

January 26, 2018

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

**Re: November 2017 Semiannual Groundwater Monitoring Report
Boeing Developmental Center, Tukwila, Washington**

Dear Byung:

This letter and attached data constitute the semiannual letter report for groundwater monitoring at The Boeing Company Developmental Center in Tukwila, Washington. This report, which covers the period following the May 2017 semiannual sampling event through the semiannual event in November 2017, provides a brief summary of the data and remedial activities performed at the site during the reporting period. Remedial actions are underway in Solid Waste Management Unit (SWMU)-20 and SWMU-17, and Area of Concern (AOC)-05. All other SWMUs and AOCs identified in the 1994 Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) have been excluded from further investigation based on determinations that they do not pose a threat to human health or the environment. In addition, stormwater/storm drain source control investigations and stormwater data for the Industrial Stormwater General Permit are not included in this report.

Groundwater monitoring during the reporting period was performed in November 2017 at wells in SWMU-20 and in August and November at SWMU-17 and AOC-05. 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 compound (VOC) concentration trend charts are provided for key constituents present in SWMU-20. A well location figure and tables of current data and cumulative data are provided for SWMU-17. Included for AOC-05 are a well location figure and 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), BTEX, and nitrate. Summary tables include proposed cleanup levels (CULs) from the May 7, 2013 *Proposed Cleanup Standards and Comparison to Site Data* document.

SWMU-20

At SWMU-20, November 2017 groundwater monitoring results indicate concentrations of tetrachloroethene (PCE), trichloroethene (TCE), and breakdown products were below the proposed CULs at all SWMU-20 monitoring wells, excluding vinyl chloride at MW-17A (discussed below). *In situ* anaerobic bioremediation was enhanced by the October/November 2015 electron donor injection

event to wells located on the fringes of the TCE source zone; the core of the TCE source zone was treated by prior bioremediation injections. VOCs were monitored at each of the nine wells injected in 2015, with total organic carbon (TOC) and monitored natural attenuation (MNA) parameters also monitored at three of the injected wells (MW-6A, MW-6B, MW-22A). TOC concentrations continue to remain substantially elevated at these three wells, as was observed in November 2016 and May 2017. The sulfate-reducing to methanogenic aquifer redox conditions, which have largely persisted in SWMU-20 following initial source zone injections, continued during this reporting period.

At all source zone wells sampled semiannually (MW-6A, MW-6B, MW-9A, and MW-22A), PCE and TCE remain below reporting limits; cis-1,2-dichloroethene (cDCE) detections were less than or equal to 0.6 micrograms per liter ($\mu\text{g/L}$), well below the proposed CUL (134 $\mu\text{g/L}$); and vinyl chloride (VC) detections were less than or equal to 0.6 $\mu\text{g/L}$, which is below the proposed CUL (2.4 $\mu\text{g/L}$). Ethane was detected in all four source area wells monitored.

At each of the 10 non-source zone wells sampled semiannually, one or more VOCs including PCE, TCE, cDCE, and/or VC were detected in November. However, with the exception of MW-17A, all detections were below proposed CULs. Semiannual monitoring will continue at SWMU-20 to evaluate continued treatment, per the Washington State Department of Ecology-approved monitoring reduction program that was implemented beginning with the April 2015 sampling event.

SWMU-17

At SWMU-17, groundwater monitoring results from August and November 2017 show that *in situ* anaerobic bioremediation continues to be enhanced following the August 2011 electron donor injection, which was the only injection at SWMU-17 as of the date of this groundwater sampling. Following groundwater sampling in November 2017, a donor injection (molasses) was completed at SWMU-17 to enhance treatment of residual contaminant concentrations.

In August and/or November 2017, PCE, TCE, cDCE, and VC concentrations were below proposed CULs at all wells, except for TCE at BDC-05-02 and BDC-05-18. In BDC-05-02 and BDC-05-18, the TCE concentrations were 3.6 $\mu\text{g/L}$ and 1.7 $\mu\text{g/L}$, respectively, compared to the proposed CUL (1.4 $\mu\text{g/L}$). Complete reductive dechlorination beyond VC continues, as indicated by end products ethene and/or ethane, which were detected in November 2017 at 16 of 18 wells analyzed. Non-toxic end products ethene and ethane were predominant on a molar basis over TCE, cDCE, and VC at all 16 wells where detected in 2017. Low sulfate and elevated concentrations of methane persisted at most wells, indicating a continuation of the highly reduced aquifer redox conditions required for complete dechlorination, despite decreasing TOC at injection wells (ranging in November from 2.7 to 33.3 milligrams per liter [mg/L]). Quarterly and semiannual monitoring will continue for evaluation of treatment progress.

AOC-5

In August and November 2017 at AOC-5, TPH-G and BTEX concentrations remained below their proposed CULs at previously impacted well BDC-104 and downgradient wells BDC-101 and BDC-102. TPH-G and BTEX concentrations at BDC-103 were above their proposed CULs in 2016, but decreased below the CULs in February and May 2017 and were not detected in August and November 2017. The most recent nitrate injection was completed in December 2016 at BDC-103 for continued biotreatment.

Nitrate was detected above the 10 mg/L action level at wells BDC-101, BDC-102, BDC-103, and BDC-104 in May 2017. In August 2017 nitrate concentrations were below the 10 mg/L action level at downgradient well BDC-104 and above the action level in wells BDC-101, BDC-02, and BDC-103. In November 2017 nitrate concentrations were below the 10 mg/L action level at downgradient wells BDC-102 and BDC-104 and above the action level at BDC-101 and BDC-103. Nitrate monitoring was also performed at four wells located farther downgradient (MW-17A, MW-18A, MW-21A, and BDC-05-04) and was not detected.

Groundwater sampling at AOC-05 wells will continue on a quarterly basis to evaluate treatment progress. As required, semiannual monitoring for nitrate at the four wells farther downgradient will also continue until nitrate remains below 10 mg/L for two consecutive semiannual events at downgradient wells BDC-101 and BDC-102.

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

LANDAU ASSOCIATES, INC.



Kenneth J. Reid, LEG
Senior Geologist



Clinton L. Jacob, PE, LG
Principal Engineer

KJR/CLJ/ljl

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Enclosures: Developmental Center Groundwater Monitoring – November 2017
SWMU-20 Data Tables, Maps, and Trend Charts
SWMU-17 Data Tables and Map
AOC-05 Data Table, Trend Charts, and Map
Facility-Wide Groundwater Elevation Contours and Groundwater Elevation Table
Groundwater Sample Collection Forms and Analytical Data (DVD)

cc: Carl Bach, Boeing EHS Remediation (elec. w/o data)
Lindsey Mahrt, Boeing EHS Remediation (elec. w/o data)
Mark Adams, Ecology (elec. w/o data)
Katie Kulha, Ecology (elec. w/o data)
Wade Wheeler, Boeing Defense and Space, EHS Manager (elec. w/o data)

***DEVELOPMENTAL CENTER
GROUNDWATER MONITORING
NOVEMBER 2017***

**DEVELOPMENTAL CENTER
GROUNDWATER MONITORING
NOVEMBER 2017**

SWMU-20 VOC/CONVENTIONALS DATA TABLES

SWMU-20 SUMMARY DATA

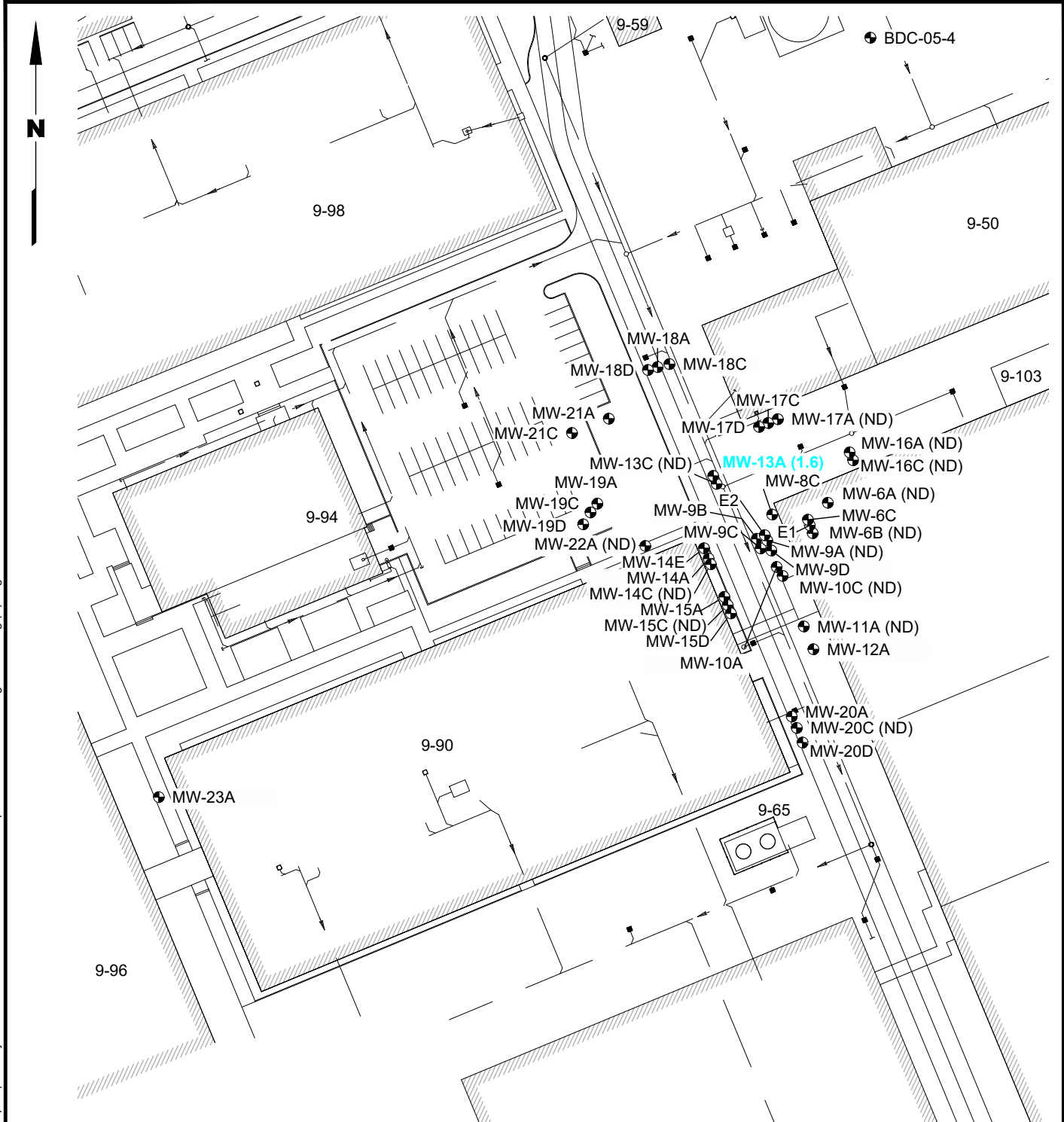
- **SWMU-20 VOC SUMMARY MAPS**
- **SWMU-20 ANALYTICAL RESULTS SUMMARY
(January 1994 through Present)**
- **SWMU-20 VOC CONCENTRATION TREND CHARTS
(January 1994 through Present)**
- **SWMU-20 CLEANUP ACTION SUMMARY – SOURCE ZONE**
- **SWMU-20 CLEANUP ACTION SUMMARY – NON-SOURCE
ZONE**

SWMU-20 VOA/CONVENTIONALS DATA
DEVELOPMENTAL CENTER GROUNDWATER MONITORING
NOVEMBER 2017




Sample Name:	DC-MW-6A	DC-MW-6B	DC-MW-9A	DC-MW-10C	DC-MW-11A	MW-11A-Dup	DC-MW-13A	DC-MW-13C	DC-MW-14C	DC-MW-15C	DC-MW-16A	DC-MW-16C	DC-MW-17A	DC-MW-20C	DC-MW-22A	TRIP BLANK
Lab SDG:	1874216	1874216	1874216	1874216	1874216	1874216	1874216	1874216	1874216	1874216	1874216	1874216	1872853	1874216	1874216	1874216
Lab Sample ID:	9312723	9312721	9312709	9312708	9312711	9312707	9312717	9312718	9312716	9312715	9312720	9312719	9306628	9312712	9312713	9312725
Sample Date:	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/08/2017	11/7/2017	11/08/2017	11/08/2017	11/8/2017
Test ID: VOA SW8260C (µg/L)																
cis-1,2-Dichloroethene	0.3 J	0.2 UJ	0.2 U	0.5	21	19	0.2 U	0.2 U	0.2	1.3 J	0.7 J	0.7	1.3 J	1.5	0.6 J	0.2 U
Tetrachloroethene	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1.6	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U
Trichloroethene	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2	0.2	0.3	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U
Vinyl Chloride	0.3 J	0.6 J	0.4	0.2	0.5	0.4	0.2 U	0.3	0.2	0.4 J	0.7 J	0.4	5.9 J	0.5	0.3 J	0.2 U
NATURAL ATTENUATION PARAMETERS																
Method Modified RSK175 (µg/L)																
Methane	13,000 J	18,000	21,000												17,000 J	
Ethane	3.4 J	2.4 J	230												1.8 J	
Ethene	1.0 U	1.0 U	51												1.0 U	
Conventional Parameters																
Sulfate (mg/L) (EPA 300.0)	16.1 J	30.0 U	0.85 J										0.30 U		15.0 U	
Total Organic Carbon (mg/L) (SMS310C)	99.5	320	16.7												277	

µg/L = micrograms per liter
mg/L = milligrams per liter
EPA = US Environmental Protection Agency

U = Compound was not detected at the reported concentration.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.



Legend

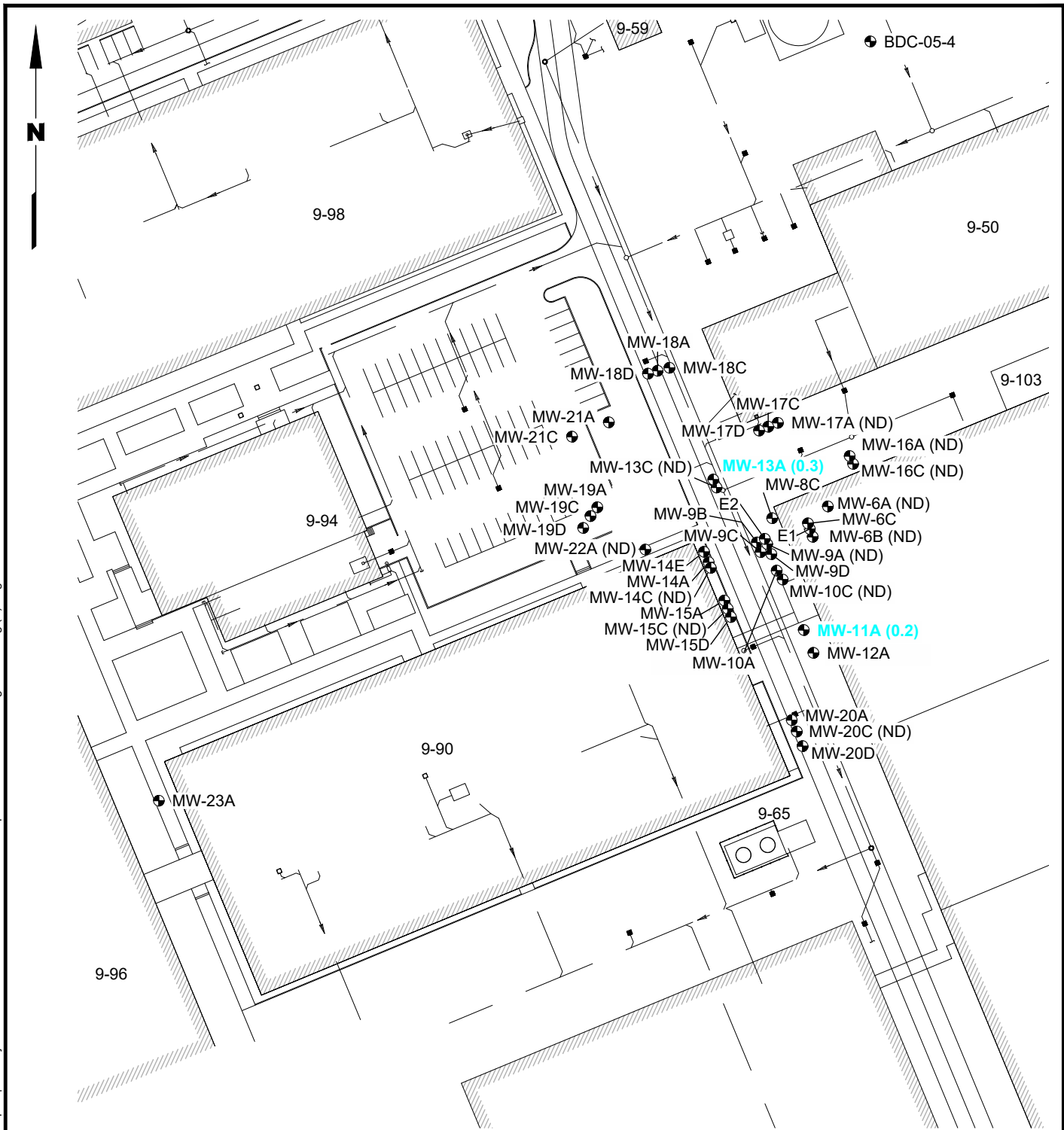
-  Monitoring Well Location
-  (ND) Tetrachloroethene Not Detected at 0.2 µg/L Detection Limit
-  (1.1) Tetrachloroethene Groundwater Concentration in µg/L




Boeing Developmental Center
Tukwila, Washington

**SWMU-20 Tetrachloroethene
November 2017
Groundwater Concentrations**

Figure
1

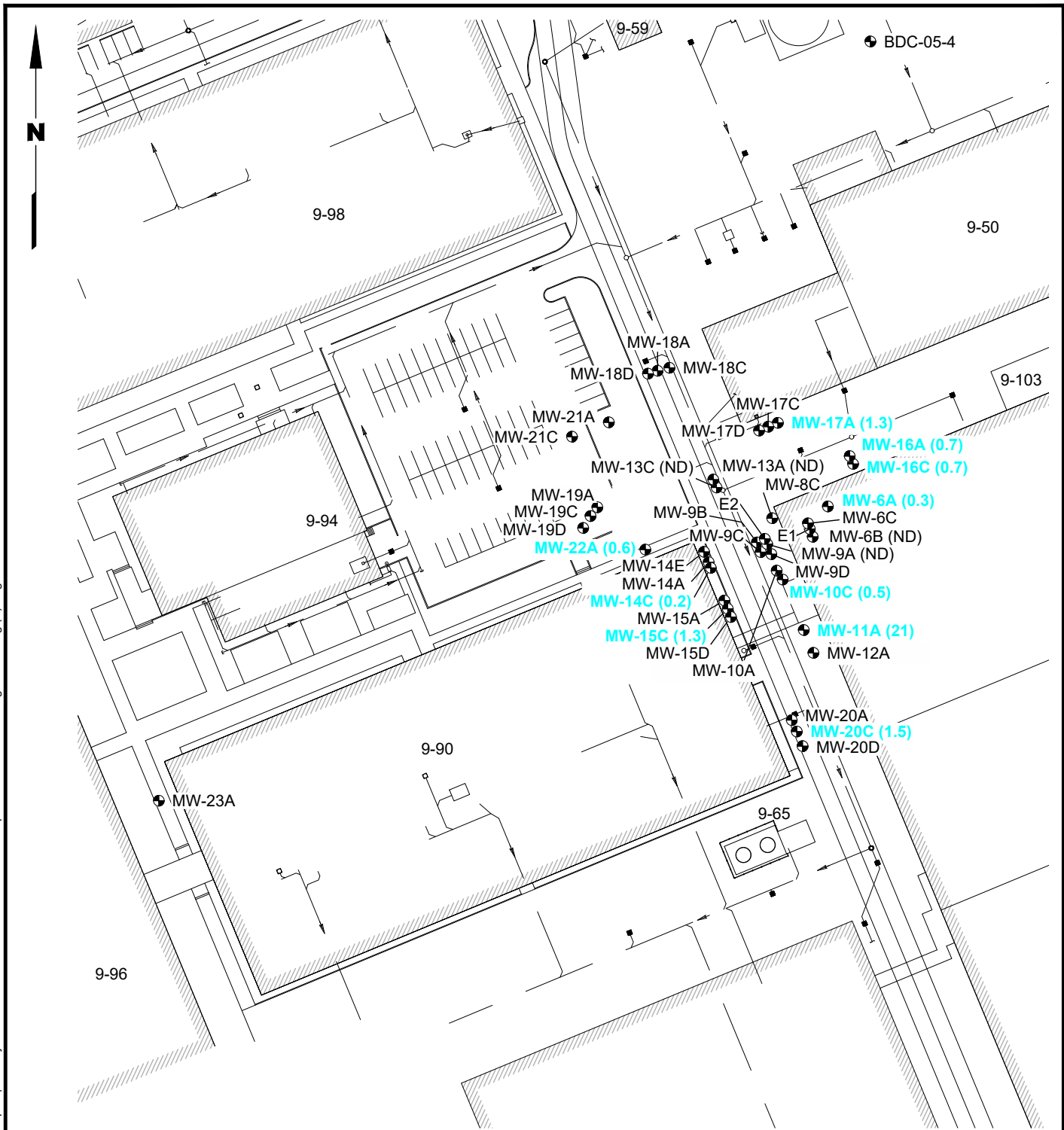


Legend

-  Monitoring Well Location
- (ND) Trichloroethene Not Detected at 0.2 µg/L Detection Limit
- (0.4) Trichloroethene Groundwater Concentration in µg/L

Boeing Developmental Center Tukwila, Washington	SWMU-20 Trichloroethene November 2017 Groundwater Concentrations	Figure 2
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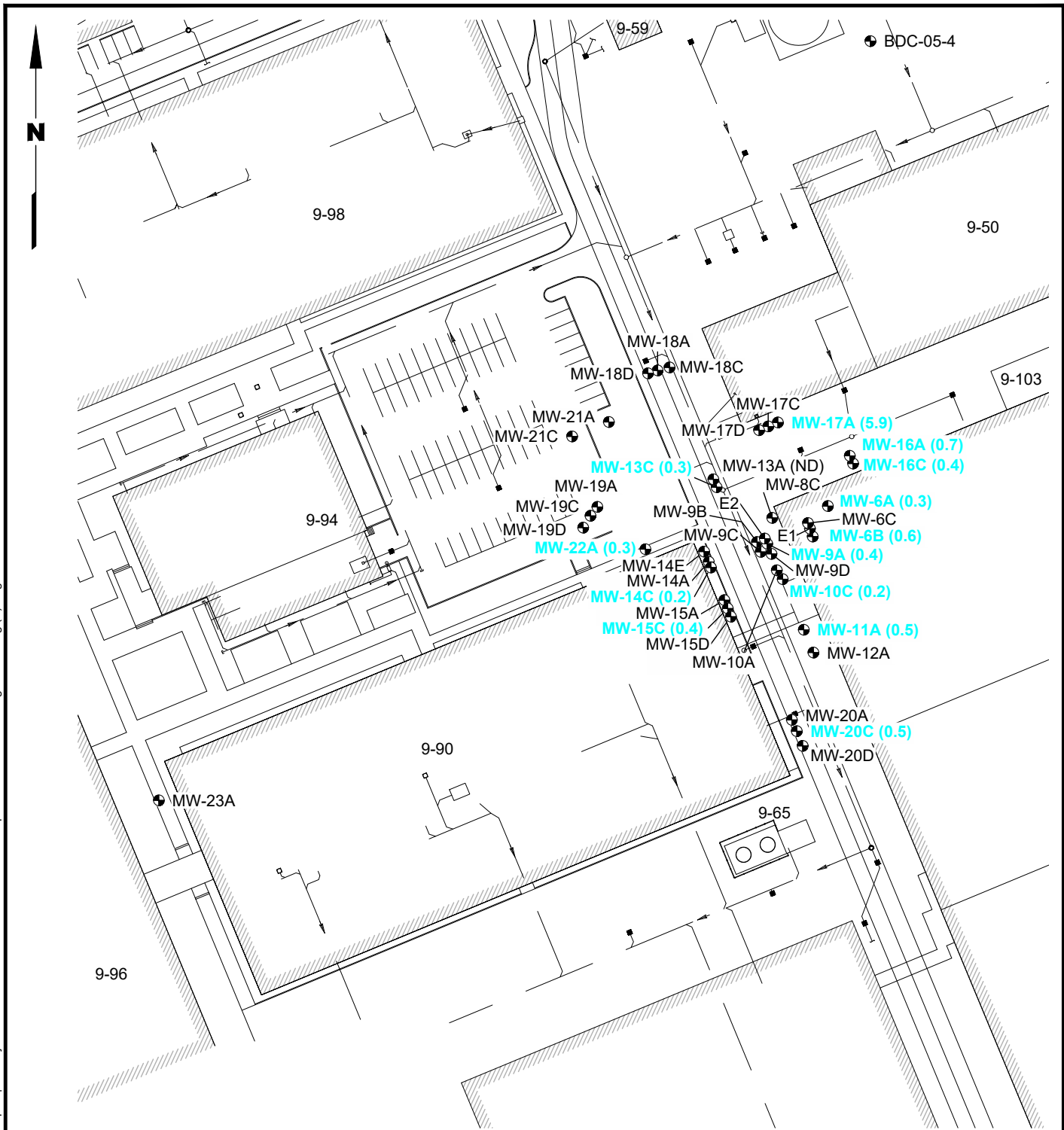
Legend

- Monitoring Well Location
- (ND) Cis-1,2-Dichloroethene Not Detected at 0.2 µg/L Detection Limit
- (18) Cis-1,2-Dichloroethene Groundwater Concentration in µg/L



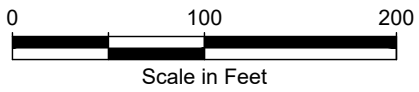
<p>Boeing Developmental Center Tukwila, Washington</p>	<p>SWMU-20 Cis-1,2-Dichloroethene November 2017 Groundwater Concentrations</p>	<p>Figure 3</p>
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Legend

- Monitoring Well Location
- (ND) Vinyl Chloride Not Detected at 0.2 µg/L Detection Limit
- (3.1) Vinyl Chloride Groundwater Concentration in µg/L



Boeing Developmental Center Tukwila, Washington	SWMU-20 Vinyl Chloride November 2017 Groundwater Concentrations	Figure 4
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**SWMU-20 ANALYTICAL RESULTS SUMMARY
DEVELOPMENTAL CENTER GROUNDWATER MONITORING
JANUARY 1994 THROUGH PRESENT**

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	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
06A	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	nt	<1.0
06B	27	5.87	14.4	9.62 J	26.18	13.7	14.3	21.5	21.3	17	16.9	18.9	16.3	22.6	2.3	6	10.19	2.6	2.4	10	10	7.9	3.9	9.5	1.9	<1.0	<1.0	nt	<2.0
06C	22	<1.00	<10.00	<10.00	<1.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<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	nt	<1.00
08C	16	<1.00	<5.00	<5.00	<3.33	<10.00	13.5	<5.00	<4.00	<4.00	<4.00	7.8	<5.00	<1.00	<2.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	nt	<1.00	nt	<1.00	
09A	420	2568.25	1589	1970	785.7	114	272	98	76	96.9	56.6	39.4	94	5.1	38	40	36.6	12.65	16	14	540	1800	1000	150	<3.0	<5.0	<10	nt	<1.00
09B	820	1972.65	668.1	1266	934.6	78.9	75.9	44.3	35	10.9	21.5	31.3	<10.00	6.74	3.6	<2.00	6.62	1.18	2.1	<1.00	<1.00	1.0	250	<3.0	<5.0	<5.0	<10	nt	<1.00
09C	nd	11.32	<5.00	<10.00	1.24	<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	nt	<1.00
09D	8.8	<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	<1.00	nt	nt	<1.00
10A	180	635.8	754 E	468.85	242.1	114	342	67.5	77.8	76.5	70.3	72.5	86.4	38	21.5	16.6	21.63	30.3	11	24	24	34	58	29	14	15	4.7	nt	4.2
10C	6.9	<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	<1.00	nt	nt	<1.00
11A	5.2	<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	nt	<1.00	nt	<1.00
12A	3.9	<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	<1.00	nt	nt	<1.00
13A	10	4.17	<5.00	<5.00	6.82	3	2.1	3.2	2.1	1.7	1.5	1.6	1.3	<1.00	<1.00	1.2	<1.00	<1.00	1.6	2.7	2.4	3.4	3.0	5.1	nt	4.3	nt	nt	6.1
13C	5.1	<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	nt	<1.00	nt	<1.00
14A	410	4.42	<5.00	133.57	96.06	11.2	<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	<1.00	<5.00	<5.00	nt	<10
14C	7.2	9.02	10.53	8.64 J	5.44	6.1	<1.00	<10.00	<10.00	<10.00	<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	nt	<1.00	nt	nt	<1.00
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	nt	<1.00	nt	<1.00
15A	11	<1.00	<5.00	<5.00	<5.00	<2.00	<1.00	<4.00	<2.00	<1.00	<2.00	<3.33	<10.00	<1.00	<10.00	<10.00	<10.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	nt	<5.00	nt	nt	<5.00
15C	13	<1.00	<33.30	<5.00	<1.00	1.1	<1.00	<2.00	<10.00	<10.00	<10.00	<3.33	<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	nt	<1.00	nt	<1.00
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	nt	<1.00	nt	<1.00
16A	1.6	1.10	<5.00	<5.00	<1.00	1.7	<1.00	1.1	<1.00	<1.00	<1.00	1.64	1.03	1.3	2.3	2.2	<1.00	<1.00	<1.00	<1.00	1.2	1.2	1.1	1.2	nt	1.2	nt	nt	1.2
16C	nd	<1.00	<5.00	<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	nt	<1.00	nt	nt	<1.00
17A	36	1.39	<5.00	<5.00	1.55	<1.00	1.3	2.7	1.90 J	2.2	<1.00	2.6	2.4	2.5	2.1	2.6	4.15	nt	<1.00	3.8	4.6	4.6	4.8	4.8	nt	5.2	nt	nt	nt
17C	36	<1.00	<5.00	<5.00	<1.00	1.6	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
17D	46	<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	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18A	5.4	<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	nt	nt	nt	nt	nt	<1.00	nt	nt	nt	nt	nt
18C	4.6	<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	<1.00	nt	nt	<1.00
18D	4.6	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19A	6	<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	nt	nt	nt	nt	nt	<1.00	nt	nt	<1.00	nt	<1.00
19C	6.5	<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	nt	<1.00	nt	<1.00
19D	9.5	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20A	3.4	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20C	3.9	<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	<1.00	nt	nt	<1.00
20D	4.3	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21A	nt	nt	nt	nt	<1.00	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	nt	nt	nt	nt	nt	nt	nt	nt
21C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.00	<1.00	<1.00	<1.00	nt	nt	nt	nt	nt	nt	nt	nt
22A	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	<1.00	<1.00
23A	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	<1.00	<1.00

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

TETRACHLOROETHENE (µg/L)

	Aug-05	Nov-05	Feb-06	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	Nov-12	May-13	Nov-13	May-14	Nov-14	Apr-15	Oct-15	Apr-16	Nov-16	May-17	Nov-17	
06A	<1.0	<1.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
06B	<1.0	<1.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2	<0.2	
06C	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
08C	nt	<1.0	nt	<1.0	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09A	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	1.9	<1.0	<5.0	<1.0	<1.0	<2.0	<0.2	<0.2	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
09B	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09C	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
10A	2.7	3.3	3.7	1.8	1.6	<0.2	1.2	1.1	1.2	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	nt	nt	nt	nt	nt	nt	
10C	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
11A	nt	<1.0	nt	<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	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	
12A	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	0.3	0.3	nt	nt	nt	nt	nt	nt	
13A	nt	6.0	nt	7.1	nt	8.3	nt	8.2	6.4	8.7	6.5	7.7	9.2	9.4	3.6	3.9	1.6	2.3	2.2	4.5	2.2	3.1	2.3	1.8	1.5	1.6	2.3	1.1	1.6	
13C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
14A	<1.0	<3.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt	nt	
14C	nt	<1.0	nt	<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	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
14E	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
15A	nt	<5.0	nt	<5.0	nt	<3.0	nt	<1.0	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.1	<0.2	<0.5	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt	nt	
15C	nt	<1.0	nt	<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	<2.0	<5.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
15D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
16A	nt	1.3	nt	1.0	nt	<0.2	nt	1.1	1.7	1.2	1.5	1.6	2.2	1.4	1.3	1.6	1.4	1.6	1.1	1.4	2.1	1.4	1.6	1.4	1.5	0.8	0.6	0.7	<0.2	
16C	nt	<1.0	nt	<1.0	nt	1.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
17A	nt	4.0	nt	4.2	nt	2.2	nt	4.7	4.2	4.3	4.2	3.2	3.7	4.0	2.3	3.1	2.6	3.1	2.8	3.6	3.9	3.6	2.9	3.4	3.4	<2.0	<0.2	<0.2	<0.2	
17C	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	nt	nt	nt
17D	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	nt	nt	nt
18A	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	nt	nt	nt
18C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18D	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	nt	nt	nt
19A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19D	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	nt	nt	nt
20A	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	nt	nt	nt
20C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<2.0	<5.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
20D	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	nt	nt	nt
21A	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	nt	nt	nt
21C	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	nt	nt	nt
22A	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
23A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

µg/L = micrograms per liter
 nd = not detected
 nt = not tested

J = Analyte was positively identified; the associated numerical value is the 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**

TRICHLOROETHENE (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
06A	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	nt	<1.0
06B	4.2	3.57	6.00 J	<5.00	7.37	3.5	2.5	4.9	4.7	4.6	6.5	3.5	2.6	4.54	2.2	4.7	8.71	5.83	4.7	5.9	4.5	2.9	1.0	3.2	1.2	<1.0	<1.0	nt	<2.0
06C	1.6	<1.00	31.36	<10.00	<1.00	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	91.6	<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	nt	<1.00
08C	21	3.16	<5.00	<5.00	<3.33	<10.00	26.2	<5.00	<4.00	<4.00	<4.00	26.6	<5.00	<1.00	<2.00	<2.00	<2.00	<1.00	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<1.00	nt	<1.00	
09A	500	1796.5	1507	2318	1160	90.8	191	49.3	51.1	69.2	56.4	15.4	77	3.5	35	23	24.3	25.21	32	24	580	990	1500	230	11	19	<10	nt	<1.00
09B	160	1463	524.7	1206	554	58.6	35.2	28.7	31.5	4.9	15.4	20.65	<10.00	7.5	4.8	2.6	11.2	5.79	4.8	2.5	12	9.7	370	4.2	16	17	<10	nt	<1.00
09C	nd	19.41	<5.00	<10.00	3.54	<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	nt	<1.00
09D	2.2	<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	nt	<1.00	<1.00
10A	120	333.23	411 E	268.41	115.3	56.7	128	28.4	38.2	36.6	48.8	23.8	33.9	19.2	14	8.3	13.11	17.02	18	24	29	32	49	27	12	15	4.8	nt	5.4
10C	3.9	<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	nt	nt	<1.00
11A	7	2.41	<5.00	<5.00	2.54	1.9	1	<1.00	<1.00	1.2	1.6	<1.00	1.03	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.9	2.2	2.2	2.8	2.1	nt	2.0	nt	nt	2.0
12A	5.5	1.13	<5.00	<5.00	<1.00	1.7	1.2	<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
13A	31	12.23	<5.00	9.57 J	16.52	3.4	3.4	2	1.5	2.9	3	1.1	1.7	1.8	2.3	2.4	2.12	1.28	<1.00	3.4	3.3	3.9	3.8	4.6	nt	4.0	nt	nt	4.6
13C	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	nt	<1.00	<1.00
14A	600	6.25	<5.00	151.58	146.72	84.1	2.8	<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	2.9	39	<5.00	nt	<10
14C	6.6	14.41	21.93	13.33	7.61	12.5	<1.00	<10.00	<10.00	<10.00	<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	nt	<1.00	<1.00
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	nt	<1.00	<1.00
15A	7.5	<1.00	<5.00	<5.00	<5.00	<2.00	<1.00	<4.00	<2.00	<1.00	<2.00	<3.33	<10.00	<1.00	<10.00	<10.00	<10.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	nt	<5.00	nt	nt	<5.00
15C	12	<1.00	<33.30	<5.00	<1.00	7.5	<1.00	<2.00	12	<10.00	<10.00	<3.33	<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	nt	<1.00	<1.00
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	nt	<1.00	<1.00
16A	4.4	5.02	<5.00	<5.00	2.57	4	2.1	2.6	2	1.9	<1.00	<1.00	<1.00	1.01	1.4	1.2	1.08	<1.00	<1.00	<1.00	1.5	1.3	1.2	1.2	nt	1.3	nt	nt	1.8
16C	nd	<1.00	<5.00	<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	nt	<1.00	<1.00
17A	7.2	17.42	17.04	<5.00	7.28	<1.00	9.8	17.5	4.9	18	2	<1.00	12.4	11.1	11.5	6.6	13.99	nt	5.9	7.4	7.5	7.4	7.9	6.5	nt	4.8	nt	nt	nt
17C	2.1	<1.00	<5.00	<5.00	<1.00	14.1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
17D	2.3	<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	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18A	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	nt	nt	nt	nt	nt	<1.00	nt	nt	nt	nt	nt
18C	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	nt	<1.00	<1.00
18D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19A	1.5	<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	nt	nt	nt	<1.00	nt	nt	<1.00	nt	<1.00	<1.00
19C	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	nt	<1.00	<1.00
19D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20A	1.1	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20C	1.8	<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	nt	<1.00	<1.00
20D	1.5	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21A	nt	nt	nt	nt	<1.00	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	nt	nt	nt	nt	nt	nt	nt	nt
21C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.00	<1.00	<1.00	<1.00	nt	nt	nt	nt	nt	nt	nt	nt
22A	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	<1.00	<1.00
23A	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	<1.00	<1.00

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

TRICHLOROETHENE (µg/L)

	Aug-05	Nov-05	Feb-06	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	Nov-12	May-13	Nov-13	May-14	Nov-14	Apr-15	Oct-15	Apr-16	Nov-16	May-17	Nov-17	
06A	<1.0	<1.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
06B	<1.0	<1.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	<0.2	<0.2		
06C	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
08C	nt	<1.0	nt	<1.0	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
09A	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	0.2	4.6	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
09B	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
09C	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
09D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
10A	6.3	6.7	9.6	3.7	1.6	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	nt	nt	nt	nt	nt		
10C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
11A	nt	2.0	nt	1.1	nt	1.5	nt	1.5	1.1	1.2	1.2	<1.0	1.0	1.1	<1.0	<1.0	0.5	0.7	<2.0	<2.0	<2.0	<2.0	0.4	0.5	0.2	0.3	<0.2	0.4	0.2	
12A	nt	<1.0	nt	<1.0	nt	0.7	nt	<1.0	<1.0	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.6	<0.2	0.4	<0.2	0.5	<0.2	<0.2	nt	nt	nt	nt	nt		
13A	nt	4.5	nt	4.6	nt	6.5	nt	7.0	4.2	6.8	3.7	5.6	6.0	5.3	2.8	2.4	<1.0	0.8	0.8	2.5	0.6	1.3	0.5	0.4	0.3	0.3	0.7	<0.2	0.3	
13C	nt	<1.0	nt	<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	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
14A	<1.0	<3.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt		
14C	nt	<1.0	nt	<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	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
14E	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
15A	nt	<5.0	nt	<5.0	nt	<3.0	nt	<1.0	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<0.2	<0.5	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt		
15C	nt	<1.0	nt	<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	3.2	<5.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	0.6	0.3	<0.2	<0.2
15D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
16A	nt	2.2	nt	1.4	nt	0.8	nt	1.3	1.2	1.3	1.4	1.6	1.5	1.4	1.1	1.4	1.3	1.7	1.5	1.5	1.8	1.6	1.5	1.4	1.5	0.7	0.3	0.2	<0.2	
16C	nt	<1.0	nt	<1.0	nt	2.3	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
17A	nt	5.4	nt	4.4	nt	6.3	nt	5.3	4.3	5.1	5.2	4.9	4.5	3.1	4.8	2.2	2.8	2.0	3.5	2.8	3.4	2.6	3.1	2.3	2.6	<2.0	0.4	<0.2	<0.2	
17C	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	nt		
17D	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	nt		
18A	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	nt		
18C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
18D	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	nt		
19A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
19C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
19D	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	nt		
20A	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	nt		
20C	nt	<1.0	nt	<1.0	nt	0.2	nt	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<2.0	<5.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	
20D	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	nt		
21A	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	nt		
21C	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	nt		
22A	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
23A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		

µg/L = micrograms per liter
nd = not detected
nt = not tested

J = Analyte was positively identified; the associated numerical value is the 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**

CIS-1,2-DICHLOROETHENE (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
06A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	23	45	2.6	3.3	nt	2.6
06B	23	43.71	53.75	29.45	58.31	46.3	30.5	37.4	60.9	61.8	76.4	66.7	9.9	70.1	49.7	71.5	91.77	63.94	27	40	23	13	11	10	13	10	11	nt	5.5
06C	7.9	14.57	99.09	<10.00	1.01	107	1.9	3.1	22.1	28.3	12.3	1.1	181 E	<2.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	3.6	nt	1.1
08C	44	14.95	<5.00	5.55 J	8	1.1	37.6	<5.00	37.3	46.1	42.3	38.4	<5.00	1.1	<2.00	3.2	<2.00	<1.00	<1.0	<1.0	<1.0	<3.0	<5.0	<1.0	nt	<1.0	nt	nt	<1.0
09A	2500	5790.9	3286	7484	6143	443	816	520	258	206 E	199	94.3	680	15.5	187	421	60.75	266.6	100	280	1600	2300	2300	970	370	460	41	nt	<1.0
09B	940	5010.35	1307 E	3407 E	1521	207	142	164 E	510	35.1	111	939 E	178	122.04	41.2	102.4	135.2	112.3	100	<180	180	140	850	250	530	300	890	nt	12
09C	520	431.66	159.69	70	33.67	29.8	1.6	4.6	2.6	2	1.7	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.1	6.7	2.7	4.1	8.9	4.0	1.7	<1.0	1.7	nt	1.2
09D	5.1	<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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0
10A	470	421.26	297 E	249.16	159.2	90.1	17.8	29	66.1	58.5	74.1	29.3	6.9	33.3	20.6	10.6	14.14	14.09	36	80	110	88	98	80	170	100	24	nt	26
10C	14	1.93	<5.00	<5.00	1.01	<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	<1.0	3.7	3.3	14	6.2	4.3	nt	6.4	nt	nt	4.0
11A	54	15.86	10.82	7.17 J	10.27	9.3	6.4	4.9	6.6	6.1	4.2	2.8	2.3	2.1	1.1	1.5	1.55	1.27	2.1	6.0	12	17	18	21	nt	20	nt	nt	20
12A	20	2.30	17.5	<5.00	1.09	9.5	6.6	<1.00	6.1	3.7	3	1.7	1.7	1.8	1.03	1.9	2.07	1.46	2.2	1.8	3.3	1.4	4	1.8	nt	4.4	nt	nt	2.0
13A	8.2	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.6	<1.00	<1.00	1.2	1.3	1.2	1.2	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0
13C	16	1.14	<5.00	<5.00	<1.00	1.3	<1.00	1.3	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	1.4	<1.0	nt	<1.0	nt	nt	nt	<1.0
14A	590	15.50	9.83 J	294.36	115.94	249	114	6.4	24.2	18.3	9.5	4.9	3.7	7	3.2	3.8	<1.00	<1.00	<1.0	<1.0	7.2	23	170	140	560	1200	300	nt	<10
14C	110	187.91	1017.82	237.4	70.06	326	211	183	163	136	82.7	25.6	21.7	6.2	<1.00	1.2	2.83	1.64	<1.0	1.5	2.4	31	13	63	nt	22	nt	nt	11
14E	1.1	<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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0
15A	9.1	3.29	<5.00	<5.00	<5.00	3.6	3.5	4.5	5	5.5	5.5	15.65	<10.00	<1.00	<10.00	<10.00	<10.00	4.99	4.9	2.8	2.8	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0
15C	92	69.14	640.52	93.62	1.47	463	532	187	1470	1100	719	785 E	90.5	53.2	28.4	1.01	2.53	<1.00	1.1	<1.0	<1.0	2.9	5.7	9.1	nt	11	nt	nt	13
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0
16A	5.5	12.63	5.38 J	<5.00	25.39	12	3.2	6.2	2.4	1.7	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.76	1.82	2.6	<1.0	1.2	2.4	1.3	2.3	nt	1.8	nt	nt	2.6
16C	14	11.83	6.24 J	<10.00	5.66	2.6	1.6	1.6	1.13	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	nt	2.4	nt	nt	2.8
17A	4.3	1.38	<5.00	<5.00	1.09	<1.00	1.4	1.2	2.90 J	4.13	<1.00	2.3	3.8	4.1	4.3	2.3	2.1	nt	2	<1.0	1.0	1.4	1.6	1.0	nt	1.2	nt	nt	nt
17C	5.3	<1.00	<5.00	<5.00	1.19	1.6	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
17D	1.8	<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	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18A	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	nt	nt	nt	nt	nt	<1.0	nt	nt	nt	nt	nt
18C	1.3	2.02	<5.00	<5.00	<1.00	1	<1.00	<1.00	<1.00	<1.00	<1.00	1.1	1.8	1.9	2.1	1.3	1.59	1.42	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	nt	<1.0	nt	nt	<1.0
18D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19A	2.4	<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	nt	nt	nt	nt	nt	<1.0	nt	nt	<1.0	nt	<1.0
19C	1.7	1.17	<5.00	<5.00	1.37	1.3	<1.00	<1.00	1.2	1.2	1.2	2	1.2	1.4	<1.00	1.03	<1.00	1.01	<1.0	<1.0	<1.0	<1.0	1	<1.0	nt	<1.0	nt	nt	<1.0
19D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20A	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20C	16	7.34	6.06 J	<5.00	2.46	2.5	2.1	1.9	1.6	<1.00	<1.00	<1.00	1.5	<1.00	<1.00	1.3	<1.00	1.09	1.1	<1.0	1.3	2.1	1.6	1.4	nt	1.7	nt	nt	1.7
20D	1.8	2.22	<5.00	<5.00	46.38	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt
21A	nt	nt	nt	nt	<1.00	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	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt
21C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.00	<1.0	<1.0	1.3	nt	nt	nt	nt	nt	nt	nt	nt
22A	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	3.5	2.3
23A	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

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

CIS-1,2-DICHLOROETHENE (µg/L)

	Aug-05	Nov-05	Feb-06	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	Nov-12	May-13	Nov-13	May-14	Nov-14	Apr-15	Oct-15	Apr-16	Nov-16	May-17	Nov-17	
06A	1.6	1.3	1.4	<1.0	<1.0	0.4	<1.0	<1.0	<0.2	<1.0	1.7	<4.0	1.9	1.3	<1.0	<1.0	0.3	0.4	0.3	<0.5	0.4	0.4	0.4	0.6	0.2	1	0.5	0.3	0.3	
06B	1.8	1.1	<1.0	<1.0	<1.0	1.4	3.8	1.4	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	0.5	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<2.0	0.5	<0.2	<0.2		
06C	1.1	1.1	<1.0	<1.0	<1.0	0.3	<1.0	<1.0	0.2	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
08C	nt	<1.0	nt	<1.0	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09A	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	110	160	<1.0	<5.0	<1.0	<1.0	<2.0	0.2	0.2	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
09B	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09C	7.6	1.2	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
10A	48	47	42	63	38	7.4	32	28	22	22	1.6	<2.0	<1.0	<1.0	<1.0	<2.0	0.2	0.2	0.3	0.2	0.2	<1.0	0.2	nt	nt	nt	nt	nt	nt	
10C	nt	<1.0	nt	1.5	nt	1.9	nt	6.7	7.2	15	8.5	<1.0	<1.0	<1.0	3.5	5.8	3.7	5.4	6.1	6.0	3.5	5.4	2.6	2.2	1.0	0.5	0.5	0.4	0.5	
11A	nt	22	nt	20	nt	24	nt	26	27	26	33	26	30	26	22	22	23	24	25	22	24	19	24	21	19	20	15	18	21	
12A	nt	3.8	nt	1.5	nt	4.4	nt	2.4	3.2	3.2	4.7	1.4	4.7	<1.0	4.3	<1.0	3.1	<0.2	2.1	0.5	2.2	<0.2	0.3	nt	nt	nt	nt	nt	nt	
13A	nt	<1.0	nt	<1.0	nt	0.3	nt	0.4	<1.0	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
13C	nt	<1.0	nt	<1.0	nt	0.8	nt	0.8	<1.0	0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<2.0	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
14A	<1.0	6.0	<1.0	2.1	3.0	<1.0	<1.0	1.5	1.6	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.6	0.3	0.6	<0.5	0.5	0.3	0.4	nt	nt	nt	nt	nt	nt	
14C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	1.1	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	
14E	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
15A	nt	<5.0	nt	<5.0	nt	<3.0	nt	1.4	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	0.3	<1.0	0.4	0.6	0.5	0.6	0.4	nt	nt	nt	nt	nt	nt	
15C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	1.8	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<2.0	<5.0	<2.0	<2.0	0.5	0.6	0.5	1.2	1.7	1.2	1.3	
15D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
16A	nt	2.1	nt	2.3	nt	4.2	nt	1.9	1.2	1.2	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.5	0.5	0.6	<0.5	0.3	0.4	0.4	0.3	0.3	10	14	5.7	0.7	
16C	nt	4.6	nt	5.2	nt	2.0	nt	8.8	7	7.8	5.3	5.0	4.9	3.7	3.3	3.7	3.3	4.8	4.9	3.9	4.4	3.4	3.4	2.2	2.7	0.9	1.9	0.4	0.7	
17A	nt	1.1	nt	<1.0	nt	1.0	nt	1.0	<1.0	0.8	1.2	1.4	1.1	<1.0	2.3	1.5	1.0	0.5	0.9	0.8	1.0	0.4	0.9	0.4	1.1	8.0	8.2	0.8	1.3	
17C	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	nt	nt	nt
17D	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	nt	nt	nt
18A	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	nt	nt	nt
18C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18D	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	nt	nt	nt
19A	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19C	nt	<1.0	nt	<1.0	nt	0.3	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19D	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	nt	nt	nt
20A	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	nt	nt	nt
20C	nt	2.1	nt	1.8	nt	2.1	nt	1.6	1.6	1.6	1.5	1.4	1.7	1.3	1.4	1.1	1.3	1.2	<2.0	<5.0	<2.0	<2.0	0.9	0.7	1.0	2.2	0.6	1.5	1.5	
20D	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	nt	nt	nt
21A	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	nt	nt	nt
21C	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	nt	nt	nt
22A	2.3	1.4	1.4	2.4	1.8	2.2	2.5	2.5	2	2.6	2.2	2.5	2.1	1.7	1.2	1.1	0.9	0.6	0.5	0.4	0.5	0.5	0.4	0.6	0.5	0.5	0.5	0.4	0.6	
23A	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

µg/L = micrograms per liter
 nd = not detected
 nt = not tested

J = Analyte was positively identified; the associated numerical value is the 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**

VINYL CHLORIDE (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	
06A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	4.0	5.9	31	<1.0	nt	<1.0		
06B	13	36.53	31.8	52.29	44.78	54.5	49.4	63.7	88.7	55	62.7	46.3	4.2	48.4	25.9	8	21.58	10.62	8.9	12	11	8.4	17	9.4	2.3	3.6	<1.0	nt	<2.0	
06C	30	20.89	34.09	38.34	22.06	164	12	18.3	50.3	39.5	26.1	6	54.6	4.4	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	
08C	130	42.13	32.69	35.33	35.96	129	41.2	201	488	256	210	20.6	<5.00	49.7	21.4	2.4	<2.00	<1.00	<1.0	<1.0	<1.0	<3.0	<5.0	2.8	nt	3.5	nt	<1.0		
09A	240	917.05	449	1385	844.9	124	228	80.9	185	127	135	83.8	425	14	278	499	17.95	86.44	7.8	46	150	120	180	37	150	220	37	nt	<1.0	
09B	140	648.6	175.6	836	228.2	104	62.6	41.7	270	20.9	50.7	439.56	132	152.36	66.6	82.6	146.7	78.9	110	7.6	27	19	360	<3.0	100	340	520	nt	24	
09C	190	233.79	185 E	71.74	50.13	106	19.4	59.8	147	102.5	87.8	1.1	<1.00	59	16.4	<1.00	<1.00	<1.00	<1.0	18	8.6	5.6	8.0	3.3	<1.0	1.5	<1.0	nt	<1.0	
09D	nd	1.37	<5.00	<5.00	<1.00	1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0		
10A	120	116.25	16.12	31.6	651.2	80.9	16.7	48.2	33.4	9.8	8.8	8.7	1.3	12.1	3.5	3	3.32	3.32	2.9	28	54	36	9.1	6.4	4.0	23	6.8	nt	7.2	
10C	39	28.29	33.16	40.41	18.69	11.6	10.1	9	<1.00	4.3	3.8	1.7	1.6	2.8	1.4	2.1	<1.00	<1.00	<1.0	8.4	15	15	8.8	4.0	nt	11	nt	nt	1.9	
11A	39	26.80	8.37 J	12.14	14.04	3.8	1.8	<1.00	<1.00	<1.00	3.4	<1.00	<1.00	1.1	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
12A	14	<1.00	17.16	<5.00	<1.00	2.9	8.6	<1.00	9.4	6.7	1.1	1.3	<1.00	2.7	1.06	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
13A	12	<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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0		
13C	760	3.03	<5.00	15.24	11.48	3.6	1.9	2.5	2.2	<1.00	<1.00	1	1.6	1.8	<1.00	<1.00	<1.00	<1.0	1.6	3.3	4.9	2.2	2.5	nt	3.3	nt	nt	nt	<1.0	
14A	170	11.38	30.32	44.4	36.4	339	232	162	270	158	70	29.1	13.74	58.2	20.9	19.7	<1.00	<1.00	<1.0	<1.0	69	28	240	110	180	650	1000	nt	<10	
14C	120	103.49	1587.3	1477	134.78	414	175	1296	307	148	144	39.4	56.4	30.2	<1.00	<1.00	4.67	1.21	<1.0	<1.0	4.4	50	35	44	nt	75	nt	nt	6.1	
14E	10	1.43	<5.00	<5.00	<1.00	1.3	<1.00	<1.00	1.3	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
15A	16	13.84	31.2	54.62	19.45	19.4	23	20.4	23.5	17.4	18.6	61.61	17.2	2.9	37	16	<10.00	3.86	1.8	2.0	3.3	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
15C	38	38.79	142.38	69.81	5.12	104	220	69	598	519	500	772 E	194 E	121.2	49.2	1.4	21.32	<1.00	1.5	<1.0	1.3	5.6	16	11	nt	17	nt	nt	6.4	
15D	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	8.6	5.2	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
16A	6	9.18	<5.00	<5.00	8.42	4.4	<1.00	<1.00	2.2	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
16C	15	23.46	38.59	45.16	31.71	20.8	11.8	11.3	9.1	3	<1.00	1.4	<1.00	1.9	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	1.4	3.8	2.6	5.4	nt	8.5	nt	nt	7.7	
17A	nd	<1.00	<5.00	<5.00	<1.00	1	<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	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	nt	
17C	10	2.32	<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	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
17D	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	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18A	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	nt	nt	nt	nt	<1.0	nt	nt	nt	nt	nt	nt	nt
18C	nd	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
18D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19A	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	nt	nt	nt	nt	nt	nt	<1.0	nt	nt	<1.0	nt	<1.0	
19C	5.5	<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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	<1.0	nt	nt	<1.0	
19D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20A	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
20C	47	20.12	12.63	13.77	8.32	6.7	3.4	3.3	3.4	<1.00	<1.00	1.6	1.8	<1.00	1.9	<1.00	1.06	<1.00	<1.0	1.4	2.7	4.0	3.1	2.4	nt	4.6	nt	nt	2.3	
20D	nd	6.98	<5.00	<5.00	31.12	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
21A	nt	nt	nt	nt	<1.00	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	<1.0	<1.0	<1.0	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	nt	nt	<1.00	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt
22A	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	nt	2.0	2.9
23A	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	nt	<1.0	<1.0

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

VINYL CHLORIDE (µg/L)

	Aug-05	Nov-05	Feb-06	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	Nov-12	May-13	Nov-13	May-14	Nov-14	Apr-15	Oct-15	Apr-16	Nov-16	May-17	Nov-17	
06A	<1.0	1.2	4.8	1.6	1.5	2.1	6.7	2.9	1.2	1.4	<1.0	<4.0	<1.0	1.9	1.7	1.4	0.8	1.2	0.8	1.3	2.4	1.5	2.7	3.3	2.5	0.7	0.7	0.4	0.3	
06B	1.6	1.3	1.4	1.3	1.1	2.6	9.5	6.5	1	<1.0	<1.0	<1.0	<1.0	4.2	5.4	5.2	0.8	6.0	3.7	4.3	2.5	2.4	1.8	1.8	1.0	<2.0	0.2	0.3	0.6	
06C	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
08C	nt	<1.0	nt	<1.0	nt	<5.0	nt	<3.0	<5.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09A	<1.0	<1.0	<1.0	<1.0	1.2	1.1	<1.0	2.8	<1.0	85	42	<1.0	<5.0	<1.0	<1.0	<2.0	<0.2	<0.2	<2.0	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	<0.2	0.7	<0.2	<0.2	0.4
09B	1.7	<1.0	1.3	<1.0	<1.0	0.5	<1.0	<1.0	<1.0	0.4	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09C	2.2	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
10A	76	73	150	19	20	9.2	35	44	78	180	5.0	<2.0	<1.0	<1.0	<2.0	0.4	0.4	0.4	0.3	0.4	0.4	<1.0	0.3	nt	nt	nt	nt	nt		
10C	nt	1.0	nt	2.2	nt	2.6	nt	5.8	5.6	6.9	7.5	<1.0	<1.0	<1.0	4.4	4.7	4.3	4.0	4.4	4.5	3.7	2.9	2.5	1.7	1.1	<0.2	<0.2	0.2	0.2	
11A	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	0.2	<1.0	<1.0	<1.0	<1.0	<1.0	0.4	0.4	<2.0	<2.0	<2.0	<2.0	<2.0	0.4	0.3	0.4	0.4	0.5	0.6	0.5	
12A	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt	
13A	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
13C	nt	3.8	nt	2.2	nt	3.4	nt	4.4	2	0.6	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	<2.0	<2.0	<2.0	<1.0	0.2	0.3	0.2	0.3	0.2	0.3	0.3	
14A	<1.0	<3.0	<1.0	<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	<0.2	<0.5	<0.2	0.3	0.2	nt	nt	nt	nt	nt	nt	
14C	nt	1.8	nt	<1.0	nt	1.0	nt	2.5	11	22	4.3	1.1	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	0.3	<0.2	0.2	0.2	
14E	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
15A	nt	<5.0	nt	<5.0	nt	<3.0	nt	2.6	1.3	<3.0	<2.0	<3.0	1.4	1.6	1.4	<1.0	1.0	1.2	0.8	1.1	0.8	1.0	0.5	nt	nt	nt	nt	nt	nt	
15C	nt	<1.0	nt	<1.0	nt	<0.2	nt	2.2	2.5	6.6	6.6	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<2.0	<5.0	2.3	2.9	2.5	2.4	2.0	0.5	0.7	0.5	0.4	
15D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
16A	nt	<1.0	nt	<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	<2.0	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	3.1	0.7	
16C	nt	12	nt	6.3	nt	<0.2	nt	10	8.9	7.9	8.8	6.3	5.6	3.4	2.8	3.2	2.5	4.2	3.8	2.8	2.1	1.2	1.3	1.2	1.1	0.3	0.3	0.2	0.4	
17A	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.8	2.2	5.9
17C	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	nt	nt	nt
17D	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	nt	nt	nt
18A	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	nt	nt	nt
18C	nt	<1.0	nt	<1.0	nt	<0.2	nt	0.2	<1.0	0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18D	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	nt	nt	nt
19A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19D	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	nt	nt	nt
20A	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	nt	nt	nt
20C	nt	2.9	nt	1.6	nt	1.5	nt	1.8	1.3	2.5	2.7	2.0	2.3	1.8	1.4	1.8	2.1	1.5	<2.0	<5.0	<2.0	<2.0	0.7	1.0	0.9	0.3	0.5	0.4	0.5	
20D	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	nt	nt	nt
21A	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	nt	nt	nt
21C	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	nt	nt	nt
22A	3.2	2.2	3.3	1.7	2.4	2.4	2.3	2.7	1.3	1.9	3.1	2.5	1.8	1.7	2.7	2.2	1.7	2.0	1.8	2.0	1.7	1.6	1.5	1.5	1.5	<0.2	<0.2	0.3	0.3	
23A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

µg/L = micrograms per liter
 nd = not detected
 nt = not tested

J = Analyte was positively identified; the associated numerical value is the 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**

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		
06A	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	nt	<1.0		
06B	nd	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	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	nt	<2.0		
06C	nd	8.64	230.09	29.96	13.7	5.6	2.9	3.4	4.6	4.1	4.2	4.2	5.7	2.8	2.7	<1.00	2.76	1.94	1.7	<1.00	<1.00	<1.00	2.2	<1.00	<1.00	1.9	1.2	nt	1.7		
08C	nd	225.74	135.58	104.73	104.6	31.8	121	27.5	6.1	<4.00	<4.00	13.6	<5.00	<1.00	<2.00	15.8	<2.00	<1.00	<1.00	5.4	4.4	<3.0	<5.0	2.0	nt	1.3	nt	<1.0			
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	<10.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<15	<20	<20	<3.0	<5.0	<10	<1.0		
09B	nd	19.76	<33.30	<50.00	<10.00	2.5	<1.00	<1.00	7.5	3.1	3.3	<3.33	<10.00	<2.00	<2.00	<2.00	<2.00	<1.00	1.2	<1.00	<1.00	<1.00	<1.00	<3.0	<5.0	<5.0	<10	nt	<1.0		
09C	nd	<1.00	<5.00	<10.00	<1.00	9.6	2.4	6.3	9.3	4.8	3.6	1.7	2.5	1.7	<1.00	1.5	1.36	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0		
09D	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	nt	<1.0	nt	<1.0			
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	nt	<1.0		
10C	nd	1.15	<5.00	<5.00	1.33	1.4	1.4	1.5	1.4	1.2	1.3	1.3	1.1	1.1	<1.00	1.4	1.23	<1.00	1.3	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	<1.0		
11A	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	nt	<1.0	nt	<1.0	
12A	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	nt	<1.0	nt	<1.0		
13A	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	nt	<1.0	nt	<1.0	
13C	nd	4.88	69.66	33.56	25.76	75	34.1	36.5	20.5	7.6	6.8	3.9	3.3	3	<1.00	2	2.31	1.16	<1.00	<1.00	3.6	6.9	2.7	4.2	nt	1.3	nt	nt	1.9		
14A	nd	<1.00	<5.00	<20.00	<1.00	<10.00	<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	<1.00	<1.00	<1.00	<1.00	nt	<10	
14C	nd	<1.00	<5.00	<5.00	26.44	22	11.7	<10.00	<10.00	<10.00	4.3	2.8	4.64	2.5	1.2	1.4	1.33	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	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	nt	<1.0	nt	<1.0		
15A	nd	<1.00	<5.00	<5.00	<5.00	<2.00	<1.00	<4.00	<2.00	<1.00	<2.00	<3.33	<10.00	<1.00	<10.00	<10.00	<10.00	<1.00	<1.00	<1.00	<1.00	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0		
15C	nd	<1.00	<33.30	<5.00	<1.00	<3.33	<1.00	<2.00	<10.00	<10.00	<10.00	<3.33	5.2	5.2	5.4	<1.00	4.28	2.92	3.2	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	nt	<1.0	
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	nt	<1.0	nt	<1.0		
16A	nd	<1.00	<5.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2	<1.00	10.9	49.8	1.6	46.03	33.88	15	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	<1.0		
16C	nd	<1.00	<5.00	<10.00	<1.00	3.3	31.2	11.3	14.4	18.8	1.7	15	8.3	10	6.4	7.8	4.33	4.99	4.5	1.7	2.6	1.2	2.8	<1.00	nt	1.0	nt	nt	<1.0		
17A	nd	<1.00	<5.00	<5.00	<1.00	78.8	2.7	<1.00	<1.00	<1.00	<1.00	11.2	<1.00	<1.00	<1.00	1.5	<1.00	nt	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0	nt	nt	nt	
17C	nd	142.64	73.23	34.26	92.46	40.6	22.5	36.6	4.7	21.8	8.53	5.6	2.7	3.7	2.4	2.1	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt		
17D	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	nt	<1.0	nt	nt	nt	
18A	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	nt	nt	nt	nt	
18C	14	8.77	5.28 J	<5.00	5.79	5.4	3.1	3.6	4	2.9	2.7	1.5	1.4	1.5	<1.00	1.1	1.26	<1.00	<1.00	<1.00	<1.00	2.2	<1.00	<1.00	nt	<1.0	nt	nt	<1.0		
18D	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	nt	nt	nt	nt	nt	
19A	1.1	<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	nt	<1.0	nt	<1.0		
19C	61	17.57	13.44	7.14 J	10.46	6.8	5.6	6.8	6.2	3.4	2.9	2.2	1.8	1.8	1.3	1.2	1.43	1.3	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	nt	<1.0		
19D	3.9	3.60	<5.00	<5.00	2.42	2.2	1.6	1.9	1.7	<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	nt	nt	nt	
20A	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	nt	nt	nt	nt	nt	
20C	nd	<1.00	<5.00	<5.00	<1.00	1.1	<1.00	1.1	1.1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.1	<1.00	<1.00	nt	<1.0	nt	nt	<1.0		
20D	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	nt	nt	nt	nt	nt	
21A	nt	nt	nt	nt	<1.00	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	<1.00	nt	nt	nt	nt	nt
21C	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<1.00	<1.00	<1.00	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	
22A	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	nt	<1.0	<1.0	
23A	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	nt	<1.0	<1.0	

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

BENZENE (µg/L)

	Aug-05	Nov-05	Feb-06	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	Nov-12	May-13	Nov-13	May-14	Nov-14	Apr-15	Oct-15	Apr-16	Nov-16	May-17	Nov-17	
06A	<1.0	<1.0	<1.0	<1.0	<1.0	0.4	<1.0	<1.0	0.3	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
06B	<1.0	<1.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
06C	1.9	1.9	1.3	1.3	1.2	1.2	<1.0	<1.0	0.9	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
08C	nt	<1.0	nt	<1.0	nt	<5.0	nt	<3.0	<5.0	<5.0	<1.0	<3.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09A	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<5.0	<1.0	<1.0	<2.0	<0.2	<0.2	<2.0	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2
09B	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09C	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
10A	<1.0	<1.0	<1.0	<1.0	<1.0	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	nt	nt	nt	nt	nt	
10C	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	nt	0.3	0.2	0.3	
11A	nt	<1.0	nt	<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	<2.0	<2.0	<2.0	<2.0	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
12A	nt	<1.0	nt	<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	<0.2	<0.2	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt	nt	
13A	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
13C	nt	3.0	nt	2.1	nt	2.1	nt	1.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<2.0	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
14A	<1.0	<3.0	<1.0	<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	<0.2	<0.5	<0.2	<0.2	<0.2	nt	nt	nt	nt	nt	nt	
14C	nt	<1.0	nt	<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	<2.0	<2.0	<2.0	<1.0	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
14E	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
15A	nt	<5.0	nt	<5.0	nt	<3.0	nt	<1.0	<1.0	<3.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	0.4	<1.0	0.4	<0.5	0.3	0.3	0.2	nt	nt	nt	nt	nt	nt	
15C	nt	<1.0	nt	<1.0	nt	0.4	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<2.0	<5.0	<2.0	<2.0	<0.2	<0.2	<0.2	nt	0.2	<0.2	<0.2	
15D	nt	<1.0	nt	<1.0	nt	<1.0	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
16A	nt	<1.0	nt	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	nt	<0.2	<0.2	<0.2	
16C	nt	<1.0	nt	<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	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	nt	0.4	<0.2	<0.2	
17A	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	nt	nt	<0.2	<0.2	
17C	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	nt	nt	nt
17D	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	nt	nt	nt
18A	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	nt	nt	nt
18C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<0.2	<1.0	<0.2	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
18D	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	nt	nt	nt
19A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19C	nt	<1.0	nt	<1.0	nt	<0.2	nt	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19D	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	nt	nt	nt
20A	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	nt	nt	nt
20C	nt	<1.0	nt	<1.0	nt	0.5	nt	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.4	<2.0	<5.0	<2.0	<2.0	0.2	0.2	<0.2	nt	0.3	<0.2	<0.2	<0.2	
20D	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	nt	nt	nt
21A	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	nt	nt	nt
21C	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	nt	nt	nt
22A	<1.0	<1.0	<1.0	<1.0	<1.0	0.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.2	0.4	0.4	0.5	0.3	0.4	0.5	0.3	0.3	nt	<0.2	0.3	0.5	
23A	<1.0	<1.0	<1.0	<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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt

µg/L = micrograms per liter

nd = not detected

nt = not tested

J = Analyte was positively identified; the associated numerical value is the 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**

NAPHTHALENE (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	
06A	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	<5.0	<5.0	<5.0	<5.0	nt	<5.0	
06B	nt	nt	nt	nt	<1.00	2.8	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.4	<1.00	<1.00	<1.00	<1.00	4.5	1.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<10	
06C	nt	nt	nt	nt	29.26	10.4	9.1	8.8	7.2	<1.00	18.4	3	25.1	3.4	<1.00	7.7	44.97	9.73	2.8	<5.0	<5.0	<5.0	220	14	<5.0	<5.0	<5.0	<5.0		
08C	nt	nt	nt	nt	351.9	401	155	370	234	118	292	600 E	38.6	230	137	109.2	174.1	125	210	180 J	290	390	300	130	nt	180	nt	nt	130	
09A	nt	nt	nt	nt	<50.00	<3.33	<10.00	<4.00	<5.00	<1.00	7	<1.00	<10.00	<1.00	<10.00	<10.00	8.65	3.63	<1.0	<5.0	<5.0	<75	<100	<100	<15	<25	<50	nt	<5.0	
09B	nt	nt	nt	nt	<10.00	<2.00	<1.00	<1.00	13.8	22.4	<2.00	<3.33	<10.00	3.4	4.6	<2.00	11.2	2.24	3.1	<5.0	<5.0	<5.0	<5.0	<15	<25	<25	<50	nt	<5.0	
09C	nt	nt	nt	nt	<1.00	1.2	<1.00	8.8	6.5	<1.00	25	<1.00	<1.00	9.9	6.8	<1.00	1.67	1.8	1.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7.7	68	nt	51	
09D	nt	nt	nt	nt	<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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	<5.0	
10A	nt	nt	nt	nt	<10.00	4.2	<3.33	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	
10C	nt	nt	nt	nt	14.27	30.5	6.3	56.1	6.4	7.6	5.8	2.8	<1.00	3.8	4.7	2.7	5.77	<1.00	36	5.0	<5.0	<5.0	<5.0	9.4	nt	<5.0	nt	nt	<5.0	
11A	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	5.1	<1.00	<1.00	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
12A	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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
13A	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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
13C	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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
14A	nt	nt	nt	nt	<1.00	<10.00	<5.00	<4.00	<2.00	<2.00	<2.00	<1.00	<1.00	150	4.8	235	113.23	84.7	35	5.7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<25	nt	<50
14C	nt	nt	nt	nt	<2.00	<10.00	<1.00	<10.00	<10.00	<10.00	11.8	7.2	6.5	6.3	7.3	17.2	8.7	6.79	3.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	
14E	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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
15A	nt	nt	nt	nt	423.67	239	152	247	136	67.3	465 E	1721 E	916	58.9	561	797	695.6	985.5	1100	840 J	510	370	490	700	nt	430	nt	nt	440	
15C	nt	nt	nt	nt	<1.00	1	<1.00	4.4	<10.00	<10.00	<10.00	<3.33	4.8	<2.00	<2.00	29.8	<1.00	<1.00	<1.0	<5.0 J	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
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	7.4	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
16A	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	3.1	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
16C	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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
17A	nt	nt	nt	nt	<1.00	62	<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	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	nt	
17C	nt	nt	nt	nt	<1.00	<1.00	26.6	<1.00	0.6	37.3	106	<1.00	<1.00	31.9	16.6	13.7	nt	12.12	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
17D	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	nt	<1.00	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
18A	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	nt	nt	nt	nt	nt	nt	<5.0	nt	nt	nt	nt	
18C	nt	nt	nt	nt	<1.00	<1.00	<1.00	1.7	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.1	<1.00	<1.00	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
18D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
19A	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	1.54	nt	nt	nt	nt	nt	<5.0	nt	nt	<5.0	<5.0	
19C	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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	nt	<5.0	
19D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
20A	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	5.48	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
20C	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	1.81	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	<5.0	nt	<5.0	
20D	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	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
21A	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	<1.0	<5.0	<5.0	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	nt	nt	207.4	<1.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	
22A	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	nt	9.9	140
23A	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	19	130	

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

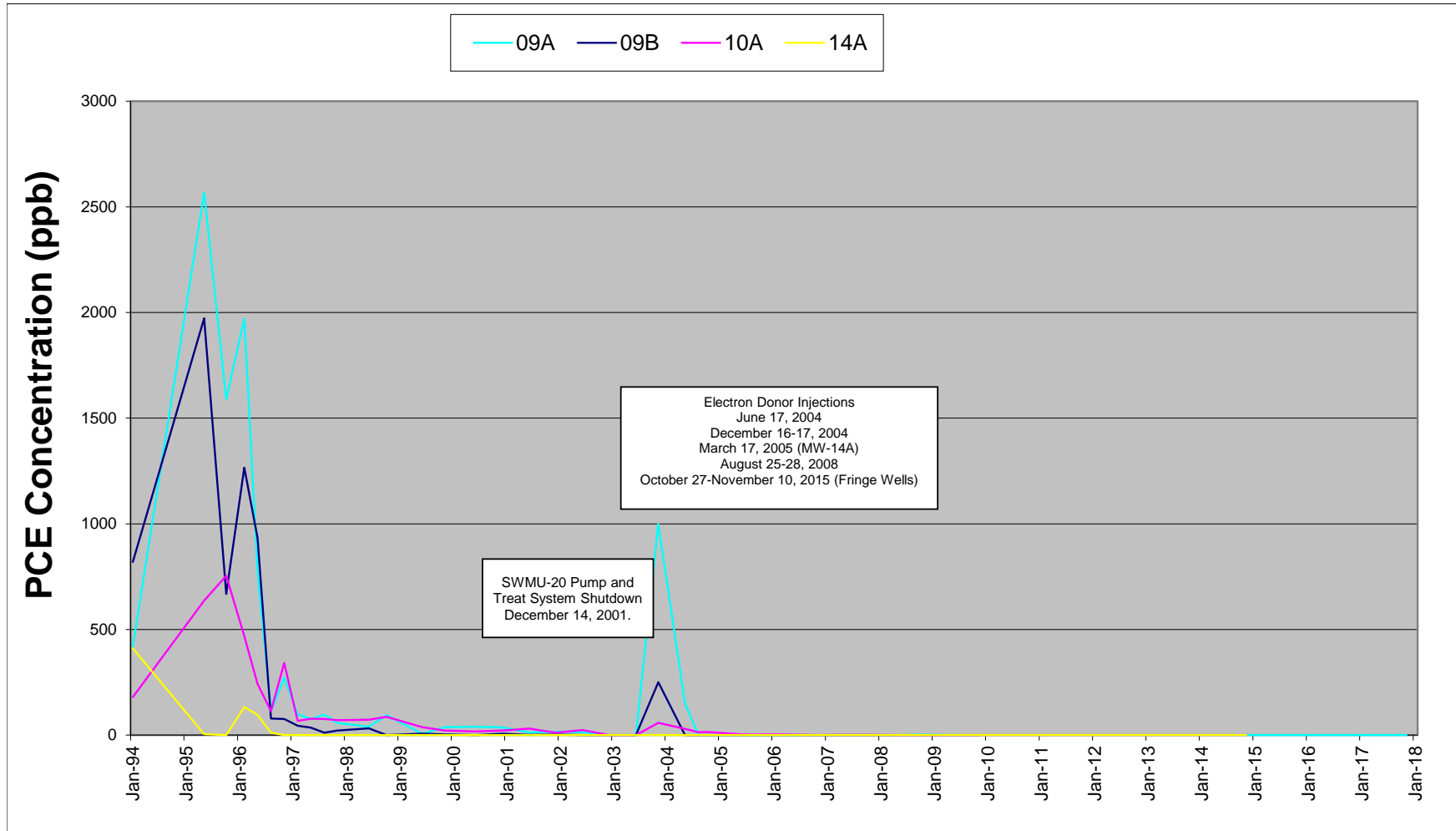
NAPHTHALENE (µg/L)

	Aug-05	Nov-05	Feb-06	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	Nov-12	May-13	Nov-13	May-14	Nov-14	Apr-15	Oct-15	Apr-16	Nov-16	May-17	Nov-17	
06A	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	<0.5	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5	
06B	<5.0	<5.0	<5.0	<5.0	<5.0	0.6	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	<0.5	0.7	<0.5	
06C	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	<5.0	<5.0	4.6	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
08C	nt	82	nt	910	nt	440	nt	500	540	180	1100	62	65	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09A	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<0.5	<5.0	<50	<25	<5.0	<5.0	<5.0	5.3	9.5	7.5	56	23	9.9	8.7	2.6	1.8	nt	0.9	100	5.8	
09B	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	0.6	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09C	29	12	5.1	<5.0	<5.0	14	18	5.5	<5.0	6.7	<5.0	56	69	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
09D	nt	<5.0	nt	<5.0	nt	<2.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
10A	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	nt	nt	nt	nt	nt	nt	
10C	nt	<5.0	nt	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	100	39	12	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	10	<0.5	nt	8.8	7.7	8.6	
11A	nt	<5.0	nt	<5.0	nt	<5.0	nt	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5	
12A	nt	<5.0	nt	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	nt	nt	nt	nt	
13A	nt	<5.0	nt	<5.0	nt	<0.5	nt	<0.5	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5	
13C	nt	<5.0	nt	<5.0	nt	16	nt	16	<5.0	0.5	<5.0	<5.0	<5.0	22	6.5	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	<0.5	14	31	
14A	<50	<15	<5.0	<10	<5.0	7.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5	<0.5	0.8	<0.5	0.7	<0.5	<0.5	nt	nt	nt	nt	nt	nt	nt	
14C	nt	<5.0	nt	<5.0	nt	6.3	nt	6.2	<5.0	<5.0	<5.0	<5.0	<5.0	15	<5.0	<5.0	<0.5	<0.5	<5.0	<5.0	<2.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5		
14E	nt	<5.0	nt	<5.0	nt	<0.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
15A	nt	390	nt	220	nt	180	nt	72	170	180	230	170	190	310	240	210	190	170	120	84	180	89	190	nt	nt	nt	nt	nt	nt	
15C	nt	<5.0	nt	<5.0	nt	<0.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5	
15D	nt	<5.0	nt	<5.0	nt	<2.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
16A	nt	<5.0	nt	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	0.6	<0.5	<0.5	
16C	nt	<5.0	nt	<5.0	nt	<0.5	nt	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5	
17A	nt	<5.0	nt	<5.0	nt	<0.5	nt	<0.5	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	nt	nt	<0.5	<0.5	
17C	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	nt	nt	nt
17D	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	nt	nt	nt
18A	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	nt	nt	nt
18C	nt	<5.0	nt	<5.0	nt	<0.5	nt	0.6	<5.0	<0.5	86	47	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
18D	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	nt	nt	nt
19A	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	
19C	nt	<5.0	nt	<5.0	nt	0.5	nt	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
19D	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	nt	nt	nt
20A	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	nt	nt	nt
20C	nt	<5.0	nt	<5.0	nt	0.8	nt	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<5.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5	nt	<0.5	<0.5	<0.5	
20D	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	nt	nt	nt
21A	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	nt	nt	nt
21C	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	nt	nt	nt
22A	180	170	210 J	120	200	140	110	100	25	41	32	51	15	14	16	20	12	15	9.2	11	7.1	9.8	6.5	6.2	4.7	nt	110	200	220	
23A	100	<5.0	45	69	140	9.0	26	36	6.1	5.3	<5.0	9.8	<5.0	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	

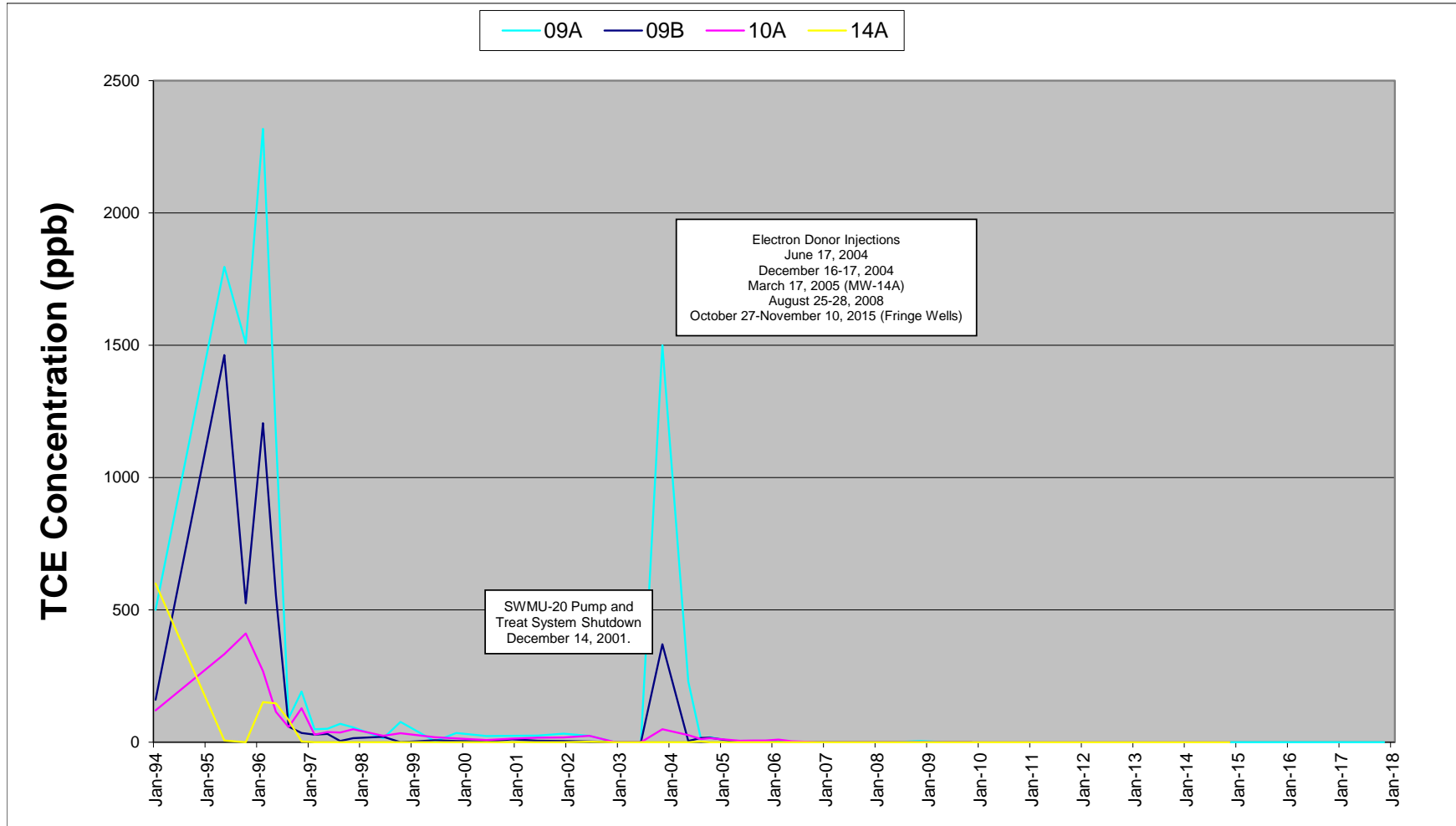
µg/L = micrograms per liter
 nd = not detected
 nt = not tested

J = Analyte was positively identified; the associated numerical value is the 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

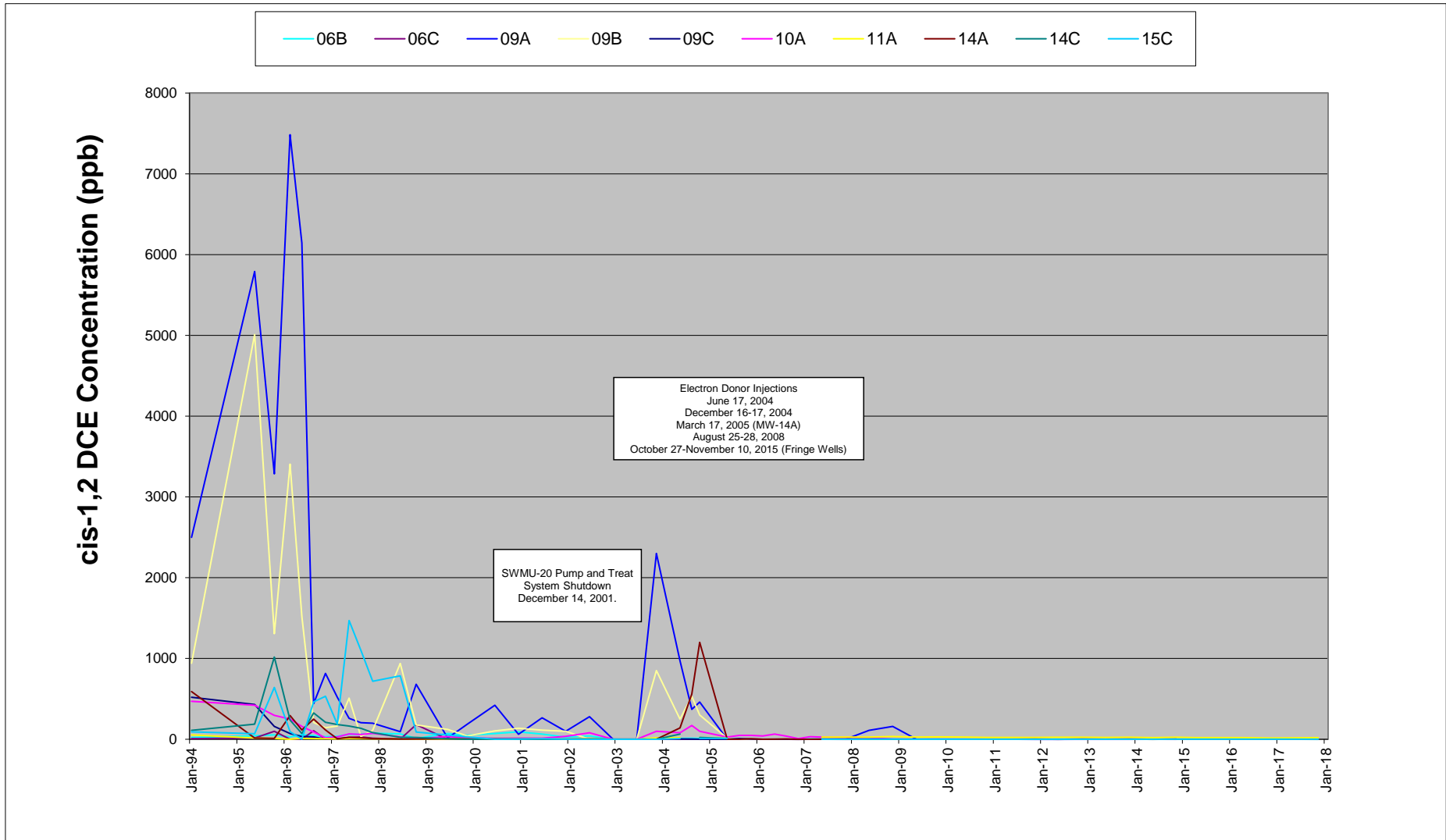
DEVELOPMENTAL CENTER WELLS TETRACHLOROETHENE CONCENTRATIONS (Wells with PCE Historically Detected over 50 ppb)



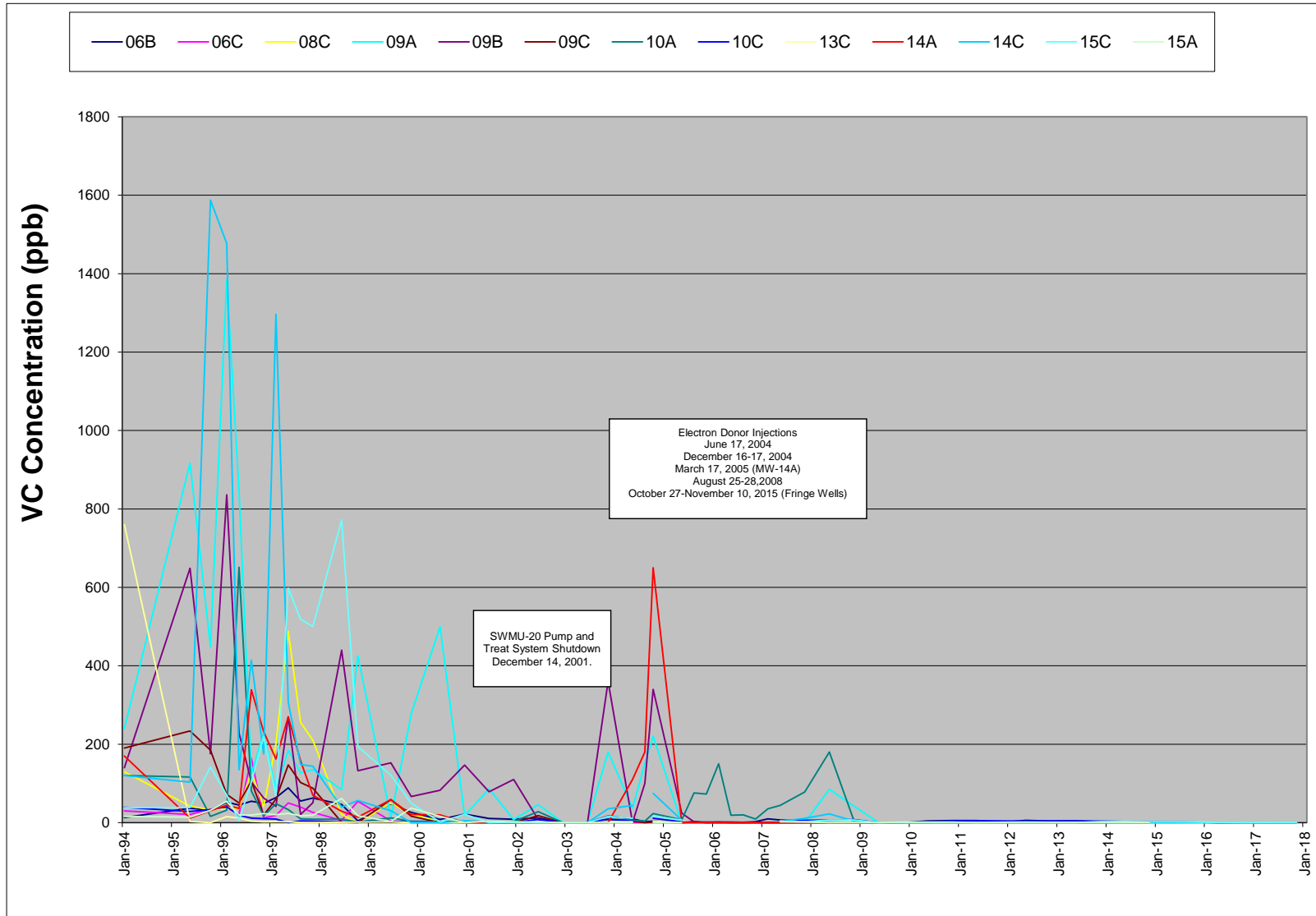
DEVELOPMENTAL CENTER WELLS TRICHLOROETHENE CONCENTRATIONS (Wells with TCE Historically Detected over 50 ppb)



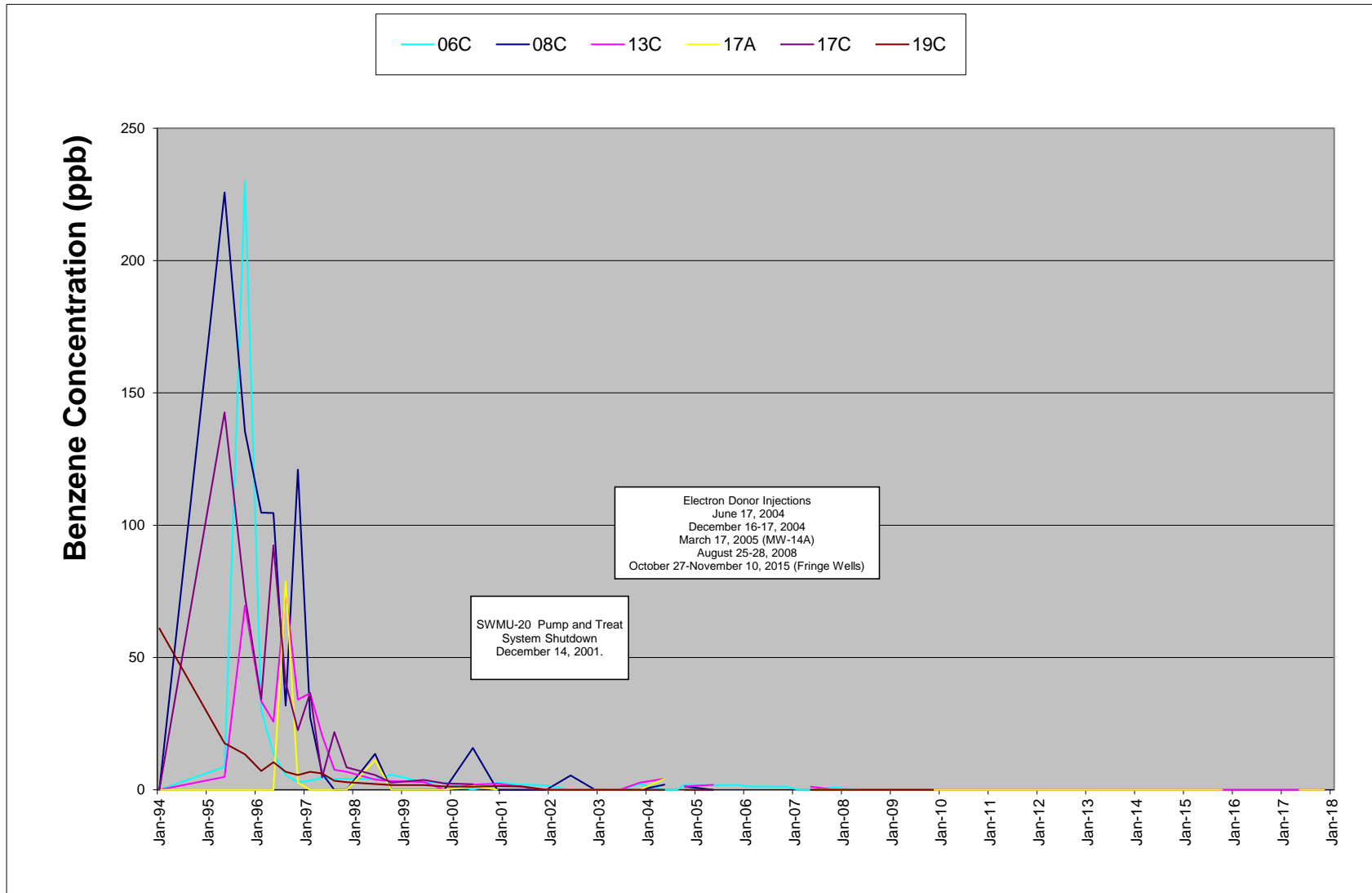
DEVELOPMENTAL CENTER WELLS CIS-1,2 DICHLOROETHENE CONCENTRATIONS (Wells with cis-1,2 DCE Historically Detected over 50 ppb)



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)



**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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/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	<1.0	1.6	<11	<12	6.41	1	3.0	20.9	16000	6.6	23.9	---
06A (c)	08/16/2006	790	608				<1.0	<1.0	<1.0	1.5	<1.1	<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	---
06A (c)	11/14/2012	3072	2890		1542		<0.2	<0.2	0.3	0.8	<1.0	<4.0	0.02	-0.5	1.5	<0.30	13000	6.9	9.0	---
06A (c)	5/21/2013	3260	3078		1730		<0.5	<0.5	<0.5	1.3	<1.0	<1.0	0.17	-434	2.6	3.3	5200	7.9	8.8	---
06A (c)	11/12/2013	3435	3253		1905		<0.2	<0.2	0.4	2.4	<1.0	<1.0	2.68	-298	1.2	5.8	3500	6.8	8.3	---
06A (c)	5/7/2014	3611	3429		2081		<0.2	<0.2	0.4	1.5	<1.0	<1.0	3.60	-386	1.5	11.2	1300	7.1	7.2	---
06A (c)	11/5/2014	3793	3611		2263		<0.2	<0.2	0.4	2.7	<1.0	<1.0	0.28	-89	1.0	13.9	770	6.7	7.2	---
06A (c)	4/29/2015	3968	3786		2438		<0.2	<0.2	0.6	3.3	<1.0	<1.0	0.36	-54	3.0	17.5	430	6.7	5.2	---
06A (c)	10/26/2015	4148	3966		2618	-16	<0.2	<0.2	0.2	2.5	<1.0	<1.0	0.17	-66	0.8	19.7	410	6.6	6.5	---
06A (c)	4/19/2016	4324	4142		2794	160	<0.2	<0.2	1	0.7	<100	<100	0.06	-118	1.0	<0.30	18000	7.0	203	Cola brown
06A (c)	11/1/2016	4520	4338		2990	356	<0.2	<0.2	0.5	0.7	<100	<100	0.35	-154.9	NM	0.47	20000	7.1	121	Opaque dark brown/amber color Turbid, dark brown/amber color, strong injection fluid odor, no sheen
06A (c)	5/2/2017	4702	4520		3172	538	<0.2	<0.2	0.3	0.4	<1.0	1.4	0.26	-151.5	NM	<0.30	18000	7.2	124	Cloudy, amber, injection fluid odor, no sheen (slight effervescence)
06A (c)	11/8/2017	4892	4710		3362	728	<0.2	<0.2	0.3	0.3	<1.0	3.4	0.41	-56.1	NM	16.1	13000	7.1	99.5	---
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	---

**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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/L)	---	---								
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	---
06B	11/14/2012	3072	2890		1542		<0.2	<0.2	<0.2	3.7	<1.0	1.8	0.02	10	2.0	7.0	2300	6.8	13.7	---
06B	5/21/2013	3260	3078		1730		<0.5	<0.5	<0.5	4.3	<1.0	<1.0	0.17	-427	2.5	20.1	720	7.7	11.0	---
06B	11/12/2013	3435	3253		1905		<0.2	<0.2	<0.2	2.5	<1.0	<1.0	2.62	-309	1.5	4.0	350	7.0	15.5	---
06B	5/7/2014	3611	3429		2081		<0.2	<0.2	<0.2	2.4	<1.0	<1.0	3.50	-320	1.6	2.8	1200	7.1	10.2	---
06B	11/5/2014	3793	3611		2263		<0.2	<0.2	<0.2	1.8	<1.0	<1.0	0.30	-54	1.7	4.7	2200	6.8	6.9	---
06B	4/29/2015	3968	3786		2438		<0.2	<0.2	<0.2	1.8	<1.0	<1.0	0.52	-39	1.0	0.99	1300	6.6	4.0	---
06B	10/26/2015	4148	3966		2618	-16	<0.2	<0.2	<0.2	1.0	<1.0	<1.0	0.99	-39	1.0	2.0	1900	6.6	4.9	---
06B	4/19/2016	4324	4142		2794	160	<2.0	<2.0	<2.0	<2.0	<100	<100	0.06	-78	NM	0.3	17000	6.8	306	---
06B	11/1/2016	4520	4338		2990	356	<0.2	<0.2	0.5	0.2	<100	<100	0.32	-148.5	NM	0.71	23000	7.24	274	Opaque dark brown/black color Turbid, dark brown/black color, strong injection fluid odor, no sheen
06B	5/2/2017	4702	4520		3172	538	<0.2	<0.2	<0.2	0.3	<1.0	<1.0	0.17	-129.6	NM	1.3	21000	7.38	149	---
06B	11/8/2017	4892	4710		3362	728	<0.2	<0.2	<0.2	0.6	<1.0	2.4	0.10	-45.5	NM	<30.0	18000	6.88	320	Turbid, black, strong injection fluid odor
06C	05/04/2004	-44					<1.0	<1.0	<1.0	<1.0	<0.50	0.6	0.40	93	5.0	20.7	360	6.7	29.0	---
06C	08/23/2004	67					<1.0	<1.0	1.4	<1.0	5.7	5.9	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	3.6	<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	1.1	<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	1.1	<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	1.1	<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	47.7	<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	2.3	0.93	231	1.6	31.8	18900	6.6	13.4	---
06C	11/29/2006	895	713				<0.2	<0.2	0.3	<0.2	<1.1	1.4	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	1.7	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	2.0	0.72	216	3.5	20.8	20800	6.5	34.0	---
06C	11/30/2007	1261	1079				<0.2	<0.2	0.2	0.3	<1.1	2.8	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					150	230	970	37	<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	370	150	4.2	<0.50	0.40	143	2.6	51.8	4.7	7.1	56.8	Clear with black tint, H2S odor
09A	10/19/2004	124	-58				<5.0	19	460	220	2.7	<0.50	0.53	219	4.0	77.4	17	6.9	19.6	Clear, slightly yellow tint
09A	02/21/2005	249	67				<1.0	<1.0	41	37	1.9	<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

**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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/L)	---	---								
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	1.2	<1.1	2.1	1.55	175	2.0	56.8	16800	6.4	50.0	---
09A	11/27/2006	893	711				<0.2	<0.2	0.3	1.1	1.9	6.3	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	7.8	0.65	-107	4.6	0.3	15300	6.4	48.8	---
09A	05/22/2007	1069	887				<1.0	<1.0	<1.0	2.8	<1.1	4.8	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	24.5	1.01	147	3.8	45.4	27600	6.4	40.6	---
09A	05/19/2008	1432	1250		-98		<0.2	0.2	110	85	7.8	35.6	2.26	-82	3.0	29.4	17100	6.7	31.0	---
09A	11/24/2008	1621	1439		91		1.9	4.6	160	42	4.0	2.1	2.61	-52	3.0	<2.0	13700	6.2	5600	---
09A	05/18/2009	1796	1614		266		<10	<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	2.0	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	2.0	2.55	33	2.0	<0.2	17800	6.9	44.4	---
09A	11/13/2011	2705	2523		1175		<0.2	<0.2	0.2	<0.2	<1.1	1.2	2.23	-66	1.2	0.4	11800	7.0	39.4	---
09A	5/14/2012	2888	2706		1358		<0.2	<0.2	0.2	<0.2	<1.0	13	0.57	91	1.5	0.40	22000	6.4	30.5	---
09A	11/14/2012	3072	2890		1542		<2.0	<2.0	<2.0	<2.0	<1.0	11	0.02	-4	2.0	0.53	21000	6.6	30.9	---
09A	5/21/2013	3260	3078		1730		<2.0	<2.0	<2.0	<2.0	<1.0	16	0.32	-399	1.8	<0.30	24000	7.8	33.0	---
09A	11/12/2013	3435	3253		1905		<2.0	<2.0	<2.0	<2.0	<1.0	10	3.87	-258	1.7	0.41	18000	6.5	30.2	---
09A	5/7/2014	3611	3429		2081		<2.0	<2.0	<2.0	<2.0	<1.0	29	4.46	-322	1.4	0.50	26000	6.7	21.5	---
09A	11/5/2014	3793	3611		2263		<0.2	<0.2	<0.2	<0.2	<1.0	15	0.12	-90	2.0	<0.30	25000	6.6	24.8	---
09A	4/29/2015	3968	3786		2438		<0.2	<0.2	<0.2	<0.2	<1.0	28	0.20	-63	1.4	0.58	27000	6.4	17.8	---
09A	10/26/2015	4148	3966		2618	-16	<0.2	<0.2	<0.2	<0.2	<1.0	49	0.10	-38	1.0	0.57	21000	6.3	21.7	---
09A	4/19/2016	4324	4142		2794	160	<0.2	<0.2	<0.2	0.7	<1.0	34	0.15	-105	0.8	<0.30	22000	6.7	33.3	---
09A	11/1/2016	4520	4338		2990	356	<0.2	<0.2	<0.2	<0.2	<1.0	120	0.73	-89	NM	<0.30	19000	6.46	17.5	Slight yellow/greenish tint
09A	5/2/2017	4702	4520		3172	538	<0.2	<0.2	<0.2	<0.2	<1.0	430	1.03	-118.2	NM	<0.30	20000	6.58	22.3	Clear, yellow tint, injection fluid odor, no sheen
09A	11/8/2017	4892	4710		3362	728	<0.2	<0.2	<0.2	0.4	51	230	0.34	17.6	NM	0.85	21000	6.59	16.7	Clear, colorless, slight injection fluid-like odor, no sheen
09B	05/03/2004	-45					<3.0	4.2	250	<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	16	530	100	0.76	<0.50	0.34	174	1.4	73.0	23	7.4	29.7	Clear, yellow-brown tint, H2S odor
09B	10/19/2004	124	-58				<5.0	17	300	340	1.4	<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	890	520	1.7	<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	12	24	<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	1.7	<0.50	<0.50	1.45	224	2.5	<0.1	400	6.7	17.6	Clear, with yellow-brown tint
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	1.3	<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	0.3	0.5	<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	1.6	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	1.4	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	3.8	1.29	238	2.2	58.3	29800	6.2	44.5	---
09B	05/19/2008	1432	1250		-98		<0.2	<0.2	0.2	0.4	<1.1	3.0	2.34	-78	3.4	39.1	12900	6.4	37.3	---
09B	11/24/2008	1621	1439		91		<1.0	<1.0	<1.0	<1.0	<1.1	17.6	2.22	-47	3.0	<1.0	27000	6.7	27.0	---
09B	05/18/2009	1796	1614		266		<1.0	<1.0	<1.0	<1.0	<1.1	6.9	0.38	-38	3.5	<0.5	19700	6.9	37.1	---

**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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/L)	---	---								
09B	11/16/2009	1978	1796			448	<1.0	<1.0	<1.0	<1.0	<1.1	16.1	1.27	12	3.5	<0.1	24500	6.2	28.1	---
09C	05/03/2004	-45					<1.0	<1.0	4.0	3.3	1.9	0.7	0.33	229	4.0	19.1	350	6.8	28.5	Clear, yellow tint
09C	08/23/2004	67					<1.0	<1.0	1.7	<1.0	1.1	2.8	0.47	114	2.6	23.2	610	6.7	302	Clear, H2S odor
09C	10/19/2004	124	-58				<1.0	<1.0	<1.0	1.5	1.1	<0.50	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	1.7	<1.0	<0.50	1.6	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	1.2	<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	7.6	2.2	<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	1.2	<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	<1.1	<1.2	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	1.6	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	9.1	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	3.9	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	5.4	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	5.4	0.81	147	3.6	27.3	30000	6.5	27.1	---
09C	05/19/2008	1432	1250			-98	<0.2	<0.2	<0.2	0.2	<1.1	15.2	2.11	-57	4.6	18.6	22800	6.5	22.3	---
09C	11/24/2008	1621	1439			91	<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			266	<1.0	<1.0	<1.0	<1.0	<1.1	4.3	0.45	-44	3.5	<0.5	21400	7.0	24.0	---
09C	11/16/2009	1978	1796			448	<3.0	<3.0	<3.0	<3.0	<1.1	1.9	1.27	-7	3.0	<0.1	22400	6.4	20.7	---
10A	05/03/2004	-45					29	27	80	6.4	<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					14	12	170	4.0	<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				15	15	100	23	<0.50	<0.50	0.66	224	4.0	37.8	2.7	7.0	24.0	Clear
10A	02/21/2005	249	67				4.7	4.8	24	6.8	<0.50	0.54	0.53	166	3.6	24.3	430	7.0	22.4	Clear, yellow color
10A	05/11/2005	328	146				4.2	5.4	26	7.2	<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				2.7	6.3	48	76	<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				3.3	6.7	47	73	<0.50	<0.50	0.91	178	2.0	50.6	370	7.1	34.1	---
10A	02/21/2006	614	432				3.7	9.6	42	150	<11.4	<12.3	0.54	320	2.0	53.9	1130	6.8	45.8	---
10A	05/15/2006	697	515				1.8	3.7	63	19	<1.1	<1.2	0.67	190	1.8	57.4	3100	6.8	49.2	---
10A	08/16/2006	790	608				1.6	1.6	38	20	<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	7.4	9.2	2.6	2.6	2.67	201	3.0	57.9	1650	6.9	56.0	---
10A	02/22/2007	980	798				1.2	<1.0	32	35	<1.1	<1.2	0.57	-176	4.6	20.4	1370	6.8	56.4	---
10A	05/22/2007	1069	887				1.1	<1.0	28	44	<1.1	1.4	0.88	73	3.0	10.2	2590	6.9	47.3	---
10A	11/29/2007	1260	1078				1.2	<1.0	22	78	4.4	3.7	0.80	106	4.2	47.9	4810	6.9	47.8	---
10A	05/19/2008	1432	1250			-98	<1.0	<1.0	22	180	7.9	4.4	2.19	-177	4.0	32.5	4870	7.0	33.3	---
10A	11/24/2008	1621	1439			91	<1.0	<1.0	1.6	5.0	<1.1	<1.2	2.29	-87	3.4	1.3	16900	7.1	1200	---
10A	05/18/2009	1796	1614			266	<2.0	<2.0	<2.0	<2.0	<1.1	<1.2	0.66	-80	3.3	<1.0	17900	6.9	168	---
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 electroic 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	0.2	0.4	<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	0.2	0.4	<1.0	<1.0	0.57	88	2.5	0.32	20000	6.4	38.0	---
10A	11/14/2012	3072	2890			1542	<0.2	<0.2	0.3	0.4	<1.0	<1.0	0.03	-16	2.0	<0.30	19000	6.6	30.6	---
10A	5/21/2013	3260	3078			1730	<0.2	<0.2	0.2	0.3	<1.0	<3.0	0.35	-340	1.8	<0.30	26000	7.5	29.5	---
10A	11/12/2013	3435	3253			1905	<0.2	<0.2	0.2	0.4	<1.0	2.5	3.53	-242	1.4	0.38	16000	6.5	29.1	---
10A	5/7/2014	3611	3429			2081	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.06	-305	2.1	<0.30	26000	6.7	27.9	---
10A	11/5/2014	3793	3611			2263	<0.2	<0.2	0.2	0.3	<1.0	5.5	0.17	-134	2.0	<0.30	25000	6.5	26.1	---

**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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/L)	---	---								
14A	05/04/2004	-44					<1.0	<1.0	140	110	<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	2.9	560	180	0.89	0.67	0.54	162	3.2	30.1	810	6.8	22.6	---
14A	10/19/2004	124	-58				<5.0	39	1200	650	<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	300	1000	13	2.7	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	6.0	<3.0	<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	2.1	<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	3.0	<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	1.5	<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	1.6	<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	1.2	<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	0.6	<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	0.3	0.2	<1.0	8.7	0.13	62	2.6	3.4	16000	6.4	5.9	---
14A	11/14/2012	3072	2890	2799	1542		<0.2	<0.2	0.6	<0.2	<1.0	5.0	0.03	31	1.5	79.0	16000	6.4	6.5	---
14A	5/21/2013	3260	3078	2987	1730		<0.5	<0.5	<0.5	<0.5	<1.0	4.8	0.24	-428	2.4	2.3	18000	7.4	6.5	---
14A	11/12/2013	3435	3253	3162	1905		<0.2	<0.2	0.5	<0.2	<1.0	6.3	4.46	-286	1.3	0.52	14000	6.4	8.0	---
14A	5/7/2014	3611	3429	3338	2081		<0.2	<0.2	0.3	0.3	<1.0	4.6	4.39	-427	1.6	19.9	15000	6.8	6.5	---
14A	11/5/2014	3793	3611	3520	2263		<0.2	<0.2	0.4	0.2	<1.0	10	0.04	-48	2.0	23.6	15000	6.5	6.8	---
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	1.4	2.6	NA	NA	1.19	144	NA	NA	NA	6.7	NA	---
15A	12/03/2007	1264	1082				<1.0	<1.0	<1.0	1.3	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	1.4	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	1.6	NA	NA	1.10	606	NA	NA	NA	6.8	NA	---
15A	11/10/2010	2337	2155		807		<1.0	<1.0	<1.0	1.4	NA	NA	2.42	118	NA	NA	NA	7.1	NA	---
15A	5/5/2011	2513	2331		983		<1.0	<1.0	<1.0	<1.0	NA	NA	4.83	-19	NA	NA	NA	7.2	NA	---
15A	11/13/2011	2705	2523		1175		<0.2	<0.2	0.3	1.0	NA	NA	4.01	-41	NA	NA	NA	7.3	NA	---
15A	5/14/2012	2888	2706		1358		<1.0	<1.0	<1.0	1.2	NA	NA	0.64	56	NA	NA	NA	6.7	NA	---
15A	11/13/2012	3071	2889		1541		<0.2	<0.2	0.4	0.8	NA	NA	0.03	23	NA	NA	NA	6.8	NA	---
15A	5/21/2013	3260	3078		1730		<0.5	<0.5	0.6	1.1	NA	NA	0.20	-394	NA	NA	NA	7.4	NA	---
15A	11/12/2013	3435	3253		1905		<0.2	<0.2	0.5	0.8	NA	NA	3.38	-267	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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/L)	---	---								
15A	5/7/2014	3611	3429		2081		<0.2	<0.2	0.6	1.0	NA	NA	3.86	-351	NA	NA	NA	6.9	NA	---
15A	11/5/2014	3793	3611		2263		<0.2	<0.2	0.4	0.5	NA	NA	0.09	-126	NA	NA	NA	6.8	NA	---
19A	05/02/2004	-46	-228				<1.0	<1.0	<1.0	<1.0	NA	NA	0.33	-3	NA	NA	NA	6.5	NA	---
19A	02/21/2005	249	67				<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.65	180	NA	47.4	17	6.7	15.5	---
19A	05/12/2005	329	147				<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.63	169	3.0	31.3	9.1	6.8	14.2	Clear, colorless
19A	08/22/2005	431	249				<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.74	106	3.0	68.3	16	6.6	10.5	Clear, colorless
19A	11/15/2005	516	334				<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.56	201	2.6	95.9	35	6.8	9.30	---
19A	02/22/2006	615	433				<1.0	<1.0	<1.0	<1.0	<11.4	<12.3	0.77	65	3.0	124.0	111	6.6	31.3	---
19A	05/17/2006	699	517				<1.0	<1.0	<1.0	<1.0	<11	<12	1.14	56	2.0	73.4	230	6.4	15.7	---
19A	08/15/2006	789	607				<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.60	229	2.0	47.3	202	6.4	11.5	---
19A	11/27/2006	893	711				<0.2	0.2	0.3	<0.2	<1.1	<1.2	0.88	264	2.0	41.9	186	6.4	13.6	---
19A	02/22/2007	980	798				<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.42	-23	3.0	20.7	248	6.2	19.8	---
19A	05/22/2007	1069	887				<1.0	<1.0	<1.0	<1.0	<1.1	5.2	0.34	277	3.5	30.8	179	6.4	15.4	---
19A	11/29/2007	1260	1078				<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.67	243	2.2	37.2	235	6.2	14.3	---
19A	05/20/2008	1433	1251		-97		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	3.23	-79	3.8	20.9	134	6.4	11.5	---
19A	11/23/2008	1620	1438		90		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	1.62	-61	2.0	46.1	97.8	6.4	10.6	---
19A	05/19/2009	1797	1615		267		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.30	-28	3.2	28.6	127	6.8	12.8	---
19A	11/18/2009	1980	1798		450		<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	1.58	-2	3.4	22.1	122	6.5	10.7	---
22A	03/21/2005	277	95	4			<1.0	<1.0	3.5	2.0	<0.50	<0.50	1.86	53	2.8	12.8	280	7.0	11.1	Hazy, suspended silt
22A	05/12/2005	329	147	56			<1.0	<1.0	2.3	2.9	<0.50	<0.50	0.83	155	2.6	1.3	300	7.1	31.3	---
22A	08/22/2005	431	249	158			<1.0	<1.0	2.3	3.2	<0.50	<0.50	0.70	170	2.6	3.0	230	6.9	26.5	Clear, slight yellow-brown tint
22A	11/16/2005	517	335	244			<1.0	<1.0	1.4	2.2	<0.50	<0.50	1.67	321	2.4	1.3	1300	6.3	29.9	---
22A	02/22/2006	615	433	342			<1.0	<1.0	1.4	3.3	<11.4	<12.3	0.69	97	2.0	59.0	1940	6.8	32.0	---
22A	05/17/2006	699	517	426			<1.0	<1.0	2.4	1.7	<11	<12	0.67	102	2.6	32.7	3600	6.8	17.6	---
22A	08/15/2006	789	607	516			<1.0	<1.0	1.8	2.4	<1.1	<1.2	0.65	239	2.0	54.7	5700	6.7	24.0	---
22A	11/30/2006	896	714	623			<0.2	0.3	2.2	2.4	<1.1	<1.2	2.15	286	2.6	40.0	4020	6.6	25.2	---
22A	02/22/2007	980	798	707			<1.0	<1.0	2.5	2.3	<1.1	<1.2	0.53	-76	5.0	<0.1	3000	6.6	22.4	---
22A	05/23/2007	1070	888	797			<1.0	<1.0	2.5	2.7	<1.1	<1.2	0.30	51	3.0	27.3	3510	6.8	18.2	---
22A	12/03/2007	1264	1082	991			<1.0	<1.0	2.0	1.3	<1.1	<1.2	0.61	41	2.6	12.3	2030	6.6	16.0	---
22A	05/20/2008	1433	1251	1160	-97		<1.0	<1.0	2.6	1.9	<1.1	<1.2	2.83	-103	4.0	20.2	1540	6.7	13.8	---
22A	11/23/2008	1620	1438	1347	90		<1.0	<1.0	2.2	3.1	<1.1	<1.2	1.13	-70	1.8	2.6	3100	6.8	19.2	---
22A	05/19/2009	1797	1615	1524	267		<1.0	<1.0	2.5	2.5	<1.1	<1.2	0.26	-43	3.2	3.4	3490	7.0	21.0	---
22A	11/18/2009	1980	1798	1707	450		<1.0	<1.0	2.1	1.8	<1.1	<1.2	0.43	-3.3	3.0	2.1	2060	6.4	13.8	---
22A	5/24/2010	2167	1985	1894	637		<1.0	<1.0	1.7	1.7	<1.1	<1.2	6.58	204	2.4	0.6	2370	7.0	15.1	---
22A	11/11/2010	2338	2156	2065	808		<1.0	<1.0	1.2	2.7	<1.1	<1.2	3.27	113	2.2	0.5	4650	7.0	21.8	---
22A	5/4/2011	2512	2330	2239	982		<1.0	<1.0	1.1	2.2	<1.1	<1.2	1.96	4	2.0	0.6	6350	7.0	22.4	---
22A	11/13/2011	2705	2523	2432	1175		<0.2	<0.2	0.9	1.7	<1.1	<1.2	2.89	-38	1.2	0.4	2510	7.3	17.6	---
22A	5/14/2012	2888	2706	2615	1358		<0.2	<0.2	0.6	2.0	<1.0	3.3	0.03	45	2.2	<0.30	5100	6.8	25.4	---
22A	11/14/2012	3072	2890	2799	1542		<0.2	<0.2	0.5	1.8	<1.0	1.7	0.03	1	1.8	<0.30	4400	6.9	22.7	---
22A	5/20/2013	3259	3077	2986	1729		<0.2	<0.2	0.4	2.0	<1.0	1.6	0.24	-404	1.0	<0.30	6100	7.7	24.6	---
22A	11/12/2013	3435	3253	3162	1905		<0.2	<0.2	0.5	1.7	<1.0	1.1	3.69	-289	1.4	1.8	3500	6.7	19.8	---
22A	5/7/2014	3611	3429	3338	2081		<0.2	<0.2	0.5	1.6	<1.0	<1.0	4.8	-368	1.3	0.66	4200	6.8	23.6	---
22A	11/5/2014	3793	3611	3520	2263		<0.2	<0.2	0.4	1.5	<1.0	1.5	0.13	-131	1.5	0.39	4800	6.8	25.8	---
22A	4/29/2015	3968	3786	3695	2438		<0.2	<0.2	0.6	1.5	<1.0	<1.0	0.09	-87	1.0	2.0	4300	6.5	14.8	---
22A	10/27/2015	4149	3967	3876	2619	-15	<0.2	<0.2	0.5	1.5	<1.0	<1.0	0.07	-64	2.0	2.6	3500	6.6	16.7	---
22A	4/19/2016	4324	4142	4051	2794	160	<0.2	<0.2	0.5	<0.2	<100	<100	0.14	-163	1.0	1.9	15000	7.0	2980	---
22A	11/2/2016	4521	4339	4248	2991	357	<0.2	<0.2	0.5	<0.2	<100	<100	0.37	-252.6	NM	<0.30	18000	7.34	542	Clear dark brown/amber color

**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	5th Injection	Proposed Groundwater Cleanup Levels (d)						DO (mg/L)	ORP (mV)	Iron II (mg/L)	Sulfate (mg/L)	Methane (µg/L)	pH	TOC (mg/L)	
							5.3 (µg/L)	1.4 (µg/L)	134 (µg/L)	2.4 (µg/L)	---	---								
22A	5/2/2017	4702	4520	4429	3172	538	<0.2	<0.2	0.4	0.3	<1.0	<1.0	0.41	-206.8	NM	<0.30	18000	7.24	300	Clear, dark brown/amber color, injection fluid odor, no sheen, very effervescent Clear, dark amber tint, injection fluid odor, no sheen (slight effervescence)
22A	11/8/2017	4892	4710	4619	3362	728	<0.2	<0.2	0.6	0.3	<1.0	1.8	0.32	-17.5	NM	<15.0	17000	7.10	277	
23A	03/21/2005	277	95	4			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.63	81	2.0	0.4	410	7.0	33.0	Slight yellow tint
23A	05/12/2005	329	147	56			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.58	158	2.0	<0.1	260	7.2	39.9	
23A	08/22/2005	431	249	158			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.75	130	3.4	1.5	98	7.0	21.0	
23A	11/16/2005	517	335	244			<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	0.49	291	2.6	4.1	140	7.2	30.8	
23A	02/22/2006	615	433	342			<1.0	<1.0	<1.0	<1.0	<11.4	<12.3	0.60	127	2.2	91.8	1520	6.4	34.5	
23A	05/17/2006	699	517	426			<1.0	<1.0	<1.0	<1.0	<11	<12	0.60	120	3.0	38.8	1700	6.7	30.0	
23A	08/15/2006	789	607	516			<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.77	256	2.2	63.9	3080	6.7	32.6	
23A	11/30/2006	896	714	623			<0.2	<0.2	<0.2	<0.2	<1.1	<1.2	1.96	287	2.5	40.7	1930	6.2	45.2	
23A	02/22/2007	980	798	707			<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.40	-58	2.0	2.9	1360	6.5	34.6	
23A	05/23/2007	1070	888	797			<1.0	<1.0	<1.0	<1.0	<1.1	<1.2	0.41	193	3.3	52.7	1850	6.4	38.7	
23A	11/30/2007	1261	1079	988			<0.2	<0.2	0.3	<0.2	<1.1	<1.2	0.55	159	2.2	81.1	4430	6.6	38.6	
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 = detected compound

µg/L = micrograms per liter

mg/L = milligrams per liter

mV = millivolts

NA = not analyzed

Box = exceedance of proposed cleanup level

(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)

-10/27-11/11/15 (6A, 6B, 10C, 15C, 16A, 16C, 17A, 20C, 22A)

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

(c) MW-06A installed June 2004.

(d) Proposed Cleanup Standards and Comparison to Site Data, Boeing Developmental Center, Tukwila, Washington (Landau Associates, 5/7/13).

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

Well	Date	Elapsed Time from Injections (a) (days)					Volatile Organic Compounds			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/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	3.5
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	<5.0
MW-8C	05/18/2009	1796	1614		266		<1.0	<1.0	<1.0	<1.0
MW-8C	11/16/2009	1978	1796		448		<3.0	<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	<1.0
MW-9D	05/18/2009	1796	1614		266		<1.0	<1.0	<1.0	<1.0
MW-9D	11/16/2009	1978	1796		448		<1.0	<1.0	<1.0	<1.0
MW-10C	5/3/2004	-45					<1.0	<1.0	4.3	4.0
MW-10C	10/19/2004	124	-58				<1.0	<1.0	6.4	11
MW-10C	5/11/2005	328	146				<1.0	<1.0	4.0	1.9
MW-10C	11/14/2005	515	333				<1.0	<1.0	<1.0	1.0
MW-10C	5/15/2006	697	515				<1.0	<1.0	1.5	2.2
MW-10C	11/27/2006	893	711				<0.2	<0.2	1.9	2.6
MW-10C	5/22/2007	1069	887				<1.0	<1.0	6.7	5.8
MW-10C	11/29/2007	1260	1078				<1.0	<1.0	7.2	5.6
MW-10C	5/19/2008	1432	1250		-98		<0.2	<0.2	15	6.9
MW-10C	11/24/2008	1621	1439		91		<1.0	<1.0	8.5	7.5
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	3.5	4.4
MW-10C	5/3/2011	2511	2329		981		<1.0	<1.0	5.8	4.7
MW-10C	11/13/2011	2705	2523		1175		<0.2	<0.2	3.7	4.3
MW-10C	5/14/2012	2888	2706		1358		<0.2	<0.2	5.4	4.0
MW-10C	11/14/2012	3072	2890		1542		<0.2	<0.2	6.1	4.4
MW-10C	5/21/2013	3260	3078		1730		<0.2	<0.2	6.0	4.5
MW-10C	11/12/2013	3435	3253		1905		<0.2	<0.2	3.5	3.7
MW-10C	5/7/2014	3611	3429		2081		<0.2	<0.2	5.4	2.9
MW-10C	11/5/2014	3793	3611		2263		<0.2	<0.2	2.6	2.5
MW-10C	4/28/2015	3967	3785		2437		<0.2	<0.2	2.2	1.7
MW-10C	10/26/2015	4148	3966		2618	-16	<0.2	<0.2	1.0	1.1
MW-10C	4/19/2016	4324	4142		2794	160	<0.2	<0.2	0.5	<0.2
MW-10C	11/1/2016	4520	4338		2990	356	<0.2	<0.2	0.5	<0.2
MW-10C	5/2/2017	4702	4520		3172	538	<0.2	<0.2	0.4	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			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
MW-10C	11/8/2017	4892	4710		3362	728	<0.2	<0.2	0.5	0.2
MW-11A	5/2/2004	-46					<1.0	2.1	21	<1.0
MW-11A	10/25/2004	130	-52				<1.0	2.0	20	<1.0
MW-11A	5/12/2005	329	147				<1.0	2.0	20	<1.0
MW-11A	11/15/2005	516	334				<1.0	2.0	22	<1.0
MW-11A	5/16/2006	698	516				<1.0	1.1	20	<1.0
MW-11A	11/26/2006	892	710				<1.0	1.5	24	<1.0
MW-11A	5/22/2007	1069	887				<1.0	1.5	26	<1.0
MW-11A	11/27/2007	1258	1076				<1.0	1.1	27	<1.0
MW-11A	5/19/2008	1432	1250		-98		<0.2	1.2	26	0.2
MW-11A	11/23/2008	1620	1438		90		<1.0	1.2	33	<1.0
MW-11A	05/18/2009	1796	1614		266		<1.0	<1.0	26	<1.0
MW-11A	11/17/2009	1979	1797		449		<1.0	1.0	30	<1.0
MW-11A	5/19/2010	2162	1980		632		<1.0	1.1	26	<1.0
MW-11A	11/8/2010	2335	2153		805		<1.0	<1.0	22	<1.0
MW-11A	5/3/2011	2511	2329		981		<1.0	<1.0	22	<1.0
MW-11A	11/13/2011	2705	2523		1175		<0.2	0.5	23	0.4
MW-11A	5/14/2012	2888	2706		1358		<0.2	0.7	24	0.4
MW-11A	11/14/2012	3072	2890		1542		<2.0	<2.0	25	<2.0
MW-11A	5/21/2013	3260	3078		1730		<2.0	<2.0	22	<2.0
MW-11A	11/12/2013	3435	3253		1905		<2.0	<2.0	24	<2.0
MW-11A	5/7/2014	3611	3429		2081		<2.0	<2.0	19	<2.0
MW-11A	11/4/2014	3792	3610		2262		<0.2	0.4	24	0.4
MW-11A	4/28/2015	3967	3785		2437		<0.2	0.5	21	0.3
MW-11A	10/26/2015	4148	3966		2618		0.2	0.2	19	0.4
MW-11A	4/19/2016	4324	4142		2794		<0.2	0.3	20	0.4
MW-11A	11/1/2016	4520	4338		2990		<0.2	<0.2	15	0.5
MW-11A	5/2/2017	4702	4520		3172		<0.2	0.4	18	0.6
MW-11A	11/8/2017	4892	4710		3362		<0.2	0.2	21	0.5
MW-12A	5/2/2004	-46					<1.0	<1.0	1.8	<1.0
MW-12A	10/25/2004	130	-52				<1.0	<1.0	4.4	<1.0
MW-12A	5/12/2005	329	147				<1.0	<1.0	2.0	<1.0
MW-12A	11/15/2005	516	334				<1.0	<1.0	3.8	<1.0
MW-12A	5/16/2006	698	516				<1.0	<1.0	1.5	<1.0
MW-12A	11/26/2006	892	710				<0.2	0.7	4.4	<0.2
MW-12A	5/22/2007	1069	887				<1.0	<1.0	2.4	<1.0
MW-12A	11/27/2007	1258	1076				<1.0	<1.0	3.2	<1.0
MW-12A	5/19/2008	1432	1250		-98		<0.2	0.6	3.2	<0.2
MW-12A	11/23/2008	1620	1438		90		<1.0	<1.0	4.7	<1.0
MW-12A	05/18/2009	1796	1614		266		<1.0	<1.0	1.4	<1.0
MW-12A	11/17/2009	1979	1797		449		<1.0	<1.0	4.7	<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	4.3	<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	0.6	3.1	<0.2
MW-12A	5/14/2012	2888	2706		1358		0.2	<0.2	<0.2	<0.2
MW-12A	11/14/2012	3072	2890		1542		<0.2	0.4	2.1	<0.2
MW-12A	5/21/2013	3260	3078		1730		<0.2	<0.2	0.5	<0.2
MW-12A	11/12/2013	3435	3253		1905		<0.2	0.5	2.2	<0.2
MW-12A	5/7/2014	3611	3429		2081		0.3	<0.2	<0.2	<0.2
MW-12A	11/4/2014	3792	3610		2262		0.3	<0.2	0.3	<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			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
MW-13A	5/2/2004	-46					5.1	4.6	<1.0	<1.0
MW-13A	10/25/2004	130	-52				4.3	4.0	<1.0	<1.0
MW-13A	5/12/2005	329	147				6.1	4.6	<1.0	<1.0
MW-13A	11/14/2005	515	333				6.0	4.5	<1.0	<1.0
MW-13A	5/16/2006	698	516				7.1	4.6	<1.0	<1.0
MW-13A	11/27/2006	893	711				8.3	6.5	0.3	<0.2
MW-13A	5/21/2007	1068	886				8.2	7.0	0.4	<0.2
MW-13A	11/28/2007	1259	1077				6.4	4.2	<1.0	<1.0
MW-13A	5/19/2008	1432	1250		-98		8.7	6.8	0.3	<0.2
MW-13A	11/23/2008	1620	1438		90		6.5	3.7	<1.0	<1.0
MW-13A	05/18/2009	1796	1614		266		7.7	5.6	<1.0	<1.0
MW-13A	11/17/2009	1979	1797		449		9.2	6.0	<1.0	<1.0
MW-13A	5/20/2010	2163	1981		633		9.4	5.3	<1.0	<1.0
MW-13A	11/10/2010	2337	2155		807		3.6	2.8	<1.0	<1.0
MW-13A	5/4/2011	2512	2330		982		3.9	2.4	<1.0	<1.0
MW-13A	11/3/2011	2695	2513		1165		1.6	<1.0	<1.0	<1.0
MW-13A	5/14/2012	2888	2706		1358		2.3	0.8	<0.2	<0.2
MW-13A	11/13/2012	3071	2889		1541		2.2	0.8	<0.2	<0.2
MW-13A	5/21/2013	3260	3078		3078		4.5	2.5	0.5	<0.2
MW-13A	11/12/2013	3435	3253		3253		2.2	0.6	<0.2	<0.2
MW-13A	5/7/2014	3611	3429		3429		3.1	1.3	<0.2	<0.2
MW-13A	11/4/2014	3792	3610		3610		2.3	0.5	<0.2	<0.2
MW-13A	4/28/2015	3967	3785		3785		1.8	0.4	<0.2	<0.2
MW-13A	10/27/2015	4149	3967		3967		1.5	0.3	<0.2	<0.2
MW-13A	4/19/2016	4324	4142		4142		1.6	0.3	<0.2	<0.2
MW-13A	11/1/2016	4520	4338		4338		2.3	0.7	<0.2	<0.2
MW-13A	5/2/2017	4702	4520		4520		1.1	<0.2	<0.2	<0.2
MW-13A	11/8/2017	4892	4710		4710		1.6	0.3	<0.2	<0.2
MW-13C	5/2/2004	-46					<1.0	<1.0	<1.0	2.5
MW-13C	10/25/2004	130	-52				<1.0	<1.0	<1.0	3.3
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	3.8
MW-13C	5/16/2006	698	516				<1.0	<1.0	<1.0	2.2
MW-13C	11/27/2006	893	711				<0.2	<0.2	0.8	3.4
MW-13C	5/21/2007	1068	886				<0.2	<0.2	0.8	4.4
MW-13C	11/28/2007	1259	1077				<1.0	<1.0	<1.0	2
MW-13C	5/19/2008	1432	1250		-98		<0.2	<0.2	0.2	0.6
MW-13C	11/23/2008	1620	1438		90		<1.0	<1.0	<1.0	2.2
MW-13C	05/18/2009	1796	1614		266		<1.0	<1.0	<1.0	<1.0
MW-13C	11/17/2009	1979	1797		449		<1.0	<1.0	<1.0	<1.0
MW-13C	5/20/2010	2163	1981		633		<1.0	<1.0	<1.0	<1.0
MW-13C	11/10/2010	2337	2155		807		<1.0	<1.0	<1.0	<1.0
MW-13C	5/4/2011	2512	2330		982		<1.0	<1.0	<1.0	<1.0
MW-13C	11/3/2011	2695	2513		1165		<1.0	<1.0	<1.0	<1.0
MW-13C	5/14/2012	2888	2706		1358		<0.2	<0.2	<0.2	0.3
MW-13C	11/13/2012	3071	2889		1541		<2.0	<2.0	<2.0	<2.0
MW-13C	5/21/2013	3260	3078		1730		<2.0	<2.0	<2.0	<2.0
MW-13C	11/12/2013	3435	3253		1905		<2.0	<2.0	<2.0	<2.0
MW-13C	5/7/2014	3611	3429		2081		<1.0	<1.0	<1.0	<1.0
MW-13C	11/4/2014	3792	3610		2262		<0.2	<0.2	<0.2	0.2
MW-13C	4/28/2015	3967	3785		2437		<0.2	<0.2	<0.2	0.3
MW-13C	10/27/2015	4149	3967		2619		<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			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
MW-13C	4/19/2016	4324	4142		2794		<0.2	<0.2	<0.2	0.3
MW-13C	11/1/2016	4520	4338		2990		<0.2	<0.2	<0.2	0.2
MW-13C	5/2/2017	4702	4520		3172		<0.2	<0.2	<0.2	0.3
MW-13C	11/8/2017	4892	4710		3362		<0.2	<0.2	<0.2	0.3
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-14C	11/14/2012	3072	2890	2799	1542		<2.0	<2.0	<2.0	<2.0
MW-14C	5/21/2013	3260	3078	2987	1730		<2.0	<2.0	<2.0	<2.0
MW-14C	11/12/2013	3435	3253	3162	1905		<2.0	<2.0	<2.0	<2.0
MW-14C	5/7/2014	3611	3429	3338	2081		<1.0	<1.0	<1.0	<1.0
MW-14C	11/5/2014	3793	3611	3520	2263		<0.2	<0.2	<0.2	<0.2
MW-14C	4/29/2015	3968	3786	3695	2438		<0.2	<0.2	<0.2	<0.2
MW-14C	10/27/2015	4149	3967	3876	2619		<0.2	<0.2	<0.2	<0.2
MW-14C	4/19/2016	4324	4142	4051	2794		<0.2	<0.2	<0.2	0.3
MW-14C	11/2/2016	4521	4339	4248	2991		<0.2	<0.2	<0.2	<0.2
MW-14C	5/2/2017	4702	4520	4429	3172		<0.2	<0.2	<0.2	0.2
MW-14C	11/8/2017	4892	4710	4619	3362		<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				<1.0	<1.0	11	17
MW-15C	5/16/2005	333	151				<1.0	<1.0	13	6.4
MW-15C	11/15/2005	516	334				<1.0	<1.0	<1.0	<1.0
MW-15C	5/17/2006	699	517				<1.0	<1.0	<1.0	<1.0
MW-15C	11/29/2006	895	713				<0.2	<0.2	<0.2	<0.2
MW-15C	5/23/2007	1070	888				<1.0	<1.0	<1.0	2.2

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

Well	Date	Elapsed Time from Injections (a) (days)					Volatile Organic Compounds			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
MW-15C	12/3/2007	1264	1082				<1.0	<1.0	<1.0	2.5
MW-15C	5/20/2008	1433	1251		-97		<1.0	<1.0	1.8	6.6
MW-15C	11/24/2008	1621	1439		91		<1.0	<1.0	1.9	6.6
MW-15C	05/19/2009	1797	1615		267		<1.0	<1.0	<1.0	<1.0
MW-15C	11/18/2009	1980	1798		450		<1.0	<1.0	<1.0	<1.0
MW-15C	5/20/2010	2163	1981		633		<1.0	<1.0	<1.0	<1.0
MW-15C	11/10/2010	2337	2155		807		<1.0	<1.0	<1.0	<1.0
MW-15C	5/5/2011	2513	2331		983		<1.0	<1.0	<1.0	<1.0
MW-15C	11/13/2011	2705	2523		1175		<0.2	<0.2	<0.2	<0.2
MW-15C	5/14/2012	2888	2706		1358		<0.2	<0.2	<0.2	<0.2
MW-15C	11/13/2012	3071	2889		1541		<2.0	3.2	<2.0	<2.0
MW-15C	5/21/2013	3260	3078		1730		<5.0	<5.0	<5.0	<5.0
MW-15C	11/12/2013	3435	3253		1905		<2.0	<2.0	<2.0	2.3
MW-15C	5/7/2014	3611	3429		2081		<2.0	<2.0	<2.0	2.9
MW-15C	11/5/2014	3793	3611		2263		<0.2	<0.2	0.5	2.5
MW-15C	4/29/2015	3968	3786		2438		<0.2	<0.2	0.6	2.4
MW-15C	10/27/2015	4149	3967		2619	-15	<0.2	<0.2	0.5	2.0
MW-15C	4/19/2016	4324	4142		2794	160	<0.2	0.6	1.2	0.5
MW-15C	11/2/2016	4521	4339		2991	357	<0.2	0.3	1.7	0.7
MW-15C	5/2/2017	4702	4520		3172	538	<0.2	<0.2	1.2	0.5
MW-15C	11/8/2017	4892	4710		3362	728	<0.2	<0.2	1.3	0.4
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-16A	11/14/2012	3072	2890		1542		1.1	1.5	0.6	<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			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
MW-16A	5/21/2013	3260	3078		1730		1.4	1.5	<0.5	<0.5
MW-16A	11/12/2013	3435	3253		1905		2.1	1.8	0.3	<0.2
MW-16A	5/8/2014	3612	3430		2082		1.4	1.6	0.4	<0.2
MW-16A	11/5/2014	3793	3611		2263		1.6	1.5	0.4	<0.2
MW-16A	4/28/2015	3967	3785		2437		1.4	1.4	0.3	<0.2
MW-16A	10/26/2015	4148	3966		2618	-16	1.5	1.5	0.3	<0.2
MW-16A	4/19/2016	4324	4142		2794	160	0.8	0.7	10	<0.2
MW-16A	11/2/2016	4521	4339		2991	357	0.6	0.3	14	0.5
MW-16A	5/2/2017	4702	4520		3172	538	0.7	0.2	5.7	3.1
MW-16A	11/8/2017	4892	4710		3362	728	<0.2	<0.2	0.7	0.7
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
MW-16C	11/14/2012	3072	2890		1542		<0.2	<0.2	4.9	3.8
MW-16C	5/21/2013	3260	3078		1730		<0.5	<0.5	3.9	2.8
MW-16C	11/12/2013	3435	3253		1905		<0.2	<0.2	4.4	2.1
MW-16C	5/8/2014	3612	3430		2082		<0.2	<0.2	3.4	1.2
MW-16C	11/5/2014	3793	3611		2263		<0.2	<0.2	3.4	1.3
MW-16C	4/28/2015	3967	3785		2437		<0.2	<0.2	2.2	1.2
MW-16C	10/26/2015	4148	3966		2618	-16	<0.2	<0.2	2.7	1.1
MW-16C	4/19/2016	4324	4142		2794	160	<0.2	<0.2	0.9	0.3
MW-16C	11/2/2016	4521	4339		2991	357	<0.2	<0.2	1.9	0.3
MW-16C	5/2/2017	4702	4520		3172	538	<0.2	<0.2	0.4	0.2
MW-16C	11/8/2017	4892	4710		3362	728	<0.2	<0.2	0.7	0.4
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

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

Well	Date	Elapsed Time from Injections (a) (days)					Volatile Organic Compounds			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
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-17A	11/13/2012	3071	2889		1541		2.8	3.5	0.9	<0.2
MW-17A	5/20/2013	3259	3077		1729		3.6	2.8	0.8	<0.2
MW-17A	11/4/2014	3792	3610		2262		3.9	3.4	1.0	<0.2
MW-17A	5/6/2014	3610	3428		2080		3.6	2.6	0.4	<0.2
MW-17A	11/4/2014	3792	3610		2262		2.9	3.1	0.9	<0.2
MW-17A	4/28/2015	3967	3785		2437		3.4	2.3	0.4	<0.2
MW-17A	10/26/2015	4148	3966		2618	-16	3.4	2.6	1.1	<0.2
MW-17A	4/19/2016	4324	4142		2794	160	<2.0	<2.0	8	<2.0
MW-17A	11/1/2016	4520	4338		2990	356	<2.0	0.4	8.2	0.8
MW-17A	5/3/2017	4703	4521		3173	539	<0.2	<0.2	0.8	2.2
MW-17A	11/7/2017	4891	4709		3361	727	<0.2	<0.2	1.3	5.9
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
MW-20C	05/19/2009	1797	1615		267		<1.0	<1.0	1.4	2.0

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

Well	Date	Elapsed Time from Injections (a) (days)					Volatile Organic Compounds			
							Proposed Groundwater Cleanup Levels (c)			
		1st Injection	2nd Injection	3rd (b) Injection	4th Injection	5th Injection	5.3 PCE (µg/L)	1.4 TCE (µg/L)	134 cDCE (µg/L)	2.4 VC (µg/L)
MW-20C	11/18/2009	1980	1798		450		<1.0	<1.0	1.7	2.3
MW-20C	5/20/2010	2163	1981		633		<1.0	<1.0	1.3	1.8
MW-20C	11/8/2010	2335	2153		805		<1.0	<1.0	1.4	1.4
MW-20C	5/4/2011	2512	2330		982		<1.0	<1.0	1.1	1.8
MW-20C	11/3/2011	2695	2513		1165		<1.0	<1.0	1.3	2.1
MW-20C	5/14/2012	2888	2706		1358		<0.2	<0.2	1.2	1.5
MW-20C	11/13/2012	3071	2889		1541		<2.0	<2.0	<2.0	<2.0
MW-20C	5/21/2013	3260	3078		1730		<5.0	<5.0	<5.0	<5.0
MW-20C	11/12/2013	3435	3253		1905		<2.0	<2.0	<2.0	<2.0
MW-20C	5/7/2014	3611	3429		2081		<2.0	<2.0	<2.0	<2.0
MW-20C	11/5/2014	3793	3611		2263		<0.2	<0.2	0.9	0.7
MW-20C	4/28/2015	3967	3785		2437		<0.2	<0.2	0.7	1.0
MW-20C	10/27/2015	4149	3967		2619	-15	<0.2	<0.2	1.0	0.9
MW-20C	4/19/2016	4324	4142		2794	160	<0.2	0.2	2.2	0.3
MW-20C	11/2/2016	4521	4339		2991	357	<0.2	0.2	0.6	0.5
MW-20C	5/2/2017	4702	4520		3172	538	<0.2	<0.2	1.5	0.4
MW-20C	11/8/2017	4892	4710		3362	728	<0.2	<0.2	1.5	0.5

PCE = tetrachloroethene

TCE = trichloroethene

cDCE = cis-1,2-dichloroethene

VC = vinyl chloride

µg/L = micrograms per liter

Bold = detected compound

Box = Exceedance of proposed
cleanup level

(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)

10/27-11/11/15 (6A, 6B, 10C, 15C, 16A, 16C, 17A, 20C, 22A)

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

(c) Proposed Cleanup Standards and Comparison to Site Data, Boeing Developmental Center,
Tukwila, Washington (Landau Associates, 5/7/13).

DEVELOPMENTAL CENTER
GROUNDWATER MONITORING
NOVEMBER 2017

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
AUGUST AND NOVEMBER 2017**

Sample Name:	BDC-05-02	BDC-05-02	BDC-05-03	BDC-05-04	BDC-05-05	BDC-05-07	BDC-05-08	BDC-05-09	BDC-05-10	BDC-05-11	BDC-05-12	BDC-05-12	BDC-05-13	BDC-05-14	BDC-05-15	BDC-05-16	BDC-05-16	BDC-05-17	BDC-05-18	BDC-05-18	BDC-05-19	BDC-05-19-Dup	BDC-05-19
LLI SDG:	1833148	1872119	1872119	1872119	1872119	1872119	1872119	1872119	1872119	1872119	1833148	1872119	1872119	1872119	1872858	1833148	1872858	1872858	1833148	1872858	1833148	1833148	1872119
LLI Sample ID:	9134857	9303785	9303767	9303791	9303797	9303779	9303821	9303803	9303773	9303809	9134863	9303815	9303833	9303839	9306687	9134875	9306681	9306675	9134821	9306651	9134869	9134851	9303827
Sample Date:	8/1/2017	11/06/2017	11/06/2017	11/06/2017	11/06/2017	11/06/2017	11/06/2017	11/06/2017	11/06/2017	11/06/2017	8/1/2017	11/06/2017	11/06/2017	11/06/2017	11/07/2017	8/1/2017	11/07/2017	11/07/2017	8/1/2017	11/07/2017	8/1/2017	8/1/2017	11/06/2017
Test ID: VOA SW8260C (µg/L)																							
Vinyl Chloride	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.2	0.5	1.2	0.6	0.3	0.2 U	0.2	1.1	0.7	0.3	0.5	0.7	0.8	0.2 U	0.2 U	0.2	0.3	0.2 U
cis-1,2-Dichloroethene	0.3	0.3	0.2 U	1.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.1	2.6	0.2 U	0.2 U	0.2 U
Trichloroethene	2.5	3.6	0.2 U	0.3	1.0	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.4	1.7	0.2 U	0.2 U	0.2 U
Tetrachloroethene	3.9	1.3	0.2	0.3	0.5	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.9	0.6	0.2 U	0.2 U	0.2 U
Test ID: Total Metals (mg/L)																							
Arsenic (EPA 200.8)	0.0119	0.0134	0.0118	0.0118	0.00076 J	0.0059	0.0087	0.0053	0.0138	0.0121	0.0107	0.0050	0.0299	0.0197	0.0526	0.0309	0.0214	0.0333	0.0469 J	0.112	0.0172	0.0178	0.0064
Copper (EPA 200.8)	0.0020 U	0.0020 U	0.0047 J	0.0020 U	0.0035	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0028	0.0020 U	0.0020 U	0.0020 U	0.0037	0.0020 U	0.0020 U	0.0020 U
Test ID: Dissolved Metals (mg/L)																							
Arsenic (EPA 200.8)	0.0085	0.0114	0.0092	0.0097	0.00040 U	0.0053	0.0082	0.0050	0.0113	0.0111	0.0094	0.0048	0.0304	0.0197	0.0528	0.0290	0.0201	0.0325	0.0013 J	0.0027	0.0124	0.0127	0.0041
Copper (EPA 200.8)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0022	0.0020 U	0.0042 J	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Test ID: Conventional (mg/L)																							
Sulfate (EPA 300.0)	18.4	13.0	0.30 U	2.7	39.0	1.5	0.90 J	0.65 J	1.3	0.30 U	0.30 U	0.30 U	0.30 U	3.8	0.30 U	0.30 U	0.30 U	0.30 U	5.2	1.3	0.30 U	0.30 U	0.45 J
Total Organic Carbon (SM5310C)	12.3	10.5	7.3	9.2	2.7	33.3	5.1	3.6	5.3	7.4	7.6	7.0	18.5	19.2	25.1	12.7	11.6	15.8	18.3	3.9	10.2	10.1	9.3
Test ID: Dissolved Gases; Mod RSK-175 (µg/L)																							
Methane	8,000	10,000	10,000	5,900		6,900		4,400	6,200	10,000	9,500	12,000	14,000	14,000	8,700	7,400	9,500	11,000	3,900	7,200	15,000	14,000	15,000
Ethane	8.2	3.5 J	3.4 J	1.0 U		1.9 J		8.7	12	5.1	8.0	1.6 J	7.0	3.6 J	11	9.9	4.0 J	7.6	1.0 U	1.0 U	9.3 J	9.9 J	1.5 J
Ethene	1.0 U	1.0 U	1.0 U	1.0 U		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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		1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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
AUGUST AND NOVEMBER 2017**

Sample Name:	BDC-05-20	BDC-05-20	BDC-05-20-Dup	BDC-05-21	BDC-05-21	BDC-05-22	BDC-05-22	BDC-05-23	BDC-05-23	BDC-05-24	BDC-05-24	Trip Blank	Trip Blank	Trip Blank
LLI SDG:	1833148	1872858	1872858	1833148	1872858	1833148	1872858	1833148	1872858	1833148	1872858	1833148	1872119	1872858
LLI Sample ID:	9134845	9306663	9306639	9134827	9306657	9134839	9306669	9134833	9306645	9134881	9306693	9134887	9303845	9306699
Sample Date:	8/1/2017	11/07/2017	11/07/2017	8/1/2017	11/07/2017	8/1/2017	11/07/2017	8/1/2017	11/07/2017	8/1/2017	11/07/2017	8/1/2017	11/6/2017	11/7/2017
Test ID: VOA SW8260C (µg/L)														
Vinyl Chloride	0.9	1.1	1.2	1.5	1.2	0.2 U	0.2 U	0.5	1.8	0.5	0.5	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.6	0.9	9.1	6.7	0.9	2.6	0.4	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	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	0.2 U	0.2 U	0.2 U	0.2 U	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)	0.0271	0.0273	0.0288	0.0094	0.0109	0.0316	0.0206	0.0169	0.0245	0.0030	0.0016 J			
Copper (EPA 200.8)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U			
Test ID: Dissolved Metals (mg/L)														
Arsenic (EPA 200.8)	0.0268	0.0269	0.0274	0.0085	0.0113	0.0297	0.0208	0.0191	0.0248	0.0021	0.00064 J			
Copper (EPA 200.8)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U			
Test ID: Conventional (mg/L)														
Sulfate (EPA 300.0)	0.30 U	0.30 U	0.30 U	1.1	1.3	1.8	0.30 U	4.7	2.0	1.3	0.30 U			
Total Organic Carbon (SM5310C)	12.3	7.9	8.2	13.9	13.2	6.3	5.9	6.7	7.5	5.7	8.4			
Test ID: Dissolved Gases; Mod RSK-175 (µg/L)														
Methane	6,400	8,700	8,700	4,900	5,800					11,000	12,000			
Ethane	4.6 J	1.3 J	1.3 J	5.6	2.5 J					1.0 U	1.3 J			
Ethene	1.4 J	1.0 U	1.0 U	3.9 J	1.0 U					1.1 J	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			

µg/L = micrograms per liter
 mg/L = milligrams per liter
 EPA = US Environmental Protection Agency

U = Compound was analyzed for, but was not detected at the given detection limit.
 J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Table 1
Groundwater Data Summary
Boeing Developmental Center
SWMU-17

Well	Date	Pilot Injection Elapsed Time From Injection (days)	Full Injection #1 Elapsed Time From Injection (days)	Volatile Organic Compounds						Metals				Aquifer Redox Conditions					Donor Indicators		VOCs- micromoles/Liter (b)							Molar Fraction (c)							
				PCE (µg/L)	TCE (µg/L)	c DCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	As, Tot (mg/L)	As, Dis (mg/L)	Cu, Tot (mg/L)	Cu, Dis (mg/L)	DO (mg/L)	Nitrate (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)	Methane (mg/L)	ORP (mV)	TOC (mg/L)	pH													
				5.3	1.4	134	2.4	NA	NA	NA	0.008	0.008	0.008	0.008										PCE	TCE	c DCE	VC	Ethene	Ethane	Total Chloroethenes (d)	Ethene + Ethane	PCE	TCE	c DCE	VC
BDC-05-13 (IW)	7/31/2011		-18	5.2	6.6	2.6	<1.0	<1.1	<1.2	<1.1	0.003	0.002	0.002	<0.002	1.73	<0.1	2.0	2.3	5.0	-1	6.0	7.06	0.03	0.05	0.03	0.00	0.00	0.00	0.11	0.00	0.29	0.46	0.25	0.00	0.00
	11/1/2011		75	<1.0	1.2	39	<1.0	<1.1	<1.2	<1.1	0.068	0.064	0.017	0.003	1.82	<1.0	1.5	<1.0	2.2	-70	550	6.65	0.00	0.01	0.40	0.00	0.00	0.41	0.00	0.00	0.02	0.98	0.00	0.00	
	5/6/2012		262	<0.2	<0.2	13	3.9	1.7	<1.0	<1.0	0.051	0.046	0.003	<0.002	0.03		3.0	0.4	19.0	78	34.2	6.40	0.00	0.00	0.13	0.06	0.06	0.00	0.20	0.00	0.00	0.52	0.24	0.24	
	11/15/2012		455	<1.0	<1.0	<1.0	2.3	3.7	<1.0	<1.0	0.060	0.055	<0.002	<0.002	0.04		2.2	<0.3	22.0	-9	30.2	6.75	0.00	0.00	0.00	0.04	0.13	0.00	0.04	0.13	0.00	0.00	0.22	0.78	
	5/22/2013		643	<0.2	<0.2	0.3	1.2	3.8	3.9	<1.0	0.019	0.019	<0.002	<0.002	0.29		1.8	0.43	23.0	-296	21.4	7.76	0.00	0.00	0.00	0.02	0.14	0.13	0.02	0.27	0.00	0.00	0.01	0.07	
	11/13/2013		818	<0.2	<0.2	0.3	2.1	3.6	6.4	<1.0	0.031	0.027	<0.002	<0.002	3.20		1.6	0.31	19.0	-241	24.7	6.59	0.00	0.00	0.00	0.03	0.13	0.21	0.04	0.34	0.00	0.00	0.01	0.09	
	5/12/2014		998	<0.2	<0.2	<0.2	2.6	4.3	6.8	<1.0	0.032	0.032	<0.002	<0.002	4.73		2.4	<0.30	19.0	-238	23.4	6.69	0.00	0.00	0.00	0.04	0.15	0.23	0.04	0.38	0.00	0.00	0.00	0.10	
	11/10/2014		1180	<0.2	<0.2	0.2	2.5	2.1	2.2	<1.0	0.020	0.019	<0.002	<0.002	0.02		1.0	0.33	7.1	-123	15.1	6.41	0.00	0.00	0.00	0.04	0.07	0.07	0.04	0.15	0.00	0.00	0.01	0.21	
	4/27/2015		1348	<0.2	<0.2	<0.2	1.9	2.5	1.6	<1.0	0.019	0.018	<0.002	<0.002	0.09		0.8	<0.30	12.0	-102	8.9	6.45	0.00	0.00	0.00	0.03	0.09	0.05	0.03	0.14	0.00	0.00	0.00	0.18	
	10/28/2015		1532	<0.2	<0.2	<0.2	1.1	<1.0	1.0	<1.0	0.020	0.019	<0.002	<0.002	0.20		1.2	<0.30	6.1	-32	10.8	6.54	0.00	0.00	0.00	0.02	0.00	0.03	0.02	0.03	0.00	0.00	0.00	0.35	
	4/20/2016		1707	<0.2	<0.2	<0.2	2.0	1.9	2.0	<1.0	0.026	0.024	<0.002	<0.002	0.10		1.0	<0.30	10.0	-36	7.6	6.60	0.00	0.00	0.00	0.03	0.07	0.07	0.03	0.13	0.00	0.00	0.00	0.19	
	11/3/2016		1904	<0.2	<0.2	<0.2	1.0	<1.0	2.3	<1.0	0.023	0.020	<0.002	<0.002	0.08		1.0	<0.30	15.0	-140.9	12.2	6.32	0.00	0.00	0.00	0.02	0.00	0.08	0.02	0.08	0.00	0.00	0.17		
	5/4/2017		2086	<0.2	<0.2	<0.2	1.1	1.4	12	<1.0	0.027	0.027	<0.002	<0.002	0.17		2.4	<0.30	14.0	-123.1	11.6	6.42	0.00	0.00	0.00	0.02	0.05	0.40	0.02	0.45	0.00	0.00	0.00	0.04	
	11/6/2017		2272	<0.2	<0.2	<0.2	1.1	<1.0	7.0	<1.0	0.030	0.030	<0.002	<0.002	0.36		1.8	<0.30	14.0	-28.5	18.5	6.53	0.00	0.00	0.00	0.02	0.00	0.23	0.02	0.45	0.00	0.00	0.00	0.04	
BDC-05-14 (IW)	7/31/2011		-18	2.8	6.8	2.8	<1.0	<1.1	<1.2	<1.1	0.004	0.004	0.004	<0.002	1.76	<0.1	2.0	10.1	6.5	-15	8.6	7.00	0.02	0.05	0.03	0.00	0.00	0.00	0.10	0.00	0.17	0.53	0.30	0.00	0.00
	11/1/2011		75	2.5	6.7	13	<1.0	<1.1	<1.2	<1.1	0.083	0.074	0.022	0.002	1.87	<1.0	2.3	4.0	-124	725	6.13		0.02	0.05	0.13	0.00	0.00	0.00	0.20	0.00	0.08	0.25	0.67	0.00	0.00
	5/6/2012		262	<0.2	0.4	3.0	1.1	<1.0	<1.0	<1.0	0.012	0.009	<0.002	<0.002	0.08		1.7	0.6	23.0	99	41.5	6.33	0.00	0.00	0.03	0.02	0.00	0.00	0.05	0.00	0.00	0.06	0.60	0.34	0.00
	11/15/2012		455	<0.2	<0.2	1.1	2.0	1.4	<1.0	<1.0	0.022	0.019	<0.002	<0.002	0.11		2.2	<0.3	24.0	-1.4	39.9	6.66	0.00	0.00	0.01	0.03	0.05	0.00	0.04	0.05	0.00	0.00	0.12	0.34	0.54
	5/22/2013		643	<0.2	<0.2	0.2	1.3	1.3	<3.0	<1.0	0.012	0.012	<0.002	<0.002	0.40		1.8	<0.3	26.0	-311	26.3	7.69	0.00	0.00	0.00	0.02	0.05	0.00	0.02	0.05	0.00	0.03	0.30	0.67	
	11/13/2013		818	<0.2	<0.2	0.2	1.2	1.3	2.5	<1.0	0.017	0.015	<0.002	<0.002	3.80		1.5	<0.30	24.0	-219	29.5	6.44	0.00	0.00	0.00	0.02	0.05	0.08	0.02	0.13	0.00	0.00	0.01	0.13	
	5/12/2014		998	<0.2	<0.2	0.2	1.5	2.2	5.0	<1.0	0.018	0.021	<0.002	<0.002	5.21		2.0	<0.30	22.0	-233	30.2	6.55	0.00	0.00	0.00	0.02	0.08	0.17	0.03	0.24	0.00	0.00	0.01	0.09	
	11/10/2014		1180	<0.2	<0.2	0.4	5.1	4.3	6.4	<1.0	0.017	0.017	<0.002	<0.002	0.15		1.2	2.3	19.0	-97	21.3	6.35	0.00	0.00	0.00	0.08	0.15	0.21	0.09	0.37	0.00	0.00	0.01	0.18	
	4/27/2015		1348	<0.2	<0.2	0.4	1.6	<1.0	1.1	<1.0	0.018	0.015	<0.002	<0.002	0.11		1.4	1.8	11.0	-88	18.9	6.25	0.00	0.00	0.00	0.03	0.00	0.04	0.03	0.04	0.00	0.00	0.06	0.39	
	10/28/2015		1532	<0.2	<0.2	0.3	1.4	1.1	2.4	<1.0	0.015	0.013	<0.002	<0.002	0.11		1.0	0.46	12.0	-28	21.0	6.47	0.00	0.00	0.00	0.02	0.04	0.08	0.03	0.12	0.00	0.00	0.02	0.15	
	4/20/2016		1707	<0.2	<0.2	0.3	0.9	<1.0	1.7	<1.0	0.016	0.016	<0.002	<0.002	0.11		2.0	3.1	11.0	-42	22.3	6.71	0.00	0.00	0.00	0.01	0.00	0.06	0.02	0.06	0.00	0.00	0.04	0.19	
	11/3/2016		1904	<0.2	<0.2	<0.2	<0.2	<1.0	<1.0	<1.0	0.007	0.007	<0.002	<0.002	0.32		2.6	<0.30	17.0	-111	16.0	6.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	5/4/2017		2086	<0.2	<0.2	0.3	1	<2.0	8.9	<1.0	0.023	0.021	<0.002	<0.002	0.17		2.2	3.8	12.0	-125.1	21.8	6.45	0.00	0.00	0.00	0.02	0.00	0.30	0.02	0.30	0.00	0.00	0.01	0.05	
	11/6/2017		2272	<0.2	<0.2	<0.2	0.7	<1.0	3.6	<1.0	0.020	0.020	<0.002	<0.002	0.31		2.8	3.8	14.0	-27.6	19.2	6.48	0.00	0.00	0.00	0.01	0.00	0.12	0.01	0.12	0.00	0.00	0.00	0.09	
BDC-05-15 (IW)	7/31/2011		-18	9.6	28	58	<1.0	<1.1	<1.2	<1.1	0.019	0.019	<0.002	<0.002	1.91	<0.1	1.3	18.6	0.8	-0.9	10.3	7.00	0.06	0.21	0.60	0.00	0.00	0.00	0.87	0.00	0.07	0.25	0.69	0.00	0.00
	11/1/2011		75	4.8	9.8	15	<1.0	<1.1	<1.2	<1.1	0.061	0.058	0.010	0.009	2.38	<0.1	3.0	11.3	3.5	-0.1	44.20	5.67	0.03	0.07	0.15	0.00	0.00	0.00	0.26	0.00	0.11	0.29	0.60	0.00	0.00
	5/6/2012		262	<2.0	<2.0	49	6.3	<1.0	<1.0	<1.0	0.057	0.047	0.009	0.004	0.07		1.8	<0.3	21.0	93	42.3	6.36	0.00	0.00	0.00	0.51	0.10	0.00	0.61	0.00	0.00	0.83	0.17	0.00	
	11/15/2012		455	<1.0	<1.0	1.5	7.5	1.8	<1.0	<1.0	0.054	0.049	<0.002	<0.002	0.02		0.8	<0.3	27.0	8	71.2	6.61	0.00	0.00	0.02	0.12	0.06	0.00	0.14	0.06	0.00	0.08	0.60	0.32	
	5/22/2013		643	<0.2	<0.2	0.3	16	11	<3.0	<1.0	0.065	0.061	<0.002	<0.002	0.22																				

Table 1
Groundwater Data Summary
Boeing Developmental Center
SWMU-17

Well	Date	Pilot Injection Elapsed Time From Injection (days)	Full Injection #1 Elapsed Time From Injection (days)	Volatile Organic Compounds						Metals				Aquifer Redox Conditions					Donor Indicators		VOCs- micromoles/Liter (b)							Molar Fraction (c)									
				PCE (µg/L)	TCE (µg/L)	c DCE (µg/L)	VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	Acetylene (µg/L)	As, Tot (mg/L)	As, Dis (mg/L)	Cu, Tot (mg/L)	Cu, Dis (mg/L)	DO (mg/L)	Nitrate (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)	Methane (mg/L)	ORP (mV)	TOC (mg/L)	pH	Comments	PCE	TCE	c DCE	VC	Ethene	Ethane	Total Chloroethenes (d)	Ethene + Ethane	PCE	TCE	c DCE	VC	Ethene + Ethane	
				5.3	1.4	134	2.4	NA	NA	NA	0.008	0.008	0.008	0.008																							
BDC-05-20	11/16/2012		456	<0.5	0.6	17	3.5	<1.0	<1.0	<1.0		0.012	0.013	<0.002	<0.002	0.07		2.0	<0.3	18.0	0.9	13.1	6.88		0.00	0.00	0.18	0.06	0.00	0.00	0.24	0.00	0.00	0.02	0.74	0.24	0.00
BDC-05-20	2/26/2013		558	<0.2	0.5	9.8	6.1	<1.0	<1.0	<1.0						0.16		1.5	<0.3	22.0	16	16.3	6.86		0.00	0.00	0.10	0.10	0.00	0.00	0.20	0.00	0.00	0.02	0.50	0.48	0.00
BDC-05-20	5/23/2013		644	<0.2	0.4	10	8.1	1.5	<1.0	<1.0		0.016	0.017	<0.002	<0.002	0.25		1.2	<0.3	25.0	-233	16.9	7.55		0.00	0.00	0.10	0.13	0.05	0.00	0.24	0.05	0.00	0.01	0.36	0.45	0.18
BDC-05-20	8/28/2013		741	<0.2	0.2	6.5	10	2.1	<1.0	<1.0						2.38		2.6	<0.30	20.0	-317	15.4	6.70		0.00	0.00	0.07	0.16	0.07	0.00	0.23	0.07	0.00	0.01	0.22	0.53	0.25
BDC-05-20	11/14/2013		819	<0.2	0.3	8.1	8.8	2.2	<1.0	<1.0		0.021	0.021	<0.002	<0.002	2.26		1.4	<0.30	19.0	-287	17.9	6.77		0.00	0.00	0.08	0.14	0.08	0.00	0.23	0.08	0.00	0.01	0.27	0.46	0.26
BDC-05-20	2/12/2014		909	<0.2	0.2	3.9	7.8	3.0	<4.0	<1.0						2.82		1.8	<0.30	16.0	-205	16.3	6.78		0.00	0.00	0.04	0.12	0.11	0.00	0.17	0.11	0.00	0.01	0.15	0.46	0.39
BDC-05-20	5/13/2014		999	<0.2	<0.2	3.8	6.3	2.0	<1.0	<1.0		0.017	0.017	<0.002	<0.002	3.44		1.6	0.36	16.0	-213	18.7	6.79		0.00	0.00	0.04	0.10	0.07	0.00	0.14	0.07	0.00	0.00	0.19	0.48	0.34
BDC-05-20	8/6/2014		1084	<0.2	<0.2	1.3	7.5	2.1	2.0	<1.0						4.23		1.4	<0.30	12.0	-150	17.6	7.31		0.00	0.00	0.01	0.12	0.07	0.07	0.13	0.14	0.00	0.00	0.05	0.44	0.51
BDC-05-20	11/10/2014		1180	<0.2	<0.2	0.7	4.9	3.0	3.6	<1.0		0.021	0.021	<0.002	<0.002	0.08		0.8	0.97	15.0	-117	15.9	6.50		0.00	0.00	0.01	0.08	0.11	0.12	0.09	0.23	0.00	0.00	0.02	0.25	0.73
BDC-05-20	1/21/2015		1252	<0.2	<0.2	0.5	3.8	2.7	2.6	<1.0						0.27		1.0	0.59	13.0	-120	13.8	6.47		0.00	0.00	0.01	0.06	0.10	0.09	0.07	0.18	0.00	0.00	0.02	0.24	0.73
BDC-05-20	4/26/2015		1347	<0.2	<0.2	0.4	6.9	4.8	1.6	<1.0		0.028	0.023			0.06		0.8	<0.30	14.0	-99	11.4	6.43		0.00	0.00	0.00	0.11	0.17	0.05	0.11	0.22	0.00	0.01	0.33	0.66	
BDC-05-20	7/21/2015		1433	<0.2	<0.2	0.2	2.7	4.5	3.0	<1.0						0.12		1.3	<0.30	17.0	-59	14.2	6.55		0.00	0.00	0.00	0.04	0.16	0.10	0.05	0.26	0.00	0.00	0.01	0.14	0.85
BDC-05-20	10/27/2015		1531	<0.2	<0.2	<0.2	2.0	1.5	1.1	<1.0		0.028	0.028	<0.002	<0.002	0.23		1.4	<0.30	11.0	-35	10.6	6.47		0.00	0.00	0.00	0.03	0.05	0.04	0.03	0.09	0.00	0.00	0.00	0.26	0.74
BDC-05-20	1/26/2016		1622	<0.2	<0.2	0.2	2.7	2.1	1.5	<1.0						0.26		1.3	<0.30	11.0	-109	9.9	6.63		0.00	0.00	0.00	0.04	0.07	0.05	0.05	0.12	0.00	0.00	0.01	0.25	0.73
BDC-05-20	4/21/2016		1708	<0.2	<0.2	0.3	6.8	6.1	2.5	<1.0		0.034	0.030	<0.002	<0.002	0.38		0.8	<0.30	8.8	-44	16.2	6.63		0.00	0.00	0.00	0.11	0.22	0.08	0.11	0.30	0.00	0.00	0.01	0.26	0.73
BDC-05-20	8/9/2016		1818	<0.2	<0.2	0.2	2.2	7.0	2.9	<1.0		0.030	0.028	<0.002	<0.002	-0.01		2.0	0.37	8.4	-82	12.9	6.62		0.00	0.00	0.00	0.04	0.25	0.10	0.04	0.35	0.00	0.00	0.01	0.09	0.90
BDC-05-20	11/3/2016		1904	<0.2	<0.2	<0.2	1.4	5.2	2.5	<1.0		0.027	0.028	<0.002	<0.002	0.40		1.0	<0.30	8.9	-121.9	14.1	6.60		0.00	0.00	0.00	0.02	0.19	0.08	0.02	0.27	0.00	0.00	0.00	0.08	0.92
BDC-05-20	2/8/2017		2001	<0.2	<0.2	<0.2	1.8	5.2	2.8	<1.0		0.029	0.030	<0.002	<0.002	0.39		2.8	<0.30	7.1	-44.2	13.0	6.61		0.00	0.00	0.00	0.03	0.19	0.09	0.03	0.28	0.00	0.00	0.00	0.09	0.91
BDC-05-20	5/4/2017		2086	<0.2	<0.2	0.2	1.2	2.3	4.3	<1.0		0.027	0.026	<0.002	<0.002	0.30		1.6	1.2	4.3	-99.6	12.9	6.55		0.00	0.00	0.00	0.02	0.08	0.14	0.02	0.22	0.00	0.00	0.00	0.08	0.92
BDC-05-20	8/1/2017		2175	<0.2	<0.2	<0.2	0.9	1.4	4.6	<1.0		0.027	0.027	<0.002	<0.002	0.61		2.1	<0.30	6.4	-104.9	12.3	6.46		0.00	0.00	0.00	0.01	0.05	0.15	0.01	0.20	0.00	0.00	0.00	0.07	0.93
BDC-05-20	11/7/2017		2273	<0.2	<0.2	<0.2	1.1	<1.0	1.3	<1.0		0.027	0.027	<0.002	<0.002	0.36		2.2	<0.30	8.7	6.8	7.9	6.56		0.00	0.00	0.00	0.02	0.00	0.04	0.02	0.04	0.00	0.00	0.00	0.29	0.71
BDC-05-21 (MW 30 ft XG)	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		0.00	0.00	0.01	0.22	0.09	0.00	0.24	0.09	0.00	0.00	0.04	0.68	0.28
BDC-05-21	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		0.00	0.00	0.01	0.08		0.09		0.00	0.00	0.12	0.88		
BDC-05-21	2/19/2012		185	<0.2	0.3	0.7	5.9									0.40	<0.5	1.4	<1.5		47	7.2	6.65		0.00	0.00	0.01	0.09		0.10		0.00	0.02	0.07	0.91		
BDC-05-21	5/7/2012		263	<0.2	0.4	0.8	2.5					0.010	0.011	0.005	<0.002	0.86		1.5	1.9		-35	12.3	6.76		0.00	0.00	0.01	0.04		0.05		0.00	0.06	0.16	0.78		
BDC-05-21	9/5/2012		384	<0.2	0.3	0.6	2.9									0.08		2.5	1.4		62	9.5	6.78		0.00	0.00	0.01	0.05		0.05		0.00	0.04	0.11	0.85		
BDC-05-21	11/16/2012		456	<0.5	<0.5	0.6	2.9					0.020	0.020	<0.002	<0.002	0.02		1.5	0.6		-4	8.9	6.92		0.00	0.00	0.01	0.05		0.05		0.00	0.00	0.12	0.88		
BDC-05-21	2/26/2013		558	<0.2	0.3	0.8	3.3	<1.0	<1.0	<1.0						0.24		1.4	<0.3	18.0	-2.6	8.7	7.03		0.00	0.00	0.01	0.05	0.00	0.00	0.06	0.00	0.04	0.13	0.83	0.00	
BDC-05-21	5/23/2013		644	<0.2	0.3	0.9	6.5					0.024	0.022	<0.002	<0.002	0.19		1.5	<0.3		-235	8.2	7.50		0.00	0.00	0.01	0.10		0.12		0.00	0.02	0.08	0.90		
BDC-05-21	8/28/2013		741	<0.2	0.2	0.8	7.7	6.2	1.8	<1.0						0.74		3.5	<0.30	14.0	-310	7.9	6.72		0.00	0.00	0.01	0.12	0.22	0.06	0.13	0.28	0.00	0.00	0.02	0.30	0.68
BDC-05-21	11/14/2013		819	<0.2	0.2	1.0	7.3	3.5	1.4	<1.0		0.019	0.017	<0.002	<0.002	2.84		2.0	<0.30	12.0	-239	7.7	6.78		0.00	0.00	0.01	0.12	0.12	0.05	0.13	0.17	0.00	0.01	0.03	0.39	0.57
BDC-05-21	2/12/2014		909	<0.2	0.2	3.0	3.4	1.9	2.9	<1.0						2.74		2.2	<0.30	12.0	-210	8.3	6.87		0.00	0.00	0.03	0.05	0.07	0.10	0.09	0.16					



- Legend**
- New Monitoring Well (July 2011)
 - Existing Monitoring Well
 - New Injection Wells (July 2011)
 - Existing Injection Wells
 - Abandoned Monitoring Well
 - Catch Basin
 - Manhole
 - SS — SS — Sanitary Sewer Utility
 - SD — SD — Storm Drain Utility
 - E — E — Electrical Utility
 - W — W — Water Utility
 - X — X — Existing Fence
 - 20 — Baseline Concentration Contours for PCE and/or TCE (µg/L)
 - ← Groundwater Flow Direction
 - SWMU-17 Solid Waste Management Unit

***DEVELOPMENTAL CENTER
GROUNDWATER MONITORING
NOVEMBER 2017***

AOC-05 DATA

- **AOC-05 Cleanup Action Summary**
- **AOC-05 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**

Well	Date	ORC Injection	Pilot Injection	Full Scale Injection 1	Full Scale Injection 2	Full Scale Injection 3	Full Scale Injection 4	Full Scale Injection 5	Full Scale Injection 6	Full Scale Injection 7	Full Scale Injection 8	Full Scale Injection 9	Full Scale Injection 10	Full Scale Injection 11	Volatile Organic Compounds (all units in ug/L)							Aquifer Redox Conditions							Donor Indicators		Comments	
		BDC-103	BDC-103	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	TPH-G	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Total Xylenes	DO	Nitrate	Nitrite	Iron II	Sulfate	Methane	ORP	TOC		pH
		Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg-N/L)	(mg-N/L)	(mg/L)	(mg/L)	(µg/L)	(mV)	(mg/L)		
Proposed Groundwater Cleanup Levels (a)															0.8	2.0	1294	1.7	NA	NA	1546											
BDC-101	4/13/2016	5090	3373	2969	2850	2722	2492	2359	2030	1520	1268	883	21		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.94	23.7	<0.10	0.0	65.4		68		6.94		
BDC-101	8/9/2016	5208	3491	3087	2968	2840	2610	2477	2148	1638	1386	1001	139		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.90	16.1	<0.10		45.8		40.6		6.36		
BDC-101	11/1/2016	5292	3575	3171	3052	2924	2694	2561	2232	1722	1470	1085	223	-35	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.70	2.3	<0.10		20.0		57.9		6.45		
BDC-101	2/7/2017	5390	3673	3269	3150	3022	2792	2659	2330	1820	1568	1183	321	63	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.26	17.1	<0.10		54.3		57		6.58		
BDC-101	5/3/2017	5475	3758	3354	3235	3107	2877	2744	2415	1905	1653	1268	406	148	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.85	24.5	<0.10		65.5		69.1		6.44		
BDC-101	8/1/2017	5565	3848	3444	3325	3197	2967	2834	2505	1995	1743	1358	496	238	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.86	19.3	<0.10		58.3		119.6		6.16		
BDC-101	11/7/2017	5663	3946	3542	3423	3295	3065	2932	2603	2093	1841	1456	594	336	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.78	12.3	<0.10		40.4		57.1		6.46		
BDC-102	6/11/2001														0.55	5.33	<1.0	<1.0			<1.0											
BDC-102	9/4/2001														0.38	1.61	1.89	<1.0			1.87											
BDC-102	12/3/2001														1.6	3.7	<1.0	<1.0			3.49											
BDC-102	3/13/2002														0.50	1.3	<1.0	<1.0			<1.0											
BDC-102	4/29/2002	-8													0.33	2.6	<1.0	<1.0	1.1	<1.0	1.1											
BDC-102	6/3/2002	27													<0.25	4.4	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	7/1/2002	55													0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	8/1/2002	86													<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	12/2/2002	209													<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	3/10/2003	307													0.26	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	6/3/2003	392													<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	11/19/2003	561													0.99	120	<1.0	8.5	<1.0	<1.0	<1.0	0.38	0.19	0.011	5.5	46	1100	122.2				
BDC-102	4/28/2004	722													0.40	10	<1.0	<1.0	3.0	<1.0	3.0											
BDC-102	10/18/2004	895													0.33	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	5/10/2005	1099													<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0											
BDC-102	11/10/2005	1283													<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.82	4.4			34.0		122	18.4			
BDC-102	5/15/2006	1469													<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.21	4.72	0.175	2.2	35.7		-11				
BDC-102	11/20/2006	1658	-59												<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.25	<0.250	<0.250	2.2	9.2		163				
BDC-102	2/20/2007	1750	33												<0.25	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	0.47	0.749	0.027	3.0	25.3		-145		6.54		
BDC-102	3/19/2007	1777	60												<0.25	18	<1.0	<1.0	32	<1.0	32	0.88	0.938	0.072	3.0	31.0		-98		6.67		
BDC-102	4/24/2007	1813	96												0.53	6.1	<1.0	3.1	100	<1.0	100	1.20	1.94	0.051	2.8	40.4		-93		6.51		
BDC-102	5/17/2007	1836	119												<0.25	1.8	<1.0	<1.0	7.4	<1.0	7.4	0.84	2.78	0.108	2.6	33.9		286		6.52		
BDC-102	11/26/2007	2029	312												<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.29	1.03	0.247	3.0	55.7		46				
BDC-102	2/18/2008	2113	396	-8											<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.51	3.91	0.054	2.8	42.8		431		5.97		
BDC-102	3/27/2008	2151	434	30											<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.85	1.3	<0.10	2.5	17.9		233				
BDC-102	5/15/2008	2200	483	79	-40										<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.40	3.0	<0.10	3.5	19.2		-115		6.56		
BDC-102	7/16/2008	2262	545	141	22										<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.46	2.5	<0.10	3.2	13.7		-312		6.67		
BDC-102	9/15/2008	2323	606	202	83	-45									<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.22	4.28	0.056	3.0	31.6		191				
BDC-102	11/20/2008	2389	672	268	149	21									<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.70	0.40	<0.10	2.0	5.6		-70		6.69		
BDC-102	1/16/2009	2446	729	325	206	78									<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.00	<0.100	0.200	2.5	8.3		-235		6.70		
BDC-102	2/11/2009	2472	755	351	232	104									<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.65	2.4	<0.1	3.0	20.4		-70		6.61		
BDC-102	3/9/2009	2498	781	377	258	130									<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.00	0.9	<0.1	3.0	8.7		-46		6.65		
BDC-102	4/16/2009	2536	819	415	296	168									<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.30	0.6	<0.1	3.0	8.3		-7		6.66		
BDC-102	5/14/2009	2564	847	443	324	196	-34								<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.29	0.9	<0.1	3.4	9.8		-35		6.78		
BDC-102	7/17/2009	2628	911	507	388	260	30								<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.66	4.9	<0.1	2.2	28.6		-11		6.46		
BDC-102	9/9/2009	2682	965	561	442	314	84	-49							<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.9										

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

Well	Date	ORC Injection	Pilot Injection	Full Scale Injection 1	Full Scale Injection 2	Full Scale Injection 3	Full Scale Injection 4	Full Scale Injection 5	Full Scale Injection 6	Full Scale Injection 7	Full Scale Injection 8	Full Scale Injection 9	Full Scale Injection 10	Full Scale Injection 11	Volatile Organic Compounds (all units in ug/L)							Aquifer Redox Conditions							Donor Indicators		Comments				
		BDC-103	BDC-103	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	TPH-G	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Total Xylenes	DO	Nitrate	Nitrite	Iron II	Sulfate	Methane	ORP	TOC		pH			
		Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg-N/L)	(mg-N/L)	(mg/L)	(mg/L)	(µg/L)	(mV)	(mg/L)					
Proposed Groundwater Cleanup Levels (a)															0.8	2.0	1294	1.7	NA	NA	1546														
BDC-102	5/6/2014	4382	2665	2261	2142	2014	1784	1651	1322	812	560	175			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.65	14.8	<0.10	1.6	56.1		-275		6.54					
BDC-102	8/7/2014	4475	2758	2354	2235	2107	1877	1744	1415	905	653	268			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.07	26.7	<0.10	1.4	65.8		-65		7.01					
BDC-102	11/4/2014	4564	2847	2443	2324	2196	1966	1833	1504	994	742	357			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.11	22.4	<0.10	1.2	55.9		-15.3		6.47					
BDC-102	1/21/2015	4642	2925	2521	2402	2274	2044	1911	1582	1072	820	435			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.20	12.9	<0.10	1.0	49.7		-22		6.14					
BDC-102	4/28/2015	4739	3022	2618	2499	2371	2141	2008	1679	1169	917	532			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.22	23.1	<0.10	0.6	77.5		28		6.13					
BDC-102	7/20/2015	4822	3105	2701	2582	2454	2224	2091	1762	1252	1000	615			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.33	15.5	<0.10	1.0	63.3		-54		6.18					
BDC-102	10/26/2015	4920	3203	2799	2680	2552	2322	2189	1860	1350	1098	713			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.23	10.9	<0.10	1.0	47.5		-42		6.41					
BDC-102	1/27/2016	5013	3296	2892	2773	2645	2415	2282	1953	1443	1191	806	-56		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.35	0.62	<0.10	1.0	11.9		-124		6.61					
BDC-102	4/13/2016	5090	3373	2969	2850	2722	2492	2359	2030	1520	1268	883	21		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.70	12.8	<0.10	1.0	43.1		-48		6.61					
BDC-102	8/9/2016	5208	3491	3087	2968	2840	2610	2477	2148	1638	1386	1001	139		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.32	14.0	<0.10		42.6		-79		6.2					
BDC-102	11/1/2016	5292	3575	3171	3052	2924	2694	2561	2232	1722	1470	1085	223	-35	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.56	0.10	<0.10		1.4		-80.8		6.54					
BDC-102	2/7/2017	5390	3673	3269	3150	3022	2792	2659	2330	1820	1568	1183	321	63	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.19	4.9	<0.10		23.8		12.3		7.78					
BDC-102	5/3/2017	5475	3758	3354	3235	3107	2877	2744	2415	1905	1653	1268	406	148	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.52	25.5	<0.10		42.9		-11.4		6.29					
BDC-102	8/1/2017	5565	3848	3444	3325	3197	2967	2834	2505	1995	1743	1358	496	238	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.86	37.1	<0.10		52.4		102.4		6.23					
BDC-102	11/7/2017	5663	3946	3542	3423	3295	3065	2932	2603	2093	1841	1456	594	336	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.79	6.8	<0.10		28.3		67.6		6.32					
BDC-103	6/11/2001														177	875	12,010	1,985																	
BDC-103	9/4/2001														123	494	3,760	419																	
BDC-103 (b)	12/3/2001														120	5,100	2,300,000	10,000																	
BDC-103	3/13/2002														200	1,700	17,000	4,900																	
BDC-103	4/29/2002	-8													200	980	16,000	5,400	20,000	7,000															
BDC-103	6/3/2002	27													200	960	17,000	5,100	20,000	7,100															
BDC-103	7/1/2002	55													240	1,300	16,000	5,200	20,000	6,800															
BDC-103	8/1/2002	86													270	4,600	18,000	5,200	19,000	6,600															
BDC-103	12/2/2002	209													250	1,400	15,000	5,000	22,000	6,900															
BDC-103	3/10/2003	307													180	780	13,000	5,200	20,000	6,700															
BDC-103	6/3/2003	392													220	900	10,000	5,000	20,000	6,600															
BDC-103	11/19/2003	561													180	850	8,300	4,500	18,000	5,500															
BDC-103	4/28/2004	722													160	1,600	6,600	3,900	16,000	5,100		0.38	0.012	0.011	5.5	53	630		-75.9						
BDC-103	10/18/2004	895													140	2,100	5,500	3,700	15,000	4,400															
BDC-103	5/10/2005	1099													110	2,200	5,500	3,800	14,000	3,200															
BDC-103	11/10/2005	1283													90	2,200	3,500	3,700	12,000	2,500		0.72	<1.0			11.9				15.4					
BDC-103	5/15/2006	1469													84	1,600	3,800	3,100	10,000	2,200		0.92	<0.010	0.054	3.5	15.2									
BDC-103	11/20/2006	1658	-59												51	2,000	730	2,200	3,900	1,000		1.23	<0.10	<0.10	2.4	28.3									
BDC-103	2/20/2007	1750	33												26	460	420	140	3,600	1,600		0.31	60.8	11.1	0.5	99.2									6.54
BDC-103	3/19/2007	1777	60												30	490	88	130	3,500	1,700		0.63	27.9	8.28	0.4	141									6.79
BDC-103	4/24/2007	1813	96												36	820	440	220	3,500	1,800		0.84	7.54	3.56	2.4	59.2									6.70
BDC-103	5/17/2007	1836	119												77	1,400	4,300	1,100	8,300	3,200		0.61	0.138	0.079	3.6	169									6.82
BDC-103	11/26/2007	2029	312												190	3,300	21,000	4,000	11,000	4,900		3.37	0.063	0.049	3.6	49.1									
BDC-103	2/18/2008	2113	396	-8											66	1,100	2,600	700	7,500	1,900		2.06	7.75	0.134	2.8	163									5.97
BDC-103	3/27/2008	2151	434	30											84	1,500	1,900	1,100	9,700	3,000		1.60	54.1	18	4.0	115.0									
BDC-103	5/15/2008	2200	483	79	-40										91	2,700	4,400	1,400	11,000	3,600		1.38	<0.10	<0.10	3.2	192									7.11

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

Well	Date	ORC Injection	Pilot Injection	Full Scale Injection 1	Full Scale Injection 2	Full Scale Injection 3	Full Scale Injection 4	Full Scale Injection 5	Full Scale Injection 6	Full Scale Injection 7	Full Scale Injection 8	Full Scale Injection 9	Full Scale Injection 10	Full Scale Injection 11	Volatile Organic Compounds (all units in ug/L)						Aquifer Redox Conditions						Donor Indicators		Comments																	
		BDC-103	BDC-103	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	TPH-G	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Total Xylenes	DO	Nitrate	Nitrite	Iron II	Sulfate	Methane		ORP	TOC	pH														
		Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	Elapsed Time from Injection (days)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg-N/L)	(mg-N/L)	(mg/L)	(mg/L)	(µg/L)		(mV)	(mg/L)															
Proposed Groundwater Cleanup Levels (a)															0.8	2.0	1294	1.7	NA	NA	1546																									
BDC-103	5/3/2012	3649	1932	1528	1409	1281	1051	918	589	79					<0.25	16	1.4	<1.0	3.6	14	17.6	0.11	149	0.83	0.0	56.2		239		6.49																
BDC-103	9/4/2012	3773	2056	1652	1533	1405	1175	1042	713	203	-49				0.72	530	24.0	9.4	40	82	0.45	7.2	<0.10	0.4	66.9		146		6.80																	
BDC-103	11/13/2012	3843	2126	1722	1603	1475	1245	1112	783	273	21				4.5	120	9.5	3.7	210	380	590	1.02	165	2.8	0.4	93.6		108		6.50																
BDC-103	2/20/2013	3942	2225	1821	1702	1574	1344	1211	882	372	120				<0.25	<1.0	<1.0	<1.0	<2.0	3.4	3.4	0.14	161	0.60	0.2	51.6		109		6.42																
BDC-103	5/20/2013	4031	2314	1910	1791	1663	1433	1300	971	461	209				<0.25	9.3	<1.0	<1.0	4.4	1.8	6.2	0.29	161	<0.10	0.0	47.1		-281		7.47																
BDC-103	8/28/2013	4131	2414	2010	1891	1763	1533	1400	1071	561	309	-76			2	210	56	47	260	91	351	1.60	17.8	0.16	0.6	54.2		-290		6.83																
BDC-103	11/19/2013	4214	2497	2093	1974	1846	1616	1483	1154	644	392	7			5.9	22	37	31	590	350	940	4.42	154	2.6	0.0	51.0		-222		6.48																
BDC-103	2/11/2014	4298	2581	2177	2058	1930	1700	1567	1238	728	476	91			<0.25	<1.0	<1.0	<1.0	4.9	3.6	8.5	2.81	79.9	0.15	0.0	99.2		-254		6.77																
BDC-103	5/6/2014	4382	2665	2261	2142	2014	1784	1651	1322	812	560	175			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.19	215	<0.10	0.0	59.8		-233		6.21																
BDC-103	8/7/2014	4475	2758	2354	2235	2107	1877	1744	1415	905	653	268			<0.25	7.8	<1.0	<1.0	2.4	<1.0	2.4	2.67	111	<0.10	0.0	59.7		-46		7.14																
BDC-103	11/4/2014	4564	2847	2443	2324	2196	1966	1833	1504	994	742	357			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.27	151	0.68	0.0	66.7		121		6.31																
BDC-103	1/21/2015	4642	2925	2521	2402	2274	2044	1911	1582	1072	820	435			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.20	137	0.27	0.0	69.1		118		6.05																
BDC-103	4/28/2015	4739	3022	2618	2499	2371	2141	2008	1679	1169	917	532			<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.16	74.8	<0.10	0.0	90.3		44		6.23																
BDC-103	7/20/2015	4822	3105	2701	2582	2454	2224	2091	1762	1252	1000	615			<0.25	54	1.0	3.7	8.3	2.6	10.9	0.18	8.1	<0.10	0.2	70.9		-22		6.48																
BDC-103	10/26/2015	4920	3203	2799	2680	2552	2322	2189	1860	1350	1098	713			19	480	740	600	1800	850	2650	0.11	<0.10	<0.10	1.0	0.55		-85		6.61																
BDC-103	1/27/2016	5013	3296	2892	2773	2645	2415	2282	1953	1443	1191	806	-56		<0.25	3.9	1.2	3.3	12	7.0	19	0.22	32.5	<0.10	0.0	102		-10		6.56																
BDC-103	4/13/2016	5090	3373	2969	2850	2722	2492	2359	2030	1520	1268	883	21		<0.25	<1.0	<1.0	<1.0	<1.0	2.0	2.0	0.46	102	0.43	0.0	51.0		6.7		6.59																
BDC-103	8/9/2016	5208	3491	3087	2968	2840	2610	2477	2148	1638	1386	1001	139		1.7	56	4.9	42	210	51	261	0.0	<0.10	<0.10		31.1		-98.6		6.90																
BDC-103	11/1/2016	5292	3575	3171	3052	2924	2694	2561	2232	1722	1470	1085	223	-35	4.5	83	24	120	360	180	540	0.3	<0.10	<0.10	0.68		-182.9		6.70																	
BDC-103	2/7/2017	5390	3673	3269	3150	3022	2792	2659	2330	1820	1568	1183	321	63	<0.25	<1.0	<1.0	<1.0	<1.0	2.1	2.1	0.41	194	0.15	0.0	47.4		77.2		6.27																
BDC-103	5/3/2017	5475	3758	3354	3235	3107	2877	2744	2415	1905	1653	1268	406	148	<0.25	<1.0	<1.0	<1.0	<1.0	1.7	1.7	0.78	215	0.40	0.0	49.4		67.1		6.25																
BDC-103	8/1/2017	5565	3848	3444	3325	3197	2967	2834	2505	1995	1743	1358	496	238	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.72	172	<0.10	0.0	64.4		111.1		6.23																
BDC-103	11/7/2017	5663	3946	3542	3423	3295	3065	2932	2603	2093	1841	1456	594	336	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.86	71	<0.10	0.0	73.2		58.2		6.54																
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	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	<1.0	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	8/1																																													

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

Well	Date	ORC Injection	Pilot Injection	Full Scale Injection 1	Full Scale Injection 2	Full Scale Injection 3	Full Scale Injection 4	Full Scale Injection 5	Full Scale Injection 6	Full Scale Injection 7	Full Scale Injection 8	Full Scale Injection 9	Full Scale Injection 10	Full Scale Injection 11	Volatile Organic Compounds (all units in ug/L)							Aquifer Redox Conditions							Donor Indicators		Comments		
		BDC-103	BDC-103	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103/104	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	BDC-103	TPH-G (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m,p-Xylene (µg/L)	o-Xylene (µg/L)	Total 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	
Proposed Groundwater Cleanup Levels (a)															0.8	2.0	1294	1.7	NA	NA	1546												
BDC-104	1/27/2016	5013	3296	2892	2773	2645	2415	2282	1953	1443	1191	806	-56		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.13	11.5	<0.10	0.0	69.1		16.0		6.67			
BDC-104	4/13/2016	5090	3373	2969	2850	2722	2492	2359	2030	1520	1268	883	21		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.65	20.2	<0.10	0.0	96.9		31		6.75			
BDC-104	8/9/2016	5208	3491	3087	2968	2840	2610	2477	2148	1638	1386	1001	139		<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	8.1	<0.10		42.2		-27.2		6.30			
BDC-104	11/1/2016	5292	3575	3171	3052	2924	2694	2561	2232	1722	1470	1085	223	-35	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.91	3.4	<0.10		22.3		-9.8		6.49			
BDC-104	2/7/2017	5390	3673	3269	3150	3022	2792	2659	2330	1820	1568	1183	321	63	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.03	0.58	<0.10		5.2		69.2		5.93			
BDC-104	5/3/2017	5475	3758	3354	3235	3107	2877	2744	2415	1905	1653	1268	406	148	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.06	23.6	<0.10		84.3		80.9		5.85			
BDC-104	8/1/2017	5565	3848	3444	3325	3197	2967	2834	2505	1995	1743	1358	496	238	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.00	7.0	<0.10		29.1		125.9		5.83			
BDC-104	11/7/2017	5663	3946	3542	3423	3295	3065	2932	2603	2093	1841	1456	594	336	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.82	0.17	<0.10		4.5		60.4		6.89			

TPH-G = total petroleum hydrocarbon-gasoline
 DO = dissolved oxygen
 µg/L = micrograms per liter
 mg/L = milligrams per liter
 mV = millivolts
 NA = not analyzed
 NA = not applicable, not available
 ORP = oxidation reduction potential
 TOC = total organic carbon

Injection Dates	Months Elapsed	ORC
5/7/2002		ORC
1/18/2007	57	Pilot -scale nitrate
2/26/2008	13	1st full scale injection
6/24/2008	4	2nd full scale injection
10/30/2008	4	3rd full scale injection
6/17/2009	8	4th full scale injection (start ammonium phosphate, 1/3 ammonium nitrate dose to both wells)
10/28/2009	4	5th full scale injection (103 full dose, 104 half dose)
9/22/2010	11	6th full scale injection (103 only full dose)
2/14/2012	17	7th full scale injection (103 only full dose)
10/23/2012	8	8th full scale injection (103 only 1.5x volume dose)
11/12/2013	13	9th full scale injection (103 only 1.5x volume dose)
3/23/2016	29	10th full scale injection (103 only 1.5x volume, half concentration dose)
12/6/2016	9	11th full scale injection (103 only 1.5x volume dose)

(a) Proposed Cleanup Standards and Comparison to Site Data, Boeing Developmental Center, Tukwila, Washington (Landau Associates, 5/7/13).
 (b) BTEX data questionable for this event. Concentrations inconsistent with TPH-G data for indicated event and BTEX data from other events.

**NITRATE CONCENTRATIONS AT DOWNGRAIDENT MONITORING LOCATIONS
AOC-05 ANAEROBIC BIOREMEDIATION REMEDIAL ACTION
BOEING DEVELOPMENTAL CENTER**

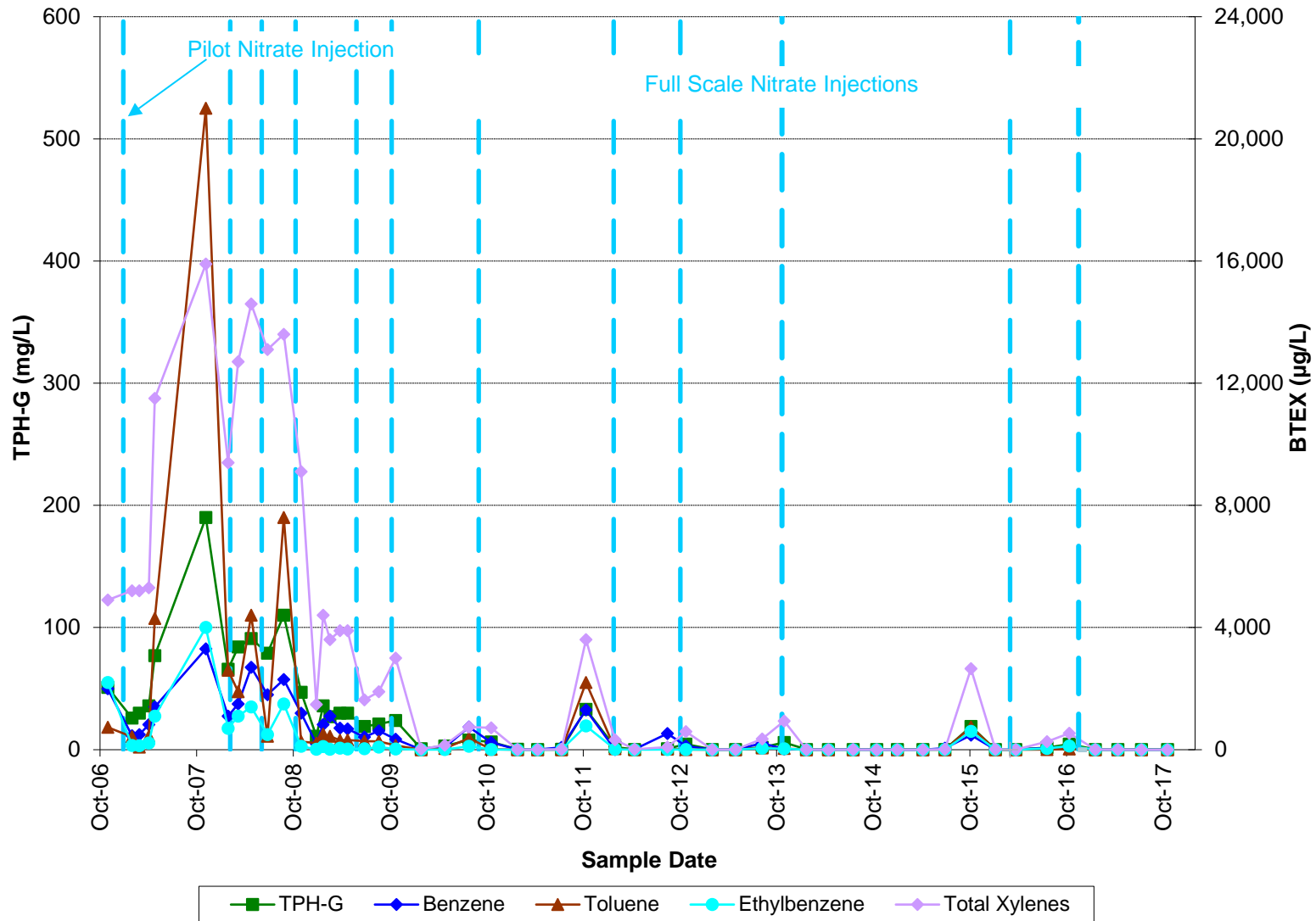
Area	Well	Date		Aquifer Redox Conditions					
				DO (mg/L)	Nitrate (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)	Methane (mg/L)	ORP (mV)
SWMU-17	BDC-05-04	5/15/2006	Natural Redox Baseline		12.3	2.6	33.4		
SWMU-17	BDC-05-04	10/23/2008		2.45	7.6	0.1	31.0	0.29	73.5
SWMU-17	BDC-05-04	11/2/2008		0.59	4.5	0.8	25.2	0.05	-16
SWMU-17	BDC-05-04	12/16/2008		0.55	5.5	1.0	30.4	1.61	-98
SWMU-17	BDC-05-04	1/16/2009		0.06	4.3	1.0	21.8	1.48	-192
SWMU-17	BDC-05-04	2/11/2009		2.45	5.9	1.0	31.8	1.06	-54
SWMU-17	BDC-05-04	3/9/2009		0.27	4.8	1.5	30.1	0.20	35
SWMU-17	BDC-05-04	4/16/2009		1.48	5.9	1.4	33.6	<0.0007	68
SWMU-17	BDC-05-04	5/13/2009		0.33	4.5	1.6	26.6	0.37	49
SWMU-17	BDC-05-04	8/16/2009		0.86	5.4	2.2	30.6	<0.0007	93
SWMU-17	BDC-05-04	11/13/2009	Downgradient Monitoring Triggered	0.56	2.2	3.0	18.4	2.44	109
SWMU-17	BDC-05-04	2/16/2010		0.88	<0.1	3.3	24.6	1.49	899
SWMU-17	BDC-05-04	5/18/2010		0.75	<0.1	3.0	25.4	1.32	473
SWMU-17	BDC-05-04	8/17/2010		1.00	<0.1	2.8	17.1	3.53	108
SWMU-17	BDC-05-04	11/9/2010		2.21	<0.1	2.2	21.3	3.00	101
SWMU-17	BDC-05-04	2/15/2011		2.50	<0.1	2.4	19.4	4.46	93
SWMU-17	BDC-05-04	5/2/2011		1.69	<0.1	2.2	18.0	1.75	49
SWMU-17	BDC-05-04	11/2/2011		1.52	<1.0	1.2	<1.0		-3
SWMU-17	BDC-05-04	5/7/2012		0.16		2.0	21.5		98
SWMU-17	BDC-05-04	9/4/2012		0.21	<0.10		16.6		96
SWMU-17	BDC-05-04	11/13/2012		0.03	<0.10	1.8	16.9		64
SWMU-17	BDC-05-04	5/23/2013		0.49		1.5	13.7		-310
SWMU-17	BDC-05-04	11/19/2013		2.56	<0.10	1.0	13.2		-259
SWMU-17	BDC-05-04	5/6/2014		3.49	0.40		14.4		-299
SWMU-17	BDC-05-04	11/4/2014		0.05	<0.10	1.6	<1.0		-126
SWMU-17	BDC-05-04	4/28/2015		0.11	5.0	0.4	13.5		74
SWMU-17	BDC-05-04	10/26/2015		0.08	<0.10	1.5	<1.0		-101
SWMU-17	BDC-05-04	4/13/2016		0.57	5.5		13.9		46
SWMU-17	BDC-05-04	11/2/2016		0.39	<0.10		0.75		-140.5
SWMU-17	BDC-05-04	5/3/2017		0.42	8.8	0.6	12.0		73.8
SWMU-17	BDC-05-04	11/6/2017		0.93	<0.050	2.0	2.7		-28.3
SWMU-20	MW-17A	05/15/2006	Natural Redox Baseline		1.37	0.0	27.0		
SWMU-20	MW-17A	11/12/2009	Downgradient Monitoring Triggered		0.9				
SWMU-20	MW-17A	5/17/2010		1.6		0.2	21.0		
SWMU-20	MW-17A	11/8/2010		0.1		2.1	15.7		
SWMU-20	MW-17A	5/3/2011		1.6		0.0	19.8		
SWMU-20	MW-17A	8/1/2011		0.5		0.0	20.5		
SWMU-20	MW-17A	11/1/2011		0.3		0.0	23.2		
SWMU-20	MW-17A	5/3/2012		4.4		0.0			
SWMU-20	MW-17A	9/4/2012		2.0			26.8		
SWMU-20	MW-17A	11/13/2012		0.59		0.0	22.9		
SWMU-20	MW-17A	5/20/2013		2.9			26.8		
SWMU-20	MW-17A	11/19/2013		1.3		0.4	23.9		
SWMU-20	MW-17A	5/6/2014		2.2		0.0	23.7		
SWMU-20	MW-17A	11/4/2014		0.16		0.4	26.0		
SWMU-20	MW-17A	4/28/2015		1.6		0.0	26.3		
SWMU-20	MW-17A	10/26/2015		0.17	0.91	0.0	29.0		-11.1
SWMU-20	MW-17A	4/13/2016		0.31	1.7	1.8	0.90		-175
SWMU-20	MW-17A	11/1/2016		0.41	<0.10	1.4			-215.9
SWMU-20	MW-17A	5/3/2017		0.62	<0.10	2.2			-225
SWMU-20	MW-17A	11/7/2017		0.57	<0.10	1.8	<0.30		23.8
SWMU-20	MW-18A	05/15/2006	Natural Redox Baseline		0.154	0.4	64.8		
SWMU-20	MW-18A	11/12/2009	Downgradient Monitoring Triggered		0.8				
SWMU-20	MW-18A	05/17/2010		1.0		0.4	32.2		
SWMU-20	MW-18A	11/08/2010		0.1		0.0	14.2		
SWMU-20	MW-18A	5/3/2011		<0.1		0.0	31.5		
SWMU-20	MW-18A	8/1/2011		1.1		0.0	42.2		
SWMU-20	MW-18A	11/1/2011		0.7		0.0	93.3		

**NITRATE CONCENTRATIONS AT DOWNGRADIENT MONITORING LOCATIONS
AOC-05 ANAEROBIC BIOREMEDIATION REMEDIAL ACTION
BOEING DEVELOPMENTAL CENTER**

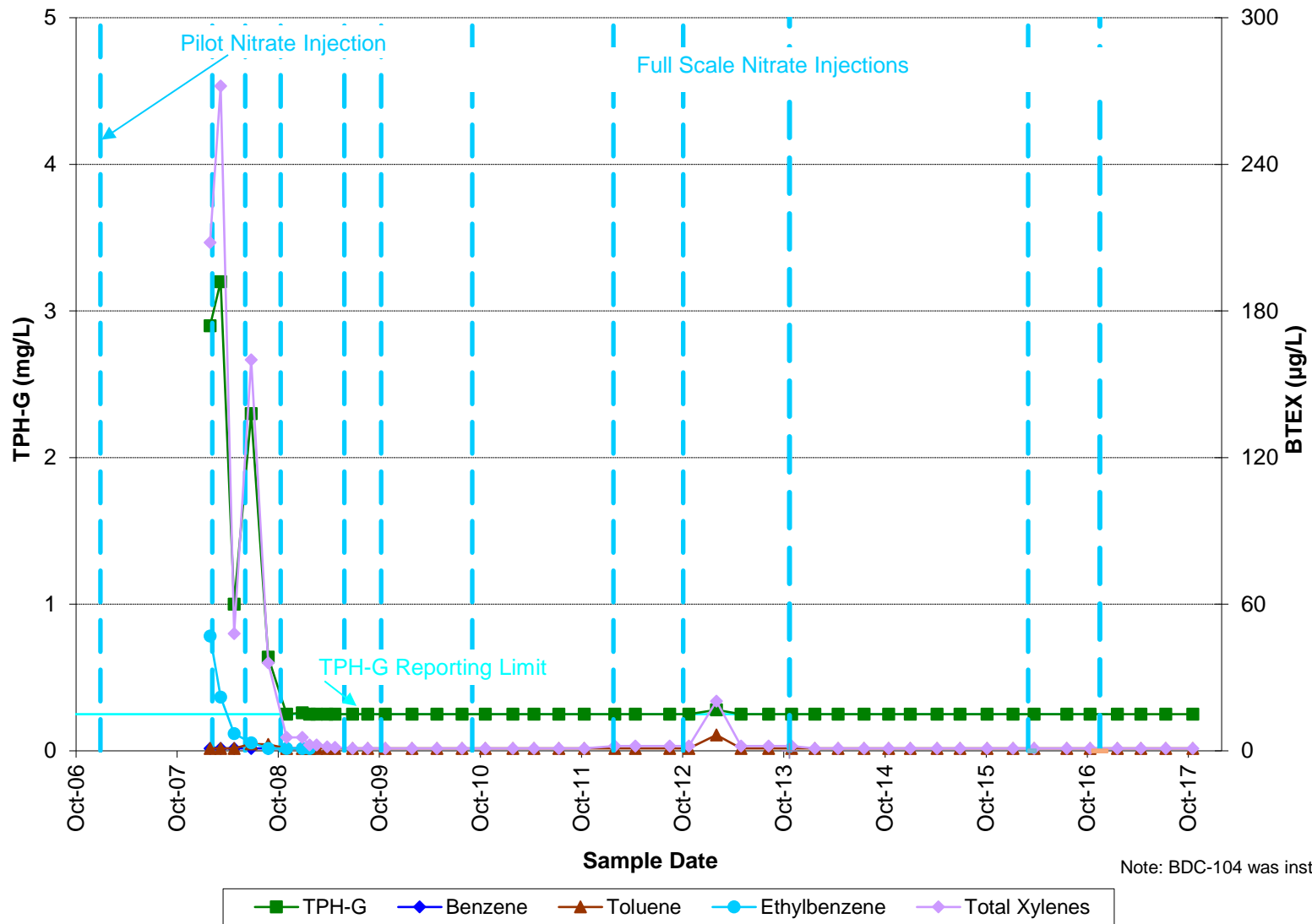
Area	Well	Date		Aquifer Redox Conditions					
				DO (mg/L)	Nitrate (mg-N/L)	Iron II (mg/L)	Sulfate (mg/L)	Methane (mg/L)	ORP (mV)
SWMU-20	MW-18A	5/3/2012			<0.10	0.0			
SWMU-20	MW-18A	9/4/2012			<0.10		19.5		
SWMU-20	MW-18A	11/13/2012			<0.10	0.0	21.5		
SWMU-20	MW-18A	5/20/2013			<0.10		19.6		
SWMU-20	MW-18A	11/19/2013			<0.10	0.6	15.0		
SWMU-20	MW-18A	5/6/2014			<0.10	0.0	26.1		
SWMU-20	MW-18A	11/4/2014			<0.10	0.4	21.0		
SWMU-20	MW-18A	4/28/2015			0.11	0.0	19.1		
SWMU-20	MW-18A	10/26/2015		0.10	<0.10	0.6	23.4		-7.1
SWMU-20	MW-18A	4/13/2016		0.76	0.10	0.0	42.8		38
SWMU-20	MW-18A	11/1/2016		0.26	<0.10	0.4			-8.5
SWMU-20	MW-18A	5/3/2017		1.22	0.26	0.0			63.7
SWMU-20	MW-18A	11/7/2017		0.55	<0.10	0.0	14.2		7.0
SWMU-20	MW-21A	05/15/2006	Natural Redox Baseline		0.136	0.4	54.9		
SWMU-20	MW-21A	11/12/2009	Downgradient Monitoring Triggered		<0.1				
SWMU-20	MW-21A	05/17/2010			0.2	0.0	11.9		
SWMU-20	MW-21A	11/08/2010			<0.1	0.0	5.9		
SWMU-20	MW-21A	5/3/2011			0.2	0.0	52.1		
SWMU-20	MW-21A	8/1/2011			0.1	0.0	26.7		
SWMU-20	MW-21A	11/1/2011			<0.1	0.0	9.3		
SWMU-20	MW-21A	5/3/2012			0.17	0.0			
SWMU-20	MW-21A	9/4/2012			<0.10		6.7		
SWMU-20	MW-21A	11/13/2012			0.16	0.0	18.5		
SWMU-20	MW-21A	5/20/2013			0.10	0.5	13.5		
SWMU-20	MW-21A	11/19/2013			<0.10	0.0	15.6		
SWMU-20	MW-21A	5/6/2014			<0.10	0.0	7.6		
SWMU-20	MW-21A	11/4/2014			<0.10	0.0	5.1		
SWMU-20	MW-21A	4/28/2015			<0.10	0.0	5.3		
SWMU-20	MW-21A	10/26/2015		0.33	0.11	0.0	3.9		10.3
SWMU-20	MW-21A	4/13/2016		2.08	<0.10	0.0	4.9		56
SWMU-20	MW-21A	11/1/2016		1.71	0.10	0.2			78
SWMU-20	MW-21A	5/3/2017		3.41	0.19	0.0			99.8
SWMU-20	MW-21A	11/7/2017		0.88	<0.10	0.0	11.0		44.2

DO = dissolved oxygen
mg/L = milligrams per liter
mg-N/L = milligrams nitrogen per liter
mV = millivolt
ORP = oxidation reduction potential
Nitrate column bolded for emphasis of target compound. Other results included for aquifer redox evaluation.
= not analyzed

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

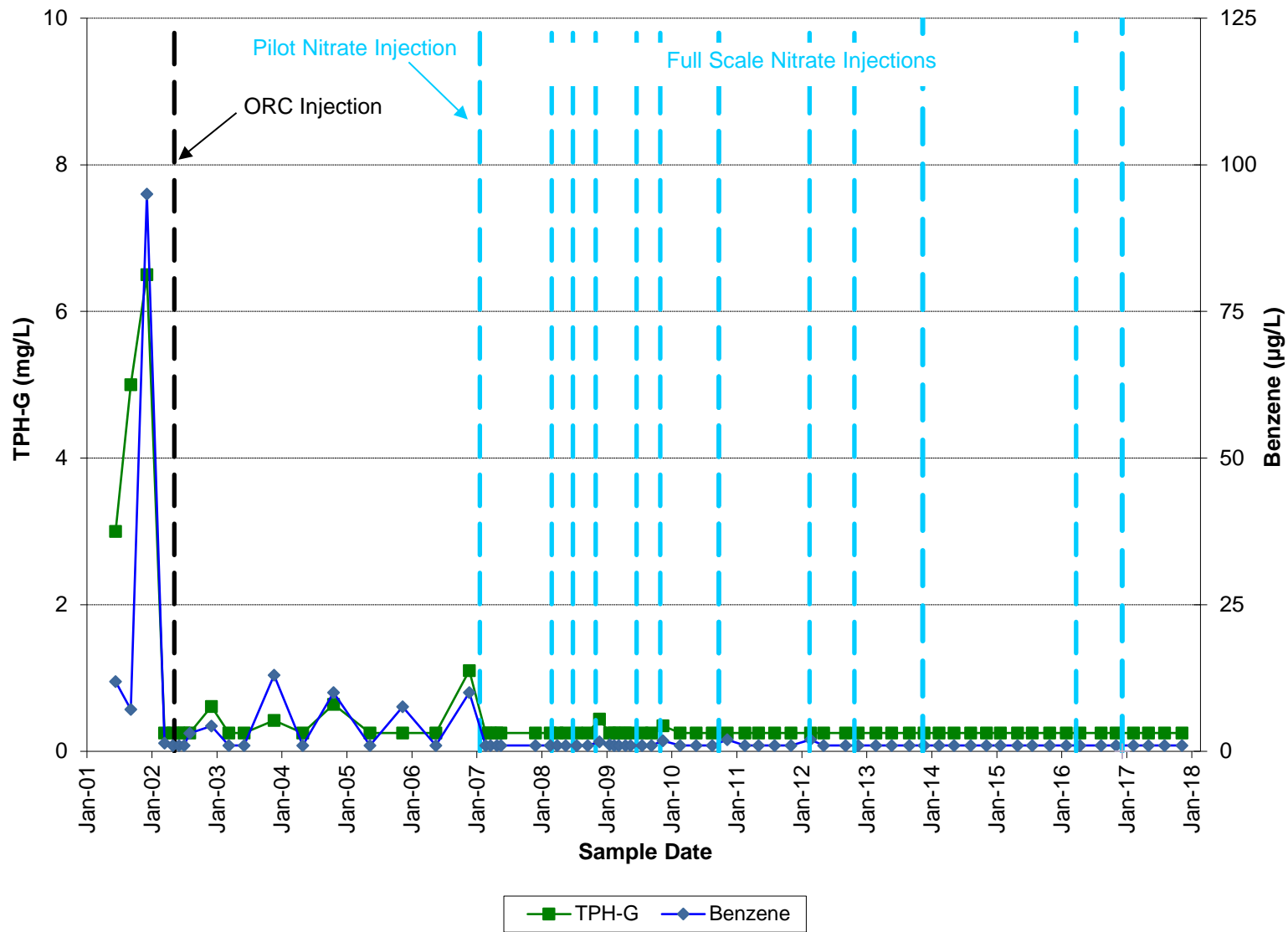


BDC-104 TPH-G and BTEX Concentrations Beginning with 2007 Pilot Testing

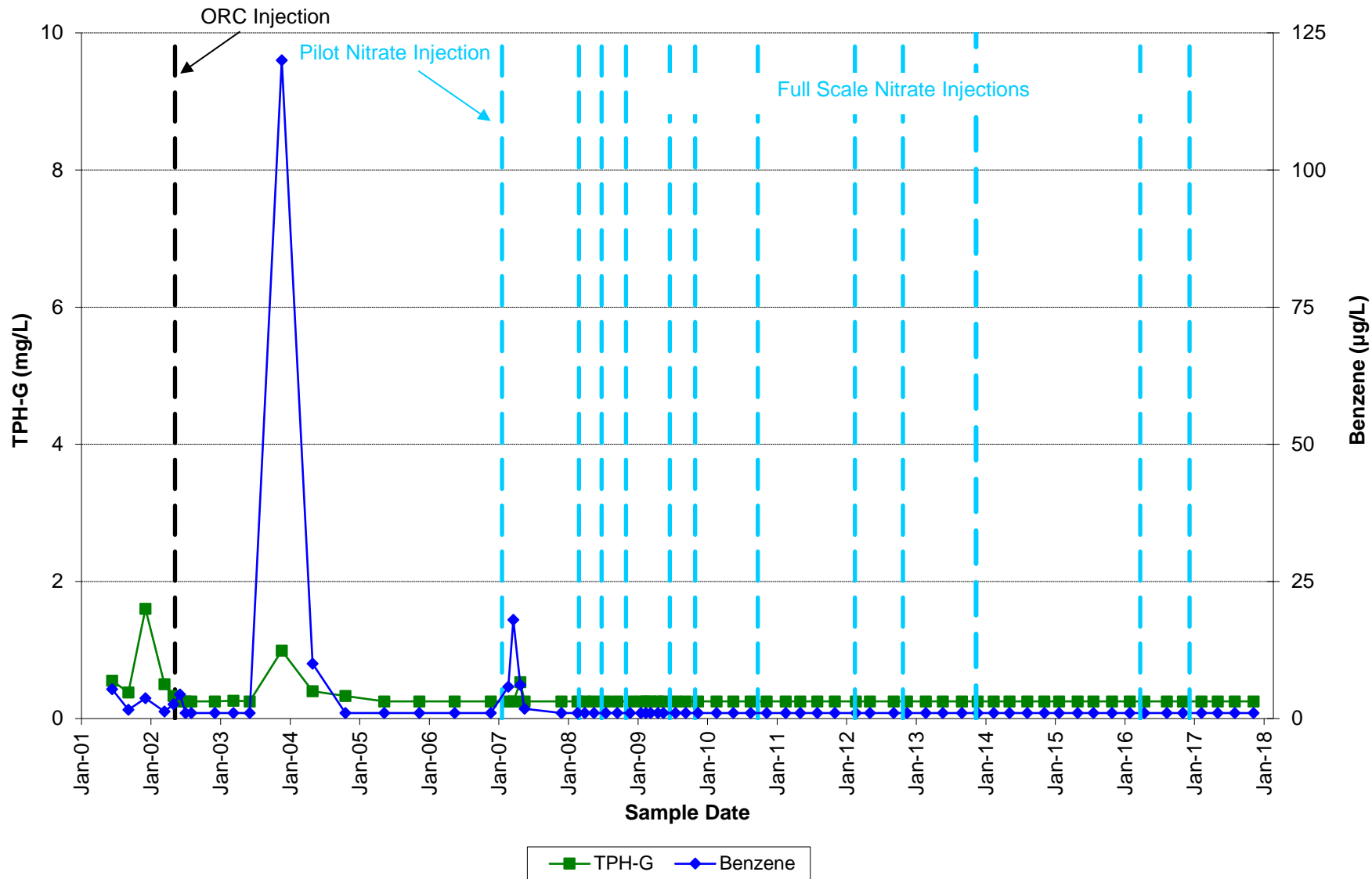


Note: BDC-104 was installed February 2008

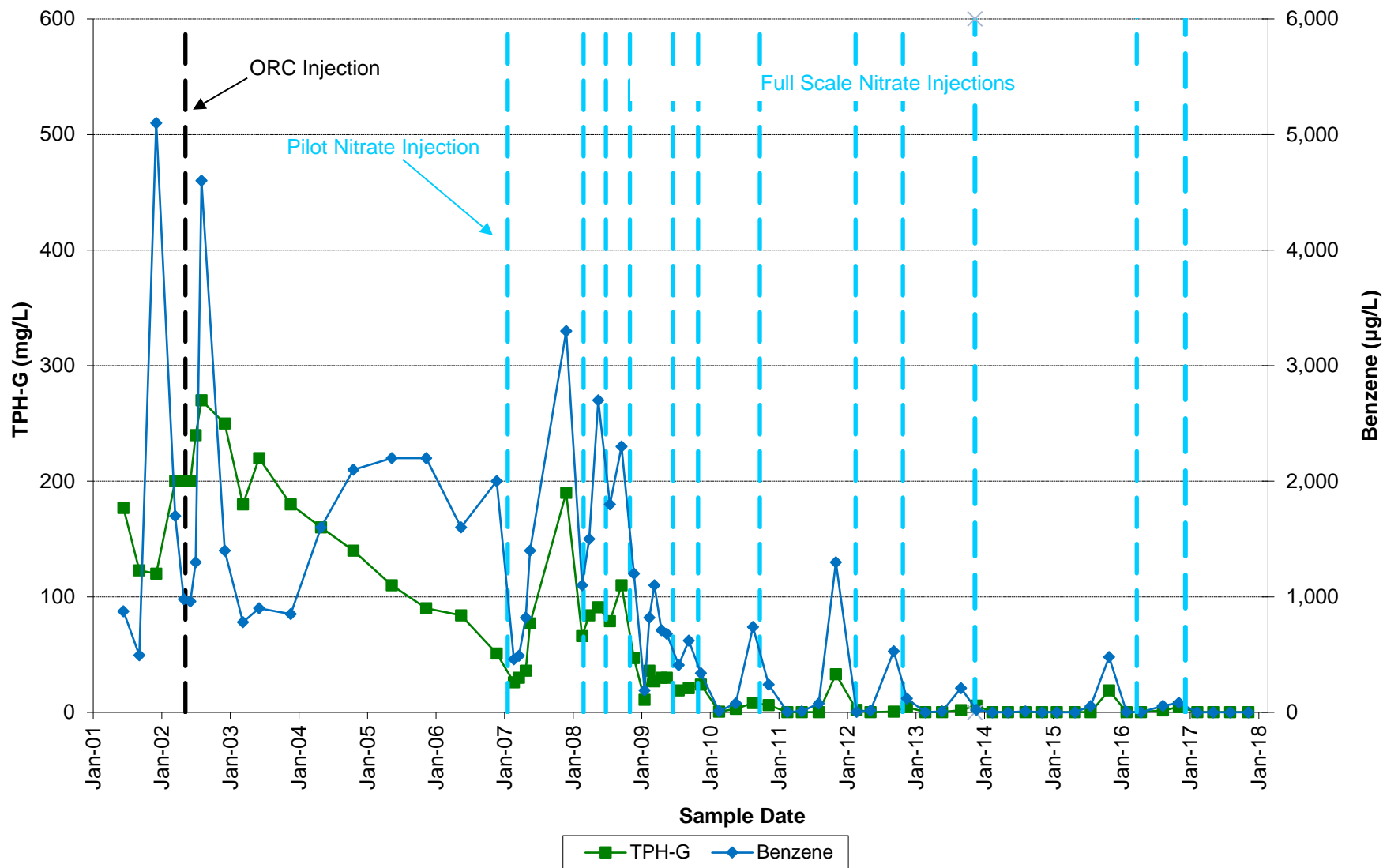
BDC-101 TPH-G and Benzene Concentrations Since 2001



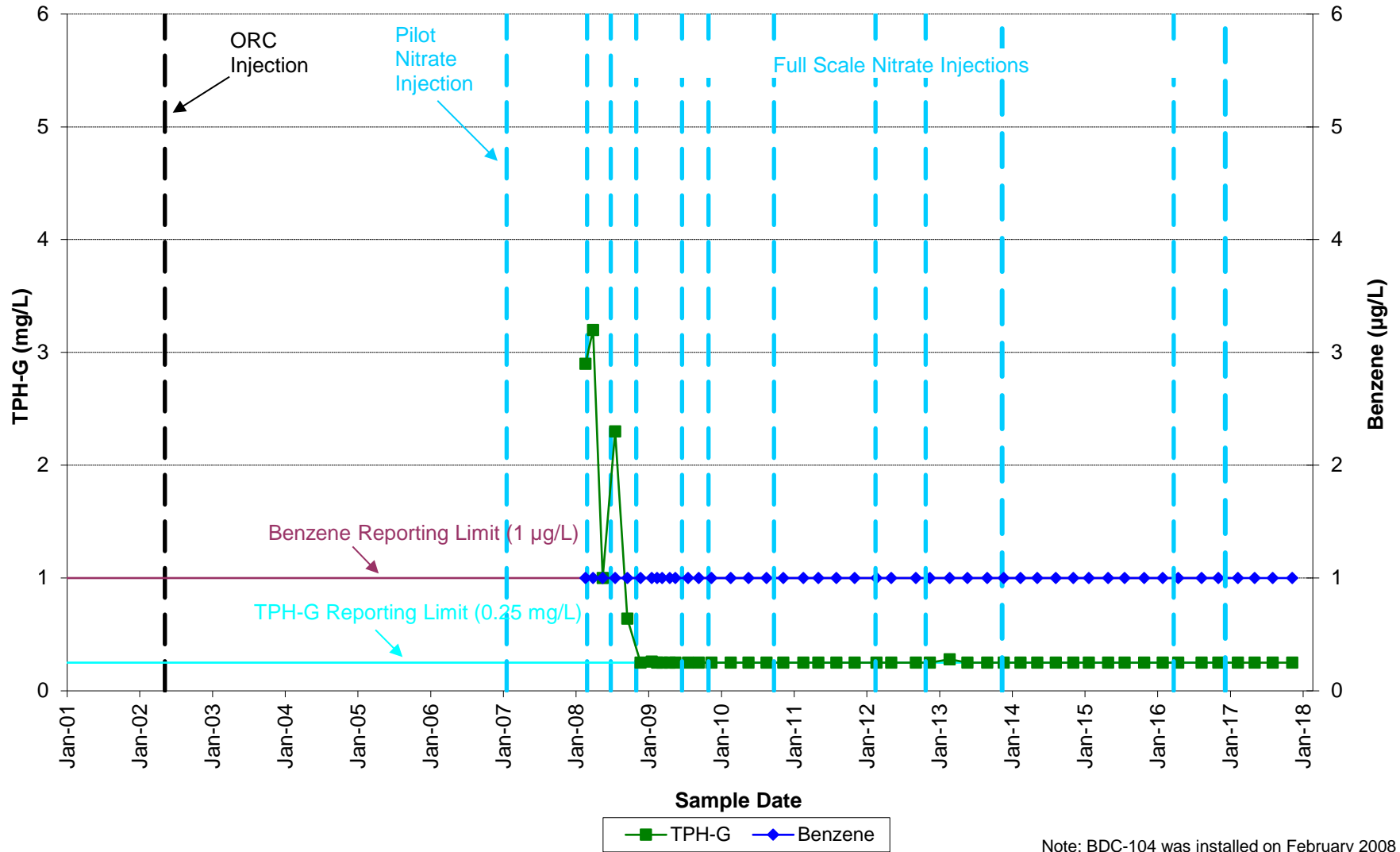
BDC-102 TPH-G and Benzene Concentrations Since 2001



BDC-103 TPH-G and Benzene Concentrations Since 2001

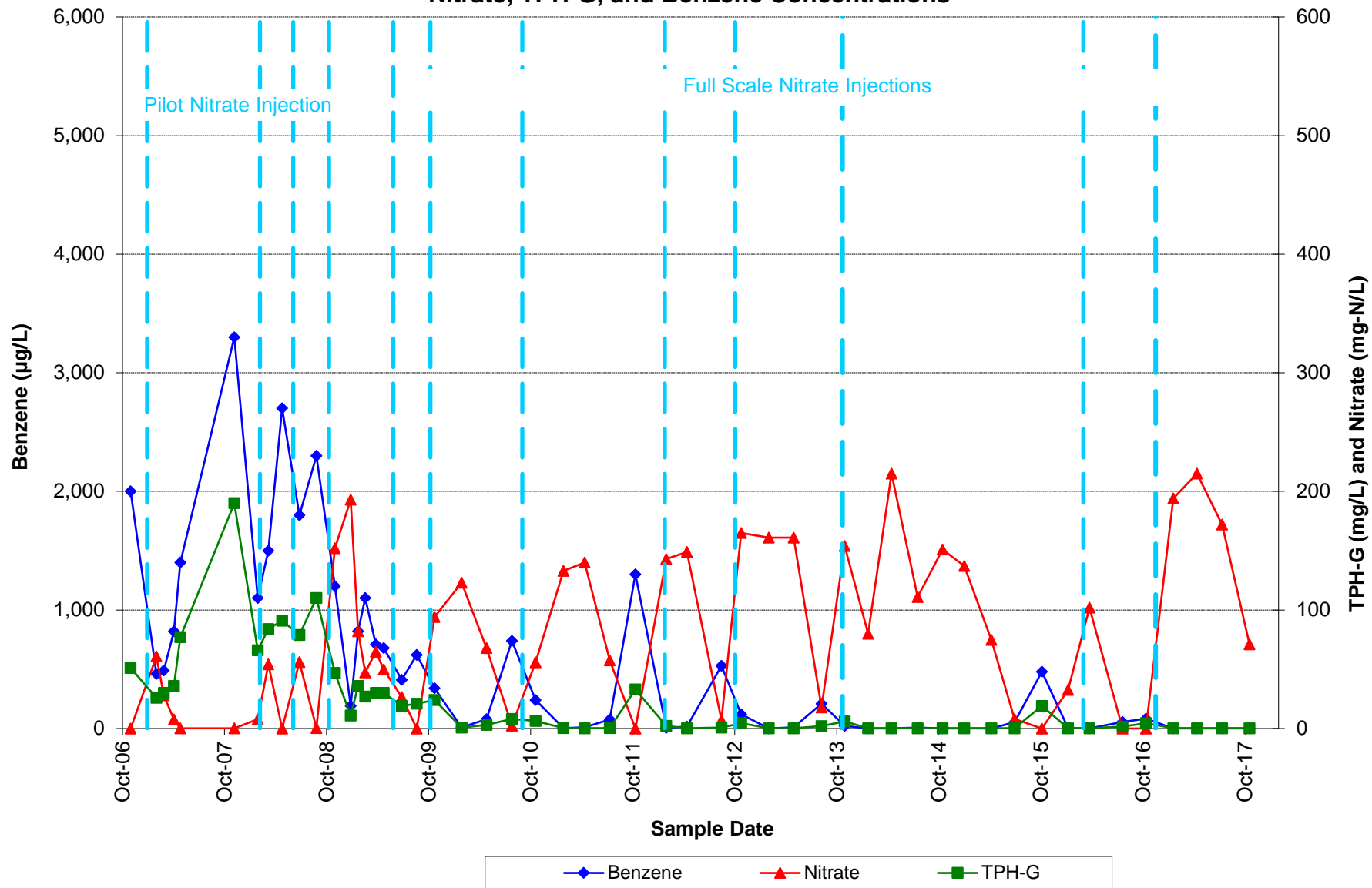


BDC-104 TPH-G and Benzene Concentrations Since 2001

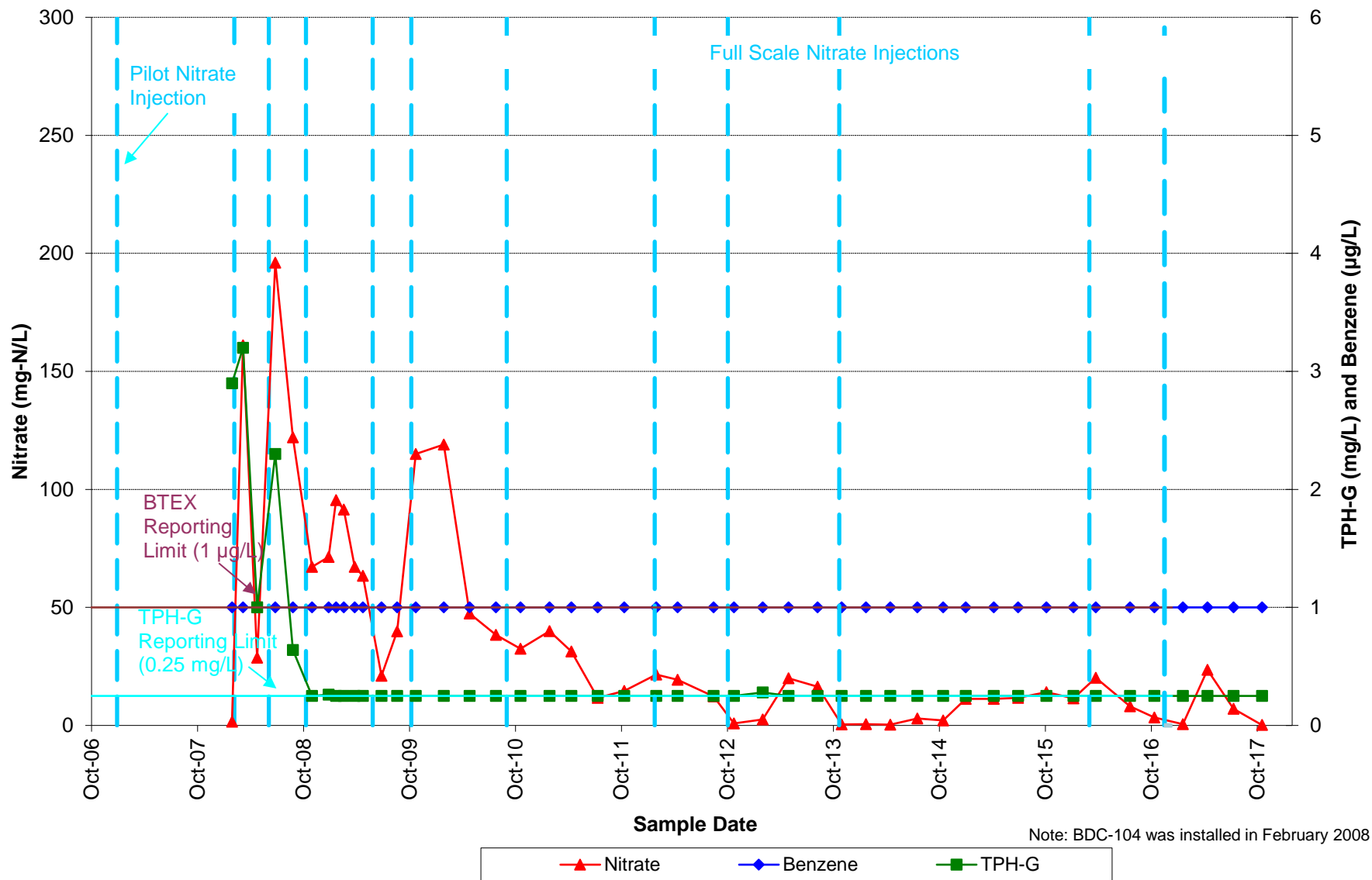


Note: BDC-104 was installed on February 2008

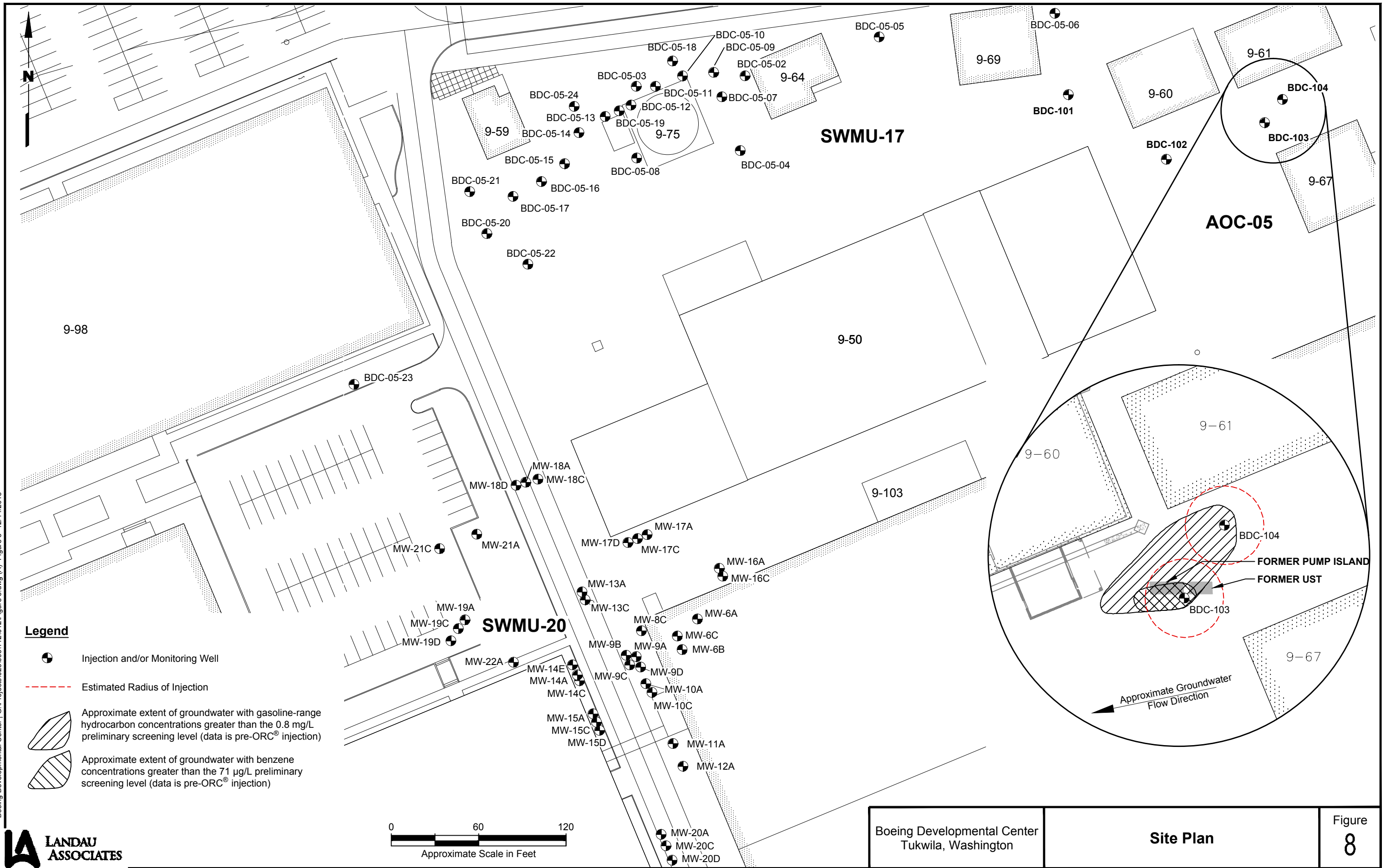
BDC-103 Nitrate, TPH-G, and Benzene Concentrations



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



Boeing Developmental Center | G:\Projects\025093112\012\Figure 8.dwg (A) Figure 8" 12/14/2015



- Legend**
- Injection and/or Monitoring Well
 - Estimated Radius of Injection
 - Approximate extent of groundwater with gasoline-range hydrocarbon concentrations greater than the 0.8 mg/L preliminary screening level (data is pre-ORC® injection)
 - Approximate extent of groundwater with benzene concentrations greater than the 71 µg/L preliminary screening level (data is pre-ORC® injection)

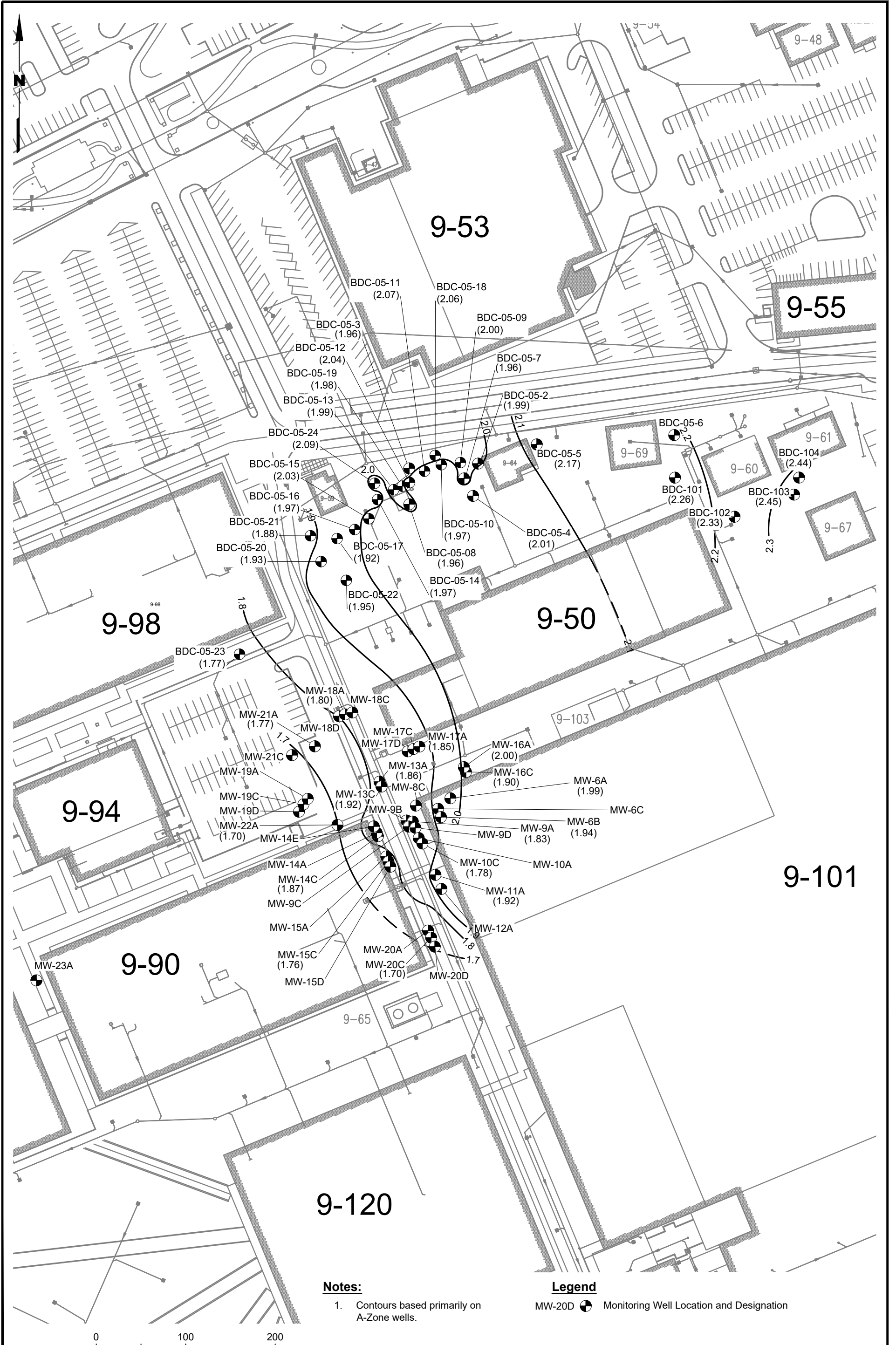
0 60 120
Approximate Scale in Feet



***DEVELOPMENTAL CENTER
GROUNDWATER MONITORING
NOVEMBER 2017***

GROUNDWATER ELEVATION INFORMATION

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

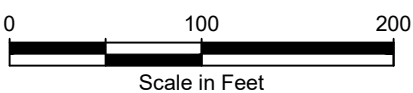


Notes:

1. Contours based primarily on A-Zone wells.

Legend

MW-20D Monitoring Well Location and Designation



DEVELOPMENTAL CENTER
CUMULATIVE WATER LEVEL MEASUREMENTS

Well Location / Bldg.	Well ID No.	Well Depth (ft)	November 2017		August 2017		May 2017		February 2017		November 2016		August 2016		April 2016		January 2016		October 2015		July 2015		April 2015		January 2015		November 2014	
			Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)
9-101-bldg.	MW-6A	24.25	12.81	1.99			11.97	2.83			12.13	2.67			12.38	2.42			12.80	2.00			12.65	2.15			12.22	2.58
9-101-bldg.	MW-6B	27.20	13.15	1.94			12.31	2.78			12.82	2.27			12.77	2.32			13.16	1.93			13.02	2.07			12.58	2.51
9-101-bldg.	MW-6C	40.55																										
9-101-bldg.	MW-8C	40.20																										
9-101-bldg.	MW-9A	21.30	12.91	1.83			12.07	2.67			12.18	2.56			12.37	2.37			12.83	1.91			12.64	2.10			12.18	2.56
9-101-bldg.	MW-9B	26.90																										
9-101-bldg.	MW-9C	38.80																										
9-101-bldg.	MW-9D	56.00																										
9-101-bldg.	MW-10A	20.20																										
9-101-bldg.	MW-10C	40.40	12.86	1.78			11.97	2.67			12.16	2.48			12.37	2.27			12.66	1.96			12.57	2.05			12.14	2.55
9-101-bldg.	MW-11A	19.90	12.96	1.92			12.03	2.85			12.14	2.74			12.47	2.41			12.87	2.01			12.74	2.14			12.06	2.56
9-101-bldg.	MW-12A	20.20																										
9-101-bldg.	MW-13A	19.37	12.28	1.86			11.57	2.57			11.55	2.59			11.82	2.32			12.23	1.91			12.19	1.95			11.71	2.43
9-101-bldg.	MW-13C	35.62	12.10	1.92			11.39	2.63			11.41	2.61			11.71	2.31			12.08	1.94			12.07	1.95			11.59	2.43
9-101-bldg.	MW-14A	19.00																										
9-101-bldg.	MW-14C	33.30	12.10	1.87			11.40	2.57			11.33	2.64			11.78	2.19			11.95	2.02			11.95	2.02			11.54	2.43
9-101-bldg.	MW-14E	82.10																										
9-101-bldg.	MW-15A	20.70																										
9-101-bldg.	MW-15C	34.35	12.79	1.76			12.00	2.55			11.98	2.57			12.45	2.10			12.19	1.98			12.29	1.88			11.77	2.40
9-101-bldg.	MW-15D	51.80																										
9-101-bldg.	MW-16A	20.55	12.99	2.00			12.18	2.81			12.32	2.67			12.60	2.39			12.96	2.03			12.85	2.14			12.40	2.59
9-101-bldg.	MW-16C	38.30	13.14	1.90			12.33	2.71			12.54	2.50			12.70	2.34			13.14	1.90			13.02	2.02			12.58	2.46
9-101-bldg.	MW-17A	19.00	12.81	1.85			11.97	2.69			12.11	2.55			12.28	2.38			12.83	1.97			12.67	2.13			12.25	2.55
9-101-bldg.	MW-17C	35.00																										
9-101-bldg.	MW-17D	52.50																										
9-101-bldg.	MW-18A	20.02	12.50	1.80			11.73	2.57			11.68	2.62			11.87	2.43			12.36	1.94			12.26	2.04			11.86	2.44
9-101-bldg.	MW-18C	34.55																										
9-101-bldg.	MW-18D	52.85																										
9-101-bldg.	MW-19A	16.86																										
9-101-bldg.	MW-19C	33.92																										
9-101-bldg.	MW-19D	51.86																										
9-101-bldg.	MW-20A	19.34																										
9-101-bldg.	MW-20C	35.32	12.45	1.70			11.59	2.56			11.55	2.60			11.95	2.20			12.14	2.01			12.19	1.96			11.61	2.54
9-101-bldg.	MW-20D	50.15																										
9-101-bldg.	MW-22A	19.20	12.55	1.70			11.79	2.46			11.79	2.46			12.12	2.13			12.34	1.91			12.33	1.92			11.96	2.29
9-101-bldg.	MW-23A	19.50																										
9-101/9-50 bldg.	MW-21A	19.90	12.68	1.77			11.97	2.48			11.85	2.60			12.10	2.35			12.55	1.90			12.48	1.97			12.06	2.39
9-101/9-50 bldg.	MW-21C	34.00																										
9-64-bldg.	BDC-05-02	25.35	12.42	1.99	12.31	2.10	11.46	2.95	11.24	3.17	11.68	2.73	12.53	1.88	11.77	2.64	10.85	3.56	12.28	2.13	12.30	2.11	12.07	2.34	11.49	2.92	11.77	2.64
9-64-bldg.	BDC-05-03	25.47	12.45	1.96			11.58	2.83			11.71	2.70			11.86	2.55			12.33	2.08			12.19	2.22			11.79	2.62
9-64-bldg.	BDC-05-04	25.36	12.58	2.01			11.62	2.97			11.86	2.73			11.95	2.64			12.54	2.05			12.26	2.33			11.95	2.64
9-64-bldg.	BDC-05-05	24.18	12.27	2.17			11.19	3.25			11.52	2.92			11.57	2.87			12.18	2.26			11.86	2.58			11.53	2.91
9-64-bldg.	BDC-05-07	25.30	12.03	1.96			11.02	2.97			11.22	2.77			11.38	2.61			11.88	2.11			11.67	2.32			11.37	2.62
9-64-bldg.	BDC-05-08	26.75	12.71	1.96			11.88	2.79			11.95	2.72			12.11	2.56			12.62	2.05			12.47	2.20			12.10	2.57
9-64-bldg.	BDC-05-09	24.55	12.41	2.00			11.49	2.92			11.68	2.73			11.80	2.61			12.30	2.11			12.10	2.31			11.79	2.62
9-64-bldg.	BDC-05-10	24.57	12.44	1.97			11.31	3.10			11.62	2.79			11.80	2.61			12.27	2.14			12.11	2.30			11.72	2.69
9-64-bldg.	BDC-05-11	24.85	12.58	2.07			11.71	2.94			11.78	2.87			12.02	2.63			12.99	1.66			12.33	2.32			11.93	2.72
9-64-bldg.	BDC-05-12	24.87	12.68	2.04	12.62	2.10	11.80	2.92	11.50	3.22	11.91	2.81	12.80	1.92	12.11	2.61	11.21	3.51	12.59	2.13	12.63	2.09	12.43	2.29	11.83	2.89	12.06	2.66
9-64-bldg.	BDC-05-13	24.78	12.44	1.99			11.62	2.81			11.68	2.75			11.87	2.56			12.37	2.06			12.20	2.23			11.85	2.58
9-64-bldg.	BDC-05-14	24.85	12.25	1.97			11.39	2.83			11.52	2.70			11.71	2.51			12.18	2.04			12.03	2.19			11.70	2.52
9-64-bldg.	BDC-05-15	24.48	11.94	2.03			11.20	2.77			11.28	2.69			11.49	2.48			11.95	2.02			11.83	2.14			11.47	2.50
9-64-bldg.	BDC-05-16	24.89	12.10	1.97	12.13	1.94	11.32	2.75	11.05	3.02	11.43	2.64	12.31	1.76	11.65	2.42	10.79	3.28	12.10	1.97	12.10	1.97	11.90	2.17	11.31	2.76	11.65	2.42
9-64-bldg.	BDC-05-17	24.82	12.33	1.92			11.56	2.69			11.65	2.60			11.86	2.39			12.29	1.96			12.12	2.13			11.86	2.39
9-64-bldg.	BDC-05-18	24.69	11.73	2.06	11.77	2.02	10.92	2.87	10.70	3.09	11.13	2.66	11.96	1.83	11.22	2.57	10.34	3.45	11.77	2.02	11.75	2.04	11.50	2.29	10.98	2.81	11.14	2.65
9-64-bldg.	BDC-05-19	24.85	12.58	1.98	12.52	2.04	11.73	2.83	11.43	3.13	11.82	2.74	12.68	1.88	11.99	2.57	11.11	3.45	12.49	2.07	12.53	2.03	12.33	2.23	11.61	2.95	11.96	2.60
9-64-bldg.	BDC-05-20	24.80	12.41	1.93	12.44	1.90	11.66	2.68	11.34	3.00	11.74	2.60	12.62	1.72	11.92	2.42	11.08	3.26	12.37	1.97	12.42	1.92	12.25	2.09	11.64	2.70	11.92	2.42
9-64-bldg.	BDC-05-21	24.86	12.31	1.88	12.29	1.90	11.49	2.70	11.16	3.03	11.57	2.62	12.50	1.69	11.80	2.39	10.96	3.23	12.22	1.97	12.24	1.95	12.10	2.09	11.51	2.68	11.80	2.39
9-64-bldg.	BDC-05-22	25.07	12.21	1.95	12.22	1.94	11.45	2.71	11.16	3.00	11.59	2.57	12.42	1.74	11.73	2.43	10.89	3.27	12.19	1.97	12.29	1.87	12.04	2.12	11.47	2.69	11.74	2.42
9-64-bldg.	BDC-05-23	25.10	12.69	1.77	12.74	1.72	11.94	2.52	11.48	2.98	12.02	2																

DEVELOPMENTAL CENTER
CUMULATIVE WATER LEVEL MEASUREMENTS

Well Location / Bldg.	Well ID No.	Well Depth (ft)	August 2014		May 2014		February 2014		November 2013		August 2013		May 2013		February 2013		November 2012		May 2012		November 2011		July 2011		May 2011		November 2010	
			Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)
9-101-bldg.	MW-6A	24.25			12.10	2.70			12.82	1.98			12.92	1.88			12.82	1.98	12.61	2.19	12.99	1.81			12.50	2.30	12.70	2.10
9-101-bldg.	MW-6B	27.20			14.44	0.65			13.16	1.93			13.27	1.82			13.17	1.92	12.96	2.13	13.29	1.80			12.81	2.28	13.06	2.03
9-101-bldg.	MW-6C	40.55																										
9-101-bldg.	MW-8C	40.20																										
9-101-bldg.	MW-9A	21.30			12.07	2.67			12.88	1.86			12.80	1.94			12.83	1.91	12.54	2.20	13.03	1.71			12.53	2.21	12.65	2.09
9-101-bldg.	MW-9B	26.90																										
9-101-bldg.	MW-9C	38.80																										
9-101-bldg.	MW-9D	56.00																										
9-101-bldg.	MW-10A	20.20			11.98	2.71			12.81	1.88			12.72	1.97			12.77	1.92	12.55	2.14	12.97	1.72			12.47	2.22	12.64	2.05
9-101-bldg.	MW-10C	40.40			11.91	2.71			12.73	1.89			12.65	1.97			12.70	1.92	12.49	2.13	12.90	1.72			12.38	2.24	12.55	2.07
9-101-bldg.	MW-11A	19.90			12.10	2.78			12.89	1.99			12.84	2.04			12.19	2.69	12.65	2.23	13.03	1.85			12.62	2.26	12.59	2.29
9-101-bldg.	MW-12A	20.20			12.17	2.66			12.98	1.85			12.88	1.95			13.01	1.82	12.70	2.13	13.23	1.60			12.71	2.12	12.68	2.15
9-101-bldg.	MW-13A	19.37			11.62	2.52			12.37	1.77			12.36	1.78			12.27	1.87	12.20	1.94	12.66	1.48			12.11	2.03	12.08	2.06
9-101-bldg.	MW-13C	35.62			11.49	2.53			12.23	1.79			12.22	1.80			12.11	1.91	12.06	1.96	12.52	1.50			11.94	2.08	11.92	2.10
9-101-bldg.	MW-14A	19.00			11.85	2.52			12.59	1.78			12.65	1.72			12.53	1.84	12.46	1.91	12.71	1.66			12.16	2.21	12.22	2.15
9-101-bldg.	MW-14C	33.30			11.49	2.48			12.17	1.80			12.25	1.72			12.07	1.90	12.09	1.88	12.20	1.77			12.78	1.19	11.82	2.15
9-101-bldg.	MW-14E	82.10																										
9-101-bldg.	MW-15A	20.70			11.72	2.45			12.44	1.73			12.48	1.69			12.34	1.83	12.16	2.01	12.51	1.66			11.87	2.30	12.12	2.05
9-101-bldg.	MW-15C	34.35			11.71	2.46			12.42	1.75			12.54	1.63			12.27	1.90	12.36	1.81	12.44	1.73			11.49	2.68	12.00	2.17
9-101-bldg.	MW-15D	51.80																										
9-101-bldg.	MW-16A	20.55			12.22	2.77			13.06	1.93			13.07	1.92			13.02	1.97	12.81	2.18	13.19	1.80			12.67	2.32	12.84	2.15
9-101-bldg.	MW-16C	38.30			12.32	2.72			13.24	1.80			13.25	1.79			13.17	1.87	13.01	2.03	13.33	1.71			12.84	2.20	13.02	2.02
9-101-bldg.	MW-17A	19.00			12.11	2.69			12.90	1.90			12.98	1.82			12.78	2.02	12.26	2.54	12.73	2.07	12.84	1.96	12.45	2.35	12.65	2.15
9-101-bldg.	MW-17C	35.00																										
9-101-bldg.	MW-17D	52.50																										
9-101-bldg.	MW-18A	20.02			11.70	2.60			12.23	2.07			12.58	1.72			12.39	1.91	11.90	2.40	12.84	1.46	12.43	1.87	12.14	2.16	12.22	2.08
9-101-bldg.	MW-18C	34.55																										
9-101-bldg.	MW-18D	52.85																										
9-101-bldg.	MW-19A	16.86											10.74	1.49														
9-101-bldg.	MW-19C	33.92																										
9-101-bldg.	MW-19D	51.86																										
9-101-bldg.	MW-20A	19.34																										
9-101-bldg.	MW-20C	35.32			11.58	2.57			12.40	1.75			12.50	1.65			12.22	1.93	12.18	1.97	12.76	1.39			12.27	1.88	11.87	2.28
9-101-bldg.	MW-20D	50.15																										
9-101-bldg.	MW-22A	19.20			11.90	2.35			12.42	1.83			12.72	1.53			12.42	1.83	12.35	1.90	12.52	1.73			12.14	2.11	12.40	1.85
9-101-bldg.	MW-23A	19.50																										
9-101/9-50 bldg.	MW-21A	19.90			11.90	2.55			12.39	2.06			12.80	1.65			12.60	1.85	12.13	2.32	13.05	1.40	12.67	1.78	12.41	2.04	12.43	2.02
9-101/9-50 bldg.	MW-21C	34.00																										
9-64-bldg.	BDC-05-02	25.35	12.26	2.15	11.69	2.72	12.21	2.20	12.36	2.05	12.47	1.94	12.29	2.12	12.19	2.22	12.31	2.10	11.81	2.60	12.63	1.78	12.35	2.06	11.81	2.60	12.10	2.31
9-64-bldg.	BDC-05-03	25.47			11.76	2.65			12.43	1.98			12.36	2.05			12.36	2.05	11.95	2.46	12.77	1.64			11.94	2.47	12.21	2.20
9-64-bldg.	BDC-05-04	25.36			11.93	2.66			12.51	2.08			12.17	2.42			12.52	2.07	12.05	2.54	12.82	1.77			12.03	2.56	12.30	2.29
9-64-bldg.	BDC-05-05	24.18			11.47	2.97			12.15	2.29			12.13	2.31			13.40	1.04	11.65	2.79	12.50	1.94			11.61	2.83	11.95	2.49
9-64-bldg.	BDC-05-07	25.30			11.29	2.70			11.96	2.03			11.92	2.07			11.97	2.02	11.40	2.59	12.23	1.76			11.42	2.57	11.95	2.04
9-64-bldg.	BDC-05-08	26.75			12.07	2.60			12.72	1.95			12.64	2.03			12.64	2.03	12.28	2.39	13.02	1.65			12.20	2.47	12.49	2.18
9-64-bldg.	BDC-05-09	24.55			11.71	2.70			12.37	2.04			12.31	2.10			12.36	2.05	11.90	2.51	12.68	1.73	12.27	2.13	12.27	2.14		
9-64-bldg.	BDC-05-10	24.57			11.70	2.71			12.36	2.05			12.31	2.10			12.30	2.11	11.95	2.46	12.74	1.67			12.27	2.14		
9-64-bldg.	BDC-05-11	24.85			11.91	2.74			12.59	2.06			12.51	2.14			12.55	2.10	12.13	2.52	12.92	1.73	12.60	2.05	12.60	2.05		
9-64-bldg.	BDC-05-12	24.87	12.58	2.14	12.01	2.71	12.53	2.19	12.88	1.84	12.78	1.94	12.61	2.11	12.53	2.19	12.66	2.06	12.24	2.48	13.00	1.72	12.57	2.15	12.57	2.15		
9-64-bldg.	BDC-05-13	24.78			11.86	2.57			12.44	1.99			12.40	2.03			12.44	1.99	12.02	2.41	12.78	1.65	12.35	2.08	12.23	1.99		
9-64-bldg.	BDC-05-14	24.85			11.68	2.54			12.25	1.97			12.21	2.01			12.29	1.93	11.83	2.39	12.55	1.67	12.23	1.99	12.23	1.99		
9-64-bldg.	BDC-05-15	24.48			11.42	2.55			12.04	1.93			12.07	1.90			11.97	2.00	11.63	2.34	12.34	1.63	11.95	2.02	11.95	2.02		
9-64-bldg.	BDC-05-16	24.89	12.04	2.03	11.60	2.47	12.00	2.07	12.16	1.91	12.25	1.82	12.19	1.88	12.04	2.03	12.09	1.98	11.78	2.29	12.44	1.63	12.05	2.02	12.05	2.02		
9-64-bldg.	BDC-05-17	24.82			11.83	2.42			12.34	1.91			12.30	1.95			12.27	1.98	11.65	2.60	12.60	1.65	12.27	1.98	12.27	1.98		
9-64-bldg.	BDC-05-18	24.69	11.51	2.28	11.16	2.63	11.62	2.17	11.71	2.08	11.90	1.89	11.72	2.07	11.63	2.16	11.75	2.04	11.34	2.45	12.10	1.69	11.84	1.95	11.84	1.95		
9-64-bldg.	BDC-05-19	24.85	12.47	2.09	11.91	2.65	12.43	2.13	12.58	1.98	12.68	1.88	12.52	2.04	12.44	2.12	12.60	1.96	12.15	2.41	12.90	1.66	12.59	1.97	12.59	1.97		
9-64-bldg.	BDC-05-20	24.80	12.45	1.89	11.95	2.39	12.28	2.06	12.46	1.88	12.55	1.79	12.38	1.96	12.41	1.93	12.44	1.90	12.08	2.26	12.75	1.59	12.47	1.87	12.47	1.87		
9-64-bldg.	BDC-05-21	24.86	12.29	1.90	11																							

DEVELOPMENTAL CENTER
CUMULATIVE WATER LEVEL MEASUREMENTS

Well Location / Bldg.	Well ID No.	Well Depth (ft)	June 2000		November 1999	
			Depth to Water (ft)	Water Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)
9-101-bldg.	MW-6A	24.25				
9-101-bldg.	MW-6B	27.20	13.01	1.82	13.33	1.50
9-101-bldg.	MW-6C	40.55	13.15	1.84	13.50	1.49
9-101-bldg.	MW-8C	40.20	13.13	1.79	13.79	1.13
9-101-bldg.	MW-9A	21.30	12.78	1.86	13.67	0.97
9-101-bldg.	MW-9B	26.90	12.81	1.91	13.90	0.82
9-101-bldg.	MW-9C	38.80	12.75	1.93	13.60	1.08
9-101-bldg.	MW-9D	56.00	12.74	1.92	13.00	1.66
9-101-bldg.	MW-10A	20.20	12.84	1.85	13.50	1.19
9-101-bldg.	MW-10C	40.40	12.74	1.88	13.29	1.33
9-101-bldg.	MW-11A	19.90	12.91	1.97	13.20	1.68
9-101-bldg.	MW-12A	20.20	13.02	1.81	13.21	1.62
9-101-bldg.	MW-13A	19.37	12.50	1.64	12.33	1.81
9-101-bldg.	MW-13C	35.62	12.37	1.65	12.21	1.81
9-101-bldg.	MW-14A	19.00	12.70	1.77	12.78	1.69
9-101-bldg.	MW-14C	33.30	12.17	1.80	12.35	1.62
9-101-bldg.	MW-14E	82.10	7.45	6.73	7.90	6.28
9-101-bldg.	MW-15A	20.70	12.40	1.77	12.35	1.82
9-101-bldg.	MW-15C	34.35	12.36	1.81	12.49	1.68
9-101-bldg.	MW-15D	51.80	12.59	1.82	12.44	1.97
9-101-bldg.	MW-16A	20.55	13.19	1.80	13.34	1.65
9-101-bldg.	MW-16C	38.30	13.36	1.68	13.52	1.52
9-101-bldg.	MW-17A	19.00	13.05	1.75	13.03	1.77
9-101-bldg.	MW-17C	35.00	13.10	1.75	13.05	1.80
9-101-bldg.	MW-17D	52.50	13.25	1.62	12.82	2.05
9-101-bldg.	MW-18A	20.02	12.55	1.75	12.38	1.92
9-101-bldg.	MW-18C	34.55	12.83	1.80	12.61	2.02
9-101-bldg.	MW-18D	52.85	12.52	1.74	12.33	1.93
9-101-bldg.	MW-19A	16.86	10.68	1.55	10.42	1.81
9-101-bldg.	MW-19C	33.92	10.65	1.58	10.35	1.88
9-101-bldg.	MW-19D	51.86	10.71	1.52	11.05	1.18
9-101-bldg.	MW-20A	19.34	12.44	1.87	12.75	1.56
9-101-bldg.	MW-20C	35.32	12.16	1.99	12.44	1.71
9-101-bldg.	MW-20D	50.15	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	12.93	1.52	12.50	1.95
9-101/9-50 bldg.	MW-21C	34.00				
9-64-bldg.	BDC-05-02	25.35	12.37	2.00	12.03	2.34
9-64-bldg.	BDC-05-03	25.47	12.56	1.85	12.33	2.08
9-64-bldg.	BDC-05-04	25.36	12.65	1.94	12.33	2.26
9-64-bldg.	BDC-05-05	24.18	12.36	2.08	11.96	2.48
9-64-bldg.	BDC-05-07	25.30	12.08	1.91	11.72	2.27
9-64-bldg.	BDC-05-08	26.75				
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	25.07				
9-64-bldg.	BDC-05-23	25.10				
9-64-bldg.	BDC-05-24	24.73				
9-60 bldg.	BDC-101	18.42				
9-60 bldg.	BDC-102	18.83				
9-60 bldg.	BDC-103	18.51				
9-60 bldg.	BDC-104	18.90				
9-52-bldg.	952MW-1	17.40			10.97	2.51
9-52-bldg.	952MW-2	17.54			11.25	2.75
9-52-bldg.	952MW-3	17.95			11.28	2.48
9-52-bldg. (west)	MW-5	27.43			10.53	2.42
9-04-bldg. (north)	MW-2	26.98	10.19	2.48	9.53	3.14
9-04-bldg. (north)	MW-7	18.50				
9-04-bldg. (north)	MW-8	18.50				
9-04-bldg. (north)	MW-9	18.50				

Notes:
ft = feet
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.
BDC-05-02 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
NOVEMBER 2017***

GROUNDWATER SAMPLE COLLECTION FORMS

ANALYTICAL DATA

(DVD)