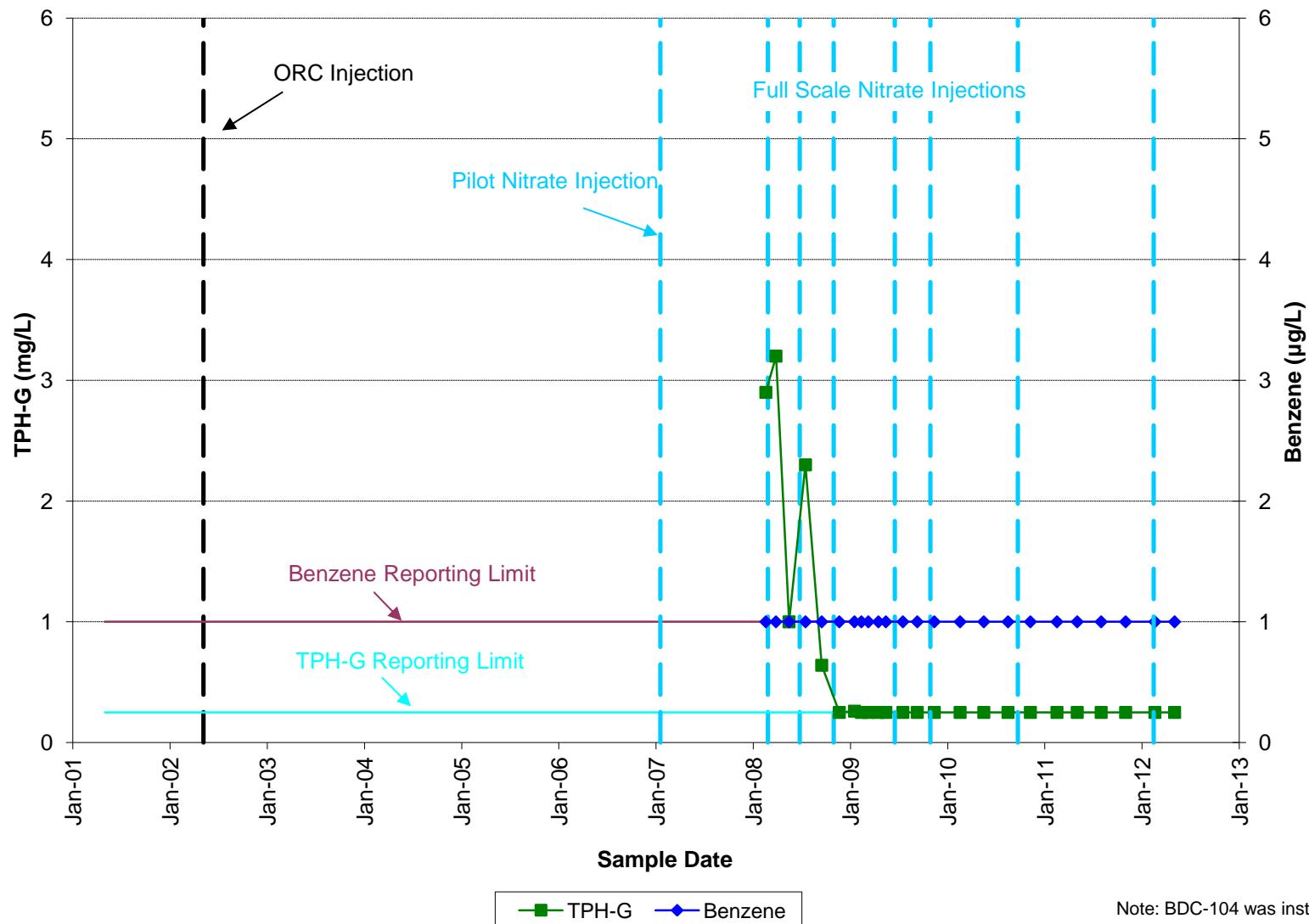
**BDC-102**  
**TPH-G and Benzene Concentrations Since 2001**



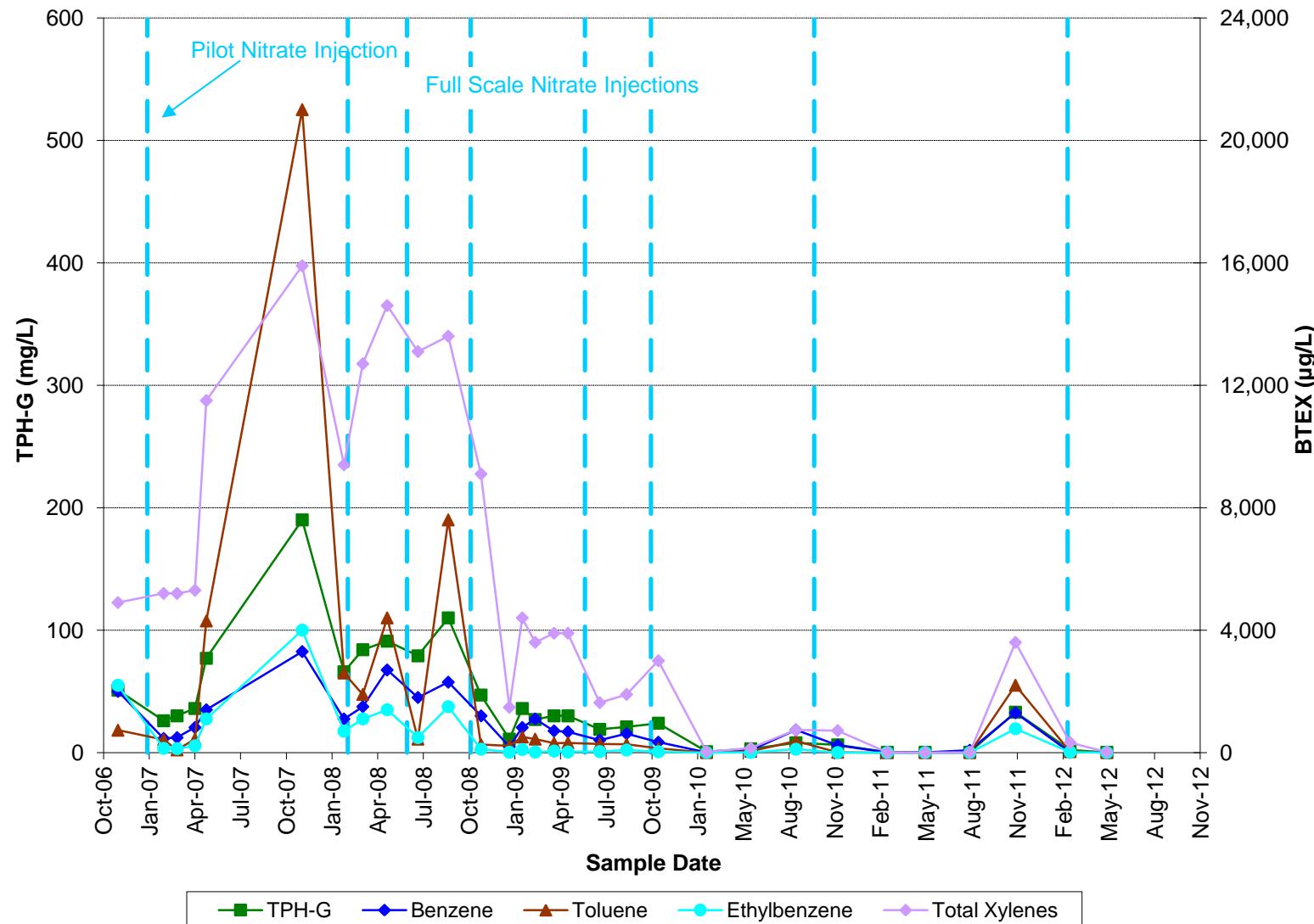
**BDC-103**  
**TPH-G and Benzene Concentrations Since 2001**



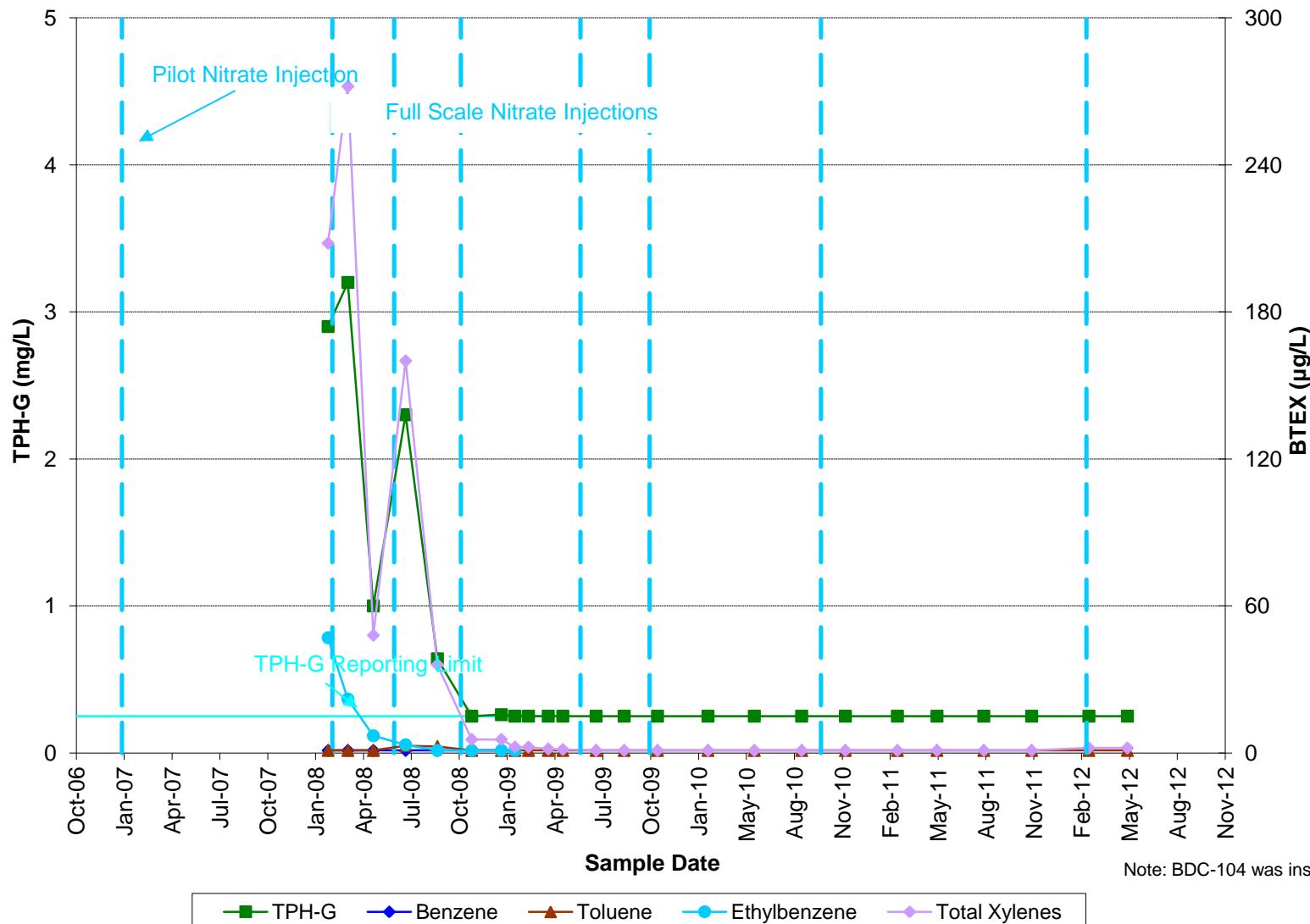
**BDC-104**  
**TPH-G and Benzene Concentrations Since 2001**



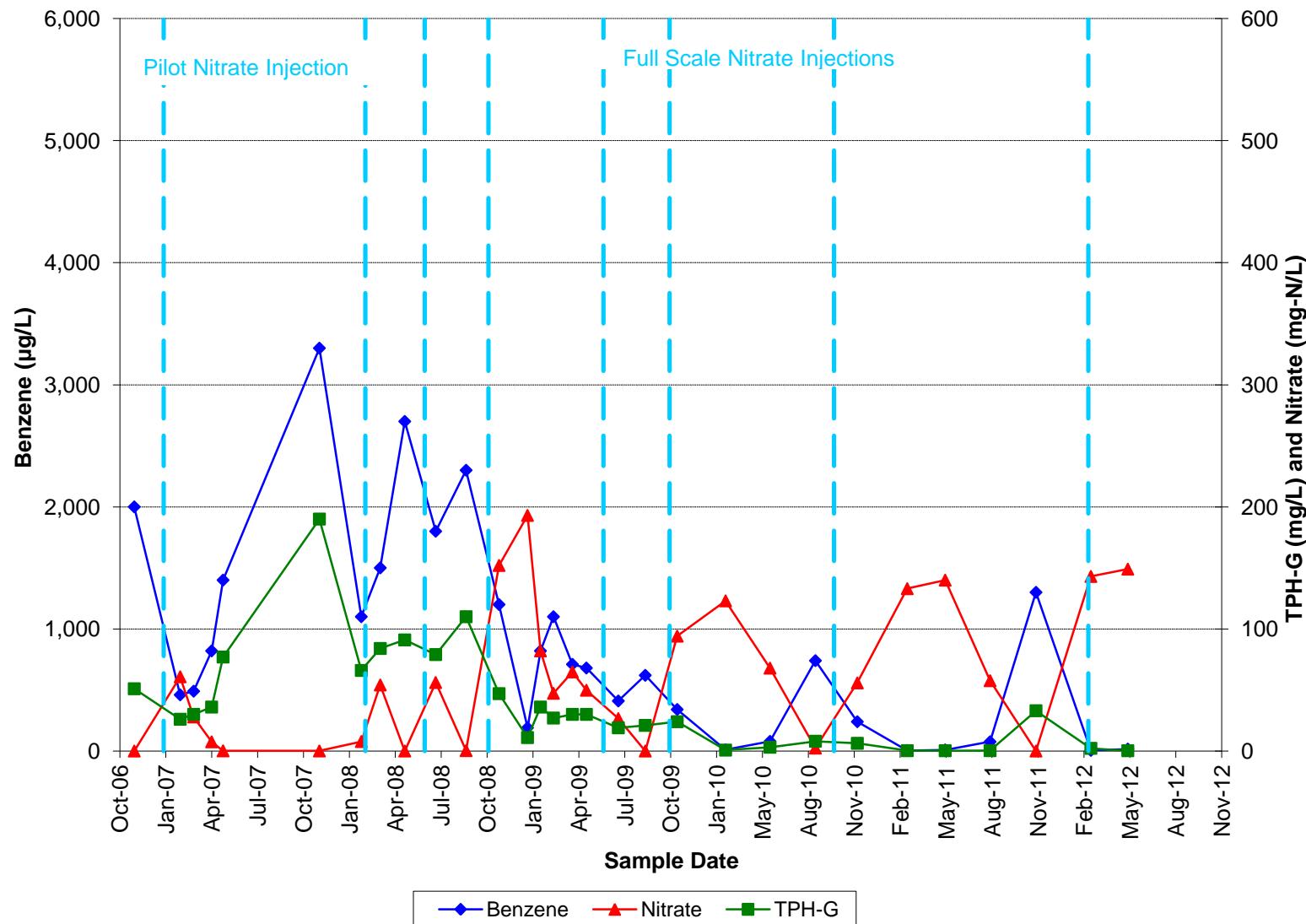
**BDC-103**  
**TPH-G and BTEX Concentrations Beginning with 2007 Pilot Testing**



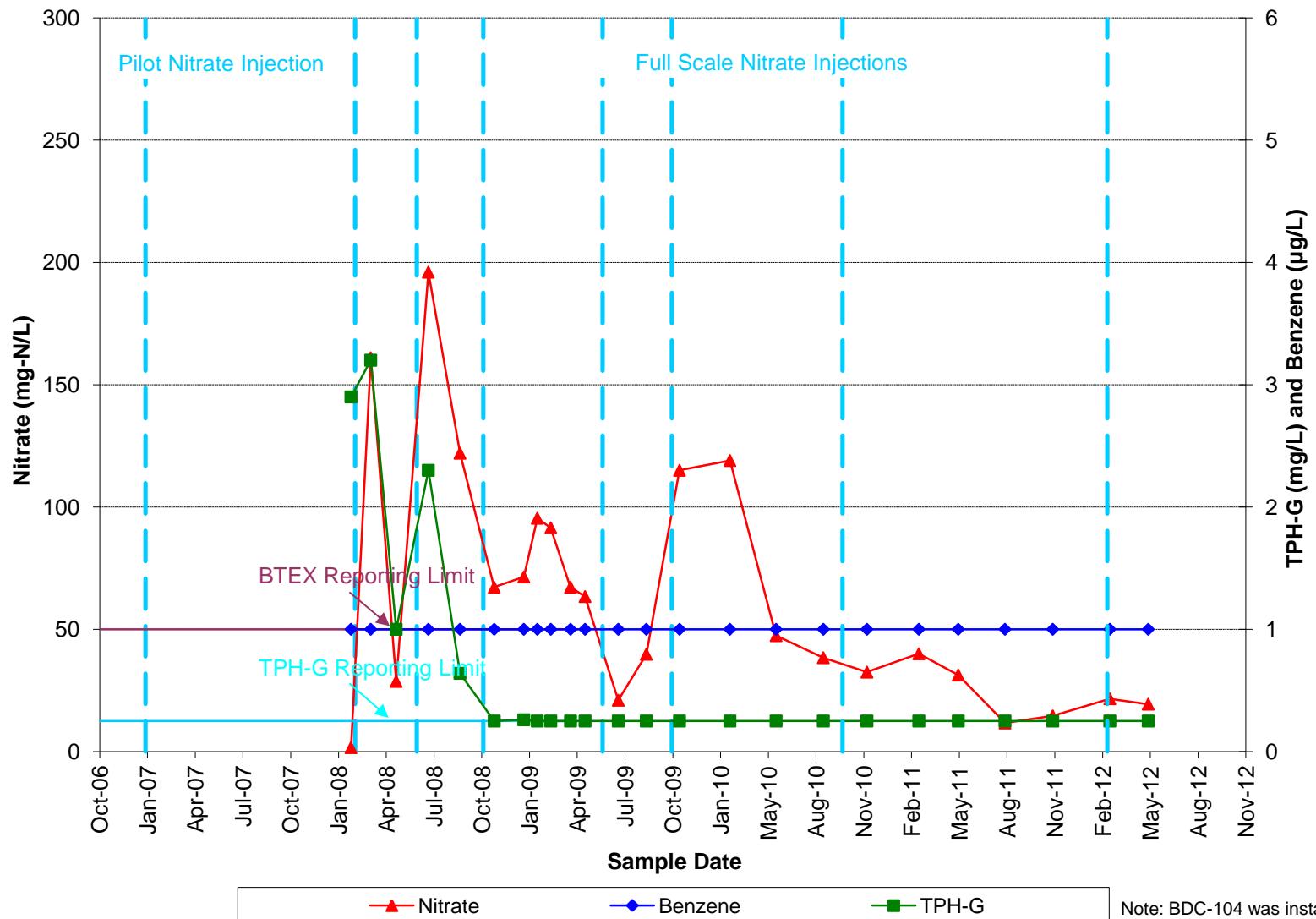
**BDC-104**  
**TPH-G and BTEX Concentrations Beginning with 2007 Pilot Testing**

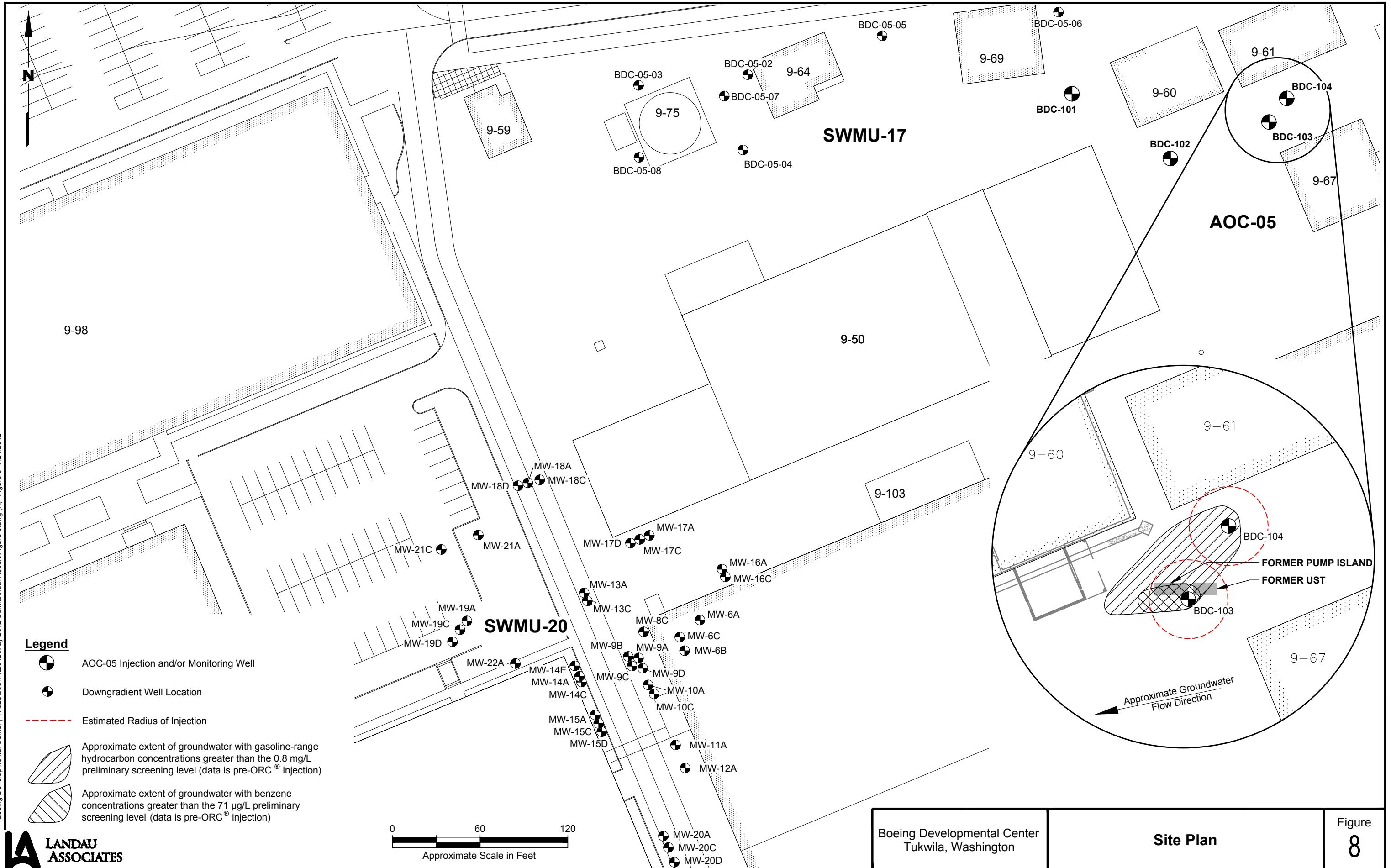


**BDC-103**  
**Nitrate, TPH-G, and Benzene Concentrations**



**BDC-104**  
**Nitrate, TPH-G, and Benzene Concentrations**

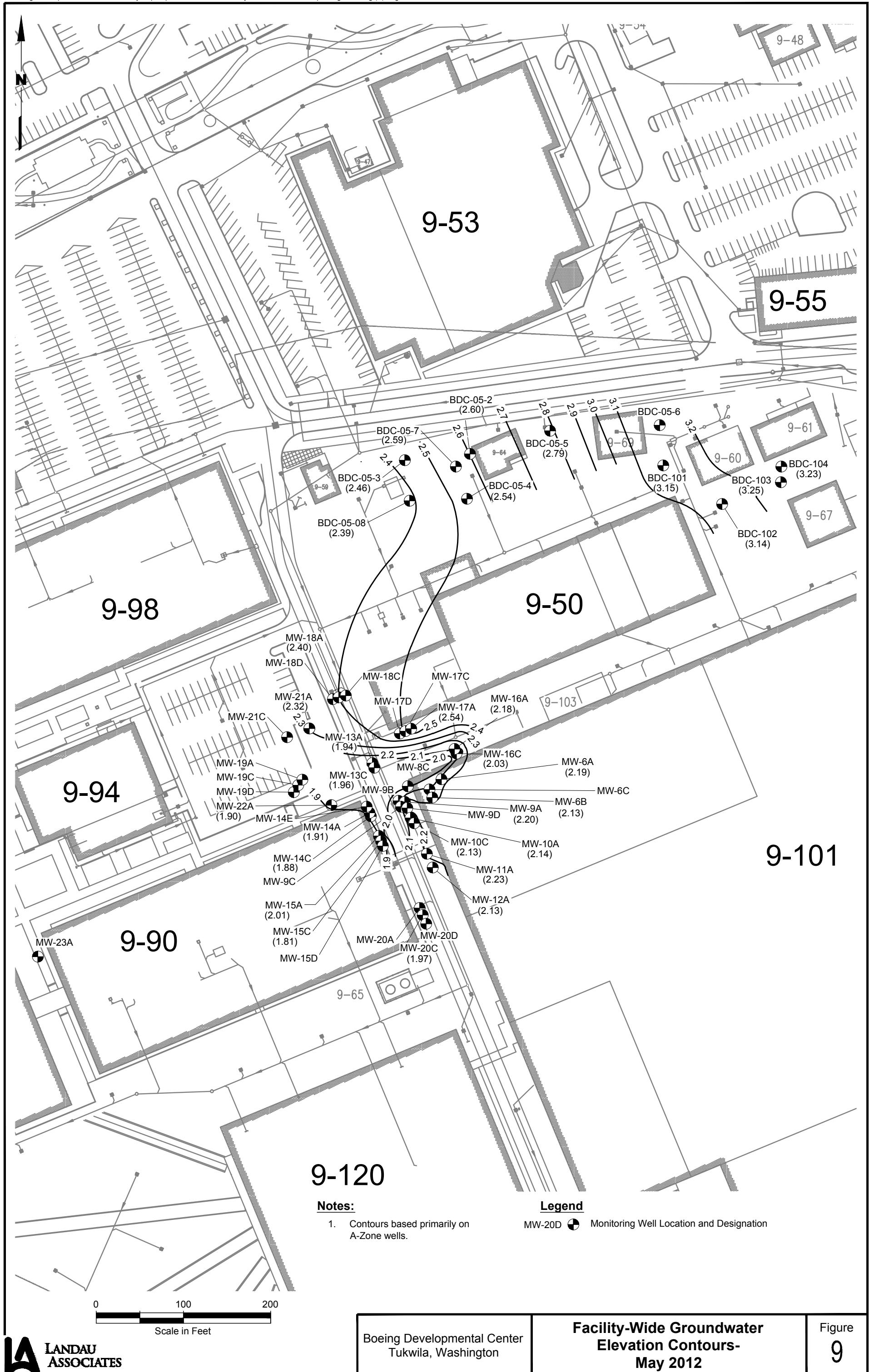




***DEVELOPMENTAL CENTER  
GROUNDWATER MONITORING  
MAY 2012***

**GROUNDWATER ELEVATION INFORMATION**

- **CONTOUR MAP**
- **CUMULATIVE WATER LEVEL MEASUREMENTS  
(November 1999 to Present)**



**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

Well Location / Bldg.	Well ID No.	Well Depth	May 2012		Nov 2011		July 2011		May 2011		Nov 2010		May 2010		Nov 2009		May 2009		Nov 2008		
			Depth to Water	Water Elevation																	
9-101-bldg.	MW-6A	24.25	12.61	2.19	12.99	1.81			12.50	2.30	12.70	2.10	12.69	2.11	12.42	2.38	12.73	2.07	12.79	2.01	
9-101-bldg.	MW-6B	27.20	12.96	2.13	13.29	1.80			12.81	2.28	13.06	2.03	13.04	2.05	12.73	2.36	13.08	2.01	13.12	1.97	
9-101-bldg.	MW-6C	40.55													12.72	2.35	13.05	2.02	13.06	2.01	
9-101-bldg.	MW-8C	40.20													12.70	2.22	13.01	1.91	12.88	2.04	
9-101-bldg.	MW-9A	21.30	12.54	2.20	13.03	1.71			12.53	2.21	12.65	2.09	12.65	2.09	12.43	2.31	12.77	1.97	12.69	2.05	
9-101-bldg.	MW-9B	26.90													12.30	2.29	12.64	1.95	12.68	1.91	
9-101-bldg.	MW-9C	38.80													12.40	2.26	12.67	1.99	12.66	2.00	
9-101-bldg.	MW-9D	56.00													12.43	2.23	12.79	1.87	12.78	1.88	
9-101-bldg.	MW-10A	20.20	12.55	2.14	12.97	1.72			12.47	2.22	12.64	2.05	12.62	2.07	12.46	2.23	12.65	2.04	12.68	2.01	
9-101-bldg.	MW-10C	40.40	12.49	2.13	12.90	1.72			12.38	2.24	12.55	2.07	12.53	2.09	12.41	2.21	12.60	2.02	12.62	2.00	
9-101-bldg.	MW-11A	19.90	12.65	2.23	13.03	1.85			12.62	2.26	12.59	2.29	12.69	2.19	12.52	2.36	12.81	2.07	12.81	2.07	
9-101-bldg.	MW-12A	20.20	12.70	2.13	13.23	1.60			12.71	2.12	12.68	2.15	12.73	2.10	12.56	2.27	12.96	1.87	12.91	1.92	
9-101-bldg.	MW-13A	19.37	12.20	1.94	12.66	1.48			12.11	2.03	12.08	2.06	12.14	2.00	11.89	2.25	12.29	1.85	12.25	1.89	
9-101-bldg.	MW-13C	35.62	12.06	1.96	12.52	1.50			11.94	2.08	11.92	2.10	12.02	2.00	11.71	2.31	12.14	1.88	12.12	1.90	
9-101-bldg.	MW-14A	19.00	12.46	1.91	12.71	1.66			12.16	2.21	12.22	2.15	12.39	1.98	12.10	2.27	12.50	1.87	12.50	1.87	
9-101-bldg.	MW-14C	33.30	12.09	1.88	12.20	1.77			12.78	1.19	11.82	2.15	12.00	1.97	11.65	2.32	12.20	1.77	12.08	1.89	
9-101-bldg.	MW-14E	82.10													7.20	6.98	7.55	6.63	7.51	6.67	
9-101-bldg.	MW-15A	20.70	12.16	2.01	12.51	1.66			11.87	2.30	12.12	2.05	12.22	1.95	11.89	2.28	12.44	1.73	12.31	1.86	
9-101-bldg.	MW-15C	34.35	12.36	1.81	12.44	1.73			11.49	2.68	12.00	2.17	12.17	2.00	11.85	2.32	12.46	1.71	12.23	1.94	
9-101-bldg.	MW-15D	51.80													12.02	2.39	12.78	1.63	12.47	1.94	
9-101-bldg.	MW-16A	20.55	12.81	2.18	13.19	1.80			12.67	2.32	12.84	2.15	12.88	2.11	12.68	2.31	12.98	2.01	12.95	2.04	
9-101-bldg.	MW-16C	38.30	13.01	2.03	13.33	1.71			12.84	2.20	13.02	2.02	13.04	2.00	12.63	2.41	13.12	1.92	13.13	1.91	
9-101-bldg.	MW-17A	19.00	12.26	2.54	12.73	2.07	12.84	1.96	12.45	2.35	12.65	2.15	12.63	2.17	12.55	2.25	12.75	2.05	12.80	2.00	
9-101-bldg.	MW-17C	35.00																			
9-101-bldg.	MW-17D	52.50																			
9-101-bldg.	MW-18A	20.02	11.90	2.40	12.84	1.46	12.43	1.87	12.14	2.16	12.22	2.08	12.25	2.05	12.21	2.09	12.42	1.88	12.37	1.93	
9-101-bldg.	MW-18C	34.55													12.36	2.27	12.66	1.97	12.67	1.96	
9-101-bldg.	MW-18D	52.85																			
9-101-bldg.	MW-19A	16.86														10.11	2.12	10.49	1.74	10.47	1.76
9-101-bldg.	MW-19C	33.92													9.98	2.25	10.44	1.79	10.33	1.90	
9-101-bldg.	MW-19D	51.86																			
9-101-bldg.	MW-20A	19.34																			
9-101-bldg.	MW-20C	35.32	12.18	1.97	12.76	1.39			12.27	1.88	11.87	2.28	12.06	2.09	11.70	2.45	12.15	2.00	12.13	2.02	
9-101-bldg.	MW-20D	50.15																			
9-101-bldg.	MW-22A	19.20	12.35	1.90	12.52	1.73			12.14	2.11	12.40	1.85	12.30	1.95	12.04	2.21	12.57	1.68	12.35	1.90	
9-101-bldg.	MW-23A	19.50													11.86	2.41	13.27	1.00	12.67	1.60	
9-101/9-50 bldg.	MW-21A	19.90	12.13	2.32	13.05	1.40	12.67	1.78	12.41	2.04	12.43	2.02	12.45	2.00	12.37	2.08					
9-101/9-50 bldg.	MW-21C	34.00																			
9-64-bldg.	BDC-05-02	25.35	11.81	2.60	12.63	1.78	12.35	2.06	11.81	2.60	12.10	2.31	12.14	2.27	12.05	2.36	12.19	2.22	12.20	2.21	
9-64-bldg.	BDC-05-03	25.47	11.95	2.46	12.77	1.64			11.94	2.47	12.21	2.20	12.24								

**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

Page 2 of 8

Well Location / Bldg.	Well ID No.	Well Depth	May 2012		Nov 2011		July 2011		May 2011		Nov 2010		May 2010		Nov 2009		May 2009		Nov 2008	
			Depth to Water	Water Elevation																
9-60 bldg.	BDC-101	18.42	11.32	3.15	12.46	2.01	12.16	2.31	11.48	2.99	11.92	2.55	11.82	2.65	11.82	2.65	11.89	2.58	11.95	2.52
9-60 bldg.	BDC-102	18.83	11.13	3.14	12.16	2.11	11.92	2.35	11.20	3.07	11.67	2.60	11.57	2.70	11.58	2.69	11.64	2.63	11.67	2.60
9-60 bldg.	BDC-103	18.51	11.09	3.25	12.20	2.14	11.90	2.44	10.96	3.38	11.63	2.71	11.54	2.80	11.55	2.79	11.61	2.73	11.68	2.66
9-60 bldg.	BDC-104	18.90	10.93	3.23	12.00	2.16	11.72	2.44	10.97	3.19	11.45	2.71	11.32	2.84	11.36	2.80	11.40	2.76	11.51	2.65
9-52-bldg.	952MW-1	17.40																		
9-52-bldg.	952MW-2	17.54																		
9-52-bldg.	952MW-3	17.95																		
9-52-bldg. (west)	MW-5	27.43																		
9-04-bldg. (north)	MW-2	26.98																		
9-04-bldg. (north)	MW-7	18.50																		
9-04-bldg. (north)	MW-8	18.50																		
9-04-bldg. (north)	MW-9	18.50																		

**DEVELOPMENTAL CENTER  
CUMULATIVE WATER LEVEL MEASUREMENTS**

Well Location / Bldg.	Well ID No.	Well Depth	May 2008		Nov 2007		May 2007		February 2007		Nov 2006		Aug 2006		May 2006		February 2006		November 2005		August 2005	
			Depth to Water	Water Elevation																		
9-101-bldg.	MW-6A	24.25	12.87	1.93	13.08	1.72	12.97	1.83	12.42	2.38	12.30	2.50	13.16	1.64	12.77	2.03	12.42	2.38	12.80	2.00	13.02	1.78
9-101-bldg.	MW-6B	27.20	13.21	1.88	13.46	1.63	13.32	1.77	12.75	2.34	12.67	2.42	13.50	1.59	13.09	2.00	12.75	2.34	13.15	1.94	13.35	1.74
9-101-bldg.	MW-6C	40.55	13.13	1.94	13.41	1.66	13.27	1.80	12.69	2.38	12.65	2.42	13.41	1.66	13.07	2.00	12.71	2.36	13.14	1.93	13.32	1.75
9-101-bldg.	MW-8C	40.20	13.16	1.76	13.28	1.64	13.00	1.92			12.21	2.71			13.18	1.74			13.00	1.92		
9-101-bldg.	MW-9A	21.30	12.93	1.81	13.07	1.67	12.90	1.84	12.36	2.38	12.12	2.62	13.05	1.69	13.00	1.74	12.37	2.37	12.73	2.01	13.08	1.66
9-101-bldg.	MW-9B	26.90	12.75	1.84	12.91	1.68	12.71	1.88	12.19	2.40	11.95	2.64	12.87	1.72	13.81	0.78	12.19	2.40	12.69	1.90	12.90	1.69
9-101-bldg.	MW-9C	38.80	12.82	1.84	13.02	1.64	12.81	1.85	12.20	2.46	12.05	2.61	13.01	1.65	12.91	1.75	12.26	2.40	12.69	1.97	12.93	1.73
9-101-bldg.	MW-9D	56.00	12.90	1.76	13.56	1.10	12.88	1.78			12.30	2.36			13.15	1.51			12.90	1.76		
9-101-bldg.	MW-10A	20.20	12.89	1.80	13.05	1.64	12.72	1.97	12.35	2.34	12.06	2.63	12.88	1.81	12.98	1.71	11.93	2.76	12.73	1.96	12.85	1.84
9-101-bldg.	MW-10C	40.40	12.78	1.84	12.96	1.66	12.77	1.85			11.99	2.63			12.88	1.74			12.63	1.99		
9-101-bldg.	MW-11A	19.90	13.16	1.72	13.16	1.72	12.96	1.92			11.85	3.03			12.80	2.08			12.92	1.96		
9-101-bldg.	MW-12A	20.20	13.22	1.61	13.24	1.59	13.00	1.83			11.89	2.94			12.97	1.86			12.98	1.85		
9-101-bldg.	MW-13A	19.37	12.62	1.52	12.42	1.72	12.33	1.81			11.50	2.64			12.48	1.66			12.26	1.88		
9-101-bldg.	MW-13C	35.62	12.46	1.56	12.29	1.73	12.20	1.82			11.35	2.67			12.33	1.69			12.10	1.92		
9-101-bldg.	MW-14A	19.00	12.64	1.73	12.55	1.82	12.73	1.64	12.03	2.34	11.46	2.91	12.83	1.54	12.59	1.78	11.95	2.42	12.39	1.98	12.56	1.81
9-101-bldg.	MW-14C	33.30	12.14	1.83	12.00	1.97	12.32	1.65			11.72	2.25			12.26	1.71			12.13	1.84		
9-101-bldg.	MW-14E	82.10	8.07	6.11	6.83	7.35	7.59	6.59			6.71	7.47			8.78	5.40			7.87	6.31		
9-101-bldg.	MW-15A	20.70	12.35	1.82	12.24	1.93	12.52	1.65			11.93	2.24			12.05	2.12			12.42	1.75		
9-101-bldg.	MW-15C	34.35	12.50	1.67	12.30	1.87	12.55	1.62			11.91	2.26			12.37	1.80			12.50	1.67		
9-101-bldg.	MW-15D	51.80	12.68	1.73	12.53	1.88	12.76	1.65			12.14	2.27			12.52	1.89			12.63	1.78		
9-101-bldg.	MW-16A	20.55	13.17	1.82	12.53	2.46	13.11	1.88			12.05	2.94			13.04	1.95			13.05	1.94		
9-101-bldg.	MW-16C	38.30	13.34	1.70	13.33	1.71	13.23	1.81			12.22	2.82			13.23	1.81			13.22	1.82		
9-101-bldg.	MW-17A	19.00	13.07	1.73	13.00	1.80	12.80	2.00			12.04	2.76			12.85	1.95			12.74	2.30		
9-101-bldg.	MW-17C	35.00																	12.83	2.21		
9-101-bldg.	MW-17D	52.50																	12.82	2.22		
9-101-bldg.	MW-18A	20.02	12.72	1.58	12.46	1.84	12.45	1.85			11.57	2.73			12.43	1.87			12.44	1.86		
9-101-bldg.	MW-18C	34.55	12.98	1.65	12.88	1.75	12.74	1.89			11.85	2.78			12.70	1.93			12.72	1.91		
9-101-bldg.	MW-18D	52.85																	12.42	2.21		
9-101-bldg.	MW-19A	16.86	10.49	1.74	10.68	1.55	10.55	1.68	9.92	2.31	9.59	2.64	10.77	1.46	10.44	1.79	10.22	2.01	10.43	1.80	10.70	1.53
9-101-bldg.	MW-19C	33.92	10.41	1.82	10.59	1.64	10.50	1.73			9.50	2.73			10.32	1.91			10.36	1.87		
9-101-bldg.	MW-19D	51.86																	10.69	1.54		
9-101-bldg.	MW-20A	19.34	12.60	1.71	12.76	1.55	12.30	2.01			12.10	2.21			12.09	2.22			12.68	1.63		
9-101-bldg.	MW-20C	35.32	12.50	1.65	12.39	1.76	12.28	1.87			11.67	2.48			12.05	2.10			12.30	1.85		
9-101-bldg.	MW-20D	50.15																	12.66	1.49		
9-101-bldg.	MW-22A	19.20	12.50	1.75	12.25	2.00	12.64	1.61	11.90	2.35	12.11	2.14	12.77	1.48	12.41	1.84	12.25	2.00	12.55	1.70	12.81	

**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

Well Location / Bldg.	Well ID No.	Well Depth	May 2008		Nov 2007		May 2007		February 2007		Nov 2006		Aug 2006		May 2006		February 2006		November 2005		August 2005	
			Depth to Water	Water Elevation																		
9-60 bldg.	BDC-101	18.42	12.29	2.18	12.22	2.25	12.13	2.34			11.42	3.05			12.07	2.40			11.91	2.56		
9-60 bldg.	BDC-102	18.83	12.08	2.19	11.86	2.41	11.89	2.38			11.13	3.14			11.85	2.42			11.79	2.48		
9-60 bldg.	BDC-103	18.51	12.02	2.32	11.93	2.41	11.87	2.47			11.10	3.24			11.78	2.56			11.81	2.53		
9-60 bldg.	BDC-104	18.90	11.84	2.32																		
9-52-bldg.	952MW-1		17.40																			
9-52-bldg.	952MW-2		17.54																			
9-52-bldg.	952MW-3		17.95																			
9-52-bldg. (west)	MW-5		27.43																			
9-04-bldg. (north)	MW-2		26.98																			
9-04-bldg. (north)	MW-7		18.50																			
9-04-bldg. (north)	MW-8		18.50																			
9-04-bldg. (north)	MW-9		18.50																			

**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

Well Location / Bldg.	Well ID No.	Well Depth	May 2005		February 2005		October 2004		August 2004		May 2004		November 2003		June 2003		December 2002		June 2002		December 2001			
			Depth to Water	Water Elevation																				
9-101-bldg.	MW-6A	24.25	12.52	2.28	12.68	2.12	12.90	1.90	13.06	1.74	13.00	1.83	12.88	1.95	13.30	1.53	13.01	1.82	13.21	1.62	12.45	2.38		
9-101-bldg.	MW-6B	27.20	12.88	2.21	12.97	2.12	13.25	1.84	13.40	1.69	13.00	1.83	13.44	1.55	13.16	1.83	13.36	1.63	12.60	2.39				
9-101-bldg.	MW-6C	40.55	12.87	2.20	12.90	2.17	13.18	1.89	13.37	1.70	13.14	1.85	13.03	1.96	13.44	1.55	13.16	1.83	13.36	1.63	12.60	2.39		
9-101-bldg.	MW-8C	40.20	12.64	2.28			12.91	2.01			13.11	1.81	13.11	1.81			13.39	1.53	13.19	1.73	13.27	1.65	12.89	2.03
9-101-bldg.	MW-9A	21.30	12.53	2.21	12.51	2.23	12.92	1.82	13.05	1.69	12.82	1.82	12.78	1.86	13.00	1.64	12.90	1.74	12.94	1.70	12.69	1.95		
9-101-bldg.	MW-9B	26.90	12.17	2.42	10.80	3.79	12.76	1.83	12.90	1.69	12.77	1.95	12.82	1.90	13.08	1.64	12.96	1.76	13.00	1.72	12.82	1.90		
9-101-bldg.	MW-9C	38.80	12.55	2.11	12.46	2.20	12.87	1.79	13.01	1.65	12.85	1.83	12.77	1.91	13.09	1.59	12.90	1.78	12.94	1.74	12.61	2.07		
9-101-bldg.	MW-9D	56.00	12.90	1.76			13.92	0.74			12.92	1.74	13.04	1.62			13.39	1.27						
9-101-bldg.	MW-10A	20.20	12.52	2.17	12.58	2.11	12.95	1.74	13.05	1.64	12.93	1.76	12.83	1.86	13.08	1.61	13.03	1.66	12.94	1.75	12.52	2.17		
9-101-bldg.	MW-10C	40.40	12.45	2.17			12.74	1.88			12.80	1.82	12.71	1.91	12.97	1.65	12.90	1.72	12.84	1.78	12.32	2.30		
9-101-bldg.	MW-11A	19.90	12.42	2.46			12.78	2.10			13.12	1.76	12.91	1.97	13.14	1.74	13.13	1.75	12.97	1.91	12.28	2.60		
9-101-bldg.	MW-12A	20.20	12.58	2.25			12.86	1.97			13.21	1.62	13.00	1.83	13.23	1.60	13.20	1.63	13.03	1.80	12.33	2.50		
9-101-bldg.	MW-13A	19.37	11.97	2.17			12.35	1.79			12.47	1.67	12.18	1.96	12.49	1.65	12.38	1.76	12.50	1.64	11.92	2.22		
9-101-bldg.	MW-13C	35.62	11.78	2.24			12.19	1.83			12.35	1.67	12.02	2.00	12.30	1.72	12.22	1.80	12.31	1.71	11.45	2.57		
9-101-bldg.	MW-14A	19.00	12.35	2.02	12.38	2.09	12.60	1.87	12.94	1.53	12.71	1.76	12.57	1.90	12.91	1.56	12.70	1.77	12.85	1.62	12.16	2.31		
9-101-bldg.	MW-14C	33.30	11.84	2.13			12.09	1.88			12.16	1.81	12.07	1.90	12.43	1.54	12.18	1.79	12.33	1.64	11.60	2.37		
9-101-bldg.	MW-14E	82.10	7.29	6.89			7.58	6.60			6.94	7.24	7.26	6.92	8.56	5.62	7.69	6.49	7.64	6.54	6.10	8.08		
9-101-bldg.	MW-15A	20.70	11.74	2.43			12.17	2.00			12.67	1.50	12.36	1.81	12.57	1.60	12.55	1.62	12.52	1.65	11.82	2.35		
9-101-bldg.	MW-15C	34.35	12.02	2.15			12.31	1.86			12.72	1.45	12.37	1.80	12.56	1.61	12.47	1.70	12.50	1.67	11.73	2.44		
9-101-bldg.	MW-15D	51.80	12.20	2.21			12.56	1.85			12.88	1.53	12.64	1.77	12.41	2.00	12.80	1.61	13.02	1.39	11.90	2.51		
9-101-bldg.	MW-16A	20.55	12.67	2.32			12.97	2.02			13.19	1.80	12.96	2.03	13.35	1.64	13.03	1.96	13.02	1.97	12.45	2.54		
9-101-bldg.	MW-16C	38.30	12.83	2.21			13.15	1.89			13.38	1.66	13.15	1.89	13.51	1.53	13.33	1.71	13.29	1.75	12.62	2.42		
9-101-bldg.	MW-17A	19.00					12.81	1.99			13.05	1.75	12.83	1.97	13.10	1.70	12.99	1.81	13.07	1.73	12.34	2.46		
9-101-bldg.	MW-17C	35.00					12.80	2.05			13.11	1.74												
9-101-bldg.	MW-17D	52.50					12.97	1.90			13.20	1.67												
9-101-bldg.	MW-18A	20.02	12.11	2.19	10.19	2.04	12.43	1.87			12.57	1.73	12.36	1.94			12.89	1.74	12.82	1.81	12.92	1.71	11.82	2.48
9-101-bldg.	MW-18C	34.55	12.36	2.27			12.75	1.88			12.84	1.79	12.62	2.01			10.55	1.68	10.41	1.82	10.71	1.52	9.93	2.30
9-101-bldg.	MW-18D	52.85					12.42	1.84			12.60	1.66												
9-101-bldg.	MW-19A	16.86	10.22	2.01			10.54	1.69			10.85	1.38	10.39	1.84										
9-101-bldg.	MW-19C	33.92	10.22	2.01			10.43	1.80			10.22	2.01	10.31	1.92										
9-101-bldg.	MW-19D	51.86					10.67	1.56			10.86	1.37												
9-101-bldg.	MW-20A	19.34	12.33	1.98			12.75	1.56			12.73	1.58	12.58	1.73										
9-101-bldg.	MW-20C	35.32	11.90	2.25			12.39	1.76			12.66	1.49	12.24	1.91										
9-101-bldg.	MW-20D	50.15																						

**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

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Well Location / Bldg.	Well ID No.	Well Depth	May 2005		February 2005		October 2004		August 2004		May 2004		November 2003		June 2003		December 2002		June 2002		December 2001	
			Depth to Water	Water Elevation																		
9-60 bldg.	BDC-101	18.42	11.73	2.74			12.31	2.16			12.04	2.43	12.08	2.39	12.43	2.04	12.34	2.13	12.07	2.40	11.29	3.18
9-60 bldg.	BDC-102	18.83	11.53	2.74			11.97	2.30			11.84	2.43	11.82	2.45	12.24	2.03	12.14	2.13	11.82	2.45	11.05	3.22
9-60 bldg.	BDC-103	18.51	11.50	2.84			12.08	2.26			11.79	2.55	11.72	2.62	12.27	2.07	12.15	2.19	11.81	2.53	11.03	3.31
9-60 bldg.	BDC-104	18.90																	11.10	2.38	10.21	3.27
9-52-bldg.	952MW-1	17.40																	11.37	2.63	10.46	3.54
9-52-bldg.	952MW-2	17.54																	11.40	2.36	10.52	3.24
9-52-bldg.	952MW-3	17.95																				
9-52-bldg. (west)	MW-5	27.43																				
9-04-bldg. (north)	MW-2	26.98																				
9-04-bldg. (north)	MW-7	18.50																				
9-04-bldg. (north)	MW-8	18.50																				
9-04-bldg. (north)	MW-9	18.50																				

**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

Well Location / Bldg.	Well ID No.	Well Depth	June 2001		December 2000		June 2000		November 1999	
			Depth to Water	Water Elevation						
9-101-bldg.	MW-6A	24.25								
9-101-bldg.	MW-6B	27.20	13.50	1.33	13.55	1.28	13.01	1.82	13.33	1.50
9-101-bldg.	MW-6C	40.55	13.67	1.32	13.70	1.29	13.15	1.84	13.50	1.49
9-101-bldg.	MW-8C	40.20	13.85	1.07	13.71	1.21	13.13	1.79	13.79	1.13
9-101-bldg.	MW-9A	21.30	13.76	0.88	13.72	0.92	12.78	1.86	13.67	0.97
9-101-bldg.	MW-9B	26.90	13.90	0.82	13.82	0.90	12.81	1.91	13.90	0.82
9-101-bldg.	MW-9C	38.80	13.64	1.04	13.57	1.11	12.75	1.93	13.60	1.08
9-101-bldg.	MW-9D	56.00	13.15	1.51	13.03	1.63	12.74	1.92	13.00	1.66
9-101-bldg.	MW-10A	20.20	13.52	1.17	13.62	1.07	12.84	1.85	13.50	1.19
9-101-bldg.	MW-10C	40.40	13.37	1.25	13.40	1.22	12.74	1.88	13.29	1.33
9-101-bldg.	MW-11A	19.90	13.35	1.53	13.52	1.36	12.91	1.97	13.20	1.68
9-101-bldg.	MW-12A	20.20	13.35	1.48	13.50	1.33	13.02	1.81	13.21	1.62
9-101-bldg.	MW-13A	19.37	12.59	1.55	12.76	1.38	12.50	1.64	12.33	1.81
9-101-bldg.	MW-13C	35.62	12.43	1.59	12.69	1.33	12.37	1.65	12.21	1.81
9-101-bldg.	MW-14A	19.00	13.00	1.47	12.98	1.49	12.70	1.77	12.78	1.69
9-101-bldg.	MW-14C	33.30	12.59	1.38	12.49	1.48	12.17	1.80	12.35	1.62
9-101-bldg.	MW-14E	82.10	7.83	6.35	7.44	6.74	7.45	6.73	7.90	6.28
9-101-bldg.	MW-15A	20.70	12.66	1.51	12.82	1.35	12.40	1.77	12.35	1.82
9-101-bldg.	MW-15C	34.35	12.80	1.37	12.77	1.40	12.36	1.81	12.49	1.68
9-101-bldg.	MW-15D	51.80	12.88	1.53	12.90	1.51	12.59	1.82	12.44	1.97
9-101-bldg.	MW-16A	20.55	13.55	1.44	13.50	1.49	13.19	1.80	13.34	1.65
9-101-bldg.	MW-16C	38.30	13.77	1.27	13.67	1.37	13.36	1.68	13.52	1.52
9-101-bldg.	MW-17A	19.00			13.32	1.48	13.05	1.75	13.03	1.77
9-101-bldg.	MW-17C	35.00	13.25	1.60			13.10	1.75	13.05	1.80
9-101-bldg.	MW-17D	52.50	13.20	1.67			13.25	1.62	12.82	2.05
9-101-bldg.	MW-18A	20.02	12.61	1.69	12.84	1.46	12.55	1.75	12.38	1.92
9-101-bldg.	MW-18C	34.55	12.87	1.76	13.12	1.51	12.83	1.80	12.61	2.02
9-101-bldg.	MW-18D	52.85	12.58	1.68	12.85	1.41	12.52	1.74	12.33	1.93
9-101-bldg.	MW-19A	16.86	10.62	1.61	10.93	1.30	10.68	1.55	10.42	1.81
9-101-bldg.	MW-19C	33.92	10.55	1.68	10.89	1.34	10.65	1.58	10.35	1.88
9-101-bldg.	MW-19D	51.86	11.00	1.23	10.90	1.33	10.71	1.52	11.05	1.18
9-101-bldg.	MW-20A	19.34	12.60	1.71	12.89	1.42	12.44	1.87	12.75	1.56
9-101-bldg.	MW-20C	35.32	12.50	1.65	12.69	1.46	12.16	1.99	12.44	1.71
9-101-bldg.	MW-20D	50.15	12.83	1.60	12.87	1.56	12.41	2.02	12.66	1.77
9-101-bldg.	MW-22A	19.20								
9-101-bldg.	MW-23A	19.50								
9-101/9-50 bldg.	MW-21A	19.90	12.77	1.68	13.04	1.41	12.93	1.52	12.50	1.95
9-101/9-50 bldg.	MW-21C	34.00	10.50	1.70						
9-64-bldg.	BDC-05-02	25.35	12.38	1.99	12.56	1.81	12.37	2.00	12.03	2.34
9-64-bldg.	BDC-05-03	25.47	12.56	1.85	12.82	1.59	12.56	1.85	12.33	2.08
9-64-bldg.	BDC-05-04	25.36	12.69	1.90	12.86	1.73	12.65	1.94	12.33	2.26
9-64-bldg.	BDC-05-05	24.18	12.37	2.07	12.53	1.91	12.36	2.08	11.96	2.48
9-64-bldg.	BDC-05-07	25.30	12.10	1.89	12.28	1.71	12.08	1.91	11.72	2.27
9-64-bldg.	BDC-05-08	27.00								
9-64-bldg.	BDC-05-09	24.55								
9-64-bldg.	BDC-05-10	24.57								
9-64-bldg.	BDC-05-11	24.85								
9-64-bldg.	BDC-05-12	24.87								
9-64-bldg.	BDC-05-13	24.78								
9-64-bldg.	BDC-05-14	24.85								
9-64-bldg.	BDC-05-15	24.48								
9-64-bldg.	BDC-05-16	24.89								
9-64-bldg.	BDC-05-17	24.82								
9-64-bldg.	BDC-05-18	24.69								
9-64-bldg.	BDC-05-19	24.85								
9-64-bldg.	BDC-05-20	24.80								
9-64-bldg.	BDC-05-21	24.86								
9-64-bldg.	BDC-05-22	25.01								
9-64-bldg.	BDC-05-23	25.10								
9-64-bldg.	BDC-05-24	24.73								

**DEVELOPMENTAL CENTER**  
**CUMULATIVE WATER LEVEL MEASUREMENTS**

Well Location / Bldg.	Well ID No.	Well Depth	June 2001		December 2000		June 2000		November 1999	
			Depth to Water	Water Elevation						
9-60 bldg.	BDC-101	18.42	12.30	2.17						
9-60 bldg.	BDC-102	18.83	12.06	2.21						
9-60 bldg.	BDC-103	18.51	12.04	2.30						
9-60 bldg.	BDC-104	18.90								
9-52-bldg.	952MW-1	17.40	11.25	2.23	11.50	1.98			10.97	2.51
9-52-bldg.	952MW-2	17.54	11.48	2.52	11.76	2.24			11.25	2.75
9-52-bldg.	952MW-3	17.95	11.55	2.21	11.85	1.91			11.28	2.48
9-52-bldg. (west)	MW-5	27.43							10.53	2.42
9-04-bldg. (north)	MW-2	26.98	10.03	2.64			10.19	2.48	9.53	3.14
9-04-bldg. (north)	MW-7	18.50	11.05	2.64						
9-04-bldg. (north)	MW-8	18.50	11.23	2.69						
9-04-bldg. (north)	MW-9	18.50	11.23	-11.23						

Notes:

Depth to Water measurements taken from top of well casing

Top of casing elevation altered in wells MW-6B, MW-6C, MW-9A, MW-9B, and MW-9C by installation of threaded fitting on 6/19/2004.

Top of casing elevation was lowered in well MW-14A by 0.10 ft on 3/17/2005; resurveyed 9/9/05.

Top of casing elevation at wells MS-22A and MW-23A measured 9/9/05.

BDC05-02 was modified in October 2008 for utilization as an injection well. Elevation changed from 14.37 to 14.41 ft; total depth changed from 25.35 to 25.27.

***DEVELOPMENTAL CENTER***  
***GROUNDWATER MONITORING***  
***MAY 2012***

**GROUNDWATER SAMPLE COLLECTION FORMS**

**ANALYTICAL DATA**

**(CD)**