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5 September 2008

Mr. F. Thomas Lubozynski, P.E.
Waste Program Administrator
Solid and Hazardous Waste Program
Florida Department of Environmental Protection, Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Re: Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility, Osceola County, Florida
Permit No. SC49-0199726-004 and SO49-0199726-005

Dear Mr. Lubozynski:

Submitted herewith is the second Biennial Technical Report on Water Quality for the J.E.D. Solid Waste Management (JED) Facility located in Osceola County, Florida. This report is being submitted as required for compliance with Specific Condition 14 and the conditions contained within Exhibit I, Monitoring Plan Implementation Schedule (MPIS) of the above referenced permit. In accordance with the permit requirements, this biennial water quality report is being submitted within 30 days of the submittal of the 8th semi-annual water quality monitoring report, submitted to the Department on 8 August 2008. This report satisfies the biennial technical reporting compliance requirements as described in Exhibit I of the permit.

As presented in Section 12 of this report, Geosyntec requests that routine monitoring of the deep or "C" Zone groundwater monitoring wells be discontinued.

As noted in the permit, one hard copy of the report along with an electronic copy of the report on a CD is being submitted to FDEP. The CD with a PDF copy of the entire report is attached to the inside of the front cover of the report. If you have any questions or need additional information, please do not hesitate to contact the undersigned.

Sincerely,

Kirk Wills

Kirk Wills
Project Engineer

Attachments

Copy: Mike Kaiser, WSI

Submitted to:

Florida Department of Environmental Protection

SECOND BIENNIAL WATER QUALITY MONITORING REPORT
J.E.D. Solid Waste Management Facility
Osceola County, Florida

Prepared for

Waste Services of Florida, Inc.
1501 Omni Way
St. Cloud, Florida

Prepared by

Geosyntec consultants

14055 Riveredge Drive, Suite 300
Tampa, Florida 33637

Project Number FQ1512
September 2008

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APPENDICES

1. INTRODUCTION

1.1 Terms of Reference

On behalf of Omni Waste of Osceola County, LLC, Geosyntec Consultants (Geosyntec) has prepared this second biennial technical report on water quality (BTRWQ) for the J.E.D. Solid Waste Disposal (JED) Facility; previously known as Oak Hammock Disposal Facility (OHDF). This BTRWQ summarizes and interprets the water quality monitoring performed in accordance with the Water Quality Monitoring Plan (Plan) prepared as part of the JED facility permit application. The requirements for executing the Plan are presented in Exhibit I of the current permit (Permit Numbers SC49-0199726-004 and SO49-0199726-005) that authorizes the development of Phases 1 through 3 at the JED facility issued by the Florida Department of Environmental Protection (FDEP) on 22 March 2007. It is noted that these permits was modified by Permit Numbers SC49-0199726-006 and SO49-0199726-007, issued by FDEP on 4 April 2008.

This second BTRWQ was prepared by Mr. Sangho "Jay" Eun and Mr. Kirk E. Wills of Geosyntec Consultants (Geosyntec). In accordance with Geosyntec's peer review procedures, Mr. Donald Strickland, P.G. reviewed this report.

1.2 Overview

The Plan and Exhibit I describe a water quality monitoring program at the JED facility that has as its intent to: (i) measure and report groundwater and surface water conditions for the monitoring network; (ii) monitor the groundwater flow direction; (iii) monitor the groundwater and surface water quality on a semi-annual basis; and (iv) monitor leachate on an annual basis. To date, in addition to the initial background (baseline) events for Phase 1, and Phases 2 and 3, eight semi-annual water quality monitoring events have been completed. This report includes the summary and interpretation of water quality data collected from the following water quality monitoring events:

(i) initial background for Phase 1 performed in January 2004;
(ii) first semi-annual performed in July 2004;
(iii) second semi-annual performed in January 2005;
(iv) third semi-annual performed in July 2005;
(v) fourth semi-annual performed in February 2006;
(vi) fifth semi-annual performed in July 2006;
(vii) sixth semi-annual performed in February 2007;
(viii) initial background for Phases 2 and 3 performed in September 2007;
(ix) seventh semi-annual performed in November 2007; and

(x) eighth semi-annual performed in May 2008.

The first BTRWQ was submitted to FDEP in November 2006 after completion of the fourth semi-annual monitoring event. This is the second BTRWQ prepared for the JED facility and includes all the data collected from all of the previous events listed above. In accordance with the FDEP permit, this report has been submitted within thirty days after submission of the eighth semi-annual water quality report, which was submitted to FDEP on 8 August 2008.

1.3 Project Background

The JED facility is located in eastern Osceola County, Florida, west of highway U.S. 441, and approximately 6.5 miles south of Holopaw. The facility includes a Class I landfill which is linked to highway U.S. 441 by a 2.86-mile access road. The JED facility comprises a total of approximately 2,179 acres. The landfill footprint at build-out will be approximately 264 acres and consist of a total of 21 landfill cells that will provide available waste capacity for a period of approximately 30 years. The FDEP issued a permit to construct and operate the Phase 1 development of the JED facility in October 2003. Phase 1 development includes four landfill cells (Cells 1 through 4) located in the northern part of the landfill and covering approximately 53 acres. As part of Phase 1, forty-five (45) groundwater monitoring wells were installed in fifteen (15) clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. The baseline water quality report for the Phase 1 monitoring well network was submitted to FDEP in May 2004. All components of the Phase 1 development have been constructed.

The FDEP issued a permit to construct and operate Phases 2 and 3 at the JED facility in March 2007. The development of Phases 2 and 3 includes six cells (Cells 5 through 10) with a total footprint of approximately 72 acres. As part of Phases 2 and 3 development, and as approved by FDEP, six (6) existing Phase 1 monitoring wells (MW-14 A, B, and C, and MW-15 A, B, and C), and ten (10) piezometers were decommissioned. The wells and piezometers were decommissioned for construction of future cells, construction of a storm water retention basin located within Phases 2 and 3, and due to the proximity of piezometers to the new network wells installed. The decommissioning of the monitoring wells and piezometers was discussed in the Phase 2 and 3 baseline water quality report. For the development of Phases 2 and 3, twenty four (24) additional groundwater monitoring wells were installed in eight (8) well clusters (MW-16 through MW-23) around the perimeter of the Phases 2 and 3 development areas in September 2007. The baseline water quality report for the Phases 2 and 3 monitoring well network was submitted to FDEP in January 2008.

The FDEP issued a permit to construct and operate Phases 1 through 3 with vertical expansion at the JED facility in April 2008. The monitoring well networks for Phase 1, and Phases 2 and 3 remain unchanged. At the time of this report, waste placement within Cell 6 has not commenced. Cell 1 was completed in January 2004, Cell 4 was completed in May 2005, Cell 2 was completed in April 2006, Cell 3 was completed in October 2006, Cell 5 was completed in October 2007, and Cell 6 was completed in July 2008. For monitoring purposes, the JED facility was given the Water Assurance Compliance System (WACS) facility identification number 89544.

1.4 Objective of Report

The objective of this second BTRWQ is to summarize and interpret the water quality monitoring results and water level measurements collected at the JED facility, as required by Exhibit I of specific condition 14 of the FDEP permit.

1.5 Report Organization

To facilitate review, the remainder of this second BTRWQ is organized in accordance with the requirements presented in Item No. 24 of Exhibit I, which are as follows:

- Section 2 presents a summary of the monitoring well construction details;
- Section 3 describes the water quality monitoring sampling and analysis procedures;
- Section 4 presents tabular displays of the field measured parameters;
- Section 5 includes tabular displays of water quality data of detected monitoring parameters exceeding regulatory levels;
- Section 6 presents trend analyses and graphical displays of monitoring parameters exceeding regulatory levels;
- Section 7 addresses the requirement for comparison of wells completed in different hydrologic zones;
- Section 8 provides comparisons of water quality between background wells and detection wells;
- Section 9 presents correlations between related parameters such as total dissolved solids and specific conductance;

- Section 10 presents a discussion of erratic and/or poorly correlated data;
- Section 11 presents an interpretation of groundwater contour maps and an evaluation of groundwater flow rates including hydrographs for all monitoring wells; and
- Section 12 provides a discussion on the adequacy of water quality monitoring frequency and sampling locations based on site conditions and the available data.

2. MONITORING WELL DETAILS

2.1 Well Layout and Construction

For the Phase 1 development, forty five (45) groundwater monitoring wells were installed in fifteen (15) clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. Monitoring well clusters were located such that the spacing between well clusters was no greater than 500 ft, in accordance with the FDEP permit requirements. For development of Phases 2 and 3, twenty four (24) groundwater monitoring wells were installed in eight (8) clusters (MW-16 through MW-23) around the perimeter of the Phases 2 and 3 development areas. In accordance with the FDEP permit requirements, the monitoring well clusters were located such that the spacing between detection well clusters (MW-16 through MW-21) was approximately 500 feet, and the spacing between background well clusters (MW-22 and MW-23) was approximately 800 feet. Each monitoring well cluster consisted of three (3) groundwater monitoring wells installed (i) across the water table to monitor the upper limit of the surficial aquifer (identified as A-zone [shallow] wells); (ii) within the lower limit of the upper surficial aquifer above the intermediate clay layer (identified as C-zone [deep] wells); and (iii) at an intermediate depth between the shallow and deep wells (identified as B-zone [intermediate] wells).

A layout depicting the location of groundwater monitoring wells installed for Phases 1, 2 and 3, and the piezometers installed as part of the hydro-geologic investigation are shown on Figures 2-1A and 2-1B. As shown, groundwater monitoring well clusters MW-1 through MW-13 and MW-23 were installed along the top outer edge of the landfill perimeter berm. The ground surface at the location of the wells in the perimeter berm is at approximately Elevation 92 feet with respect to National Geodetic Vertical Datum of 1929 (NGVD, 1929). Groundwater monitoring well clusters MW-16 and MW-17 were installed along the outer edge of the landfill perimeter berm that serves as the initial storm water berm. The ground surface at these two well locations is at approximately Elevation 85 feet (NGVD, 1929). Groundwater monitoring well clusters MW-18 through MW-22 were installed along the interim Phase 3 storm water berm at the southern limit of the Phase 3 development at approximately Elevation 84 feet (NGVD, 1929). The location of each well (latitude and longitude, and elevation [NGVD, 1929]) was surveyed by professional land surveyors licensed in the State of Florida.

Wells were constructed with 2-in diameter schedule 40 PVC casing. The well screens were 10-ft in length with #6-slot (0.006-in.) machine slotted PVC screen. A 30/45 graded silica sand was placed around the screen to a height of 2 to 3 ft above the top of the screen. A seal of 30/65 graded fine silica sand was placed above the sand filter around the screen. The remaining annular space from the top of the fine sand filter seal

to the existing ground surface was grouted using a tremie pipe with a cement/bentonite mixture containing no more than 5 percent bentonite by dry weight. The PVC well casings were extended approximately 2.5 to 3 ft above the existing ground surface. Surface completion consisted of a protective steel or aluminum casing with a lockable cover set in a concrete pad. Each well was provided with a well cap, padlock, and an identification label. A summary of the monitoring well construction details are presented in Table 2-1.

Table 2-1 (1 of 3)

Summary of Monitoring Well Construction Details
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1A	28 03 48.55	81 05 59.88	19900	9-Dec-03	95.1	23.0	13.0	23.0	82.1	72.1	10.6	8.2
MW-2A	28 03 51.99	81 05 59.90	19903	10-Dec-03	95.2	22.6	12.6	22.6	82.6	72.6	10.3	8.9
MW-3A	28 03 55.34	81 05 59.91	19906	11-Dec-03	94.6	22.8	12.8	22.8	81.9	71.9	10.4	9.0
MW-4A	28 03 58.97	81 05 59.92	19909	12-Dec-03	95.5	23.1	13.1	23.1	82.4	72.4	10.8	9.4
MW-5A	28 04 02.92	81 05 59.95	19912	24-Nov-03	95.3	22.5	12.5	22.5	82.8	72.8	10.1	9.1
MW-6A	28 04 06.50	81 05 59.15	19915	25-Nov-03	94.7	22.6	12.6	22.6	82.2	72.2	10.6	8.6
MW-7A	28 04 07.13	81 05 54.78	19918	26-Nov-03	95.5	23.3	13.3	23.3	82.2	72.2	10.3	9.3
MW-8A	28 04 06.20	81 05 50.64	19921	5-Dec-03	94.7	22.5	12.5	22.5	82.2	72.2	10.2	8.6
MW-9A	28 04 04.34	81 05 46.60	19924	4-Dec-03	94.7	22.4	12.4	22.4	82.3	72.3	10.0	8.6
MW-10A	28 04 00.07	81 05 44.77	19927	3-Dec-03	96.3	22.1	12.1	22.1	84.1	74.1	9.8	7.6
MW-11A	28 03 55.43	81 05 43.27	19930	3-Dec-03	93.6	22.8	12.8	22.8	80.7	70.7	10.5	9.1
MW-12A	28 03 52.08	81 05 43.26	19933	2-Dec-03	95.1	23.0	13.0	23.0	82.1	72.1	10.7	9.3
MW-13A	28 03 48.67	81 05 43.25	19936	8-Dec-03	95.2	22.5	12.5	22.5	82.7	72.7	10.2	7.7
MW-14A	Monitoring Well Abandoned 10 July 2007											
MW-15A	Monitoring Well Abandoned 10 July 2007											
MW-16A	28 03 44.55	81 05 40.22	22342	21-Sep-07	88.69	18.63	8.1	18.1	80.6	70.6	6.1	5.1
MW-17A	28 03 42.38	81 05 35.42	22345	22-Sep-07	88.86	19.88	9.4	19.4	79.5	69.5	7.4	6.4
MW-18A	28 03 37.21	81 05 35.16	22348	11-Sep-07	87.56	17.70	7.2	17.2	80.4	70.4	5.2	4.2
MW-19A	28 03 33.40	81 05 39.60	22351	11-Sep-07	87.54	17.65	7.2	17.2	80.4	70.4	5.2	4.2
MW-20A	28 03 31.82	81 05 45.45	22354	19-Sep-07	87.12	17.93	7.4	17.4	79.7	69.7	5.4	4.4
MW-21A	28 03 32.10	81 05 52.48	22357	14-Sep-07	87.20	18.04	7.5	17.5	79.7	69.7	5.5	4.5
MW-22A	28 03 32.35	81 05 59.48	22360	14-Sep-07	87.71	18.00	7.5	17.5	80.2	70.2	5.5	4.5
MW-23A	28 03 42.41	81 05 59.79	22363	25-Sep-07	97.90	27.75	17.3	27.3	80.7	70.7	15.3	14.3

Table 2-1 (2 of 3)

Summary of Monitoring Well Construction Details
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J.E.D. Solid Waste Management Facility

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1B	28 03 48.59	81 05 59.89	19901	9-Dec-03	95.0	47.9	37.9	47.9	57.1	47.1	35.6	33.1
MW-2B	28 03 51.94	81 05 59.90	19904	10-Dec-03	95.2	48.3	38.3	48.3	56.9	46.9	36.0	34.6
MW-3B	28 03 55.31	81 05 59.91	19907	11-Dec-03	94.7	47.6	37.6	47.6	57.1	47.1	35.3	33.9
MW-4B	28 03 59.01	81 05 59.92	19910	12-Dec-03	95.2	47.4	37.4	47.4	57.8	47.8	35.1	33.5
MW-5B	28 04 02.88	81 05 59.95	19913	24-Nov-03	95.3	47.1	37.1	47.1	58.2	48.2	34.4	32.7
MW-6B	28 04 06.48	81 05 59.18	19916	25-Nov-03	94.6	47.4	37.4	47.4	57.2	47.2	34.9	33.5
MW-7B	28 04 07.13	81 05 54.81	19919	26-Nov-03	95.3	47.5	37.5	47.5	57.8	47.8	34.5	33.5
MW-8B	28 04 06.19	81 05 50.60	19922	5-Dec-03	94.6	49.6	39.6	49.6	55.0	45.0	37.1	35.6
MW-9B	28 04 04.31	81 05 46.56	19925	4-Dec-03	94.6	49.1	39.1	49.1	55.5	45.5	36.8	35.3
MW-10B	28 04 00.04	81 05 44.75	19928	3-Dec-03	96.2	48.3	38.3	48.3	58.0	48.0	35.9	33.9
MW-11B	28 03 55.40	81 05 43.27	19931	2-Dec-03	93.6	47.9	37.9	47.9	55.7	45.7	35.5	34.0
MW-12B	28 03 52.05	81 05 43.27	19934	1-Dec-03	95.0	49.0	39.0	49.0	56.1	46.1	36.6	35.1
MW-13B	28 03 48.64	81 05 43.24	19937	8-Dec-03	95.1	47.2	37.2	47.2	58.0	48.0	34.8	33.4
MW-14B	Monitoring Well Abandoned 10 July 2007											
MW-15B	Monitoring Well Abandoned 10 July 2007											
MW-16B	28 03 44.52	81 05 40.17	22343	21-Sep-07	88.73	38.09	27.6	37.6	61.1	51.1	25.6	24.6
MW-17B	28 03 42.35	81 05 35.36	22346	20-Sep-07	88.79	40.18	29.7	39.7	59.1	49.1	27.7	26.7
MW-18B	28 03 37.16	81 05 35.19	22349	11-Sep-07	87.43	37.80	27.3	37.3	60.1	50.1	25.3	24.3
MW-19B	28 03 33.38	81 05 39.66	22352	11-Sep-07	87.64	37.73	27.2	37.2	60.4	50.4	25.2	24.2
MW-20B	28 03 31.82	81 05 45.51	22355	19-Sep-07	87.27	37.76	27.3	37.3	60.0	50.0	25.3	24.3
MW-21B	28 03 32.09	81 05 52.55	22358	17-Sep-07	87.23	37.63	27.1	37.1	60.1	50.1	25.1	24.1
MW-22B	28 03 32.36	81 05 59.54	22361	14-Sep-07	87.69	37.96	27.5	37.5	60.2	50.2	25.5	24.5
MW-23B	28 03 42.46	81 05 59.79	22364	25-Sep-07	97.91	42.75	32.3	42.3	65.7	55.7	30.3	29.3

Table 2-1 (3 of 3)

Summary of Monitoring Well Construction Details
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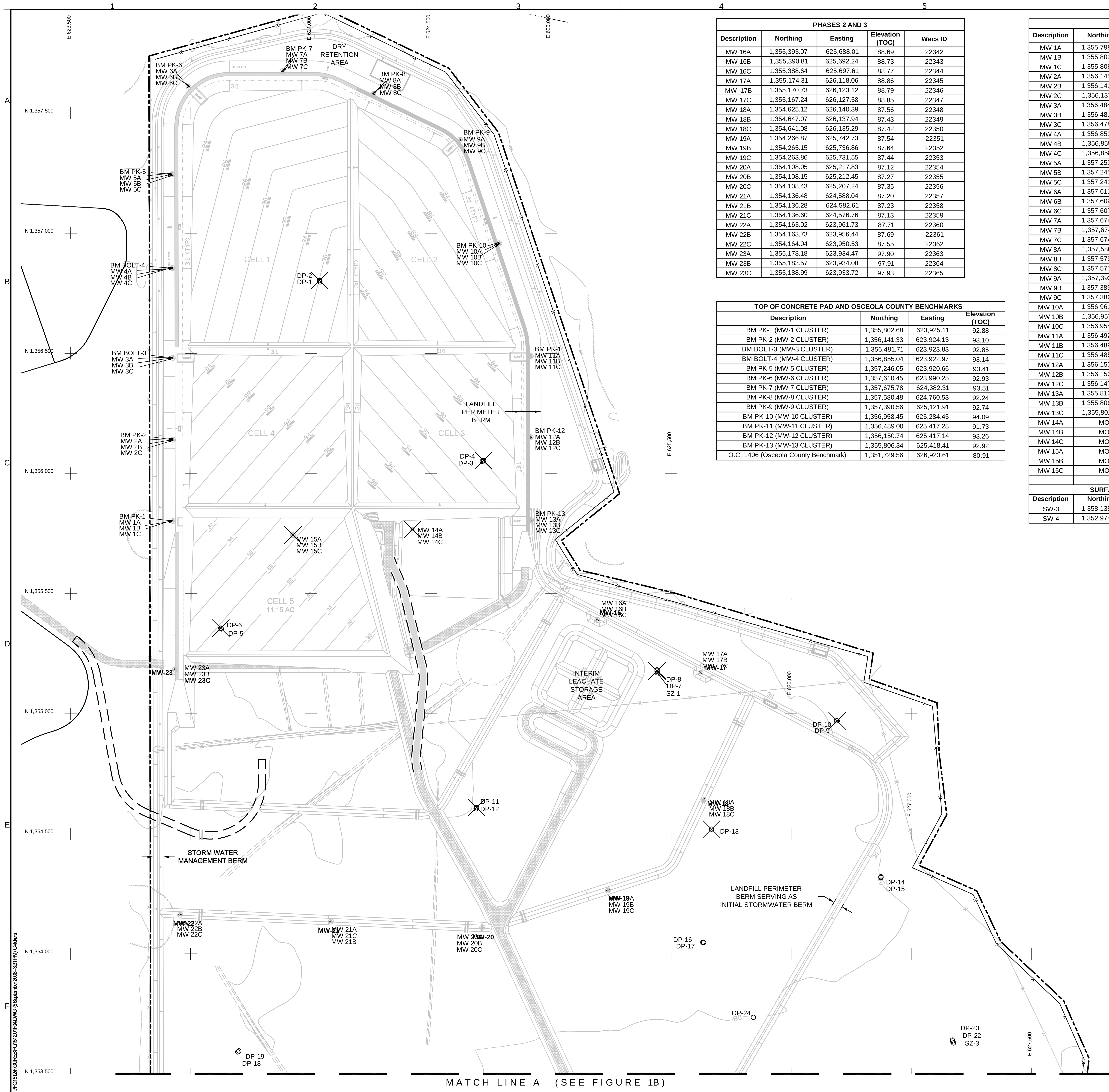
J.E.D. Solid Waste Management Facility

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1C	28 03 48.63	81 05 59.88	19902	9-Dec-03	95.2	75.2	65.2	75.2	30.0	20.0	62.9	61.4
MW-2C	28 03 51.90	81 05 59.89	19905	10-Dec-03	95.3	68.4	58.4	68.4	36.9	26.9	56.1	53.7
MW-3C	28 03 55.28	81 05 59.91	19908	11-Dec-03	94.7	68.7	58.7	68.7	36.0	26.0	56.3	54.8
MW-4C	28 03 59.04	81 05 59.92	19911	12-Dec-03	95.4	72.5	62.5	72.5	32.9	22.9	61.2	59.6
MW-5C	28 04 02.83	81 05 59.95	19914	24-Nov-03	95.4	73.0	63.0	73.0	32.4	22.4	60.7	58.7
MW-6C	28 04 06.46	81 05 59.22	19917	25-Nov-03	94.6	73.2	63.2	73.2	31.4	21.4	60.2	57.7
MW-7C	28 04 07.13	81 05 54.86	19920	25-Nov-03	94.9	73.3	63.3	73.3	31.6	21.6	60.3	59.3
MW-8C	28 04 06.17	81 05 50.55	19923	5-Dec-03	94.5	73.9	63.9	73.9	30.6	20.6	61.6	59.8
MW-9C	28 04 04.29	81 05 46.53	19926	4-Dec-03	94.5	73.8	63.8	73.8	30.8	20.8	61.4	59.4
MW-10C	28 04 00.01	81 05 44.74	19929	3-Dec-03	96.4	73.7	63.7	73.7	32.7	22.7	61.4	60.0
MW-11C	28 03 55.36	81 05 43.26	19932	2-Dec-03	93.7	73.4	63.4	73.4	30.3	20.3	61.0	59.6
MW-12C	28 03 52.01	81 05 43.26	19935	1-Dec-03	95.1	73.6	63.6	73.6	31.5	21.5	60.2	58.7
MW-13C	28 03 48.60	81 05 43.25	19938	8-Dec-03	95.0	73.0	63.0	73.0	32.1	22.1	60.7	58.2
MW-14C	Monitoring Well Abandoned 10 July 2007											
MW-15C	Monitoring Well Abandoned 10 July 2007											
MW-16C	28 03 44.50	81 05 40.11	22344	21-Sep-07	88.8	67.7	57.2	67.2	31.6	21.6	55.2	54.2
MW-17C	28 03 42.31	81 05 35.31	22347	20-Sep-07	88.9	67.3	56.8	66.8	32.0	22.0	54.8	53.8
MW-18C	28 03 37.10	81 05 35.22	22350	12-Sep-07	87.4	67.2	56.7	66.7	30.8	20.8	54.7	53.7
MW-19C	28 03 33.37	81 05 39.72	22353	10-Sep-07	87.4	66.7	56.2	66.2	31.2	21.2	54.2	53.2
MW-20C	28 03 31.82	81 05 45.57	22356	18-Sep-07	87.4	66.8	56.3	66.3	31.1	21.1	54.3	53.3
MW-21C	28 03 32.10	81 05 52.61	22359	17-Sep-07	87.1	62.6	52.1	62.1	35.1	25.1	50.1	49.1
MW-22B	28 03 32.36	81 05 59.60	22362	13-Sep-07	87.6	67.3	56.8	66.8	30.8	20.8	54.8	53.8
MW-23B	28 03 42.51	81 05 59.80	22365	24-Sep-07	97.9	67.1	56.6	66.6	41.4	31.4	54.6	53.6



PHASES 2 AND 3				
Description	Northing	Easting	Elevation (TOC)	Wacs ID
MW 16A	1,355,393.07	625,688.01	88.69	22342
MW 16B	1,355,390.81	625,692.24	88.73	22343
MW 16C	1,355,388.64	625,697.61	88.77	22344
MW 17A	1,355,174.31	626,118.06	88.86	22345
MW 17B	1,355,170.73	626,123.12	88.79	22346
MW 17C	1,355,167.24	626,127.58	88.85	22347
MW 18A	1,354,625.12	626,140.39	87.56	22348
MW 18B	1,354,647.07	626,137.94	87.43	22349
MW 18C	1,354,641.08	626,135.29	87.42	22350
MW 19A	1,354,266.87	625,742.73	87.54	22351
MW 19B	1,354,265.15	625,736.86	87.64	22352
MW 19C	1,354,263.86	625,731.55	87.44	22353
MW 20A	1,354,108.05	625,217.83	87.12	22354
MW 20B	1,354,108.15	625,212.45	87.27	22355
MW 20C	1,354,108.43	625,207.24	87.35	22356
MW 21A	1,354,136.48	624,588.04	87.20	22357
MW 21B	1,354,136.28	624,582.61	87.23	22358
MW 21C	1,354,136.60	624,576.76	87.13	22359
MW 22A	1,354,163.02	623,961.73	87.71	22360
MW 22B	1,354,163.73	623,956.44	87.69	22361
MW 22C	1,354,164.04	623,950.53	87.55	22362
MW 23A	1,355,178.18	623,934.47	97.90	22363
MW 23B	1,355,183.57	623,934.08	97.91	22364
MW 23C	1,355,188.99	623,933.72	97.93	22365

TOP OF CONCRETE PAD AND OSCEOLA COUNTY BENCHMARKS			
Description	Northing	Easting	Elevation (TOC)
BM PK-1 (MW-1 CLUSTER)	1,355,802.68	623,925.11	92.88
BM PK-2 (MW-2 CLUSTER)	1,356,141.33	623,924.13	93.10
BM BOLT-3 (MW-3 CLUSTER)	1,356,481.71	623,923.83	92.85
BM BOLT-4 (MW-4 CLUSTER)	1,356,855.04	623,922.97	93.14
BM PK-5 (MW-5 CLUSTER)	1,357,246.05	623,920.66	93.41
BM PK-6 (MW-6 CLUSTER)	1,357,610.45	623,990.25	92.93
BM PK-7 (MW-7 CLUSTER)	1,357,675.78	624,382.31	93.51
BM PK-8 (MW-8 CLUSTER)	1,357,580.48	624,760.53	92.24
BM PK-9 (MW-9 CLUSTER)	1,357,390.56	625,121.91	92.74
BM PK-10 (MW-10 CLUSTER)	1,356,958.45	625,284.45	94.09
BM PK-11 (MW-11 CLUSTER)	1,356,489.00	625,417.28	91.73
BM PK-12 (MW-12 CLUSTER)	1,356,150.74	625,417.14	93.26
BM PK-13 (MW-13 CLUSTER)	1,355,806.34	625,418.41	92.92
O.C. 1406 (Osceola County Benchmark)	1,351,729.56	626,923.61	80.91

PHASE I				
Description	Northing	Easting	Elevation (TOC)	Wacs ID
MW 1A	1,355,798.49	623,926.46	95.12	19900
MW 1B	1,355,802.59	623,926.20	95.00	19901
MW 1C	1,355,806.37	623,926.66	95.18	19902
MW 2A	1,356,145.78	623,925.58	95.21	19903
MW 2B	1,356,141.26	623,925.71	95.17	19904
MW 2C	1,356,137.51	623,925.87	95.32	19905
MW 3A	1,356,484.95	623,925.16	94.64	19906
MW 3B	1,356,481.57	623,925.19	94.68	19907
MW 3C	1,356,478.10	623,925.17	94.66	19908
MW 4A	1,356,851.54	623,924.06	95.48	19909
MW 4B	1,356,855.01	623,924.07	95.18	19910
MW 4C	1,356,858.61	623,924.22	95.39	19911
MW 5A	1,357,250.20	623,921.86	95.32	19912
MW 5B	1,357,245.88	623,922.02	95.30	19913
MW 5C	1,357,241.29	623,922.25	95.39	19914
MW 6A	1,357,611.54	623,994.19	94.72	19915
MW 6B	1,357,609.34	623,990.94	94.60	19916
MW 6C	1,357,607.07	623,987.86	94.58	19917
MW 7A	1,357,674.42	624,385.52	95.48	19918
MW 7B	1,357,674.51	624,382.31	95.27	19919
MW 7C	1,357,674.43	624,378.32	94.93	19920
MW 8A	1,357,580.31	624,756.36	94.67	19921
MW 8B	1,357,579.19	624,759.97	94.58	19922
MW 8C	1,357,577.70	624,764.25	94.50	19923
MW 9A	1,357,392.41	625,117.91	94.66	19924
MW 9B	1,357,389.45	625,121.09	94.63	19925
MW 9C	1,357,386.99	625,123.87	94.54	19926
MW 10A	1,356,961.53	625,281.78	96.25	19927
MW 10B	1,356,957.91	625,283.13	96.23	19928
MW 10C	1,356,954.76	625,284.09	96.36	19929
MW 11A	1,356,492.64	625,415.70	93.56	19930
MW 11B	1,356,489.00	625,415.84	93.59	19931
MW 11C	1,356,485.39	625,415.96	93.65	19932
MW 12A	1,356,153.77	625,415.64	95.10	19933
MW 12B	1,356,150.78	625,415.56	95.01	19934
MW 12C	1,356,147.27	625,415.63	95.10	19935
MW 13A	1,355,810.14	625,416.90	95.19	19936
MW 13B	1,355,806.36	625,417.25	95.12	19937
MW 13C	1,355,802.61	625,417.08	95.04	19938
MW 14A	MONITONING WELL ABANDONED 10 JULY 2007			
MW 14B	MONITONING WELL ABANDONED 10 JULY 2007			
MW 14C	MONITONING WELL ABANDONED 10 JULY 2007			
MW 15A	MONITONING WELL ABANDONED 10 JULY 2007			
MW 15B	MONITONING WELL ABANDONED 10 JULY 2007			
MW 15C	MONITONING WELL ABANDONED 10 JULY 2007			

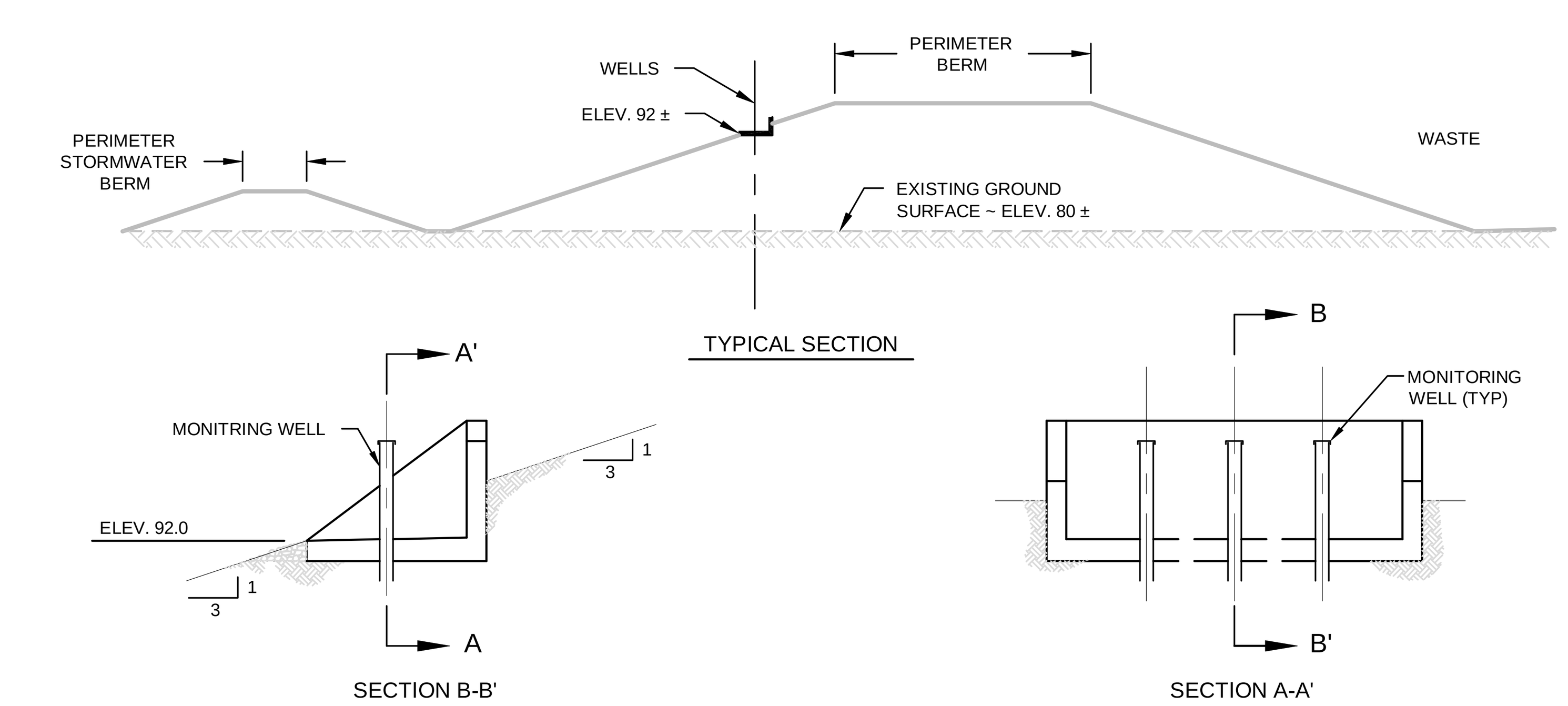
SURFACE WATER MONITORING SITES				
Description	Northing	Easting	Elevation	Wacs ID
SW-3	1,358,138.00	623,814.00	-	19945
SW-4	1,352,974.10	631,682.40	-	19946

LEGEND

- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF INTERMITTENT STREAM
- 80 — EXISTING GROUND ELEVATION (FEET) (SEE NOTE 4)
- EXISTING FENCE
- WB1 — WETLAND BOUNDARY BY PHOTO INTERPRETATION BY BRA
- WB2 — WETLAND BOUNDARY PER BRA FLAGGING AND SURVEY BY JOHNSTON SURVEYING INC.
- STORMWATER MANAGEMENT POND
- BORROW AREA BOUNDARY
- PROPOSED FENCE
- DP-2 — PIEZOMETER / MONITORING WELL LOCATION
- DP-2 — PIEZOMETER / MONITORING WELL LOCATION (REMOVED)
- SZ-1 — SHELL ZONE WELL LOCATION
- BM PK-1 — GROUNDWATER MONITORING WELL TOP OF CONCRETE PAD BENCHMARK
- MW-1A, MW-1B, MW-1C — EXISTING GROUNDWATER MONITORING WELL CLUSTER
- MW-21 — GROUNDWATER MONITORING WELL CLUSTER INSTALLED

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REPRESENT FLORIDA STATE PLANE EAST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83).
2. THE ELEVATIONS SHOWN REPRESENT NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29)(FEET).
3. PROPOSED GRADING IS SHOWN IN THE BACKGROUND TO ILLUSTRATE MONITORING WELL LOCATIONS RELATIVE TO LANDFILL.



TYPICAL MONITORING WELL SURFACE COMPLETION DETAIL FOR WELLS INSTALLED ON LANDFILL PERIMETER BERM

NOT TO SCALE

REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
14055 RIVEREDGE DRIVE, SUITE 300
TAMPA, FLORIDA 33637 USA
PH: 813.558.0990 - FX: 813.558.9726
AUTHORIZATION NUMBER 4321

WSI Waste Services Of Florida Inc.
1501 OMNI WAY
ST. CLOUD, FLORIDA 34773
PH: 407.841.3720 - FX: 407.841.3730

TITLE:
GROUNDWATER MONITORING NETWORK

PROJECT:
SECOND BIENNIAL TECHNICAL REPORT ON WATER QUALITY

SITE:
J.E.D. SOLID WASTE DISPOSAL FACILITY

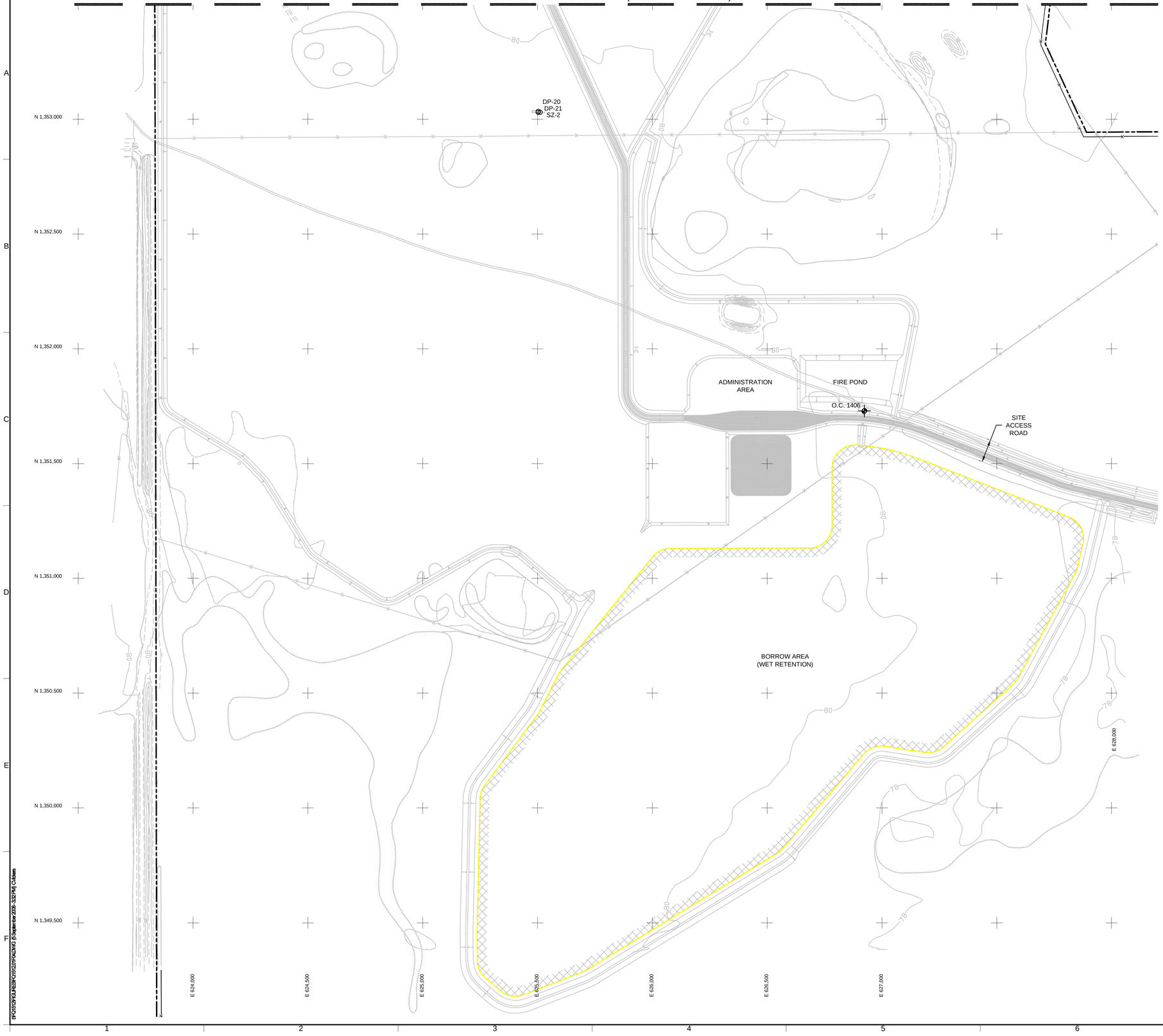
SIGNATURE

DATE

DON STRICKLAND - LICENSE NO. 1565

DESIGN BY:	AG	DATE:	SEPTEMBER 2008
DRAWN BY:	JWO	PROJECT NO.:	FQ1512
CHECKED BY:	JE	FILE:	FQ1512.01F04
REVIEWED BY:	KEW	FIGURE NO.:	2-1A
APPROVED BY:	DS		

MATCH LINE A (SEE FIGURE 1A)



NORTH

0 100' 200' 400'

SCALE: 1" = 200'

LEGEND

- PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF INTERMITTENT STREAM
- EXISTING GROUND ELEVATION (FEET)
- EXISTING FENCE
- WETLAND BOUNDARY BY PHOTO INTERPRETATION BY BRA
- WETLAND BOUNDARY PER BRA FLAGGING AND SURVEY BY JOHNSTON SURVEYING INC.
- STORMWATER MANAGEMENT POND
- BORROW AREA BOUNDARY
- PROPOSED FENCE
- DP-2 — PIEZOMETER / MONITORING WELL LOCATION
- SZ-2 — SHELL ZONE WELL LOCATION
- O.C. 1406 BM PK-1 — SURVEY BENCHMARK

NOTES:

1. NORTHING AND EASTING COORDINATES SHOWN REPRESENT FLORIDA STATE PLANE EAST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83).
2. THE ELEVATIONS SHOWN REPRESENT NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29)(FEET).
3. PROPOSED GRADING IS SHOWN IN THE BACKGROUND TO ILLUSTRATE MONITORING WELL LOCATIONS RELATIVE TO LAYOUT.

REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
14055 RIVEREDGE DRIVE, SUITE 300
TAMPA, FLORIDA 33637 USA
PH: 813.558.0990 - FX: 813.558.9726
AUTHORIZATION NUMBER 4321

WSI Waste Services Of Florida, Inc.
1501 OMNI WAY
ST. CLOUD, FLORIDA 34773
PH: 407.841.3720 - FX: 407.841.3730

TITLE: GROUNDWATER MONITORING NETWORK

PROJECT: SECOND BIENNIAL TECHNICAL REPORT ON WATER QUALITY

SITE: J.E.D. SOLID WASTE DISPOSAL FACILITY

DESIGN BY:	AG	DATE:	SEPTEMBER 2008
DRAWN BY:	JWO	PROJECT NO.:	FQ1512
CHECKED BY:	JE	FILE:	FQ1512.01F04
REVIEWED BY:	KEW	FIGURE NO.:	2-1B
APPROVED BY:	DS		

SIGNATURE

DATE

DON STRICKLAND - LICENSE NO. 1565

3. WATER QUALITY MONITORING

3.1 Groundwater Sampling

3.1.1 Sampling Locations and Procedures

All forty five (45) monitoring wells installed as part of the Phase 1 monitoring plan were sampled during the first through sixth semi-annual monitoring events. During the seventh and eighth monitoring events, thirty three (33) monitoring wells installed as part of the Phase 1 development and all twenty four (24) monitoring wells installed as part of the Phase 2 and 3 development were sampled in accordance with the current monitoring plan implementation schedule (MPIS). Low-flow sampling techniques were used for groundwater sample collection. Except for the turbidity considerations as described in Section 6.2.14, all groundwater sampling was performed in accordance with the current FDEP Standard Operating Procedures (SOP's, February 2004) for groundwater sampling. Additionally for quality control (QC) purposes, sample duplicates and equipment blanks were collected and analyzed for each event.

In general, peristaltic pumps were used to purge and sample the majority of the A-zone (shallow), some of B-zone (intermediate), and some of the C-zone (deep) groundwater monitoring wells. A stainless steel submersible pump was used to purge and sample the remainder of the wells, primarily the B-zone (intermediate) and C-zone (deep) groundwater wells. New tubing (silicone and/or polyethylene) was used at each monitoring well.

During the purging process, a multi-parameter water quality meter with flow-through cell was used to monitor the following field parameters: pH; temperature; specific conductance; Eh; and dissolved oxygen. Turbidity levels were measured using a separate turbidity meter. Field parameters were recorded on sample collection forms. When the field parameters stabilized within the acceptable tolerances required by the FDEP SOP, well purging was considered complete and groundwater samples were collected. For wells where the turbidity was not less than 20 NTU, turbidity stability was established by purging at least 5 well volumes and observing variations in the turbidity measurements. For these wells, once the turbidity had stabilized and all other parameters conformed to the guidance set forth in the FDEP SOP's, samples were collected. A non-filtered and field-filtered (1-micron) metals sample was collected for each monitoring well where turbidity measurements exceeded the 20 NTU level.

For monitoring wells where peristaltic pumps were used, volatile organic compound (VOC) sample vials were filled by removing the down well sample tubing, disconnecting the tubing from the water quality meter flow through cell, and reversing the flow direction on the peristaltic pump. For the monitoring wells that were purged and sampled

with a submersible pump, all sample aliquots were filled directly from the down-well tubing.

The calibration of the water quality monitoring instruments was checked on a daily basis, and re-calibrated as necessary. Samples were placed in coolers and packed with bagged ice for transport to the analytical laboratory. Chain-of-Custody forms were completed and accompanied the samples to the analytical laboratory. Trip blank samples accompanied all sample coolers with VOC samples. Temperature blanks were packed in each sample cooler. Security seals were affixed to every cooler shipped.

3.1.2 Sample Analyses

Four different analytical laboratories were used for the water quality monitoring events included in this report. Environmental Conservation Laboratories, Inc (ENCO), Orlando, Florida performed the laboratory analyses for the initial (baseline) event for Phase 1 development. Severn Trent Laboratories (STL), Tampa, Florida performed the laboratory analyses for the first and second semi-annual events. Accutest Laboratories Southeast Inc., (Accutest) Orlando, Florida performed the laboratory analyses for the third semi-annual event. Columbia Analytical Services, Inc. (CAS) Jacksonville, Florida performed the laboratory analyses for the fourth through eighth semi-annual events. All laboratory analyses were performed in accordance with the National Environmental Laboratory Accreditation Conference (NELAC) standards. Each laboratory holds certification from the Florida Department of Health (FDOH) for the analytical test methods used for this project and are all certified in the State of Florida for analysis of environmental samples.

For the initial background (baseline) monitoring events for Phase 1, and Phases 2 and 3, groundwater samples were analyzed for total ammonia as nitrogen (N), chlorides, nitrate, total dissolved solids (TDS), iron, mercury, sodium, and the 40 CFR, Part 258 Appendix I and Appendix II parameters. The same analyses were performed for each of the semi-annual monitoring events, with the exception of the Appendix II parameters, which are not required after the baseline event. Other required parameters (i.e., pH; temperature; specific conductance; turbidity; Eh; and dissolved oxygen) were field measured during collection of the groundwater samples during each monitoring event.

Utilizing four different laboratories created disparities with relation to the practical quantitative limit (PQL) for each constituent analyzed. A review of the tables contained in Section 5 shows that each laboratory was able to achieve different PQLs for the constituents analyzed.

3.2 Surface Water Sampling

3.2.1 Sampling Locations and Procedures

Two (2) surface water sampling locations established during the initial hydrogeological investigation were selected by FDEP for routine water quality monitoring. As stated in the Permit, surface water samples are only to be collected when there is flow in Bull Creek. The latitude and longitude of the two surface water monitoring locations (SW-3 and SW-4) is included in Table 3-1.

Collection of surface water samples commenced at the downstream monitoring location (SW-3) followed by the upstream monitoring location (SW-4). Bull Creek was visually observed to be flowing at the time of each sampling event. Surface water samples were collected from the approximate center of Bull Creek. A multi-parameter water quality meter was used to measure field parameters including temperature, pH, dissolved oxygen, specific conductance, and Eh at each sampling location. Turbidity levels were measured using a separate turbidity meter. Surface water samples were collected in accordance with FDEP surface water sampling SOP's.

3.2.2 Sample Analyses

Surface water samples were analyzed by the same laboratories as described in Section 3.1.2. For the initial background (baseline) and all semi-annual monitoring events, surface water samples were analyzed for unionized ammonia, total hardness as $CaCO_3$, total organic carbon, chloride, nitrate, total dissolved solids (TDS), total suspended solids (TSS), biological oxygen demand (BOD), chemical oxygen demand (COD), total nitrogen as N, nitrate as N, total phosphates as P, chlorophyll-A, iron, mercury, fecal coliform, and the 40 CFR, Part 258 Appendix I parameters. It is noted that the fecal coliform test was not required by FDEP until the seventh semi-annual monitoring event (November 2007). Other required parameters (pH; temperature; specific conductance; turbidity; Eh; and dissolved oxygen) were measured in the field during collection of the surface water samples.

3.3 Leachate Sampling

3.3.1 Sampling Locations and Procedures

In accordance with the permit requirements, a leachate sample is to be collected from each disposal cell on an annual basis. To date, Cells 1 trough 6 have been constructed. Cells 1 through 5 have received waste. Currently, Cell 6 has not been certified for the placement of waste. A leachate sample was collected from Cell 1 for year 2004 as part of the first semi-annual water quality monitoring event performed in July 2004. A leachate

sample was collected from Cell 1 for year 2005 as part of the third semi-annual water quality monitoring event performed in July 2005. Leachate samples from Cells 1, 2, and 4 were collected for year 2006 as part of the fifth semi-annual sampling event performed in July 2006. Leachate from Cells 1, 2, 3, and 4 were collected for year 2007 as part of the fifth semi-annual sampling event performed in November 2007. It should be noted that a leachate sample was collected from each cell that had been constructed and had received waste at the time of sampling to satisfy the annual leachate sample requirement. Leachate samples for year 2008 will be collected in November 2008 and will be collected from Cells 1 through 5. The latitude and longitude of the leachate monitoring sites (L-1 through L-4) is included in Table 3-2.

The leachate samples were collected from primary leachate sump riser using a peristaltic pump. An multi-parameter water quality meter was used to measure field parameters including temperature, pH, dissolved oxygen, specific conductance, and Eh. A separate meter was used to measure turbidity. The leachate samples were collected in accordance with FDEP SOP.

3.3.2 Sample Analyses

Leachate samples were analyzed by the same laboratories as described in Section 3.1.2. The laboratory analyses for leachate samples collected from each disposal cell were performed in accordance with the NELAC standards for total ammonia-N, bicarbonate, chlorides, nitrate, total dissolved solids (TDS), iron, mercury, sodium and the 40 CFR, Part 258 Appendix II parameters. Other required parameters (i.e., pH; temperature; specific conductance; turbidity; Eh; and dissolved oxygen) were field measured during collection of the leachate samples.

Table 3-1

Surface Water Monitoring Geographic Locations
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Surface Water Monitoring Location	WACS ID	Latitude (NAD 1983)	Longitude (NAD 1983)
SW - 3	19945	28 03 20.63973	81 04 33.16311
SW - 4	19946	28 04 11.71727	81 06 01.16679

Table 3-2

Leachate Sampling Sites Geographic Locations
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Leachate Sampling Site Location	WACS ID	Latitude (NAD 1983)	Longitude (NAD 1983)
L - 1	19947	28 04 06.29227	81 05 40.08305
L - 2	19948	28 04 04.14722	81 05 46.75141
L - 3	19949	28 03 55.34894	81 05 43.54716
L - 4	19950	28 03 55.33060	81 05 59.59289

4. FIELD-MEASURED PARAMETERS

4.1 Overview

As discussed previously in Section 3 of this report, field parameters including, pH, turbidity, specific conductance, temperature, Eh, and dissolved oxygen were measured and recorded for each water quality (groundwater, surface water, and leachate) sample collected during the various monitoring events.

4.2 Groundwater

A summary of the final field-measured parameters for groundwater for all eight monitoring events is presented in Tables 4-1 through 4-5. Field-measured parameters exceeding or not within the acceptable levels of the secondary drinking water standard (SDWS) for that parameter have been highlighted in orange. The two field-measured parameters with SDWS criteria are pH (between 6.5 and 8.5 standard units) and turbidity (< 20 NTU). The field-measured parameters exceeding the SDWS are discussed in Section 6 of this report.

4.3 Surface Water

A summary of the field-measured parameters collected at the two surface water locations during the eight monitoring events are presented in Table 4-6. Field-measured parameters exceeding or not within the acceptable levels of the Class III surface water standards for that parameter have been highlighted in orange. Table 4-6 also includes the Class III standard criteria for each field measured parameter. The field-measured parameters exceeding the Class III surface water standards are discussed in Section 6 of this report.

4.3 Leachate

A summary of the field-measured parameters for leachate samples collected on an annual basis is presented in Table 4-7. As mentioned previously in Section 3.3.1, leachate samples have been collected from Cells 1, 2, 3, and 4 during the past eight semi-annual water quality monitoring events.

Table 4-1
Groundwater Field Measured Parameter - pH
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (pH)	1st Event Jul-04 (pH)	2nd Event Jan-05 (pH)	3rd Event Jul-05 (pH)	4th Event Feb-06 (pH)	5th Event Jul-06 (pH)	6th Event Feb-07 (pH)	PH 2&3 Baseline Sep-07 (pH)	7th Event Nov-07 (pH)	8th Event May-08 (pH)
MW-1A	B	5.01	3.51	4.95	5.03	5.03	4.68	4.67	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	4.68	2.69	4.60	4.82	4.82	4.72	4.80		4.77	4.94
MW-3A	B	5.83	3.79	5.05	5.32	5.32	4.91	4.85		4.48	5.01
MW-4A	B	4.61	4.87	5.07	5.08	5.08	5.02	4.62		4.75	5.12
MW-5A	B	4.55	4.40	4.55	4.71	4.71	4.45	4.43		4.19	4.49
MW-6A	B	5.43	5.07	5.07	5.06	5.06	4.92	4.51		NA	NA
MW-7A	D	5.51	4.78	5.29	4.78	4.78	4.68	4.59		4.36	5.03
MW-8A	D	5.71	4.71	4.95	4.75	4.75	4.76	4.45		4.16	4.82
MW-9A	D	5.77	3.59	4.86	4.92	4.92	4.51	4.68		4.29	4.64
MW-10A	D	5.60	4.66	4.95	4.95	4.95	4.69	4.57		4.40	4.33
MW-11A	D	5.42	4.58	5.48	5.44	5.44	5.61	5.05		5.20	6.30
MW-12A	D	4.55	4.32	4.61	4.44	4.44	4.37	4.18		4.54	6.16
MW-13A	D	6.18	4.79	5.17	5.36	5.36	5.31	5.07		5.10	5.46
MW-14A	D	5.24	4.24	5.03	5.12	5.12	5.06	5.01		NA	NA
MW-15A	D	5.55	4.27	5.15	4.96	4.96	4.79	4.74		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							5.56	4.81	5.13
MW-17A	D								5.04	4.77	5.00
MW-18A	D								5.06	4.84	4.55
MW-19A	D								5.27	4.71	5.61
MW-20A	D								4.71	4.97	4.84
MW-21A	D								5.25	4.43	4.87
MW-22A	B								5.15	4.66	4.72
MW-23A	B								5.50	5.29	4.93
MW-1B	B	4.83	5.01	4.74	4.79	4.79	4.85	4.69	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	4.93	4.73	4.41	4.88	4.88	4.79	4.48		4.60	4.43
MW-3B	B	5.24	5.05	4.93	5.16	5.16	4.99	4.56		4.70	5.46
MW-4B	B	4.52	4.69	4.70	4.93	4.93	4.76	4.76		4.81	4.41
MW-5B	B	4.10	4.53	4.43	4.64	4.64	4.49	4.07		4.13	4.51
MW-6B	B	5.49	5.27	5.12	5.10	5.10	5.00	4.53		NA	NA
MW-7B	D	5.10	5.23	5.12	5.04	5.04	4.80	4.88		4.50	4.63
MW-8B	D	4.97	3.34	5.02	5.10	5.10	4.68	4.97		4.63	4.78
MW-9B	D	5.15	4.91	5.05	5.10	5.10	4.87	5.02		4.82	4.70
MW-10B	D	5.05	4.56	4.67	4.96	4.96	4.70	5.14		5.57	5.09
MW-11B	D	5.49	5.47	5.13	5.09	5.09	5.02	4.65		4.82	6.01
MW-12B	D	5.25	5.29	5.23	5.19	5.19	5.42	4.69		4.46	5.76
MW-13B	D	5.34	4.69	4.80	5.00	5.00	4.62	4.61		4.70	5.38
MW-14B	D	4.73	4.77	4.58	5.04	5.04	5.22	4.87		NA	NA
MW-15B	D	4.38	3.21	4.86	4.94	4.94	4.44	4.50		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							4.83	5.06	5.03
MW-17B	D								4.99	5.07	5.02
MW-18B	D								5.02	4.94	4.96
MW-19B	D								4.67	4.96	4.77
MW-20B	D								4.97	5.09	5.11
MW-21B	D								4.85	5.04	4.96
MW-22B	B								4.88	5.02	4.60
MW-23B	B								4.54	4.76	4.36
MW-1C	B	4.86	5.20	5.33	5.41	5.41	5.24	5.11	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	4.85	5.05	4.94	5.21	5.21	5.05	4.94		5.32	4.87
MW-3C	B	5.09	5.23	4.97	5.31	5.31	5.25	5.13		5.03	5.54
MW-4C	B	5.52	5.56	5.44	5.61	5.61	5.54	5.20		5.92	6.09
MW-5C	B	5.37	5.04	4.81	5.13	5.13	5.01	4.65		4.83	5.22
MW-6C	B	4.60	4.90	4.93	5.02	5.02	4.88	4.88		NA	NA
MW-7C	D	5.92	5.29	5.19	5.19	5.19	5.13	5.14		4.92	5.53
MW-8C	D	5.44	4.90	4.68	5.05	5.05	4.80	4.55		4.64	4.66
MW-9C	D	5.15	4.96	4.79	5.05	5.05	4.78	4.99		5.02	5.33
MW-10C	D	4.84	4.84	5.06	5.15	5.15	5.04	4.72		4.99	4.51
MW-11C	D	5.79	5.26	5.42	5.51	5.51	5.79	4.98		5.08	5.53
MW-12C	D	4.70	4.71	4.83	5.01	5.01	5.32	4.55		4.23	5.13
MW-13C	D	5.07	4.72	4.84	5.02	5.02	4.87	4.66		6.03	5.18
MW-14C	D	5.24	5.35	5.34	5.20	5.20	5.68	5.11		NA	NA
MW-15C	D	5.56	5.37	5.12	5.42	5.42	5.29	5.45		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							5.01	5.15	5.04
MW-17C	D								5.35	5.45	5.31
MW-18C	D								5.34	5.80	5.36
MW-19C	D								5.30	5.25	5.21
MW-20C	D								5.14	5.22	5.10
MW-21C	D								5.20	5.10	5.33
MW-22C	B								6.84	6.68	6.82
MW-23C	B								5.54	5.83	5.37

Notes:
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 4-2
Groundwater Field Measured Parameter - Temperature
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Well ID	Type	PH 1 Baseline Jan-04 (°C)	1st Event Jul-04 (°C)	2nd Event Jan-05 (°C)	3rd Event Jul-05 (°C)	4th Event Feb-06 (°C)	5th Event Jul-06 (°C)	6th Event Feb-07 (°C)	PH 2&3 Baseline Sep-07 (°C)	7th Event Nov-07 (°C)	8th Event May-08 (°C)
MW-1A	B	16.90	26.17	23.11	23.32	23.32	24.70	21.87	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	18.10	27.57	23.24	21.55	21.55	23.66	21.08		25.79	23.96
MW-3A	B	23.17	26.63	23.35	22.95	22.95	24.83	25.12		26.32	26.64
MW-4A	B	23.28	25.18	23.61	22.86	22.86	24.48	24.17		26.62	24.36
MW-5A	B	22.62	26.12	23.43	22.09	22.09	25.20	23.35		27.00	23.89
MW-6A	B	24.10	30.90	23.10	23.26	23.26	24.80	22.38		NA	NA
MW-7A	D	23.81	29.41	22.85	22.43	22.43	23.92	22.90		24.90	24.02
MW-8A	D	23.89	29.40	23.32	22.66	22.66	25.34	22.92		25.36	25.79
MW-9A	D	23.19	29.17	23.08	22.01	22.01	25.70	23.47		27.53	26.26
MW-10A	D	23.43	27.74	23.68	22.82	22.82	25.29	21.47		26.69	24.82
MW-11A	D	24.12	26.93	23.28	23.47	23.47	25.52	22.56		27.10	27.60
MW-12A	D	23.51	28.70	23.47	24.11	24.11	24.84	22.70		26.13	25.98
MW-13A	D	22.62	27.32	24.11	23.42	23.42	24.64	21.83		25.07	24.49
MW-14A	D	24.01	27.00	22.10	21.93	21.93	25.89	23.33		NA	NA
MW-15A	D	19.20	28.30	23.02	22.22	22.22	24.92	23.80		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							27.69	26.11	25.99
MW-17A	D								27.37	25.78	25.26
MW-18A	D								27.30	24.53	24.14
MW-19A	D								33.32	28.58	28.82
MW-20A	D								27.44	26.01	25.07
MW-21A	D								26.89	25.90	23.87
MW-22A	B								27.10	26.31	25.11
MW-23A	B								26.02	27.58	26.96
MW-1B	B	23.04	23.70	24.02	24.55	24.55	24.65	22.80	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	22.81	23.61	24.09	23.92	23.92	25.27	23.99		24.52	23.85
MW-3B	B	23.06	23.80	24.29	24.13	24.13	24.72	25.05		25.03	25.17
MW-4B	B	23.01	24.11	24.49	24.40	24.40	25.50	24.06		25.65	24.86
MW-5B	B	23.83	24.22	24.69	23.32	23.32	24.39	23.64		25.72	24.22
MW-6B	B	23.32	24.76	24.13	24.94	24.94	25.03	24.37		NA	NA
MW-7B	D	22.22	23.87	24.18	24.34	24.34	24.38	24.42		23.91	24.25
MW-8B	D	22.64	24.25	24.50	24.74	24.74	25.20	24.64		24.03	24.35
MW-9B	D	23.93	24.19	24.77	24.56	24.56	25.59	24.90		24.99	24.98
MW-10B	D	24.24	23.95	24.55	23.42	23.42	24.31	21.92		24.73	24.65
MW-11B	D	22.73	23.70	24.11	24.80	24.80	25.43	23.06		25.33	24.59
MW-12B	D	23.94	24.05	24.39	24.58	24.58	25.02	24.67		24.95	24.39
MW-13B	D	23.98	23.68	24.19	25.00	25.00	24.81	24.32		24.69	24.37
MW-14B	D	23.73	23.73	24.33	23.29	23.29	24.65	23.76		NA	NA
MW-15B	D	17.60	23.83	24.10	23.26	23.26	24.58	24.00		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							24.52	25.17	24.27
MW-17B	D								24.86	24.45	23.95
MW-18B	D								24.20	24.45	23.37
MW-19B	D								33.81	32.50	29.39
MW-20B	D								24.22	24.24	23.63
MW-21B	D								24.35	24.56	23.74
MW-22B	B								24.32	24.32	23.63
MW-23B	B								25.48	25.46	24.58
MW-1C	B	23.49	23.89	24.13	24.21	24.21	24.56	24.11	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	22.83	23.88	24.05	23.99	23.99	24.28	22.15		24.02	24.40
MW-3C	B	22.62	23.96	23.90	23.26	23.26	24.40	24.22		24.66	27.02
MW-4C	B	23.37	24.53	24.37	24.26	24.26	25.02	24.42		24.17	24.45
MW-5C	B	22.95	24.34	24.41	23.09	23.09	24.48	23.71		25.68	24.00
MW-6C	B	23.01	23.99	24.01	23.43	23.43	24.40	22.58		NA	NA
MW-7C	D	23.00	23.86	23.81	23.84	23.84	24.57	23.15		23.73	25.03
MW-8C	D	23.67	24.09	24.02	22.76	22.76	24.64	22.84		24.58	25.20
MW-9C	D	24.02	24.16	24.18	23.01	23.01	25.17	23.00		25.24	26.28
MW-10C	D	23.31	24.01	24.08	24.66	24.66	24.64	24.10		23.87	23.94
MW-11C	D	23.38	23.91	24.01	23.38	23.38	24.99	22.70		24.90	26.13
MW-12C	D	23.45	24.07	24.17	24.39	24.39	24.26	22.48		24.85	25.77
MW-13C	D	23.66	23.87	23.89	23.33	23.33	24.49	21.90		24.39	24.99
MW-14C	D	23.40	23.82	23.77	24.16	24.16	24.86	24.09		NA	NA
MW-15C	D	23.30	24.05	23.95	23.60	23.60	24.51	23.78		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							24.26	24.45	24.45
MW-17C	D								24.20	23.90	24.46
MW-18C	D								24.99	24.29	24.38
MW-19C	D								28.07	28.26	28.29
MW-20C	D								23.70	24.18	24.30
MW-21C	D								24.13	24.48	24.44
MW-22C	B								24.52	24.42	24.83
MW-23C	B								24.64	24.27	24.82

Notes:
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 4-3
Groundwater Field Measured Parameter - Specific Conductance
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Well ID	Type	PH 1 Baseline Jan-04 (mS/cm)	1st Event Jul-04 (mS/cm)	2nd Event Jan-05 (mS/cm)	3rd Event Jul-05 (mS/cm)	4th Event Feb-06 (mS/cm)	5th Event Jul-06 (mS/cm)	6th Event Feb-07 (mS/cm)	PH 2&3 Baseline Sep-07 (mS/cm)	7th Event Nov-07 (mS/cm)	8th Event May-08 (mS/cm)
MW-1A	B	0.140	0.187	0.080	0.149	0.149	0.115	0.130	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	0.180	0.141	0.080	0.164	0.164	0.174	0.164		0.133	0.125
MW-3A	B	0.232	0.249	0.095	0.221	0.221	0.265	0.225		0.307	0.242
MW-4A	B	0.067	0.188	0.067	0.168	0.168	0.130	0.137		0.148	0.126
MW-5A	B	0.102	0.138	0.085	0.127	0.127	0.172	0.160		0.185	0.138
MW-6A	B	0.099	0.090	0.044	0.100	0.100	0.094	0.103		NA	NA
MW-7A	D	0.164	0.120	0.045	0.225	0.225	0.143	0.120		0.150	0.099
MW-8A	D	0.215	0.159	0.092	0.136	0.136	0.119	0.221		0.254	0.136
MW-9A	D	0.152	0.120	0.071	0.177	0.177	0.124	0.163		0.145	0.095
MW-10A	D	0.107	0.147	0.083	0.163	0.163	0.133	0.124		0.123	0.087
MW-11A	D	0.212	0.271	0.155	0.213	0.213	0.222	0.194		0.222	0.193
MW-12A	D	0.078	0.115	0.073	0.126	0.126	0.113	0.087		0.139	0.284
MW-13A	D	0.333	0.164	0.101	0.171	0.171	0.175	0.153		0.156	0.127
MW-14A	D	0.120	0.201	0.102	0.162	0.162	0.250	0.110		NA	NA
MW-15A	D	0.161	0.109	0.062	0.146	0.146	0.107	0.109		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.115	0.120	0.078
MW-17A	D								0.111	0.118	0.078
MW-18A	D								0.089	0.087	0.066
MW-19A	D								0.383	0.154	0.373
MW-20A	D								0.117	0.222	0.174
MW-21A	D								0.105	0.191	0.115
MW-22A	B								0.154	0.152	0.114
MW-23A	B								0.149	0.162	0.137
MW-1B	B	0.045	0.062	0.029	0.056	0.056	0.042	0.040	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	0.045	0.056	0.030	0.055	0.055	0.070	0.051		0.047	0.043
MW-3B	B	0.068	0.090	0.049	0.084	0.084	0.083	0.074		0.072	0.066
MW-4B	B	0.086	0.140	0.077	0.097	0.097	<0.200	0.085		0.079	0.515
MW-5B	B	0.055	0.062	0.036	0.063	0.063	0.072	0.050		0.052	0.033
MW-6B	B	0.082	0.088	0.040	0.054	0.054	0.057	0.049		NA	NA
MW-7B	D	0.074	0.106	0.049	0.091	0.091	0.088	0.077		0.088	0.069
MW-8B	D	0.076	0.086	0.042	Fluctuated	0.069	0.069	0.054		0.055	0.043
MW-9B	D	0.085	0.082	0.049	0.083	0.083	0.073	0.066		0.071	0.056
MW-10B	D	0.056	0.068	0.043	0.091	0.091	0.074	0.088		0.087	0.055
MW-11B	D	0.146	0.225	0.080	0.137	0.137	0.132	0.114		0.118	0.085
MW-12B	D	0.062	0.112	0.045	0.077	0.077	0.074	0.070		0.077	0.061
MW-13B	D	0.095	0.077	0.042	Fluctuated	0.070	0.068	0.063		0.064	0.048
MW-14B	D	0.048	0.056	0.032	0.064	0.064	0.056	0.048		NA	NA
MW-15B	D	0.048	0.078	0.034	0.056	0.056	0.050	0.050		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.074	0.087	0.052
MW-17B	D								0.089	0.117	0.073
MW-18B	D								0.096	0.116	0.067
MW-19B	D								0.135	0.121	0.096
MW-20B	D								0.135	0.110	0.092
MW-21B	D								0.126	0.100	0.081
MW-22B	B								0.066	0.057	0.053
MW-23B	B								0.084	0.080	0.058
MW-1C	B	0.040	0.068	0.045	Fluctuated	0.076	0.058	0.057	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	0.033	0.065	0.038	0.066	0.066	0.054	0.050		0.048	0.041
MW-3C	B	0.045	0.085	0.043	0.080	0.080	0.076	0.066		0.064	0.048
MW-4C	B	0.092	0.143	0.072	0.110	0.110	0.122	0.094		0.120	0.075
MW-5C	B	0.101	0.097	0.054	0.085	0.085	0.093	0.081		0.088	0.057
MW-6C	B	0.035	0.060	0.032	0.046	0.046	0.054	0.044		NA	NA
MW-7C	D	0.082	0.103	0.048	0.074	0.074	0.066	0.059		0.064	0.050
MW-8C	D	0.038	0.068	0.037	0.063	0.063	0.061	0.051		0.066	0.041
MW-9C	D	0.085	0.078	0.041	0.066	0.066	0.064	0.055		0.065	0.055
MW-10C	D	0.062	0.075	0.042	0.071	0.071	0.064	0.057		0.058	0.043
MW-11C	D	0.128	0.161	0.087	0.146	0.146	0.137	0.102		0.132	0.112
MW-12C	D	0.050	0.065	0.035	0.063	0.063	0.058	0.052		0.058	0.050
MW-13C	D	0.067	0.079	0.043	0.071	0.071	0.068	0.057		0.065	0.059
MW-14C	D	0.065	0.100	0.058	0.078	0.078	0.090	0.073		NA	NA
MW-15C	D	0.095	0.095	0.049	0.083	0.083	0.081	0.087		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.083	0.107	0.066
MW-17C	D								0.099	0.125	0.073
MW-18C	D								0.121	0.122	0.075
MW-19C	D								0.115	0.101	0.086
MW-20C	D								0.118	0.096	0.085
MW-21C	D								0.117	0.101	0.080
MW-22C	B								0.517	0.473	0.400
MW-23C	B								0.112	0.113	0.088

Notes:
NA = Not Analyzed
mS/cm = millisiemens per centimeter
Well type: (B) Background well (D) Detection well
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.
Some specific conductance values still fluctuated after purging five well volumes

Table 4-4
Groundwater Field Measured Parameter - Turbidity
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Well ID	Type	PH 1 Baseline Jan-04 (NTUs)	1st Event Jul-04 (NTUs)	2nd Event Jan-05 (NTUs)	3rd Event Jul-05 (NTUs)	4th Event Feb-06 (NTUs)	5th Event Jul-06 (NTUs)	6th Event Feb-07 (NTUs)	PH 2&3 Baseline Sep-07 (NTUs)	7th Event Nov-07 (NTUs)	8th Event May-08 (NTUs)
MW-1A	B	17.0	0.8	1.3	0.5	0.1	0.0	0.7	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	0.6	2.4	0.0	1.5	0.0	0.9	1.5		0.5	8.2
MW-3A	B	5.0	1.0	1.3	1.3	5.5	0.5	0.4		0.3	0.9
MW-4A	B	6.9	32.7	9.0	0.5	1.0	1.4	2.2		0.5	2.2
MW-5A	B	45.0	51.5	13.6	10.5	17.2	4.9	10.3		6.2	10.0
MW-6A	B	6.1	1.5	6.0	2.5	4.5	0.1	1.2		NA	NA
MW-7A	D	5.1	1321.0	5.6	0.8	0.4	0.0	0.3		0.5	11.3
MW-8A	D	7.8	5.6	2.0	3.6	1.0	0.6	2.4		1.0	0.0
MW-9A	D	5.0	14.0	16.3	10.4	6.5	0.0	17.0		2.2	2.4
MW-10A	D	2.8	12.5	14.0	8.8	14.9	1.4	16.4		4.7	15.8
MW-11A	D	9.3	8.1	10.1	6.3	7.0	5.8	9.8		12.4	9.9
MW-12A	D	4.2	1.5	2.0	0.9	0.1	0.7	2.3		0.0	0.2
MW-13A	D	2.8	0.0	0.0	0.9	0.3	1.0	1.5		2.5	1.9
MW-14A	D	0.0	4.8	34.0	101.0	55.7	20.0	29.5		NA	NA
MW-15A	D	13.0	4.5	2.0	1.1	0.0	1.2	0.0		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.5	2.4	0.0
MW-17A	D								2.8	4.2	0.0
MW-18A	D								42.0	3.1	0.3
MW-19A	D								69.9	0.0	65.7
MW-20A	D								2.0	3.9	7.7
MW-21A	D								0.0	0.0	3.9
MW-22A	B								0.0	0.4	0.1
MW-23A	B								11.0	3.2	3.2
MW-1B	B	360.0	258.0	115.0	14.2	5.4	0.0	0.7	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	800.0	85.3	38.9	55.0	31.7	6.2	4.2		6.2	17.5
MW-3B	B	550.0	695.0	233.0	44.3	62.0	14.5	6.9		6.2	2.5
MW-4B	B	61.0	28.0	13.1	18.6	14.4	3.8	0.6		0.5	0.0
MW-5B	B	22.0	5.4	8.9	3.3	2.3	1.9	0.3		0.4	3.7
MW-6B	B	573.0	378.0	128.0	63.5	19.5	14.7	19.2		NA	NA
MW-7B	D	550.0	1184.0	130.0	62.0	82.0	16.0	18.9		17.7	8.5
MW-8B	D	668.0	720.0	144.0	157.0	62.0	69.3	31.4		59.2	19.1
MW-9B	D	179.0	130.0	135.0	49.0	22.6	8.9	8.3		7.0	16.2
MW-10B	D	37.6	26.3	5.5	2.4	0.6	1.0	0.6		0.4	0.0
MW-11B	D	13.0	625.0	92.3	19.2	3.1	11.0	1.7		3.3	13.0
MW-12B	D	>999	1178.0	123.0	30.0	19.7	20.0	41.4		5.7	5.9
MW-13B	D	>999	161.5	161.0	48.4	19.0	19.7	13.0		18.7	19.5
MW-14B	D	78.3	66.4	57.0	65.0	16.3	4.2	9.2		NA	NA
MW-15B	D	10.8	207.0	226.0	8.3	7.9	0.8	0.1		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							96.9	276.0	590.0
MW-17B	D								149.0	65.3	42.4
MW-18B	D								63.1	5.4	11.0
MW-19B	D								66.8	19.2	44.2
MW-20B	D								186.0	190.0	76.0
MW-21B	D								189.0	100.0	47.0
MW-22B	B								> 1000	113.0	45.3
MW-23B	B								2.2	3.5	2.0
MW-1C	B	408.0	43.0	54.0	19.5	19.4	6.0	4.9	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	350.0	65.3	35.7	19.0	10.1	9.0	4.2		4.2	2.2
MW-3C	B	450.0	130.0	9.8	19.0	7.2	5.4	5.4		2.3	2.7
MW-4C	B	907.0	1130.0	228.0	114.0	102.0	81.2	17.1		59.0	18.9
MW-5C	B	215.0	14.4	10.8	3.0	0.0	4.1	4.2		13.2	10.8
MW-6C	B	789.0	35.0	32.1	15.3	9.3	16.8	12.2		NA	NA
MW-7C	D	>999	1184.0	121.0	19.0	19.4	8.8	6.4		4.6	6.0
MW-8C	D	87.1	7.0	5.4	7.4	2.1	2.6	3.9		3.7	2.6
MW-9C	D	72.0	0.0	2.3	2.0	1.5	1.0	1.1		0.9	10.2
MW-10C	D	657.0	48.6	17.5	17.6	30.8	11.2	9.7		4.9	7.9
MW-11C	D	121.0	15.5	10.2	8.5	1.2	1.6	1.9		0.9	0.0
MW-12C	D	109.0	8.5	10.9	12.9	1.3	2.4	1.2		0.4	0.0
MW-13C	D	70.7	5.0	4.7	4.7	4.0	3.5	2.1		2.2	12.0
MW-14C	D	160.0	156.0	75.0	17.3	9.5	19.6	10.1		NA	NA
MW-15C	D	70.0	5.4	7.0	2.5	1.6	1.9	0.4		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							16.9	10.4	11.7
MW-17C	D								53.1	18.0	12.7
MW-18C	D								176.0	70.7	88.4
MW-19C	D								171.0	226.0	66.5
MW-20C	D								192.0	113.0	178.0
MW-21C	D								162.0	68.2	105.6
MW-22C	B								19.7	5.8	1.2
MW-23C	B								700.0	80.1	18.7

Notes:
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.
NTU = Nephalometric Turbidity Units
Highlighted values exceed Secondary Drinking Water Standard for turbidity (20 NTUs)

Table 4-5
Groundwater Field Measured Parameter - Dissolved Oxygen
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Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	1.06	0.50	0.82	0.22	0.22	1.49	1.57	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	0.45	0.88	0.62	0.19	0.19	0.39	0.70		0.26	0.50
MW-3A	B	0.49	0.38	0.68	0.16	0.16	0.28	1.20		0.32	0.36
MW-4A	B	0.52	0.36	0.54	0.31	0.31	0.33	1.54		0.42	0.81
MW-5A	B	0.52	1.23	0.83	0.26	0.26	0.24	1.20		0.28	0.24
MW-6A	B	0.39	0.34	0.44	0.21	0.21	0.12	1.07		NA	NA
MW-7A	D	0.63	1.17	0.78	0.43	0.43	0.19	1.33		0.41	0.76
MW-8A	D	2.08	0.56	0.50	0.44	0.44	0.27	1.68		0.21	0.65
MW-9A	D	0.47	1.03	0.85	0.26	0.26	0.18	1.27		0.27	0.22
MW-10A	D	0.76	0.40	0.53	0.31	0.31	0.18	1.13		0.32	0.65
MW-11A	D	3.30	1.41	0.91	0.09	0.09	0.22	0.90		0.16	0.45
MW-12A	D	0.46	0.09	0.61	0.19	0.19	0.17	1.24		0.19	0.42
MW-13A	D	1.13	0.24	0.45	0.37	0.37	0.33	0.95		0.78	0.45
MW-14A	D	1.95	0.27	0.92	0.15	0.15	0.06	0.74		NA	NA
MW-15A	D	0.46	0.37	0.45	0.13	0.13	0.13	0.73		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							1.11	0.91	0.31
MW-17A	D								1.25	0.25	0.86
MW-18A	D								0.28	0.49	0.94
MW-19A	D								0.16	0.27	0.34
MW-20A	D								0.40	0.96	0.53
MW-21A	D								0.93	0.23	0.79
MW-22A	B								0.56	0.40	0.36
MW-23A	B								0.56	0.18	0.36
MW-1B	B	0.83	0.64	0.47	0.12	0.12	0.41	0.75	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	0.60	0.19	0.80	0.10	0.10	0.24	0.88		0.29	0.42
MW-3B	B	0.51	0.20	0.42	0.12	0.12	0.24	1.07		0.21	0.19
MW-4B	B	1.17	0.12	0.90	0.35	0.35	0.21	1.00		0.41	0.43
MW-5B	B	0.70	0.15	0.44	0.21	0.21	0.24	0.58		0.44	0.53
MW-6B	B	0.67	0.16	0.80	0.18	0.18	0.14	0.59		NA	NA
MW-7B	D	1.12	0.09	0.36	0.18	0.18	0.09	0.69		0.26	0.33
MW-8B	D	0.77	0.34	0.48	0.01	0.01	0.29	0.57		0.19	0.32
MW-9B	D	0.64	0.27	0.46	0.02	0.02	0.18	0.38		0.31	0.28
MW-10B	D	0.55	0.31	0.38	0.14	0.14	0.38	0.91		0.35	0.29
MW-11B	D	0.48	0.24	0.53	0.15	0.15	0.20	0.77		0.10	0.37
MW-12B	D	0.46	0.17	0.80	0.12	0.12	0.20	0.49		0.20	0.26
MW-13B	D	0.48	0.21	0.38	0.30	0.30	0.15	0.58		0.11	0.17
MW-14B	D	0.72	1.32	0.38	0.17	0.17	0.28	0.56		NA	NA
MW-15B	D	0.35	0.26	0.69	0.15	0.15	0.74	1.32		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.75	0.18	0.40
MW-17B	D								0.41	0.42	0.27
MW-18B	D								0.18	0.34	1.37
MW-19B	D								0.15	0.87	0.17
MW-20B	D								0.17	0.73	0.29
MW-21B	D								0.26	0.35	0.31
MW-22B	B								0.18	0.33	0.25
MW-23B	B								0.22	0.20	0.53
MW-1C	B	0.83	0.17	0.44	0.12	0.12	0.13	0.72	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	3.44	0.18	0.78	0.11	0.11	0.24	0.55		0.24	0.79
MW-3C	B	0.92	0.17	0.82	0.16	0.16	0.27	0.87		0.58	0.29
MW-4C	B	0.37	0.22	0.48	0.19	0.19	0.18	0.63		0.30	0.29
MW-5C	B	0.71	0.20	0.42	0.17	0.17	0.38	1.55		0.67	0.51
MW-6C	B	0.49	0.23	0.38	0.20	0.20	0.23	1.02		NA	NA
MW-7C	D	0.33	0.10	0.50	0.38	0.38	0.11	1.62		0.72	0.71
MW-8C	D	0.57	0.19	0.46	0.02	0.02	0.29	1.11		0.44	0.46
MW-9C	D	0.87	0.22	0.36	0.26	0.26	0.28	0.71		0.42	0.33
MW-10C	D	0.46	0.27	0.71	0.13	0.13	0.22	0.86		0.37	0.31
MW-11C	D	0.39	0.27	0.40	0.13	0.13	0.36	0.83		0.26	0.39
MW-12C	D	1.19	0.21	0.51	0.31	0.31	0.34	0.62		0.29	0.22
MW-13C	D	0.94	0.21	0.82	0.52	0.52	0.23	0.68		0.23	0.23
MW-14C	D	0.99	0.34	0.71	0.13	0.13	0.26	0.78		NA	NA
MW-15C	D	0.46	0.15	0.42	0.22	0.22	0.23	1.01		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.64	0.27	0.27
MW-17C	D								0.40	0.27	0.19
MW-18C	D								0.11	0.33	0.30
MW-19C	D								0.32	0.18	0.18
MW-20C	D								0.18	1.26	0.40
MW-21C	D								0.12	0.13	0.56
MW-22C	B								0.24	0.56	0.33
MW-23C	B								0.22	0.20	0.36

Notes:
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.
mg/L = milligram per liter

Table 4-6
Surface Water Field Measured Parameters
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Parameter Monitored	Class III Standard Criteria	Units	Baseline Jan-04	1st Event July-04	2nd Event Jan-05	3rd Event July-05	4th Event Feb-06	5th Event July-06	6th Event Feb-07	7th Event Nov-07	8th Event May-08
SW-3											
Dissolved Oxygen	>5	mg/L	7.84	4.03	6.55	3.23	5.55	7.58	10.95	7.41	3.24
pH	6.0 - 8.5	pH units	6.09	4.37	4.77	4.37	5.06	5.07	4.63	4.58	5.43
Temperature	--	degrees C	19.34	27.65	14.76	28.88	17.17	31.29	19.88	15.11	22.9
Specific Conductance	not 50% above background or 1275	µS/cm	114	46	67	42	92	76	73	95	31
Turbidity	< 29 plus background	NTU	*	1.4	3.82	2.2	1.56	0.75	2.1	0.2	0
SW-4											
Dissolved Oxygen	>5	mg/L	*	3.19	8.4	2.24	6.16	4.13	8.75	7.47	3.74
pH	6.0 - 8.5	pH units	*	3.72	4.78	3.61	4.71	4.54	4.48	4.29	4.8
Temperature	--	degrees C	*	27.72	14.60	28.31	15.82	28.1	18.23	14.08	22.35
Specific Conductance	not 50% above background or 1275	µS/cm	*	43	55	40	94	60	53	98	30
Turbidity	< 29 plus background	NTU	*	1.2	15.5	3.6	1.6	1.14	3	0.3	7.4

Notes:
1. Shaded values exceed Class III Standard Criteria
2. "--" indicates that no criteria has been established.
3. "*" indicates that measurements were taken at the time of sampling but forms were lost.

Table 4-7
Leachate Field Measured Parameters
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J.E.D Solid Waste Management Facility

Parameter	Regulatory Level	Unit	July 2004 Event	July 2005 Event	July 2006 Event			Nov 2007 Event			
			L-1	L-1	L-1	L-2	L-4	L-1	L-2	L-3	L-4
Temperature	-	^{o}C	28.22	31.57	32.5	33.6	31.7	28.75	30	28.23	37.28
pH	-	Std Units	4.88	5.21	6.9	4.55	6.85	6.75	5.97	4.74	6.4
Conductivity	-	mS/cm	0.478	6.45	14.28	2.696	15.66	5.312	6.362	4.044	10.14
Turbidity	-	NTU	0	79.5	1	24.8	4.82	3	28.2	12.8	1
Oxidation/Reduction Potential (ORP)	-	mV	27.2	-85.2	-342.3	-94.6	-330.5	-57.5	-208.5	-171.7	-295.3
Dissolved Oxygen (DO)	-	mg/L	0.99	4.84	0.99	3.75	0.18	0.3	0.26	0.22	0.22

Notes:
NTU = Nephalometric Turbidity Units
mg/L = milligram per liter
mS/cm = millisiemens per centimeter

5. DETECTED PARAMETERS

5.1 Overview

In accordance with Exhibit I of the FDEP permit and Rule 62-701.510(9)(b) F.A.C., the biennial technical report is to include: (i) tabular displays of any monitoring parameter that has been detected; and (ii) graphical displays of any key leachate indicator parameter detected such as; pH, specific conductance, TDS, TOC, sulfate, chloride, sodium, and iron. The laboratory analytical test results for the two initial background events (i.e., Phase 1 wells, and Phases 2 and 3 wells) and the eight semi-annual water quality monitoring reports were used to create the tabular and graphical displays required. A complete copy of the database used for this analysis is provided on a CD-ROM included in Appendix A.

5.2 Groundwater

Analytical laboratory results have been summarized to show all parameters reported above the practical quantitative limit (PQL). The tables generated showing all parameters detected above the PQL's but below the Ground Water Cleanup Target Levels (GWCTL's) are included in Appendix B. Sample data for parameters detected above the PQL, but within the regulatory guidelines are shaded green. Tables for all detected parameters exceeding GWCTL's as provided in Chapter 62-777 F.A.C. are presented in the orange shaded cells and are included in this Section. These parameters are discussed further in Section 6 of this report. Parameters which exceeded the GWCTL's at a minimum of one well location for all monitoring events are; arsenic, ammonia-N, beryllium, chromium, iron, lead, toluene, total dissolved solids (TDS), vanadium, benzene, and vinyl chloride.

5.3 Surface Water

Table 5-18 (SW-3) and Table 5-19 (SW-4) summarize the parameters that have been detected in the surface water samples collected during the water quality monitoring events and compared with the Class III surface water quality standards (SWQS) presented in Rule 62-302.530 F.A.C. Graphical displays of the surface water data for pH, dissolved oxygen and iron are depicted in Figure 6-14. Iron and fecal coliform were the only parameters detected that exceed the Class III SWQS. The iron exceedance was encountered during the performance of the Phase 1 background monitoring event at the up-gradient monitoring station (SW-4), which was performed prior to any waste disposal activities at the site. Since the facility has started to accept waste, iron concentrations in the surface water samples have been below the Class III SWQS for iron. Fecal coliform

testing was not required by the FDEP until the performance of the seventh semi-annual monitoring event performed in November 2007. Fecal coliform has only been tested for during two monitoring events, and for both events fecal coliform was detected in the up-gradient monitoring station (SW-4) at concentrations exceeding the Class III SWQS. Fecal coliform concentrations at the down-gradient monitoring station have been below the Class III SWQS level. It should be noted that all of the land surrounding Bull Creek, from which the surface water samples are collected, near the site is used for cattle grazing. A discussion of the iron exceedance is included in Section 6 of this report.

5.4 Leachate

The leachate analytical laboratory results have been summarized in Table 5-20 to show all parameters reported above the practical quantitative limit for the leachate samples collected from 2004 to 2007. No parameter detected in the leachate samples has exceeded the regulatory levels established in 40 Code of Federal Regulations (CFR) Part 261.24 (Hazardous Waste Toxicity Characteristic).

Table 5-1
Arsenic Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)		1st Event Jul-04 (µg/L)		2nd Event Jan-05 (µg/L)		3rd Event Jul-05 (µg/L)		4th Event Feb-06 (µg/L)		5th Event Jul-06 (µg/L)		6th Event Feb-07 (µg/L)		PH 2&3 Baseline Sep-07 (µg/L)		7th Event Nov-07 (µg/L)		8th Event May-08 (µg/L)	
MW-1A	B	10	U	3.8	U	3.8	I	2.8	U	1.1		0.73		0.3	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2A	B	10	U	3.8	U	3.8	U	2.8	U	2.2		1.5		1.7				0.5	I	0.7	
MW-3A	B	10	U	3.8	U	3.8	U	2.8	U	1.1		1.2		0.3	U			0.3	I	1.4	
MW-4A	B	10	U	3.8	U	3.8	U	2.8	U	0.9		0.32	I	0.5	I			0.8		1.9	
MW-5A	B	10	U	3.8	U	3.8	U	2.8	U	0.9		0.81		1.0				1.2		1.3	
MW-6A	B	10	U	3.8	U	3.8	U	2.8	U	0.6		0.58		0.3	U			NA		NA	
MW-7A	D	10	U	16	I	3.8	U	2.8	U	0.8		0.56		0.8				0.7		1.4	
MW-8A	D	10	U	3.8	U	3.8	U	2.8	U	0.6		0.53		0.8				0.6	U	0.2	U
MW-9A	D	10	U	3.8	U	3.8	U	2.8	U	1.8		0.88		2.3				2.2		2.2	
MW-10A	D	10	U	3.8	U	3.8	U	2.8	U	2.5		1.5		2.3				0.9	I	1.2	
MW-11A	D	17		27		31		21		18.0		20		20.0				19		21	
MW-12A	D	10	U	3.8	U	4.7	I	2.8	U	1.9		2.5		1.3				4.1		12	
MW-13A	D	10	U	5.3	I	13		15.5		18.0		21		19.0				16		24	
MW-14A	D	10	U	3.8	U	3.8	U	2.8	U	1.5		0.59		0.6				NA		NA	
MW-15A	D	10	U	3.8	U	3.8	U	2.8	U	0.8		0.28	U	0.5				NA		NA	
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007														0.74		0.6		0.6	
MW-17A	D															0.54		0.9		0.5	I
MW-18A	D															0.39	I	0.3	I	0.2	U
MW-19A	D															13		0.7		7.4	
MW-20A	D															0.5		0.3	I	0.4	I
MW-21A	D															0.85		0.4	I	0.2	U
MW-22A	B															0.29	I	0.4	I	0.2	U
MW-23A	B															0.36	I	0.4	I	0.4	I
MW-1B	B	10	U	3.8	U	3.8	U	2.8	U	1.0		0.28	U	0.3	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2B	B	10	U	3.8	U	3.8	U	2.8	U	0.7		0.41	I	0.3	U			0.3	U	0.2	U
MW-3B	B	10	U	7.2	I	3.8	U	2.8	U	0.5		0.43	I	0.7				0.3	U	0.4	I
MW-4B	B	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	U			0.3	U	1.3	
MW-5B	B	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	I			0.3	U	0.2	U
MW-6B	B	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.62		0.3	U			NA		NA	
MW-7B	D	10	U	7.4	I	3.8	U	2.8	U	0.5	I	0.34	I	0.3	U			0.3	U	0.2	U
MW-8B	D	10	U	5.4	I	3.8	U	4.9	I	0.6		0.43	I	0.3	U			0.6	U	0.2	U
MW-9B	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.32	I	0.3	U			0.6	U	0.2	U
MW-10B	D	10	U	3.8	U	3.8	U	2.8	U	0.6		0.34	I	0.3	U			0.6	U	0.2	U
MW-11B	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.29		0.3	U			0.3	U	0.4	I
MW-12B	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	1.0				0.3	U	0.2	I
MW-13B	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.46		0.3	U			0.3	U	0.2	U
MW-14B	D	10	U	3.8	U	3.8	U	2.8	U	0.3	I	0.28	U	0.3	U			NA		NA	
MW-15B	D	10	U	3.8	U	3.8	U	2.8	U	1.0		0.42	i	0.3	U			NA		NA	
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007														0.33	I	0.6	U	1.0	
MW-17B	D															0.78		0.6	U	0.3	I
MW-18B	D															0.68		0.3	U	0.5	
MW-19B	D															0.44	I	0.5	I	0.3	I
MW-20B	D															1.0		0.6		0.7	
MW-21B	D															1.7		0.9		0.6	
MW-22B	B															7.4		0.7		0.6	
MW-23B	B															0.28	U	0.3	U	0.2	U
MW-1C	B	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2C	B	13		3.8	U	3.8	U	2.8	U	0.8		0.29	I	0.3	U			0.3	U	0.2	U
MW-3C	B	10	U	4.1	I	4		2.8	U	0.3	U	0.28	U	0.3	U			0.3	U	0.2	U
MW-4C	B	10	U	15		3.8	U	2.8	U	0.5	I	0.6		0.3	U			0.3	U	0.2	I
MW-5C	B	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	U			0.3	U	0.3	I
MW-6C	B	10	U	3.8	U	3.8	U	2.8	U	0.4	I	0.49	I	0.3	I			NA		NA	
MW-7C	D	10	U	10		3.8	U	2.8	U	0.7		0.28	U	0.3	U			0.3	U	0.2	U
MW-8C	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	U			0.6	U	0.2	U
MW-9C	D	10	U	3.8	U	3.8	U	2.8	U	0.5	I	0.28	U	0.3	I			0.6	U	0.2	U
MW-10C	D	10	U	3.8	U	3.8	U	2.8	U	1.2		0.42	I	0.4	I			0.6	U	0.2	U
MW-11C	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	U			0.3	U	0.2	U
MW-12C	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.28	U	0.3	I			0.3	U	0.2	U
MW-13C	D	10	U	3.8	U	3.8	U	2.8	U	0.3	U	0.38		0.3	U			0.3	U	0.3	I
MW-14C	D	10	U	3.8	U	3.8	U	2.8	U	1.3		0.63		0.5	I			NA		NA	
MW-15C	D	10	U	3.8	U	3.8	U	2.8	U	0.4	I	0.28	U	0.3	U			NA		NA	
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007														0.92		0.6	U	0.5	I
MW-17C	D															1.1		0.3	U	0.4	I
MW-18C	D															4.4		1.4		0.6	
MW-19C	D															1.4		1.4		0.2	U
MW-20C	D															1.7		1.0		1.0	
MW-21C	D															3.7		1.0		0.7	
MW-22C	B															0.62		0.6		0.2	U
MW-23C	B															3.3		0.3	U	0.2	U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-2
Dissolved Arsenic Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	NA	3.8 U	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	10 U	3.8 U	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	3.8 U	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	3.8 U	2.8 U	1.2	NA	0.59		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								0.33 I	NA	NA
MW-19A	D								9.4	NA	6.5
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	10 U	3.8 U	3.8 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	10 U	3.8 U	3.8 U	2.8 U	0.28 U	NA	NA		NA	NA
MW-3B	B	10 U	3.8 U	3.8 U	2.8 U	0.284 U	NA	NA		NA	NA
MW-4B	B	10 U	3.8 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	10 U	3.8 U	3.8 U	2.8 U	NA	NA	NA		NA	NA
MW-7B	D	10 U	3.8 U	3.8 U	2.8 U	0.66	NA	NA		NA	NA
MW-8B	D	10 U	3.8 U	4 I	2.8 U	0.28 U	0.58	0.28 U		0.4 I	NA
MW-9B	D	10 U	3.8 U	3.8 U	2.8 U	0.4 I	NA	NA		NA	NA
MW-10B	D	10 U	3.8 U	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	3.8 U	3.8 U	NA	NA	NA	NA		NA	NA
MW-12B	D	10 U	3.8 U	3.8 U	2.8 U	NA	NA	1.0		NA	NA
MW-13B	D	10 U	3.8 U	3.8 U	2.8 U	NA	NA	NA		NA	NA
MW-14B	D	10 U	3.8 U	3.8 U	2.8 U	NA	NA	NA		NA	NA
MW-15B	D	NA	3.8 U	3.8 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.31 I	0.7	0.4 I
MW-17B	D								0.28 U	0.6	0.54
MW-18B	D								0.29 I	NA	NA
MW-19B	D								0.28 U	NA	0.4 I
MW-20B	D								0.37 I	0.3 I	0.5 I
MW-21B	D								0.46 I	0.4 I	0.4 I
MW-22B	B								1.3	0.4 I	0.4 I
MW-23B	B								NA	NA	NA
MW-1C	B	10 U	3.8 U	3.8 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	13	4.2 I	3.8 U	NA	NA	NA	NA		NA	NA
MW-3C	B	10 U	3.8 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	10 U	3.8 U	3.8 U	2.8 U	0.28 U	0.28 U	NA		0.3 U	NA
MW-5C	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	10 U	3.8 U	3.8 U	NA	NA	NA	NA		NA	NA
MW-7C	D	10 U	3.8 U	3.8 U	NA	NA	NA	NA		NA	NA
MW-8C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	10 U	3.8 U	NA	NA	0.36 I	NA	NA		NA	NA
MW-11C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	10 U	3.8 U	3.8 U	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								0.28 U	NA	NA
MW-18C	D								1.0	0.5	0.4 I
MW-19C	D								0.28 U	0.3 U	0.2 U
MW-20C	D								0.28 U	0.3 U	0.3 I
MW-21C	D								0.33 I	0.3 U	0.3 I
MW-22C	B								NA	NA	NA
MW-23C	B								2.1	0.3 U	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-3
Ammonia (as N) Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	0.51	1.2	1.1	2	1.4	0.71	1.20	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	0.95	0.62	0.76	0.51	1.1	0.46	0.79		0.21	0.2
MW-3A	B	0.34	2.9	0.51	5.6	1.5	0.66	1.40		1.30	3.1
MW-4A	B	0.51	0.05 U	1.60	0.82	2.80	1.5	4.30		2.80	6.2
MW-5A	B	4.40	3.60	5.60	3.40	6.90	7.3	6.50		8.40	7.5
MW-6A	B	0.14	0.18	0.20	0.54	0.61	0.36	0.75		NA	NA
MW-7A	D	0.059	0.05 U	0.071	0.19	1.30	0.69	0.89		1.80	1.1
MW-8A	D	0.047	0.14	0.44	0.55	0.77	0.71	1.00		1.60	1.4
MW-9A	D	0.14	2.30	3.40	4.70	9.30	1.4	9.80		5.70	4.5
MW-10A	D	0.14	2.70	5.40	6.20	8.90	0.08	6.40		6.00	3.8
MW-11A	D	1.30	2.10	2.90	3.60	4.50	4.2	6.10		9.40	8.0
MW-12A	D	0.044	0.19	0.17	0.24	0.20	0.26	0.18		0.70	1.6
MW-13A	D	0.12	0.05 U	0.54	0.83	1.40	1.1	1.70		1.30	1.5
MW-14A	D	0.08	0.36	1.70	1.30	1.40	1.5	1.40		NA	NA
MW-15A	D	0.02	0.10	0.06	0.16	0.021 I	0.031 i	0.09		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							1.4	1.30	0.5
MW-17A	D								1.7	1.80	0.6
MW-18A	D								0.92	0.37	0.3
MW-19A	D								16	0.93	9.2
MW-20A	D								0.32	0.13	0.1
MW-21A	D								0.47	0.18	0.3
MW-22A	B								0.56	0.40	0.3
MW-23A	B								0.44	0.57	0.5
MW-1B	B	0.12	0.13	0.10	0.27	0.071	0.042 i	0.12	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	0.089	0.12	0.08	0.19	0.07	0.07	0.16		0.15	0.2
MW-3B	B	0.11	0.12	0.10	0.18	0.12	0.14	0.18		0.17	0.2
MW-4B	B	0.02	0.09	0.049 I	0.31	0.046 I	0.009 I	0.08		0.04 I	2.3
MW-5B	B	0.14	0.13	0.15	0.35	0.19	0.16	0.22		0.18	0.2
MW-6B	B	0.14	0.11	0.11	0.21	0.11	0.08	0.19		NA	NA
MW-7B	D	0.085	0.20	0.08	0.15	0.093	0.08	0.18		0.15	0.2
MW-8B	D	0.11	0.05 U	0.077	0.61	0.081	0.1	0.18		0.18	0.2
MW-9B	D	0.072	0.11	0.052	10.50	0.09	0.07	0.13		0.14	0.2
MW-10B	D	0.08	0.10	0.07	0.32	0.077	0.07	0.12 J		0.13	0.2
MW-11B	D	0.03	0.15	0.051	0.37	0.013 I	0.03 I	0.08		0.06	0.1
MW-12B	D	0.095	0.12	0.053	1.00	0.10	0.08	0.16		0.12	0.2
MW-13B	D	0.12	0.11	0.08	0.50	0.11	0.08	0.13		0.14	0.2
MW-14B	D	0.09	0.11	0.07	0.16	0.096	0.11	0.17		NA	NA
MW-15B	D	0.07	0.05 U	0.085	0.19	0.063	0.05	0.11		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.33	0.61	0.3
MW-17B	D								0.36	0.28	0.3
MW-18B	D								0.15	0.07	0.1
MW-19B	D								0.21	0.16	0.2
MW-20B	D								0.59	0.54	0.3
MW-21B	D								0.91	0.43	0.3
MW-22B	B								3.2	0.27	0.2
MW-23B	B								0.14	0.16	0.2
MW-1C	B	0.054	0.01	0.071	0.19 I	0.057	0.049 i	0.11	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	0.06	0.11	0.07	0.16	0.07	0.06	0.12		0.13	0.2
MW-3C	B	0.068	0.11	0.083	0.19	0.061	0.07	0.14		0.13	0.2
MW-4C	B	0.098	0.11	0.12	0.13	0.10	0.11	0.18		0.19	0.2
MW-5C	B	0.066	0.08	0.088	0.11	0.084	0.06	0.12		0.10	0.2
MW-6C	B	0.11	0.11	0.12	0.33	0.13	0.1	0.17		NA	NA
MW-7C	D	0.14	0.15	0.075	0.20	0.066	0.06	0.13		0.11	0.2
MW-8C	D	0.06	0.11	0.066	0.33	0.082	0.07	0.13		0.11	0.2
MW-9C	D	0.07	0.11	0.08	0.46	0.08	0.53	0.14		0.12	0.2
MW-10C	D	0.11	0.12	0.09	0.22	0.088	0.08	0.15		0.15	0.2
MW-11C	D	0.062	0.11	0.072	0.31	0.045 I	0.05	0.10		0.09	0.1
MW-12C	D	0.075	0.14	0.068	0.17	0.11	0.08	0.13		0.11	0.2
MW-13C	D	0.09	0.13	0.08	0.37	0.12	0.08	0.13		0.17	0.2
MW-14C	D	0.09	0.13	0.08	3.00	0.08	0.11	0.19		NA	NA
MW-15C	D	0.09	0.11	0.07	0.19	0.071	0.07	0.14		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.18	0.15	0.2
MW-17C	D								0.24	0.22	0.2
MW-18C	D								0.72	0.24	0.3
MW-19C	D								0.43	0.77	0.3
MW-20C	D								0.43	0.36	0.4
MW-21C	D								0.56	0.34	0.3
MW-22C	B								0.2	0.14	0.2
MW-23C	B								0.72	0.27	0.2

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
J = Estimated value
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-4
Beryllium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.084 U	0.1 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.084 U	0.1 U		0.12 I	0.20 U
MW-3A	B	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.084 U	0.1 U		0.084 U	0.20 U
MW-4A	B	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.1 I	0.1 U		0.084 U	0.20 U
MW-5A	B	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.11 I	0.1 U		0.084 U	0.20 U
MW-6A	B	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.084 U	0.1 U		NA	NA
MW-7A	D	1.0 U	5.1	0.74 U	0.3 U	0.10 I	0.084 U	0.1 I		0.084 U	0.20 U
MW-8A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.57 I	0.084 U	0.1 I		0.17 U	0.20 U
MW-9A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.084 U	0.1 U		0.17 U	0.20 U
MW-10A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.084 U	0.1 U		0.17 U	0.20 U
MW-11A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.82 I	0.24	0.1 U		0.084 U	0.20 U
MW-12A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.09 I	0.2	0.2 I		0.084 U	0.20 U
MW-13A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.28	0.1 U		0.084 U	0.20 U
MW-14A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.23	0.1 U		NA	NA
MW-15A	D	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.084 U	0.1 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.084 U	0.084 U	0.20 U
MW-17A	D								0.084 U	0.084 U	0.20 U
MW-18A	D								0.084 U	0.084 U	0.20 U
MW-19A	D								1.1	0.084 U	1.30
MW-20A	D								0.084 U	0.084 U	0.20 U
MW-21A	D								0.084 U	0.084 U	0.20 U
MW-22A	B								0.084 U	0.084 U	0.20 U
MW-23A	B								0.084 U	0.084 U	0.20 U
MW-1B	B	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.084 U	0.1 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.24 I	0.1 U		0.084 U	0.20 U
MW-3B	B	1.0 U	1.4 I	0.74 U	0.3 U	0.50 U	0.1 I	0.1 U		0.091 I	0.20 U
MW-4B	B	1.0 U	0.74 U	0.74 U	0.3 U	0.10 I	0.14 I	0.1 U		0.084 U	0.98 I
MW-5B	B	1.0 U	0.74 U	0.74 U	0.3 U	0.12 I	0.15 I	0.1 U		0.084 U	0.20 U
MW-6B	B	1.0 U	0.74 U	0.74 U	0.77 I	0.16 I	0.11 I	0.2 I		NA	NA
MW-7B	D	1.0 U	2.6 I	0.74 U	0.75 I	0.19 I	0.084 U	0.1 I		0.084 U	0.20 U
MW-8B	D	1.0 U	1.2 I	0.74 U	1.2 I	0.50 U	0.27 I	0.2 I		0.17 U	0.20 U
MW-9B	D	1.0 U	0.74 U	0.74 U	0.7 I	0.50 U	0.13 I	0.1 I		0.17 U	0.20 U
MW-10B	D	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.084 U	0.1 I		0.17 U	0.20 U
MW-11B	D	1.0 U	0.86 I	0.74 U	0.3 U	0.09 I	0.23	0.1 U		0.084 U	0.20 U
MW-12B	D	3.7	1.1 I	0.74 U	0.3 U	0.08 U	0.28	0.1 U		0.084 U	0.20 U
MW-13B	D	3.1	0.74 U	0.74 U	0.84 I	0.50 U	0.25	0.1 U		0.084 U	0.20 U
MW-14B	D	1.0 U	0.74 U	0.74 U	0.88 I	0.08 U	0.2	0.1 U		NA	NA
MW-15B	D	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.084 U	0.1 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.14 I	0.18 I	0.39 I
MW-17B	D								0.25 I	0.19 I	0.20 U
MW-18B	D								0.25 I	0.093 I	0.20 U
MW-19B	D								0.17 I	0.1 I	0.20 U
MW-20B	D								0.69 I	0.57 I	0.20 U
MW-21B	D								0.8 I	0.21 I	0.20 U
MW-22B	B								2.1	0.084 U	0.20 U
MW-23B	B								0.084 U	0.1 I	0.20 U
MW-1C	B	1.6	0.74 U	0.74 U	0.75 I	0.11 I	0.084 U	0.1 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	2.4	0.74 U	0.74 U	0.3 U	0.50 U	0.16 I	0.1 I		0.15 I	0.20 U
MW-3C	B	1.0 U	0.74 U	0.74 U	0.3 U	0.50 U	0.084 U	0.1 U		0.084 U	0.20 U
MW-4C	B	1.4	4 I	0.74 U	0.3 U	0.25 I	0.42 I	0.1 U		0.084 U	0.20 U
MW-5C	B	1.0 U	0.74 U	0.74 U	0.72 I	0.08 U	0.14 I	0.1 U		0.11 I	0.20 U
MW-6C	B	1.8	0.74 U	0.74 U	0.76 I	0.11 I	0.28 I	0.2 I		NA	NA
MW-7C	D	2.4	2.9 I	0.74 U	0.83 I	0.24 I	0.12 I	0.2 I		0.13 I	0.20 U
MW-8C	D	1.0 U	0.74 U	0.74 U	0.3 U	1.00 I	0.11 I	0.1 I		0.17 U	0.20 U
MW-9C	D	1.0 U	0.74 U	0.74 U	0.73 I	0.50 U	0.084 U	0.1 I		0.17 U	0.20 U
MW-10C	D	1.6	0.74 U	0.74 U	0.3 U	0.50 U	0.13 I	0.1 U		0.17 U	0.20 U
MW-11C	D	1.0 U	0.74 U	0.74 U	0.3 U	1.30 I	0.18	0.1 U		0.084 U	0.20 U
MW-12C	D	1.0 U	0.74 U	0.74 U	0.93 I	0.11 I	0.29	0.1 I		0.17 I	0.20 U
MW-13C	D	1.0 U	0.74 U	0.74 U	0.77 I	0.12 I	0.27	0.1 U		0.084 U	0.20 U
MW-14C	D	1.0 U	0.74 U	0.74 U	0.79 I	0.08 U	0.3	0.1 U		NA	NA
MW-15C	D	1.0 U	0.74 U	0.74 U	0.3 U	0.08 U	0.084 U	0.1 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 I	0.17 U	0.20 U
MW-17C	D								0.22 I	0.084 U	0.20 U
MW-18C	D								1.4	0.36 I	0.36 I
MW-19C	D								1.6	2.1	0.61 I
MW-20C	D								0.46 I	0.38 I	0.58 I
MW-21C	D								1.1	0.38 I	0.41 I
MW-22C	B								0.084 U	0.084 U	0.20 U
MW-23C	B								0.79 I	0.1 I	0.20 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-5
Dissolved Beryllium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)		1st Event Jul-04 (µg/L)		2nd Event Jan-05 (µg/L)		3rd Event Jul-05 (µg/L)		4th Event Feb-06 (µg/L)		5th Event Jul-06 (µg/L)		6th Event Feb-07 (µg/L)		PH 2&3 Baseline Sep-07 (µg/L)		7th Event Nov-07 (µg/L)		8th Event May-08 (µg/L)	
MW-1A	B	1.0	U	NA		NA		NA		NA		NA		NA		MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2A	B	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-3A	B	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-4A	B	1.0	U	0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-5A	B	NA		0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-6A	B	1.0	U	0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-7A	D	1.0	U	0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-8A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-9A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-10A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-11A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-12A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-13A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-14A	D	1.0	U	NA		0.74	U	0.3	U	0.5	U	NA		0.09	I			NA		NA	
MW-15A	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007														NA		NA		NA	
MW-17A	D															NA		NA		NA	
MW-18A	D															0.084	U	NA		NA	
MW-19A	D															0.084	U	NA		0.95	I
MW-20A	D															NA		NA		NA	
MW-21A	D															NA		NA		NA	
MW-22A	B															NA		NA		NA	
MW-23A	B															NA		NA		NA	
MW-1B	B	1.0	U	0.74	U	0.74	U	NA		NA		NA		NA		MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2B	B	1.0	U	0.74	U	0.74	U	0.3	U	0.5	U	NA		NA				NA		NA	
MW-3B	B	1.0	U	1.4	I	0.74	U	0.3	U	0.5	U	NA		NA				NA		NA	
MW-4B	B	1.0	U	0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-5B	B	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-6B	B	1.0	U	0.74	U	0.74	U	0.3	U	NA		NA		NA				NA		NA	
MW-7B	D	1.0	U	0.74	U	0.74	U	0.3	U	0.2	I	NA		NA				NA		NA	
MW-8B	D	1.0	U	0.74	U	0.74	U	0.3	U	0.5	U	0.094	I	0.15	I			0.16	I	NA	
MW-9B	D	1.0	U	0.74	U	0.74	U	0.3	U	0.5	U	NA		NA				NA		NA	
MW-10B	D	1.0	U	0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-11B	D	1.0	U	0.74	U	0.74	U	NA		NA		NA		NA				NA		NA	
MW-12B	D	3.0		0.74	U	0.74	U	0.3	U	NA		NA		0.12	I			NA		NA	
MW-13B	D	1.8		0.74	U	0.74	U	0.3	U	NA		NA		NA				NA		NA	
MW-14B	D	1.0	U	0.74	U	0.74	U	0.3	U	NA		NA		NA				NA		NA	
MW-15B	D	NA		0.74	U	0.74	U	NA		NA		NA		NA				NA		NA	
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007														0.084	U	0.26	I	0.2	U
MW-17B	D															0.084	U	0.12	I	0.2	U
MW-18B	D															0.084	U	NA		NA	
MW-19B	D															0.084	U	NA		0.2	U
MW-20B	D															0.084	U	0.08	U	0.2	U
MW-21B	D															0.084	U	0.08	U	0.2	U
MW-22B	B															0.084	U	0.08	U	0.2	U
MW-23B	B															NA		NA		NA	
MW-1C	B	1.0	U	0.74	U	0.74	U	NA		NA		NA		NA		MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2C	B	1.0	U	0.74	U	0.74	U	NA		NA		NA		NA				NA		NA	
MW-3C	B	1.0	U	0.74	U	NA		NA		NA		NA		NA				NA		NA	
MW-4C	B	1.0	U	0.74	U	0.74	U	0.3	U	0.3	I	0.084	U	NA				0.08	U	NA	
MW-5C	B	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-6C	B	1.0	U	0.74	U	0.74	U	NA		NA		NA		NA				NA		NA	
MW-7C	D	1.1		0.74	U	0.74	U	NA		NA		NA		NA				NA		NA	
MW-8C	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-9C	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-10C	D	1.0	U	0.74	U	NA		NA		0.5	U	NA		NA				NA		NA	
MW-11C	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-12C	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-13C	D	1.0	U	NA		NA		NA		NA		NA		NA				NA		NA	
MW-14C	D	1.0	U	0.74	U	0.74	U	NA		NA		NA		NA				NA		NA	
MW-15C	D	NA		NA		NA		NA		NA		NA		NA				NA		NA	
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007														NA		NA		NA	
MW-17C	D															0.084	U	NA		NA	
MW-18C	D															0.084	U	0.09	I	0.2	U
MW-19C	D															0.084	U	0.09	I	0.2	U
MW-20C	D															0.084	U	0.08	U	0.2	U
MW-21C	D															0.084	U	0.08	U	0.2	U
MW-22C	B															NA		NA		NA	
MW-23C	B															0.084	U	0.08	U	NA	

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-6
Chromium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	10 U	1.7 U	1.7 U	2.1 I	3.6	2.5	2.4	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	10 U	1.7 U	1.7 U	1.7 I	3.4	2.8	2.6		2	3
MW-3A	B	10 U	2.2 I	1.7 U	2.6 I	2.7	2.3	1.8 I		4	1.7 I
MW-4A	B	10 U	2.4 I	2.1 I	2 I	3.3	2.6	2.8		2.8	3.7
MW-5A	B	10 U	6.1 I	2.3 I	3 I	4.1	3.8	6.3		4.8	4
MW-6A	B	10 U	1.8 I	1.7 U	1.2 I	2	3.4	1.5 I		NA	NA
MW-7A	D	10 U	170	1.7 U	0.4 U	2.4	1.5 I	1.9 I		3.3	2.6
MW-8A	D	10 U	2.6 I	1.7 U	2.4 I	2.8	3.1	2.6		2.8 I	2.8
MW-9A	D	10 U	3.4 I	8.5 I	2.4 I	3.7	1.9 I	6.4		2.4 I	2.5
MW-10A	D	10 U	2.8 I	3 I	2.6 I	4.8	2.4	4.4		3.4 I	2.2
MW-11A	D	10 U	5.8 I	6.2 I	5.2 I	5.6	6	6		7	5.6
MW-12A	D	10 U	1.9 I	1.7 U	1.1 I	2.5	2.9	2.3		3.3	1.7 I
MW-13A	D	10 U	1.7 U	2.2 I	2.4 I	3.6	3.8	3.2		5.9	4.6
MW-14A	D	10 U	1.7 U	6.1 I	9.5 I	11	5.4	5.5		NA	NA
MW-15A	D	10 U	2.2 I	1.7 U	0.4 U	3	1.4 i	1.6 I		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							1.9 I	2.1	2.3
MW-17A	D								2.0	2.5	1.8 I
MW-18A	D								4.7	2	1.9 I
MW-19A	D								47	3.5	45
MW-20A	D								1.6 I	2.9	2 I
MW-21A	D								1.4 I	1.3 I	1.2 I
MW-22A	B								2 I	2.3	1.7 I
MW-23A	B								2.3	2.4	1.3 I
MW-1B	B	10 U	16	2.2 I	1.7 I	2.1	1.1 i	1.2 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	10 U	9.3 I	2 I	3.2 I	6.4	2.8	1.6 I		2.4	1.8 I
MW-3B	B	10 U	61	1.7 U	0.81 I	5.3	3	1.7 I		2.1	1.8 I
MW-4B	B	10 U	4.7 I	1.7 U	2.2 I	2.4	1.7 I	1.3 I		3	1.4 I
MW-5B	B	10 U	1.9 I	1.7 U	0.57 I	1.3 I	3	1.3 I		2.3	1.6 I
MW-6B	B	10 U	30	14	0.91 I	4.3	3.8	3.7		NA	NA
MW-7B	D	10 U	120	9.4 I	0.65 I	6.4	3.2	3.2		2.9	2
MW-8B	D	10 U	57	1.7 U	18.5	8.7	8.9	5.2		5.6	3.3
MW-9B	D	10 U	36	12	14.7 I	4.1	3.2	2.7		3.2 I	2.7
MW-10B	D	10 U	3.8 I	1.7 U	1 I	1.6 I	1.2 I	1.5 I		1.6 I	1.2 I
MW-11B	D	10 U	40	1.7 U	2.1 I	3.1	2.6	1.9 I		2.2	1.9 I
MW-12B	D	10 U	44	11	4.3 I	3.5	3.2	3.6		2.1	2.1
MW-13B	D	10 U	11	1.7 U	5.2 I	7.4	3.5	2.3		2.5	1.7 I
MW-14B	D	10 U	10	2.2 I	0.5 I	4.3	1.7	1.9 I		NA	NA
MW-15B	D	10 U	9.1 I	1.7 U	0.74 I	3.7	1.1 i	0.94 I		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							8.1	11	20
MW-17B	D								9.3	5.5	4.3
MW-18B	D								7.1	2.6	2
MW-19B	D								5.3	2.4	5.3
MW-20B	D								19	15	6.4
MW-21B	D								28	8.8	4.7
MW-22B	B								67	1.8 I	4.4
MW-23B	B								1.8 I	4.3	2
MW-1C	B	10 U	3.8 I	2.5 I	3 I	3.1	1.7 i	1.4 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	10 U	9.7 I	1.7 U	1.5 I	1.8 I	1.8 I	1.3 I		2.2	2 I
MW-3C	B	10 U	15	1.7 U	1.4 I	1.6 I	1.4 I	1.4 I		2 I	1.7 I
MW-4C	B	10 U	130	2.4 I	0.95 I	7.3	9.5	2.7		1.8 I	4.9
MW-5C	B	10 U	2.5 I	1.7 U	0.4 U	1.4 I	1.2 I	1.3 I		2.4	2.2
MW-6C	B	10 U	3.4 I	3.3 I	1.2 I	2 I	3.1	2.1		NA	NA
MW-7C	D	10 U	86	8.4 I	1.6 I	3.9	2.5	2.3		2.6	1.8 I
MW-8C	D	10 U	1.7 U	1.7 U	0.75 I	1.8 I	1.6 I	1.7 I		4.7	1.8 I
MW-9C	D	10 U	1.7 U	1.7 U	0.4 U	1.9 I	1.4 I	1.5 I		2 I	1.7 I
MW-10C	D	10 U	4.1 I	2.2 I	1.2 I	3.9	4.6	2.2		1.8 I	2.6
MW-11C	D	10 U	1.8 I	1.7 U	0.9 I	2	1.2	1.5 I		1.8 I	1.5 I
MW-12C	D	10 U	2.3 I	1.8 I	1.2 I	2	1.2	1.3 I		1.7 I	0.85 I
MW-13C	D	10 U	1.7 U	1.7 U	0.4 U	2.5	2.1	1.3 I		2.2	1.5 I
MW-14C	D	15	12	1.7 U	0.84 I	3.4	3.1	1.8 I		NA	NA
MW-15C	D	10 U	2.5 I	1.7 U	0.4 U	1.9 I	1.4 i	1.1 I		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							3.0	3.1 I	2.1
MW-17C	D								6.5	2.8	2.7
MW-18C	D								32	7.5	9.1
MW-19C	D								21	32	7
MW-20C	D								11	8.2	13
MW-21C	D								18	14	6.5
MW-22C	B								3.9	5.8	2.9
MW-23C	B								29	7.1	2.6

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-7
Dissolved Chromium Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	NA I	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	10 U	5.3 I	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	1.7 U	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	6.1 I	5.8 I	5.8	NA	3.6		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								2.1	NA	NA
MW-19A	D								7.2	NA	30
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	10 U	1.7 U	1.7 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	10 U	3.3 I	1.7 U	4 U	1.3 I	NA	NA		NA	NA
MW-3B	B	10 U	1.7 U	1.7 U	4.3 I	1.6 I	NA	NA		NA	NA
MW-4B	B	10 U	1.7 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	10 U	1.7 U	1.7 U	6.3 I	NA	NA	NA		NA	NA
MW-7B	D	10 U	20	1.7 U	3.6 I	2	NA	NA		NA	NA
MW-8B	D	10 U	1.7 U	1.7 U	4 U	6	1.2 I	2.0		4.1	NA
MW-9B	D	10 U	1.7 U	1.7 U	1.3 I	2.2	NA	NA		NA	NA
MW-10B	D	10 U	1.7 U	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	1.7 U	1.7 U	NA	NA	NA	NA		NA	NA
MW-12B	D	10 U	1.7 U	1.7 U	4 U	NA	NA	1.5 I		NA	NA
MW-13B	D	10 U	1.7 U	1.7 U	4 U	NA	NA	NA		NA	NA
MW-14B	D	10 U	3.8 I	1.7 U	4.1 I	NA	NA	NA		NA	NA
MW-15B	D	NA	1.7 U	1.7 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							1.6 I	10	1.3 I
MW-17B	D								1.5 I	3.5	1 I
MW-18B	D								1.2 I	NA	NA
MW-19B	D								1.7 I	NA	0.82 I
MW-20B	D								2.5	1.2 I	0.81 I
MW-21B	D								11	1.1 I	1.1 I
MW-22B	B								8.2	0.69 I	1.1 I
MW-23B	B								NA	NA	NA
MW-1C	B	10 U	1.7 U	1.7 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	10 U	1.7 U	1.7 U	NA	NA	NA	NA		NA	NA
MW-3C	B	10 U	1.7 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	10 U	2.2 I	1.7 U	7.6 I	1.8 I	3.6	NA		1.2 I	NA
MW-5C	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	10 U	1.7 U	1.7 U	NA	NA	NA	NA		NA	NA
MW-7C	D	10 U	3.9 I	1.7 U	NA	NA	NA	NA		NA	NA
MW-8C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	10 U	1.7 U	NA	NA	2.4	NA	NA		NA	NA
MW-11C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	10 U	1.7 U	1.7 U	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								1.7 I	NA	NA
MW-18C	D								1.5 I	3.7	1.3 I
MW-19C	D								3.3	1 I	1 I
MW-20C	D								1.8 I	1 I	1.3 I
MW-21C	D								2	2 I	1.2 I
MW-22C	B								NA	NA	NA
MW-23C	B								1.8 I	1.9 I	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-8
Iron Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	1.2	4	2.7	3.0	1.8	1.1	1.6	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	4.4	1.9	3.8	1.9	4.9	10.0	13.0		3.8	11.9
MW-3A	B	1.2	5.8	2.8	5.1	3.9	4.4	3.6		1.7	1.5
MW-4A	B	1.4	2.9	2.6	2.6	2.3	1.9	2.1		1.9	1.7
MW-5A	B	0.7	2	1.9	1.7	0.9	1.5	1.0		0.23	0.5
MW-6A	B	1.2	1.6	1	2.9	2.5	1.8	2.7		NA	NA
MW-7A	D	1.2	19	0.71	1.7	4.9	3.1	2.3		5.9	5.1
MW-8A	D	2.1	2.4	2.2	1.8	1.4	2.0	2.6		2.7	2.3
MW-9A	D	1.9	1.9	2	1.2	1.0	2.2	1.4		2.1	1.8
MW-10A	D	2.1	2	1.7	1.0	0.6	2.0	2.0		2.8	2.8
MW-11A	D	39	33	35	23.6	18.0	21.2	20.0		20.3	23.3
MW-12A	D	1.3	1.2	1.5	1.4	1.1	1.6	0.4		17.3	75.1
MW-13A	D	2.1	6.2	13	12.8	16.0	20.3	16.0		17.3	23.0
MW-14A	D	2.2	5	2.4	1.5	0.5	1.6	1.4		NA	NA
MW-15A	D	0.59	2.5	2.1	1.9	1.9	1.2	1.2		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							1.2	0.7	0.9
MW-17A	D								1.4	1.3	0.8
MW-18A	D								0.5	0.6	0.7
MW-19A	D								12.5	1.0	13.7
MW-20A	D								2.1	0.5	0.2
MW-21A	D								1.5	0.20	0.2
MW-22A	B								1.5	1.8	1.0
MW-23A	B								0.6	1.7	2.3
MW-1B	B	1.1	2.6	0.82	0.7	0.6	0.4	0.34	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	1.3	1.4	0.7	0.9	0.9	0.8	0.8		0.7	0.8
MW-3B	B	1.5	8.5	1	1.0	1.0	0.9	0.9		0.9	1.1
MW-4B	B	1.3	1.5	0.97	0.7	0.8	0.8	0.8		0.7	14.4
MW-5B	B	0.85	0.64	0.55	0.4	0.4	0.5	0.4		0.3	0.31
MW-6B	B	1.2	4.8	2.1	1.5	1.1	1.3	1.3		NA	NA
MW-7B	D	1.7	17	1.7	1.4	1.4	1.4	1.3		1.6	1.3
MW-8B	D	1.5	6.6	1.1	2.8	1.5	1.4	0.7		1.0	0.8
MW-9B	D	0.93	5.8	2.5	2.1	1.0	0.9	0.8		0.9	1.0
MW-10B	D	1.2	0.97	0.57	0.5	0.7	0.6	0.7		0.7	0.6
MW-11B	D	1.6	5.5	0.97	0.8	0.8	0.8	0.7		0.7	0.7
MW-12B	D	1.1	6.8	2.1	1.2	1.0	0.9	1.0		1.0	1.1
MW-13B	D	1.9	2.3	0.82	1.4	1.0	0.9	0.8		0.9	0.9
MW-14B	D	1.2	1.9	0.97	1.1	0.5	0.7	0.7		NA	NA
MW-15B	D	0.57	1.4	0.41	0.4	0.4	0.3	0.4		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							1.6	1.7	3.8
MW-17B	D								1.9	2.0	2.0
MW-18B	D								1.0	0.8	0.7
MW-19B	D								1.0	0.9	1.0
MW-20B	D								2.5	2.8	2.3
MW-21B	D								3.8	3.1	2.2
MW-22B	B								9.3	2.5	1.5
MW-23B	B								0.8	0.7	0.4
MW-1C	B	0.65	0.69	0.51	0.6	0.5	0.5	0.4	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	0.94	1.7	1.5	1.4	1.1	1.1	1.0		0.7	0.7
MW-3C	B	1.2	3.1	1.4	1.4	1.6	1.4	1.2		0.9	0.8
MW-4C	B	1.2	17	1.1	1.6	1.3	1.8	0.8		1.5	0.8
MW-5C	B	1.1	1.9	1.7	1.2	1.1	1.2	1.1		1.3	1.0
MW-6C	B	1.2	1.8	1.3	0.7	0.6	0.9	0.7		NA	NA
MW-7C	D	2.9	10	1.4	0.9	0.9	0.9	0.8		0.9	0.7
MW-8C	D	1.3	1.7	1.1	0.9	0.9	1.1	0.9		1.0	0.8
MW-9C	D	1.1	1.3	0.89	0.8	0.8	0.7	0.7		0.7	0.9
MW-10C	D	1.2	1.5	0.92	0.9	0.4	1.0	0.8		0.9	0.8
MW-11C	D	1.3	0.76	0.55	0.6	0.5	0.5	0.6		0.5	0.5
MW-12C	D	1.4	1.2	0.87	0.9	0.7	0.6	0.6		0.7	0.7
MW-13C	D	1.8	0.92	0.65	0.6	0.6	0.5	0.5		0.6	0.6
MW-14C	D	2.4	2.2	1	1.2	1.1	0.9	0.8		NA	NA
MW-15C	D	0.6	0.69	0.56	0.5	0.5	0.5	0.6		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							1.0	1.4	1.8
MW-17C	D								1.4	1.0	1.3
MW-18C	D								3.8	1.7	2.0
MW-19C	D								2.9	5.1	1.6
MW-20C	D								3.4	2.9	3.4
MW-21C	D								5.5	2.5	2.7
MW-22C	B								1.2	0.8	0.4
MW-23C	B								2.9	0.6	0.6

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-9
Dissolved Iron Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	3	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	0.72	1.9	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	0.35	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	2.3	1.23	0.44	NA	1.6		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							1.19	NA	NA
MW-17A	D								1.40	NA	NA
MW-18A	D								0.49	NA	NA
MW-19A	D								12.5	NA	10.2
MW-20A	D								2.07	NA	NA
MW-21A	D								1.45	NA	NA
MW-22A	B								1.54	NA	NA
MW-23A	B								0.58	NA	NA
MW-1B	B	0.94	0.5	0.61	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	1.2	0.97	0.63	0.7	0.67	NA	NA		NA	NA
MW-3B	B	1.5	0.62	0.71	0.7	0.68	NA	NA		NA	NA
MW-4B	B	1.2	1.2	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	0.75	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	1.1	0.95	0.98	0.91	NA	NA	NA		NA	NA
MW-7B	D	1.6	3.3	1	1.06	1.1	NA	NA		NA	NA
MW-8B	D	1.2	0.84	0.85	0.83	1.0	1.0	0.91		1.0	NA
MW-9B	D	0.94	0.96	NA	0.91	NA	NA	NA		NA	NA
MW-10B	D	1	0.6	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	0.49	0.91	NA	NA	NA	NA		NA	NA
MW-12B	D	1.1	0.64	0.66	0.67	NA	NA	0.8		NA	NA
MW-13B	D	1.8	0.91	0.74	0.7	NA	NA	NA		NA	NA
MW-14B	D	1.3	1	0.75	0.65	NA	NA	NA		NA	NA
MW-15B	D	NA	0.29	0.3	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							1.62	2.4	1.2
MW-17B	D								1.89	2.0	1.8
MW-18B	D								0.99	NA	NA
MW-19B	D								0.97	NA	0.7
MW-20B	D								2.49	1.7	1.9
MW-21B	D								3.81	2.4	2.0
MW-22B	B								9.27	1.5	1.3
MW-23B	B								0.82	NA	NA
MW-1C	B	0.56	0.43	0.4	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	0.82	1	1.4	NA	NA	NA	NA		NA	NA
MW-3C	B	1.4	1.4	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	1.1	0.81	0.89	0.77	0.78	0.78	NA		0.6	NA
MW-5C	B	1.2	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	1.1	1.4	0.83	NA	NA	NA	NA		NA	NA
MW-7C	D	1.2	0.89	0.81	NA	NA	NA	NA		NA	NA
MW-8C	D	0.87	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	0.66	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	0.78	0.81	NA	NA	0.8	NA	NA		NA	NA
MW-11C	D	1.1	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	1.2	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	1.4	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	0.69	0.73	0.94	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							1.04	NA	NA
MW-17C	D								1.44	NA	NA
MW-18C	D								3.76	1.1	1.2
MW-19C	D								2.90	1.2	1.0
MW-20C	D								3.39	1.4	1.5
MW-21C	D								5.52	1.3	1.5
MW-22C	B								1.24	NA	NA
MW-23C	B								2.86	0.6	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-10
Lead Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	10 U	1.5 U	1.5 U	1.2 U	0.12 U	0.12 U	0.12 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	**NA**	NA
MW-2A	B	10 U	1.5 U	1.5 U	1.5 I	0.12 U	0.12 U	0.12 U		0.3 U	0.7 I
MW-3A	B	10 U	1.5 U	1.5 U	1.7 I	0.19 I	1.5	0.12 U		0.3 U	0.2 U
MW-4A	B	10 U	1.5 U	1.5 U	1.3 I	0.12 U	0.12 U	0.13 I		0.3 U	0.2 U
MW-5A	B	5 U	2 I	2.5 I	1.4 I	0.91 I	0.67 I	1.2		1.3	1.2
MW-6A	B	10 U	1.5 U	1.5 U	1.2 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-7A	D	10 U	130	1.5 U	1.2 U	0.12 U	0.12 U	0.12 U		0.3 U	1.0 I
MW-8A	D	10 U	1.5 U	1.5 U	1.8 I	0.19 I	0.13 I	0.24 I		0.6 U	0.2 U
MW-9A	D	10 U	1.5 U	1.5 U	1.2 U	0.32 I	0.17 I	1		0.6 U	0.2 U
MW-10A	D	10 U	1.5 U	1.5 U	1.9 I	0.73 I	0.25 I	0.91 I		0.6 U	0.2 U
MW-11A	D	10 U	1.5 U	7.7	1.2 U	0.58 I	0.51	0.52 I		0.6 I	0.3 I
MW-12A	D	10 U	1.5 U	1.5 U	7.4	0.12 U	0.12 U	0.7 I		0.3 U	0.2 U
MW-13A	D	10 U	1.5 U	2.7 I	1.2 U	0.12 U	0.12 U	0.12 U		0.3 U	0.2 U
MW-14A	D	10 U	1.5 U	1.7 I	1.4 I	5.6	0.87	0.86 I		NA	NA
MW-15A	D	10 U	1.5 U	1.5 U	1.2 U	0.12 U	0.14 i	0.12 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.3 U	1.8	1.1
MW-17A	D								0.3 U	0.3 U	0.3 I
MW-18A	D								1.7	0.7 I	1.0
MW-19A	D								19	0.3 U	11.0
MW-20A	D								0.3 U	1.0 I	0.9 I
MW-21A	D								0.3 U	0.4 I	0.2 I
MW-22A	B								0.3 U	0.3 U	0.2 U
MW-23A	B								0.3 U	0.3 U	0.2 U
MW-1B	B	5 U	12	1.6 I	1.8 I	0.14 I	0.12 U	0.12 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	5 U	5.2	1.7 I	6.1	3	2.5	2.4		0.5 I	0.5 I
MW-3B	B	5 U	43	1.5 U	1.6 I	4.4	2.1	0.88 I		0.4 I	1.8
MW-4B	B	5 U	1.6 I	1.5 U	2.6 I	0.5 I	0.63 I	0.12 U		0.3 U	0.2 U
MW-5B	B	5 U	1.5 U	1.5 U	1.7 I	0.12 U	0.12 U	0.12 U		0.3 U	0.2 U
MW-6B	B	10 U	24	9.6	6.9	1.5	1.8	1.9		NA	NA
MW-7B	D	5 U	100	7.1	2.6 I	3.1	1.8	1.5		1.1	0.6 I
MW-8B	D	5 U	39	1.5 U	20	11	13	5.6		5.3	3.2
MW-9B	D	5 U	28	10	8	1.7	1.5	1.7		0.8 I	1.3
MW-10B	D	5 U	1.5 U	1.5 U	3.9 I	0.15 I	0.22 I	0.12 I		0.6 U	0.2 U
MW-11B	D	10 U	24	1.5 U	1.6 I	0.82 I	1.1	0.2 I		0.7 I	0.4 I
MW-12B	D	5 U	38	10	5	11	2.9	3.7		1.1	1.3
MW-13B	D	5 U	7.4	1.5 U	5.7	2.8	2.9	1.4		2.0	0.9 I
MW-14B	D	5 U	8.9	1.5 U	1.2 I	1.6	0.47	1		NA	NA
MW-15B	D	10 U	7.2	1.5 U	1.3 I	0.34 I	0.12 U	0.12 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							7.6	14.0	28
MW-17B	D								12	6.3	3.0
MW-18B	D								3.4	0.6 I	0.6 I
MW-19B	D								5.2	2.2	6.1
MW-20B	D								15	19.0	4.3
MW-21B	D								21	7.8	2.6
MW-22B	B								80	0.3 U	3.2
MW-23B	B								0.3 U	0.3 I	0.2 U
MW-1C	B	5 U	1.5 U	1.5 U	1.8 I	0.22 I	0.18 i	0.14 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	5 U	2.1 I	1.5 U	1.2 U	0.14 I	0.89 I	0.2 I		0.3 U	0.3 I
MW-3C	B	5 U	3.8 I	1.6 I	1.4 I	0.13 I	0.12 I	0.14 I		0.3 U	0.2 U
MW-4C	B	5 U	19	1.5 U	2.7 I	0.91 I	1.5	0.45 I		0.3 U	0.3 I
MW-5C	B	5 U	1.5 U	1.5 U	1.3 I	0.12 U	0.12 U	0.17 I		0.3 I	0.2 U
MW-6C	B	10 U	1.5 U	2.3 I	1.2 U	0.23 I	0.49 I	0.36 I		NA	NA
MW-7C	D	5 U	60	4.2 I	2.4 I	1.7	1.4	1.4		1.6	0.5 I
MW-8C	D	5 U	1.5 U	1.5 U	1.4 I	0.15 I	0.25 I	0.25 I		0.6 U	0.2 U
MW-9C	D	5 U	1.5 U	1.5 U	1.2 U	0.12 I	0.14 I	0.12 U		0.6 U	0.3 I
MW-10C	D	5 U	1.5 U	1.5 U	1.9 I	0.85 I	0.88 I	0.54 I		0.6 U	0.2 U
MW-11C	D	5 U	1.5 U	1.5 U	1.5 I	2.7	0.12 U	0.33 I		0.3 U	0.2 U
MW-12C	D	5 U	1.5 U	1.5 U	1.2 U	0.13 I	0.12 U	0.12 I		0.3 U	0.2 U
MW-13C	D	10 U	1.5 U	1.5 U	1.2 U	0.2 I	0.12 I	0.18 I		0.3 U	0.3 I
MW-14C	D	10 U	3.8 I	1.5 U	1.2 U	1.4	0.94	0.49 I		NA	NA
MW-15C	D	10 U	1.5 U	1.5 U	1.2 I	0.12 U	0.28 i	0.12 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.65 I	0.7 I	0.2 I
MW-17C	D								1.7	0.4 I	0.2 U
MW-18C	D								13	2.2	1.5
MW-19C	D								5.1	6.5	1.4
MW-20C	D								3.2	2.5	3.1
MW-21C	D								4.8	1.3	1.3
MW-22C	B								0.3 U	0.3 U	0.2 U
MW-23C	B								4.3	0.7 I	0.2 I

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-11
Dissolved Lead Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	1.5 U	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	1.5 U	1.5 U	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	1.5 U	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	1.5 U	1.5 U	1.4	NA	0.18 I		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								0.3 U	NA	NA
MW-19A	D								0.82 I	NA	5.8
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	1.5 U	1.5 U	1.5 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	NA	NA		NA	NA
MW-3B	B	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	NA	NA		NA	NA
MW-4B	B	1.5 U	1.5 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	1.5 U	NA U	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	1.5 U	1.5 U	1.5 U	1.5 U	NA	NA	NA		NA	NA
MW-7B	D	1.5 U	15	1.5 U	1.5 U	1.5 U	NA	NA		NA	NA
MW-8B	D	1.5 U	1.5 U	1.5 U	1.5 U	6.1 U	3.3	1.4		5.0	NA
MW-9B	D	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	NA	NA		NA	NA
MW-10B	D	1.5 U	1.5 U	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	1.5 U	1.5 U	NA	NA	NA	NA		NA	NA
MW-12B	D	1.5 U	1.5 U	1.5 U	1.5 U	NA	NA	0.31 I		NA	NA
MW-13B	D	1.5 U	1.5 U	1.5 U	1.5 U	NA	NA	NA		NA	NA
MW-14B	D	1.5 U	4.2 I	1.5 U	1.5 U	NA	NA	NA		NA	NA
MW-15B	D	NA	NA	1.5 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.32 I	14.0	0.2 U
MW-17B	D								0.3 U	5.5	0.2 U
MW-18B	D								0.3 U	NA	NA
MW-19B	D								0.3 U	NA	0.2 U
MW-20B	D								0.94 I	0.8 I	0.2 U
MW-21B	D								5	0.3 U	0.2 U
MW-22B	B								7.5	0.3 U	0.2 U
MW-23B	B								NA	NA	NA
MW-1C	B	1.5 U	1.5 U	1.5 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	1.5 U	1.5 U	1.5 U	NA	NA	NA	NA		NA	NA
MW-3C	B	1.5 U	1.5 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.17 I	NA		0.3 U	NA
MW-5C	B	1.5 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	1.5 U	1.5 U	1.5 U	NA	NA	NA	NA		NA	NA
MW-7C	D	1.5 U	1.5 U	1.5 U	NA	NA	NA	NA		NA	NA
MW-8C	D	1.5 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	1.5 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	1.5 U	1.5 U	NA	NA	3.1 U	NA	NA		NA	NA
MW-11C	D	1.5 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	1.5 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	1.5 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	1.5 U	1.5 U	1.5 U	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								0.3 U	NA	NA
MW-18C	D								0.3 U	0.4 I	0.2 U
MW-19C	D								0.53 I	0.3 U	0.2 U
MW-20C	D								0.3 U	0.3 U	0.2 U
MW-21C	D								0.3 U	0.3 I	0.2 U
MW-22C	B								NA	NA	NA
MW-23C	B								0.3 U	0.3 U	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-12
Toluene Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	1 U	1.9	3.5	2.2	0.9 I	0.57 J	0.21 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	100	1.8	0.51 U	0.5 U	0.15 I	0.13 U	0.13 U		0.13 U	0.54 I
MW-3A	B	17	7.6	0.51 U	0.52 I	0.13 U	0.13 U	0.13 U		0.13 U	0.77 I
MW-4A	B	1.7	190	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.15 I
MW-5A	B	76	170	0.51 U	0.69 I	0.13 U	0.13 U	0.17 I		0.13 U	0.18 I
MW-6A	B	1.4	1.8	0.51 U	0.5 U	0.49 I	0.47 I	0.52 I		0.13 U	NA
MW-7A	D	2.8	0.51 U	0.51 U	0.51 I	0.13 U	0.13 U	0.13 U		NA	0.14 U
MW-8A	D	7.8	0.51 U	0.51 U	0.5 U	0.22 I	0.13 U	0.14 I		0.13 U	0.14 U
MW-9A	D	1.2	0.51 U	0.51 U	0.5 U	0.22 I	0.13 U	2.6		0.33 I	0.45 I
MW-10A	D	1 U	24	0.51 U	0.5 U	0.13 U	0.13 U	0.22 I		0.29 I	0.41 I
MW-11A	D	2.2	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.14 I		0.13 U	1.2
MW-12A	D	2.3	0.51 U	0.51 U	0.5 U	0.3 I	0.13 U	0.13 U		0.13 U	0.14 U
MW-13A	D	1.3	1.8	0.51 U	0.5 U	0.5 I	0.13 U	0.13 U		0.3 I	0.14 U
MW-14A	D	1 U	7.1	14	3.2	0.13 U	0.13 U	0.13 U		NA	NA
MW-15A	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.13 U	8.6	2.4
MW-17A	D								0.13 U	1.6	0.14 U
MW-18A	D								0.13 U	0.13 U	0.14 U
MW-19A	D								0.71 I	0.13 U	0.65 I
MW-20A	D								0.13 U	0.13 U	0.14 U
MW-21A	D								0.13 U	0.13 U	0.14 U
MW-22A	B								0.13 U	0.13 U	2.7
MW-23A	B								0.13 U	0.13 U	0.76 I
MW-1B	B	1 U	4.8	2.2	0.79 I	0.13 U	0.13 U	0.13 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	1 U	4.5	1.3	2.7	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-3B	B	1 U	2.9	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-4B	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.15 I
MW-5B	B	1 U	8.8	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-6B	B	1 U	0.51 U	5.3	0.66 I	0.13 U	0.13 U	0.13 U		NA	NA
MW-7B	D	1 U	8.5	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-8B	D	1 U	7.8	0.51 U	3.3	0.62 I	0.55 I	0.18 I		0.13 U	0.14 U
MW-9B	D	1.2	8.1	1.6	0.5 U	0.16 I	0.13 U	0.13 U		0.13 U	0.14 U
MW-10B	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.16 I		0.13 U	0.19 I
MW-11B	D	1	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.18 I		0.13 U	0.14 U
MW-12B	D	1 U	1.7	1.5	1.1	0.3 I	0.13 U	0.13 U		0.13 U	0.14 U
MW-13B	D	1 U	0.51 U	0.51 U	0.5 U	0.35 I	0.13 U	0.13 U		0.13 U	0.14 U
MW-14B	D	1 U	2.1	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		NA	NA
MW-15B	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.13 U	0.19 I	0.51 I
MW-17B	D								0.13 U	0.48 I	5.8
MW-18B	D								0.13 U	0.13 U	8.9
MW-19B	D								0.13 U	2.9	1.7
MW-20B	D								0.1 U	0.13 U	0.14 U
MW-21B	D								0.1 U	3	0.68 I
MW-22B	B								0.1 U	3.7	1.3
MW-23B	B								0.13 U	0.35 I	1.1
MW-1C	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-3C	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-4C	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-5C	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-6C	B	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.2 I		NA	NA
MW-7C	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-8C	D	1 U	0.51 U	0.51 U	0.5 U	0.19 I	0.13 U	0.15 I		0.13 U	0.14 U
MW-9C	D	1 U	0.51 U	0.51 U	0.5 U	0.21 I	0.13 U	0.17 I		0.13 U	0.16 I
MW-10C	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		0.13 U	0.14 U
MW-11C	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.21 I		0.23 I	0.14 U
MW-12C	D	1 U	0.51 U	0.51 U	0.5 U	0.27 I	0.13 U	0.13 U		0.13 U	0.14 U
MW-13C	D	1 U	0.51 U	0.51 U	0.5 U	0.36 I	0.13 U	0.13 U		0.13 U	0.14 U
MW-14C	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		NA	NA
MW-15C	D	1 U	0.51 U	0.51 U	0.5 U	0.13 U	0.13 U	0.13 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.13 U	6.6	10
MW-17C	D								0.13 U	2.6	8.7
MW-18C	D								0.13 U	0.13 U	0.14 U
MW-19C	D								0.13 U	0.13 U	0.14 U
MW-20C	D								0.13 U	0.13 U	0.14 U
MW-21C	D								0.13 U	0.13 U	0.14 U
MW-22C	B								0.13 U	1.3	2.5
MW-23C	B								0.13 U	0.51 I	0.14 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-13
Total Dissolved Solids Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	110	94	6	5900	69	67	71	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	140	50	10	105	65	83	88		61	80
MW-3A	B	140	160	56 Q	208	100	140	140		150	180
MW-4A	B	92	120	64 Q	146	104	86	97		110	120
MW-5A	B	120	120	130 Q	166	130	190	187		190	200
MW-6A	B	96	60	36 Q	86	53	47	57		NA	NA
MW-7A	D	140	1800	34	60	100	66	75		69	69
MW-8A	D	190	76	26	119	87	85	130		150	110
MW-9A	D	160	82	52	129	110	70	140		95	86
MW-10A	D	88	110	48	181	95	93	81		97	82
MW-11A	D	270	180	110	234	140	210	190		180	190
MW-12A	D	68 Q	48	5 U	66	74	67	67		100	180
MW-13A	D	240	90	100	217	109	130	120		110	130
MW-14A	D	80	110	190	250	170	200	135		NA	NA
MW-15A	D	140	56	48	117	54	59	70		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							79	110	100
MW-17A	D								80	99	95
MW-18A	D								100	79	86
MW-19A	D								840	100	870
MW-20A	D								75	170	150
MW-21A	D								73	110	81
MW-22A	B								110	100	78
MW-23A	B								130	110	97
MW-1B	B	280	190	48	68	31	25	32	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	610	110	20	96	39	41	42		37	40
MW-3B	B	530	530	260	120	53	66	57		50	64
MW-4B	B	140	84	68 Q	69	60	60	53		81	520
MW-5B	B	64	42	22 Q	57	41	37	41		42	33
MW-6B	B	710	270	130	197	47	130	54		NA	NA
MW-7B	D	500	1000	90	122	52	59	72		69	59
MW-8B	D	830	600	150	259	120	140	59		86	55
MW-9B	D	80	260	120	71	65	55	49		61	69
MW-10B	D	140	58	40	53	37	46	53		59	60
MW-11B	D	120	530	36	96	57	83	74		69	66
MW-12B	D	980	930	200	80	63	86	80		56	60
MW-13B	D	2000	86	56 Q	86	61	58	57		59	49
MW-14B	D	160	130	78 Q	77	36	44	52		NA	NA
MW-15B	D	40	140	74 Q	55	21	29	37		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							130	180	190
MW-17B	D								160	110	88
MW-18B	D								110	81	56
MW-19B	D								140	87	110
MW-20B	D								260	210	95
MW-21B	D								310	120	73
MW-22B	B								810	67	55
MW-23B	B								47	48	42
MW-1C	B	120	70	46	78	32	38	37	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	250	74	14	39	36	33	41		44	28
MW-3C	B	290	130	5 U	63	45	37	40		35	36
MW-4C	B	710	490	130 Q	186	72	95	77		100	110
MW-5C	B	210	56	26	71	42	52	53		59	54
MW-6C	B	550	44	42	63	43	50	43		NA	NA
MW-7C	D	2500	590	34	38	41	51	54		59	38
MW-8C	D	44	50	260	53	53	46	43		57	45
MW-9C	D	80	50	44	43	62	42	41		50	48
MW-10C	D	320	50	40	67	42	58	44		56	65
MW-11C	D	170	100	82	100	61	85	69		85	76
MW-12C	D	160	52	5 U	42	41	38	42		43	33
MW-13C	D	140	82	42 Q	47	50	47	51		32	47
MW-14C	D	200	120	72 Q	38	31	55	57		NA	NA
MW-15C	D	80	54	46 Q	62	42	50	53		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							75	81	69
MW-17C	D								100	94	84
MW-18C	D								220	91	86
MW-19C	D								150	120	94
MW-20C	D								100	93	110
MW-21C	D								97	83	90
MW-22C	B								330	330	310
MW-23C	B								110	74	69

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
Q = Sample held beyond the accepted holding time
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-14
Vanadium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	10 U	2.5 U	2.5 U	1.7 I	4.1 U	0.18 U	1.4 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	10 U	2.5 U	2.5 U	2.1 I	4.1 U	1.3 I	4.8 I		0.5 I	2.0 U
MW-3A	B	10 U	2.8 I	2.5 U	3.5 I	4.1 U	2.6	0.18 U		0.5 I	2.0 U
MW-4A	B	10 U	2.5 U	2.5 U	1.9 I	4.1 U	0.18 U	1.2 I		1.4 I	2.5 I
MW-5A	B	10 U	3.9 I	2.5 U	1.8 I	4.1 U	1.6 I	7.2		2.2	2.0 U
MW-6A	B	10 U	2.5 U	2.5 U	2 I	4.1 U	1.6 I	0.18 U		NA	NA
MW-7A	D	10 U	270	2.5 U	0.5 U	4.1 U	0.18 U	6.8		0.7 I	2.0 U
MW-8A	D	10 U	3.1 I	2.5 U	3 I	4.1 U	1.3 I	7		1.9 I	2.7 I
MW-9A	D	10 U	4.6 I	2.7 I	2.8 I	4.1 U	3.4	8.3		2.8 I	2.2 I
MW-10A	D	10 U	4.4 I	3.4 I	2.3 I	4.1 I	2.4	5		2.8 I	2.3 I
MW-11A	D	14	2.5 U	2.5 U	5.2 I	8.8 I	4.2	5.8		5.5	5.0
MW-12A	D	10 U	2.8 I	2.5 U	2.4 I	4.1 U	1.8	1.7 I		1.5 I	2.0 U
MW-13A	D	10 U	2.5 U	3.1 I	4.8 I	6.2 I	4.8	5.1		3.5	4.4 I
MW-14A	D	10 U	2.5 U	7.5 I	7.6 I	12	4.4	9.4		NA	NA
MW-15A	D	10 U	2.5 U	2.5 U	1.1 I	4.1 U	0.18 U	1.1 I		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							1.7 I	7.9	5.2
MW-17A	D								1.4 I	2.9	4.2 I
MW-18A	D								4.7	2.6	2.0 U
MW-19A	D								43	2.8	40.0
MW-20A	D								0.46 I	7.1	4.9 I
MW-21A	D								0.74 I	0.2 U	2.0 U
MW-22A	B								0.18 U	0.4 I	2.0 U
MW-23A	B								2.8	2.0	2.0 U
MW-1B	B	10 U	18	3.1 I	1.8 I	4.1 U	0.18 U	0.18 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	35	14	5.5 I	5.9 I	8.4 I	1.9 I	4.4 I		2.1	2.0 U
MW-3B	B	26	81	12	8 I	5.1 I	3.4	2.1 I		1.7 I	2.0 U
MW-4B	B	10 U	5.6 I	3.6 I	3.4 I	4.1 U	1.6 I	0.18 U		1.6 I	2.0 U
MW-5B	B	10 U	3.6 I	2.5 U	1.4 I	4.1 U	2.7	3 I		1.0 I	2.0 U
MW-6B	B	11	43	21	12.5 I	5.8 I	4.5	6.4		NA	NA
MW-7B	D	15	180	12	1.6 I	7.1 I	2.6	6.8		2.6	2.0 U
MW-8B	D	54	120	18	3.9 I	16	16	12		13.0	6.2
MW-9B	D	13	51	18	3.3 I	5.9 I	0.79 I	6.7		2.8 I	3.2 I
MW-10B	D	10 U	4.1 I	2.5 U	0.98 I	4.1 U	0.18 U	5.2		1.1 I	2.0 U
MW-11B	D	10 U	56	3.5 I	3 I	4.1 U	1.6	4		1.4 I	2.0 U
MW-12B	D	10 U	53	12	1.5 I	4.8 I	2.1	2.3		0.5 I	2.0 U
MW-13B	D	11	12	3.3 I	0.92 I	4.2 I	3.1	3.2		1.3 I	2.0 U
MW-14B	D	10 U	12	4.6 I	5.1 I	4.1 U	1.6	4.3 I		NA	NA
MW-15B	D	10 U	13	4.7 I	1.4 I	4.1 U	0.18 U	2.4 I		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							5.1	11.0	20.0
MW-17B	D								10	5.7	5.0 I
MW-18B	D								12	2.2	2.1 I
MW-19B	D								7	2.6	6.1
MW-20B	D								27	17.0	7.3
MW-21B	D								41	12.0	5.1
MW-22B	B								106	0.9 I	5.8
MW-23B	B								1.6 I	2.7	2.0 U
MW-1C	B	14	5.6 I	3.3 I	4.1 I	4.1 U	0.18 U	2.3 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	18	9.5 I	2.8 I	2.4 I	4.1 U	3.1	4 I		1.8 I	2.0 U
MW-3C	B	18	18	2.5 I	2.5 I	4.1 U	1.2 I	0.18 U		1.3 I	2.0 U
MW-4C	B	24	120	8.9 I	7.2 I	5.6 I	9.7	5.2		1.7 I	2.0 U
MW-5C	B	10 U	2.5 U	2.5 U	0.78 I	4.1 U	0.4 I	4.1 I		1.5 I	2.0 U
MW-6C	B	24	4.6 I	2.5 U	2.2 I	4.3 I	3.1	3 I		NA	NA
MW-7C	D	93	140	9.8 I	3.2 I	4.1 U	1.8 I	3 I		2.8	2.0 U
MW-8C	D	10 U	2.5 U	2.5 U	1.9 I	4.1 U	0.34 I	7.3		2.4 I	2.0 U
MW-9C	D	10 U	2.6 I	2.5 U	2 I	4.1 U	0.18 U	2.5 I		1.9 I	2.2 I
MW-10C	D	33	5.7 I	2.5 U	2.4 I	4.1 U	1.1 I	6.8		1.2 I	2.0 U
MW-11C	D	10 U	2.5 U	2.6 I	1.6 I	4.1 U	0.83	2.4		0.8 I	2.0 U
MW-12C	D	10 U	3 I	2.5 U	2.3 I	4.1 U	0.68	4		0.4 I	2.0 U
MW-13C	D	10 U	2.5 U	2.5 U	1.2 I	4.1 U	0.88	1.3 I		0.8 I	2.0 U
MW-14C	D	17	15	2.8 I	1.8 I	4.1 U	3.9	1.3 I		NA	NA
MW-15C	D	10 U	3.4 I	2.5 U	0.87 I	4.1 U	0.18 U	0.18 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							3.3	3.5 I	2.0 U
MW-17C	D								7.4	2.9	2.3 I
MW-18C	D								46	9.4	8.3
MW-19C	D								29	37.0	8.1
MW-20C	D								10	8.1	11.0
MW-21C	D								18	5.5	6.0
MW-22C	B								2.9	0.6 I	2.0 U
MW-23C	B								29	5.0	2.0 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-15
Dissolved Vanadium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	10 U	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	10 U	2.6 I	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	10 U	3.4 I	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	10 U	3.9 I	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	10 U	NA	7.4 I	5 I	9.6 I	NA	2.1 I		NA	NA
MW-15A	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								3	NA	NA
MW-19A	D								15	NA	29.0
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	10 U	2.5 U	2.5 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	21	6 I	2.5 U	1.4 I	4.1 U	NA	NA		NA	NA
MW-3B	B	19	2.6 I	2.5 U	1.9 I	4.1 U	NA	NA		NA	NA
MW-4B	B	10 U	2.5 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	10 U	2.9 I	2.5 U	2.4 I	NA	NA	NA		NA	NA
MW-7B	D	14	30	2.5 U	1.6 I	4.1 U	NA	NA		NA	NA
MW-8B	D	36	2.5 U	4 I	3.9 I	10	5.8	1.9 I		11.0	NA
MW-9B	D	14 U	3.7 I	2.5 U	3.3 I	4.1 U	NA	NA		NA	NA
MW-10B	D	10 U	2.5 U	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	10 U	2.5 U	2.5 U	NA	NA	NA	NA		NA	NA
MW-12B	D	10 U	2.5 I	2.5 U	1.5 I	NA	NA	0.1 U		NA	NA
MW-13B	D	11	2.5 U	2.6 I	0.92 I	NA	NA	NA		NA	NA
MW-14B	D	10 U	4.9 I	2.5 U	1.3 I	NA	NA	NA		NA	NA
MW-15B	D	NA	2.5 U	2.5 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.64 I	11.0	2.0 U
MW-17B	D								1.1 I	4.7	2.0 U
MW-18B	D								0.18 U	NA	NA
MW-19B	D								0.18 U	NA	2.0 U
MW-20B	D								2.1	2.5	2.0 U
MW-21B	D								13	0.6 I	2.0 U
MW-22B	B								12	0.9 I	2.0 U
MW-23B	B								NA	NA	NA
MW-1C	B	10 U	2.5 U	2.5 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	10 U	2.5 U	2.5 U	NA	NA	NA	NA		NA	NA
MW-3C	B	10 U	2.5 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	10 U	3.9 I	2.9 I	1.3 I	4.1 U	1.0 I	NA		1.2 I	NA
MW-5C	B	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	10 U	2.5 U	2.5 U	NA	NA	NA	NA		NA	NA
MW-7C	D	45	6.2 I	2.5 U	NA	NA	NA	NA		NA	NA
MW-8C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	10 U	2.5 U	NA	NA	4.1 U	NA	NA		NA	NA
MW-11C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	10 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	10 U	2.5 U	2.8 I	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								1.3 I	NA	NA
MW-18C	D								1.3 I	1.8 I	2.0 U
MW-19C	D								3.4	1.6 I	2.0 U
MW-20C	D								0.42 I	1.6 I	2.0 U
MW-21C	D								0.97 I	1.0 I	2.0 U
MW-22C	B								NA	NA	NA
MW-23C	B								0.54 I	0.5 I	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-16
Benzene Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)		1st Event Jul-04 (µg/L)		2nd Event Jan-05 (µg/L)		3rd Event Jul-05 (µg/L)		4th Event Feb-06 (µg/L)		5th Event Jul-06 (µg/L)		6th Event Feb-07 (µg/L)		PH 2&3 Baseline Sep-07 (µg/L)		7th Event Nov-07 (µg/L)		8th Event May-08 (µg/L)	
MW-1A	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2A	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-3A	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-4A	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-5A	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.3	I
MW-6A	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	NA	
MW-7A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		0.2	U
MW-8A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.3	I	0.2	U
MW-9A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	3.9				1.4		2.8	
MW-10A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.4	I
MW-11A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			1	I	3.3	
MW-12A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-13A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0	U	0.2	U
MW-14A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-15A	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007														0.088	U	0.1	U	0.2	U
MW-17A	D															0.088	U	0.1	U	0.2	U
MW-18A	D															0.088	U	0.1	U	0.2	U
MW-19A	D															0.44	U	0.1	U	0.2	U
MW-20A	D															0.088	U	0.1	U	0.2	U
MW-21A	D															0.088	U	0.1	U	0.2	U
MW-22A	B															0.088	U	0.1	U	0.2	U
MW-23A	B															0.088	U	0.1	U	0.2	U
MW-1B	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2B	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-3B	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-4B	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-5B	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-6B	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-7B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-8B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-9B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-10B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-11B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-12B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-13B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-14B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-15B	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007														0.088	U	0.1	U	0.2	U
MW-17B	D															0.088	U	0.1	U	0.2	U
MW-18B	D															0.088	U	0.1	U	0.2	U
MW-19B	D															0.088	U	0.1	U	0.2	U
MW-20B	D															0.088	U	0.1	U	0.2	U
MW-21B	D															0.088	U	0.1	U	0.2	U
MW-22B	B															0.088	U	0.1	U	0.2	U
MW-23B	B															0.088	U	0.1	U	0.2	U
MW-1C	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2C	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-3C	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-4C	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-5C	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-6C	B	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-7C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-8C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-9C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-10C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-11C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-12C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-13C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			0.1	U	0.2	U
MW-14C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-15C	D	1.0	U	0.27	U	0.27	U	0.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007														0.088	U	0.1	U	0.5	U
MW-17C	D															0.088	U	0.1	U	0.2	U
MW-18C	D															0.088	U	0.1	U	0.2	U
MW-19C	D															0.088	U	0.1	U	0.2	U
MW-20C	D															0.088	U	0.1	U	0.2	U
MW-21C	D															0.088	U	0.1	U	0.2	U
MW-22C	B															0.088	U	0.1	U	0.2	U
MW-23C	B															0.088	U	0.1	U	0.2	U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-17
Vinyl Chloride Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)		1st Event Jul-04 (µg/L)		2nd Event Jan-05 (µg/L)		3rd Event Jul-05 (µg/L)		4th Event Feb-06 (µg/L)		5th Event Jul-06 (µg/L)		6th Event Feb-07 (µg/L)		PH 2&3 Baseline Sep-07 (µg/L)		7th Event Nov-07 (µg/L)		8th Event May-08 (µg/L)	
MW-1A	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2A	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-3A	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-4A	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-5A	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.4	I	0.42	I
MW-6A	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	NA	
MW-7A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		0.23	U
MW-8A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-9A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	3.00				2.1		2.4	
MW-10A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.61	I
MW-11A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	1.7	
MW-12A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-13A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-14A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-15A	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007														0.12	U	0.12	U	0.23	U
MW-17A	D															0.12	U	0.12	U	0.23	U
MW-18A	D															0.12	U	0.12	U	0.23	U
MW-19A	D															0.12	U	0.12	U	0.23	U
MW-20A	D															0.12	U	0.12	U	0.23	U
MW-21A	D															0.12	U	0.12	U	0.23	U
MW-22A	B															0.12	U	0.12	U	0.23	U
MW-23A	B															0.12	U	0.12	U	0.23	U
MW-1B	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2B	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-3B	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-4B	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-5B	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-6B	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-7B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-8B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-9B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-10B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-11B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-12B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-13B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-14B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-15B	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007														0.12	U	0.12	U	0.23	U
MW-17B	D															0.12	U	0.12	U	0.23	U
MW-18B	D															0.12	U	0.12	U	0.23	U
MW-19B	D															0.12	U	0.12	U	0.23	U
MW-20B	D															0.12	U	0.12	U	0.23	U
MW-21B	D															0.12	U	0.12	U	0.23	U
MW-22B	B															0.12	U	0.12	U	0.23	U
MW-23B	B															0.12	U	0.12	U	0.23	U
MW-1C	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2C	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-3C	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-4C	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-5C	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-6C	B	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-7C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-8C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-9C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-10C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-11C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-12C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-13C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			0.12	U	0.23	U
MW-14C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-15C	D	1.0	U	0.5	U	0.5	U	0.5	U	0.12	U	0.12	U	0.12	U			NA		NA	
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007														0.12	U	0.12	U	0.25	U
MW-17C	D															0.12	U	0.12	U	0.23	U
MW-18C	D															0.12	U	0.12	U	0.23	U
MW-19C	D															0.12	U	0.12	U	0.23	U
MW-20C	D															0.12	U	0.12	U	0.23	U
MW-21C	D															0.12	U	0.12	U	0.23	U
MW-22C	B															0.12	U	0.12	U	0.23	U
MW-23C	B															0.12	U	0.12	U	0.23	U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 5-18
Surface Water Detections (SW - 3)
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J.E.D. Solid Waste Management Facility

Parameter Monitored	Class III Standard Criteria	Units	Baseline Jan-04	1st Event July-04	2nd Event Jan-05	3rd Event July-05	4th Event Feb-06	5th Event July-06	6th Event Feb-07	7th Event Nov-07	8th Event May-08
Ammonia (as N)	--	mg/L	ND	0.069	0.33	0.18	0.01	ND	ND	ND	NA
Arsenic	50	ug/L	ND	ND	ND	ND	0.78	ND	ND	0.5	ND
B.O.D.	--	mg/L	NA	NA	NA	ND	NA	82	ND	ND	ND
Barium	--	ug/L	ND	ND	10	ND	7.7	11	9.2	14	6.7
Chloride	--	mg/L	NA	NA	NA	4.1	NA	NA	NA	NA	NA
Chlorophyll-a	--	mg/m^3	NA	3.5	1.1	NA	2.1	3.2	3.2	2.4	11
Chromium	--	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
COD	--	mg/L	NA	99	81	50.7	65	100	28	87	33
Fecal Coliform	800	#/100mL	NA	NA	NA	NA	NA	NA	NA	560	240
Hardness as $CaCO_3$	--	mg/L	NA	8.1	16	8.4	13	13	12	16	5.8
Iron	1000	ug/L	790	730	670	630	360	870	370	795	279
Nitrate-N	--	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen, Total as N	--	mg/L	NA	0.78	1.2	0.72	0.79	1.1	0.5	1.5	1.2
Organic Carbon, Total	--	mg/L	NA	25	29	19.1	32	26	16	36	9.2
Phosphates, Total	--	mg/L	NA	ND	ND	ND	62	0.054	0.056	0.045	0.038
Sodium	--	mg/L	NA	NA	NA	NA	ND	NA	NA	9.9	NA
Total Dissolved Solids	--	mg/L	120	26	86	645	49	92	56	95	30
Total Suspended Solids	--	mg/L	ND	ND	ND	ND	ND	ND			8
Vanadium	--	ug/L	ND	ND	ND	0.6	ND	ND	ND	ND	ND
Zinc	--	ug/L	ND	ND	ND	3.8	ND	ND	ND	ND	ND

Notes:
1. Shaded values exceed Class III Standard Criteria
2. "--" indicates that no criteria has been established
3. NA = not analyzed.
4. ND = not detected

Table 5-19
Surface Water Detections (SW - 4)
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Parameter Monitored	Class III Standard Criteria	Units	Baseline Jan-04	1st Event July-04	2nd Event Jan-05	3rd Event July-05	4th Event Feb-06	5th Event July-06	6th Event Feb-07	7th Event Nov-07	8th Event May-08
Ammonia (as N)	--	mg/L	0.032	0.062	0.093	0.12	0.01	ND	ND	ND	NA
Arsenic	50	ug/L	ND	ND	ND	ND	ND	0.9	ND	ND	ND
B.O.D.	--	mg/L	ND	ND	ND	ND	ND	53	ND	ND	ND
Barium	--	ug/L	ND	ND	ND	ND	9	8	7.1	15	7.7
Chloride	--	mg/L	NA	NA	NA	3.6	NA	NA	NA	NA	NA
Chlorophyll-a	--	mg/m^3	NA	1.1	ND	NA	3.1	ND	2.7	ND	24
Chromium	--	ug/L	ND	ND	ND	ND	2.7	ND	ND	ND	ND
COD	--	mg/L	NA	64	94	61.3	57	92	6.9	95	31
Fecal Coliform	800	#/100mL	NA	NA	NA	NA	NA	NA	NA	1000	7200
Hardness as $CaCO_3$	--	mg/L	NA	6.2	13	5.8	12	6.4	8.1	16	5.6
Iron	1000	ug/L	1100	590	670	707	460	510	270	875	261
Nitrate-N	--	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen, Total as N	--	mg/L	NA	0.78	1.7	0.84	0.88	1.2	ND	1.4	0.82
Organic Carbon, Total	--	mg/L	NA	23	28	17.7	30	17	11	37	8.6
Phosphates, Total	--	mg/L	ND	ND	0.29	0.065	NA	0.044	0.063	0.053	0.11
Sodium	--	mg/L	NA	NA	NA	NA	NA	NA	NA	10	NA
Total Dissolved Solids	--	mg/L	130	ND	92	157	47	64	51	88	36
Vanadium	--	ug/L	ND	ND	ND	ND	ND	3.1	ND	ND	ND
Zinc	--	ug/L	ND	ND	ND	ND	ND	ND	10	ND	ND

Notes:
1. Shaded values exceed Class III Standard Criteria
2. "--" indicates that no criteria has been established
3. NA = not analyzed.
4. ND = not detected

Table 5-20
Leachate Detections (L-1 through L-4)
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Parameter	Regulatory Level	Unit	July 2004 Event	July 2005 Event	July 2006 Event			Nov 2007 Event			
			L-1	L-1	L-1	L-2	L-4	L-1	L-2	L-3	L-4
1,1-Dichloroethane	-	ug/L	1	0.97	ND	1.6	ND	ND	ND	12	ND
1,2-Dichloroethane	500	ug/L	1.9	11.9	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	-	ug/L	ND	2.78	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	7,500	ug/L	ND	5.55	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	-	ug/L	ND	ND	ND	ND	64	ND	ND	ND	ND
2.4 -D	10,000	ug/L	ND	ND	ND	0.8	ND	ND	ND	ND	ND
2-Butanone (MEK)	200,000	ug/L	1200	25200	ND	ND	ND	ND	ND	25000	ND
2-Hexanone	-	ug/L	ND	30.6	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	-	ug/L	ND	1420	ND	92	ND	ND	16	2500	ND
4-Methyl-2-pentanone	-	ug/L	ND	203	ND	29	ND	ND	ND	420	ND
Acetone	-	ug/L	350	11200	ND	730	ND	ND	ND	12000	ND
Acetonitrile	-	ug/L	ND	90.3	ND	ND	ND	ND	ND	ND	ND
Alkalinity, Bicarbonate	-	mg/L	37	1390	2400	10	2600	1200	570	420	2200
Ammonia-N	-	mg/L	3.9	NA	520	17	690	57	200	190	760
Antimony	-	ug/L	ND	ND	ND	2.8	ND	ND	ND	3.4	56
Arsenic	5,000	ug/L	ND	16	0.86	3.5	1.9	21	27	13	97
B.O.D.	-	mg/L	ND	228	NA	NA	NA	NA	NA	NA	NA
Barium	100,000	ug/L	83	424	9	220	8.9	817	234	281	281
Benzene	500	ug/L	2	15.6	ND	11	ND	ND	11	20	ND
Benzyl alcohol	-	ug/L	ND	36	ND	ND	ND	ND	ND	ND	ND
Bicarbonate Ion	-	mg/L	ND	ND	2400	10	2600	ND	ND	ND	ND
C.O.D.	-	mg/L	ND	7300	NA	NA	NA	NA	NA	NA	NA
Cadmium	1,000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	3.6
Carbon disulfide	-	ug/L	1.7	16.1	ND	ND	ND	ND	ND	ND	ND
CFC-11	-	ug/L	ND	ND	ND	9.9	ND	ND	ND	ND	ND
Chloride	-	mg/L	79	1250	2300	360	2600	1100	1800	720	2200
Chlorobenzene	100,000	ug/L	ND	0.4	ND	ND	ND	ND	ND	ND	ND
Chloroethane	-	ug/L	ND	1.46	ND	1.6	ND	ND	ND	ND	ND
Chloromethane	-	ug/L	ND	ND	ND	2.5	ND	ND	ND	ND	ND
Chromium	5,000	ug/L	ND	20.1	3.8	8.4	6.7	50	41	14	534
cis-1,2-Dichloroethene	-	ug/L	ND	21.3	ND	1.1	ND	ND	ND	ND	ND
Cobalt	-	ug/L	ND	ND	ND	3.9	ND	12	ND	1.5	28
Copper	-	ug/L	ND	ND	ND	2.6	2.7	ND	ND	ND	27
Cresol, m & p	200,000	ug/L	130	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	-	ug/L	10	ND	ND	6.2	ND	ND	ND	ND	ND
Ethylbenzene	-	ug/L	ND	40.6	ND	13	ND	16	44	48	23
Ethylene dichloride	-	ug/L	ND	ND	ND	18	ND	ND	ND	22	ND
Ethyl Methacrylate	-	ug/L	ND	ND	ND	1.4	ND	ND	ND	ND	ND
Fluorene	-	ug/L	ND	10.5	ND	ND	ND	ND	ND	ND	ND
Iron	-	ug/L	6300	16100	270	11200	130	12700	2940	16500	346
Lead	5,000	ug/L	ND	ND	ND	1.2	ND	ND	ND	N	14
Methyl methacrylate	-	ug/L	ND	ND	ND	6.7	ND	ND	ND	ND	ND
Methylene Chloride	-	ug/L	7.3	7.18	ND	57	ND	ND	ND	ND	ND
Naphthalene	-	ug/L	12	2.09	ND	ND	ND	ND	ND	ND	ND
Nickel	-	ug/L	ND	89.4	7.9	6.5	4.1	59	41	27	168
Nitrate	-	mg/L	ND	1.3	ND	ND	ND	ND	ND	ND	ND
Nitrate + Nitrite-N	-	mg/L	ND	271	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Total	-	mg/L	ND	573	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Total Kjeldahl	-	mg/L	ND	302	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	100,000	ug/L	ND	ND	2	0.1	1	ND	ND	ND	ND
Phenol	-	ug/L	29	366	ND	35	120	ND	ND	300	ND
Phosphorus	-	mg/L	ND	1.6	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	-	mg/L	280	133	7900	1720	11000	4400	4100	2600	10000
Selenium	1,000	ug/L	ND	ND	ND	8.6	ND	12	12	3.8	162
Sodium	-	mg/L	38	680	52	230	52	1300	829	447	237
Sulfate	-	mg/L	ND	201	NA	NA	NA	NA	NA	NA	NA
Sulfide	-	mg/L	4.2	NA	95	8.6	180	50	11	29	16
Styrene		ug/L	ND	ND	ND	4.8	ND	ND	ND	ND	ND
Tetrachloroethene	700	ug/L	ND	1.75	ND	3.6	ND	ND	ND	ND	ND
Toluene	-	ug/L	5.2	178	ND	75	ND	ND	51	930	44
Trichloroethene	-	ug/L	ND	2.26	ND	2.4	ND	ND	ND	ND	ND
Trichlorofluoromethane	500	ug/L	ND	0.46	NA	NA	NA	NA	NA	NA	NA
Vanadium	-	ug/L	ND	61.6	9.3	27	12	44	102	55	712
Xylenes, total	-	ug/L	ND	73.8	ND	23	ND	ND	55	56	40
Zinc	-	ug/L	ND	40.9	ND	32	26	ND	ND	ND	ND

Notes:

1. ND = Not detected
2. NA = Not analyzed
3. Regulatory level is listed in 40 CFR Part 261.24

6. TREND ANALYSES

6.1 Overview

Section 4 presented a summary of the field-measured parameters and Section 5 provided a summary of the detected parameters, as compared to the regulatory criteria for groundwater, surface water, and leachate samples collected during the water quality monitoring events performed between January 2004 and May 2008. Exhibit I of the permit requires trend analyses to be completed for any monitoring parameters detected. For this report, only those field measured or detected parameters exceeding the regulatory criteria are addressed. The tables for all parameters detected but at concentrations below the regulatory criteria have been included in Appendix B. The subsequent sections present discussions of the visual trends for the parameters detected exceeding regulatory criteria for groundwater, surface water, and leachate samples.

6.2 Groundwater

Trend analyses have been completed for parameters that exceeded the GWCTL at a minimum of one well location for all monitoring events. These parameters include; arsenic, beryllium, chromium, iron, lead, vanadium, ammonia-N, toluene, total dissolved solids (TDS), beryllium, benzene, and vinyl chloride. The results are discussed below for each parameter with respect to either the GWCTL or secondary drinking water standards (SDWS), whichever is applicable. It should be noted that the monitoring well clusters, MW-16 through MW-23, installed as part of Phase 2 and 3 development in September 2007, are excluded in the trend analysis since analytical data collected for these wells are not sufficient for proper trend analyses.

6.2.1 Arsenic

Figure 6-1 shows that the GWCTL for arsenic (10 ug/L) was exceeded in at least one monitoring event for six (6) monitoring wells (MW-2C, 4C, 7C, 11A, 12A, and 13A). MW-2C, 4C, and 7C all had arsenic concentrations slightly exceeding the GWCTL during the baseline event for Phase I or the first semi-annual event and all three monitoring wells show a similar visual downward trend over the last four years. The turbidity levels for all three wells were well above the SDWS of 20 NTUs (350 to 1,130 NTUs) for the sampling event(s) that exceeded the arsenic GWCTL. The dissolved (filtered) samples from these three wells were analyzed for arsenic, and only MW-2C had a dissolved arsenic concentration above the GWCTL.

Arsenic was detected in MW-11A (17 ug/L) for the baseline monitoring event (performed prior to placement of any waste in landfill) which exceeded the GWCTL. The arsenic levels in MW-11A have varied between 17 and 31 ug/L with no obvious visual trend. Arsenic has been detected consistently in MW-13A for the last seven monitoring events. The arsenic levels in MW-13A are close in concentration and show a slight incremental upward trend. MW-12A had a concentration exceeding the GWCTL during the eighth monitoring event only. Arsenic in MW-12A had not detected in the previous seven monitoring events.

The presence of soluble (ferrous) iron is an excellent predictor of arsenic concentrations. Figure 9-3 shows the correlation plot between iron and arsenic. The correlation coefficient of 0.75 indicates a positive correlation between the two analytes. The positive correlation observed in Figure 9-3 has also been observed at many other landfills statewide. Geosyntec participated as geochemical experts on a Technical Advisory Group (TAG) to evaluate potential rulemaking options for CCA-treated wood along with FDEP Solid Waste Division and other interested stakeholders. A review of FDEP's data base for C&D landfills shows similar correlations at virtually every site that has arsenic impacts. For geochemical perspective, this is not surprising. One of the primary solubility controls over arsenic is the presence of iron (ferric) hydroxides (FeOH(x)) in the aquifer. These oxy-hydroxides have a strong affinity for arsenic and, even at relatively low levels, serve to render arsenic insoluble in groundwater systems. However, under low oxygen (reducing) conditions, the oxidized (ferric) form is reduced to the soluble ferrous form. Arsenic levels go up because arsenic is solubilized during the iron reduction process.

This is precisely what has happened in shallow groundwater at the JED facility. Each of the arsenic exceedances occurred when iron was higher than 10 mg/L. No arsenic exceedances occur under any other conditions except for MW-2C in the baseline event for Phase 1. However, MW-2C has not had an arsenic detection in the past eight (8) monitoring events. The fact that the levels in MW-11A have not changed appreciably since before waste was placed and that the biochemical conditions are favorable for arsenic dissolution suggest that the arsenic exceedances encountered at the JED facility are naturally occurring.

6.2.2 Ammonia (as N)

Figure 6-2 shows the monitoring wells where the GWCTL for ammonia (2.8 mg/L) was exceeded in at least one monitoring event for eight (8) monitoring wells (MW-3A, 4A, 5A, 9A, 9B, 10A, 11A, and 14C). Ammonia was detected in all of these wells during the baseline sampling event for Phase 1. There appears to be no visual trends for

ammonia in MW-3A, 9A, 9B, 10A, and 14C. The ammonia concentrations appear to be increasing slightly over the last eight monitoring events in MW-4A, 5A, 11A.

It is unlikely that the ammonia reported in groundwater from certain shallow ("A" zone) monitoring wells (MW-3A, 4A, 5A, 9A, 10A, and 11A) is the result of landfill operations. It is suspected that the source of ammonia reported in groundwater is related to previous activity at the site and or land use in the adjacent area. Prior to construction of the landfill, the property was used as a sod farm. Any numbers of nitrogen-based compounds that can easily be converted to ammonia or can be applied in an ammonia form were likely used to fertilize the grass to achieve optimum growth. Though nitrate has not been consistently detected in groundwater, the use of nitrate fertilizer is likely masked by the reducing groundwater conditions at and in the vicinity of the landfill. Under reducing conditions, nitrate undergoes a denitrification process whereby nitrogen gas is released to the atmosphere. In addition to the sod farming activities discussed above, the adjacent property was and continues to be used for cattle grazing, which may provide an additional ammonia source. Cattle manure contains between 2 and 2.5 percent organic nitrogen (Singer and Munns, 1991), which if converted to an inorganic form may serve as another potential groundwater ammonia source.

Other geochemical parameters that are currently monitored in groundwater were evaluated to determine if other constituent levels in groundwater provide evidence of a landfill operations-derived release. Leachate generated in landfills can generally be characterized as reducing, with a high concentration of organic material, and various ions. The following four groups of constituents are generally found in landfill leachate, and if present at elevated levels, may be indicative of leachate migration to groundwater (Christensen, et al, 2001). The four groups include:

- dissolved organic matter
- inorganic macro-components – Ca, Mg, Na, K, ammonia, Fe, Mn, Cl, sulfate, and bicarbonate;
- heavy metals – Cd, Cr, Cu, Pb, Ni, and Zn; and
- xenobiotic organic compounds – aromatic hydrocarbons, phenols, and chlorinated aliphatics.

Although other constituents may be present in leachate from landfills, they are likely to be present at very low concentrations and are generally viewed as having a secondary importance (Christensen, et al 2001). Select metals and organic compounds have been infrequently detected previously in "A" zone groundwater. However; subsequent groundwater monitoring events indicated that these detections were not representative of "A" zone groundwater and/or not associated with landfill operations.

Chloride and sodium levels in "A" zone groundwater were evaluated for evidence of landfill impacts to groundwater. Chloride and sodium are inorganic constituents that are generally present at elevated levels in leachate and have been widely used as tracers for landfill impacts to groundwater. Figure B-6 included as Appendix B of this report provides a summary of chloride concentrations reported from the baseline event (January 2004), prior to liner installation and the acceptance of waste, to the May 2008 sampling event. The reported concentration of chloride for monitoring wells MW-3A, 4A, 5A, 9A, 10A, and 11A has been consistently less than the average chloride concentration and appears to decrease over time rather than increase. If leachate were impacting groundwater, the chloride concentration would be expected to increase as the reported chloride concentration in leachate of ranging between 79 and 2,600 mg/L is much higher than background chloride levels. These data provide supporting evidence that the ammonia reported in groundwater is not associated with landfill operations.

6.2.3 Beryllium

As shown on Figure 6-3, the GWCTL for beryllium (4 ug/L) was exceeded at one well (MW-7A) during the first semi-annual monitoring event. The beryllium concentration of 5.1 ug/L for this sample was just slightly above the GWCTL. The turbidity for MW-7A for this sample was 1,321 NTU, which is well above the SDWS of 20 NTU. The dissolved beryllium (filtered) concentration for this sample was below the PQL of 0.74 ug/L. There is no visual trend for beryllium in MW-7A. Beryllium has not been detected in any of monitoring wells in the last seven monitoring events.

6.2.4 Chromium

Figure 6-4 shows the monitoring wells where the GWCTL for chromium (100 ug/L) was exceeded in at least one monitoring event for three (3) monitoring wells (MW-4C, 7A, and 7B). The turbidity levels for these three samples for the first monitoring event ranged between 1,184 and 1,321 NTU. Chromium levels for these three wells in the other seven monitoring events have all been well below the GWCTL. These spikes in chromium concentrations are attributed to extremely high turbidities.

6.2.5 Iron

As shown in Figure 6-5, the GWCTL for iron (0.3 mg/L) has been exceeded in every monitoring well during every monitoring event. Upward spikes in the iron concentrations seen during the first semi-annual event in the "B" and "C" zones wells can be attributed primarily to high turbidity levels. The source of the iron is naturally occurring. There appears to be no general trend in iron concentrations in the monitoring

wells at the site. There is no substantial difference between the total and dissolved iron concentrations for samples with turbidity levels greater than 20 NTU.

6.2.6 Lead

Figure 6-6 shows the monitoring wells where the GWCTL for lead (15 ug/L) was exceeded in at least one monitoring event for ten (10) monitoring wells (MW-7A, 3B, 6B, 7B, 8B, 9B, 11B, 12B, 4C, and 7C). A review of the data shows that for the first semi-annual monitoring event, all ten wells that exceeded the lead GWCTL had turbidity levels significantly above 20 NTU (130 – 1,321 NTU). Filtered (dissolved) samples from each of these ten wells were also analyzed for lead and all were non-detect for lead except for MW-7B, which still had a detection, but below the GWCTL. The lead GWCTL was exceeded in the third semi-annual event for MW-8B. Again, the turbidity level for this sample (144 NTU) was greater than the SDWS of 20 NTU. The lead concentration in the filtered sample (1.5 ug/L) was less than the GWCTL. Based on Figure 6-6, no visual trend is identified. Lead has not been detected above the GWCTL in any well over the last five monitoring events.

It is unlikely that lead detections in groundwater are associated with landfill operations. Lead has not been detected in the leachate samples collected from the Cells 1 through 4 except for two (2) leachate samples collected from Cell 2 in July 2006 and from Cell 4 in November 2007 at concentrations of 1.2 and 14 ug/L, respectively, which is lower than concentrations detected in monitoring wells. Moreover, all lead exceedances occurred during the first (July 2004) and second monitoring events (January 2005). These exceedances are attributable to the high turbidity levels and not associated with landfill operations.

6.2.7 Toluene

As shown on Figure 6-7, an overall downward trend in toluene concentrations can be observed for the three (3) wells (MW-2A, 4A, and 5A) where the GWCTL for toluene (40 ug/L) was exceeded in at least one monitoring event. Two of the toluene detections (MW-2A and 5A) were encountered during the baseline monitoring event for Phase 1. Toluene is commonly found in petroleum products. The toluene detections exceeding the GWCTL have been limited to the "A" zone wells and are likely the result of heavy equipment usage during landfill construction and pre-landfill site usage. None of the wells have had detections of toluene exceeding the GWCTL in the last seven monitoring events.

6.2.8 Total Dissolved Solids (TDS)

Figure 6-8 shows an overall downward trend in TDS concentrations for the monitoring wells where the GWCTL for TDS (500 mg/L) was exceeded in at least one monitoring event. A significant spike in the TDS concentration for MW-1A can be seen for the third semi-annual monitoring event, which spears to be a spurious results and not representative of TDS results for the same well during the other monitoring events where TDS ranged between 5 and 110 mg/L. The early event exceedances of TDS may be attributable to turbidity issues and not attributable to the landfill operations. In any event, exceedances have not occurred in the last seven monitoring events except for the spurious result for MW-1A noted above and for MW-4B (520 mg/L) which is slightly above the GWCTL.

6.2.9 Vanadium

Figure 6-9 shows the monitoring wells where the GWCTL for lead (49 ug/L) was exceeded in at least one monitoring event for nine (9) monitoring wells (MW-7A, 3B, 7B, 8B, 9B, 11B, 12B, 4C, and 7C). A review of the data shows that for the baseline and first semi-annual monitoring events all wells that exceeded the vanadium GWCTL had turbidity levels significantly above 20 NTU (130 – 1,321 NTU). Filtered (dissolved) samples from each of these wells were also analyzed for vanadium and all were non-detect for vanadium except for MW-7B, which still had a detection, but well below the GWCTL. As shown on Figure 6-9, an overall downward trend in vanadium concentrations can be observed. Vanadium has not been detected in any of these wells above the GWCTL in the past seven monitoring events.

6.2.10 Benzene

Figure 6-10 shows the monitoring wells where the GWCTL for benzene (1 ug/L) was exceeded in at least one monitoring event for two (2) monitoring wells (MW-9A and MW-11A). Volatile organic compounds (VOCs) benzene and vinyl chloride were detected in MW-9A during the sixth through eighth monitoring events, and in MW-11A during the eight monitoring event. In accordance with Chapter 62-701.510(7)(a) F.A.C. and Paragraph 4 of Monitoring Plan Implementation Schedule section of the FDEP Permit, the resample event was performed within 30 days of receiving data for the initial sampling event for the two monitoring wells. WSI notified the FDEP of these findings twice in letters dated 13 April 2007 and 3 June 2008.

It is likely that these detections are attributable to residual contamination remaining from the erosion caused by surface water run-off from the landfill in the vicinity of MW-

9A and MW-11A as previously discussed in the sixth through eight semi-annual water quality monitoring reports. .

6.2.11 Vinyl Chloride

Figure 6-11 shows the monitoring wells where the GWCTL for vinyl chloride (1 ug/L) was exceeded in at least one monitoring event for two (2) monitoring wells (MW-9A and MW-11A). As mentioned above in Section 6.2.10, benzene and vinyl chloride were detected in MW-9A during the sixth through eighth monitoring events, and in MW-11A during the eight monitoring event. Vinyl chloride and benzene had not detected in any wells prior to the sixth monitoring event.

6.2.12 pH

A plot of the final field measured pH for each groundwater monitoring well in the network for each sampling event compared with the secondary drinking water standard (SDWS) for pH (between 6.5 and 8.5 standard units) is presented in Figure 6-12. The pH values have been relatively consistent over the monitoring period. Figure 6-12 shows that the measured pH typically ranges between 4 and 6 standard units. All pH measurements are below the lower limit of the SDWS of 6.5 standard units. These results can be attributable to the shallow nature of some monitoring wells and groundwater levels. The average pH for precipitation in Florida is 4.77 (Florida Geological Survey, 1992). The data obtained from the monitoring wells appear to be consistent with what would be expected in shallow groundwater from this environment.

6.2.13 Turbidity

As discussed in the baseline water quality reports for Phase 1 (May 2004) and Phases 2 and 3 (September 2007), the formation around the screened intervals consists primarily of a fine, brown to dark brown, silty sand. Due to the subsurface formation properties, fine-grained and colloidal material are able to pass through the sand filter pack in many wells, primarily in the B-zone and C-zone wells. Most of the intermediate and deep wells had turbidity values in excess of the 20-NTU criterion even after extended well development and the removal of multiple well volumes of water.

The difficulty in attaining the desired turbidity criterion was discussed at a meeting between GeoSyntec and FDEP on 12 January 2004. In accordance with these discussions, it was agreed to collect field-filtered (1-micron) and unfiltered samples for metals analyses for any sample with a turbidity value greater than 20 NTU. The data generated by the dual sampling is expected to help demonstrate: (i) what effect turbidity may have on metal analyses (i.e., compare total and dissolved metal concentrations); and

(ii) whether groundwater samples with turbidities greater than 20 NTU showed higher concentrations of metals than those samples with turbidities less than 20 NTU. The overall goal is to establish a site-specific turbidity level at which samples could be collected in future sampling events without the need of collecting filtered samples.

Overall, the turbidity levels have improved dramatically from the initial background (Baseline) event for Phase 1 (monitoring well clusters, MW-1 thorough MW-15) to the most recent semi-annual event completed in May 2008. The number of wells requiring the collection of a filtered metals sample has decreased dramatically from twenty-eight (28) wells during the initial background event to no wells collected for a filtered metal sample during the eighth semi-annual monitoring event completed in May 2008.

A plot of the final field-measured turbidity for each groundwater monitoring well in the network for each sampling event compared with the secondary drinking water standard (SDWS) for turbidity (below 20 NTUs) is presented in Figure 6-13. An overall downward trend in the turbidity levels can be observed.

Based upon a review of Figure 6-13, the measured turbidity for the majority of the "A" zone wells is below the SDWS. Four (4) "A" zone wells (MW-4A, 5A, 7A, and 14A) had turbidity levels exceeding the turbidity SDWS for any event. For the last two (seventh and eighth) monitoring events, all "A" zone wells had turbidity levels below the SDWS.

The "B" and "C" zone wells have shown in an improvement in turbidity levels since the initial background event for Phase 1. During the last two (seventh and eighth) semi-annual monitoring events, only MW-8B and MW-4C exceeded the SDWS for turbidity.

6.3 Surface Water

6.3.1 pH

A plot of the field-measured pH for each surface water monitoring location in the network for each sampling event compared with the Class III surface water quality standard (SWQS) for pH (between 6.5 and 8.5 standard units) is presented in Figure 6-14. The pH values have been relatively consistent over the monitoring period. Figure 6-14 shows that the measured pH typically ranges between 3.6 and 6.1 standard units. The pH values have been below the SWQS acceptable pH range of approximately 6.0 to 8.5 standard units from Jan 2004 to May 2008 with the exception of the Jan 2004 baseline event for the SW-3 location. The average pH for precipitation in Florida is 4.77 (Florida Geological Survey, 1992). The pH data obtained from the monitoring wells appears to be

consistent with that of the surface water samples. The low pH values detected from the surface water samples are consistent with the environmental conditions in the region.

6.3.2 Dissolved Oxygen

A plot of the field measured DO levels are presented on Figure 6-14. The dissolved oxygen (DO) concentrations in the surface water samples collected at the two monitoring stations (SW-3 and SW-4) were below the SWQS of 5 milligrams per liter (mg/L) during the monitoring events performed during the summer months (i.e., July 2004, July 2005, and July 2006 monitoring events) except for SW-3 measured during the fifth event. The most likely explanation for the decrease in DO is warmer surface water temperatures and algal blooms consuming DO in greater amounts during the summer months. Alternatively, the results could be due to a lack of precipitation immediately prior to sampling. In either case, it is highly unlikely that these are the reflection of any landfill impacts.

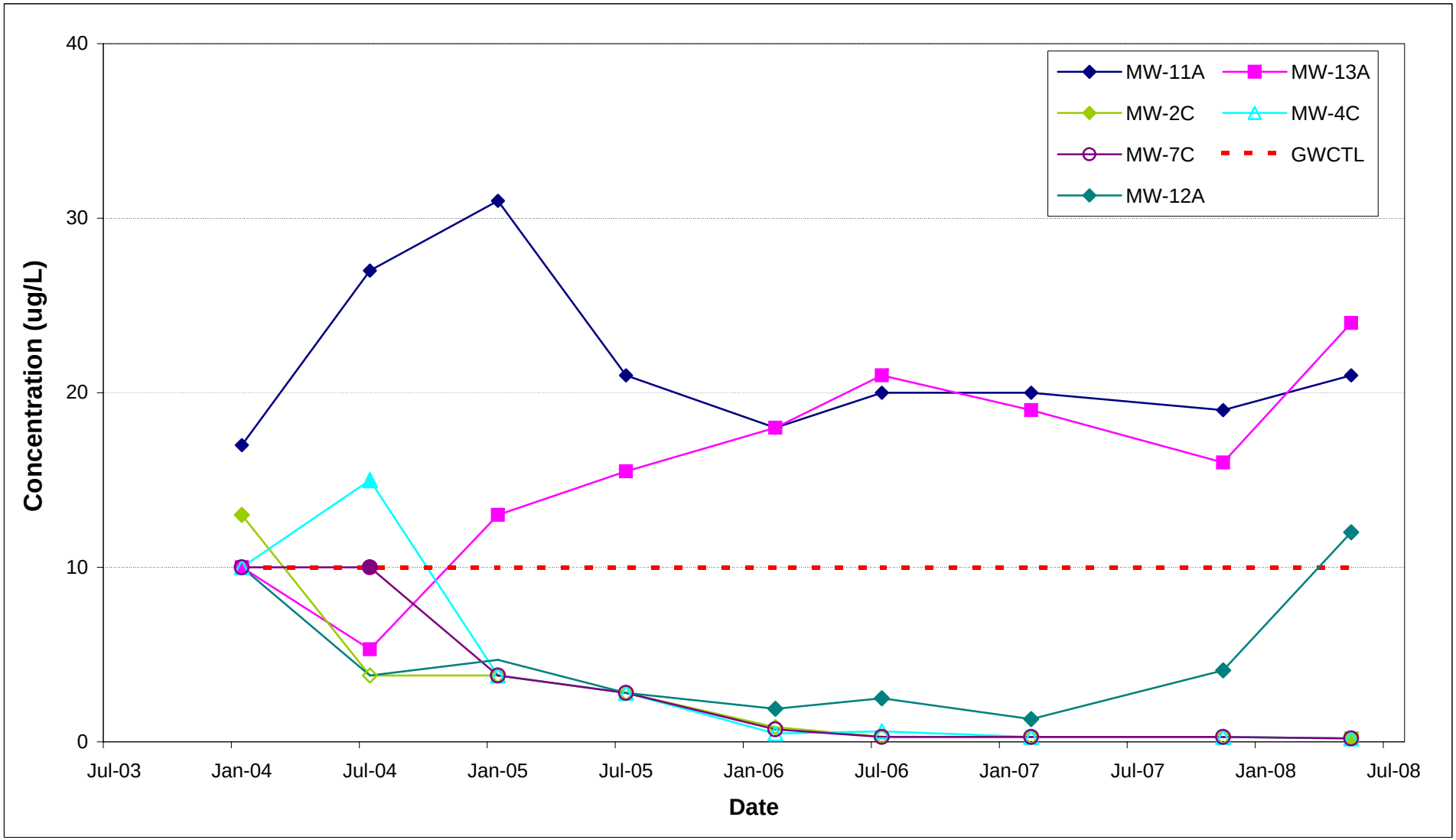
6.3.3 Iron

Figure 6-14 shows the iron concentrations in the two surface water locations for the eight monitoring events. The SWQS for iron is 1 mg/L. With the exception of the baseline (January 2004) monitoring event, in which a concentration of 1.1 mg/L was detected at the SW-4 location, the other eight monitoring events show no discernable trend, but iron concentrations are well below the 1 mg/L standard.

6.3.4 Fecal Coliform

Table 5-19 presents that the fecal coliform concentrations for the SW-4 (upstream or background) monitoring station exceeded the SWQC for a Class III water standard of 800 #/100ml during the seventh and eighth monitoring events. Please note that the fecal coliform test started from the seventh semi-annual monitoring event (November 2007). Although the SWQC was exceeded, this monitoring location is upstream of the site. The fecal coliform concentrations for the downstream monitoring station (SW-3) were below the SWQC Class III level. Therefore, it is highly unlikely that these are the reflection of any landfill impacts and are related to cattle and wildlife activities in the surrounding areas.

Figure 6-1
Groundwater Trends - Arsenic
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

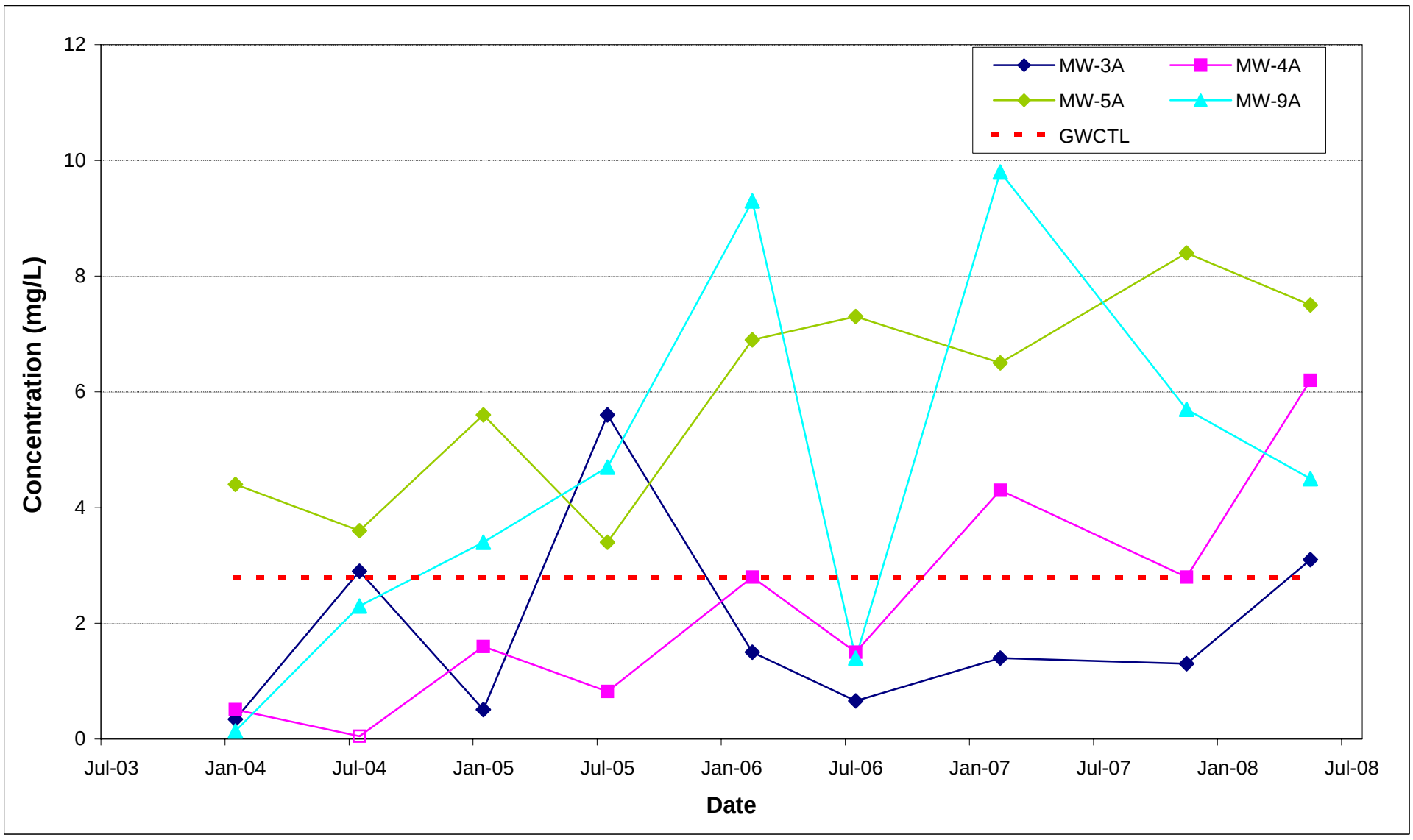


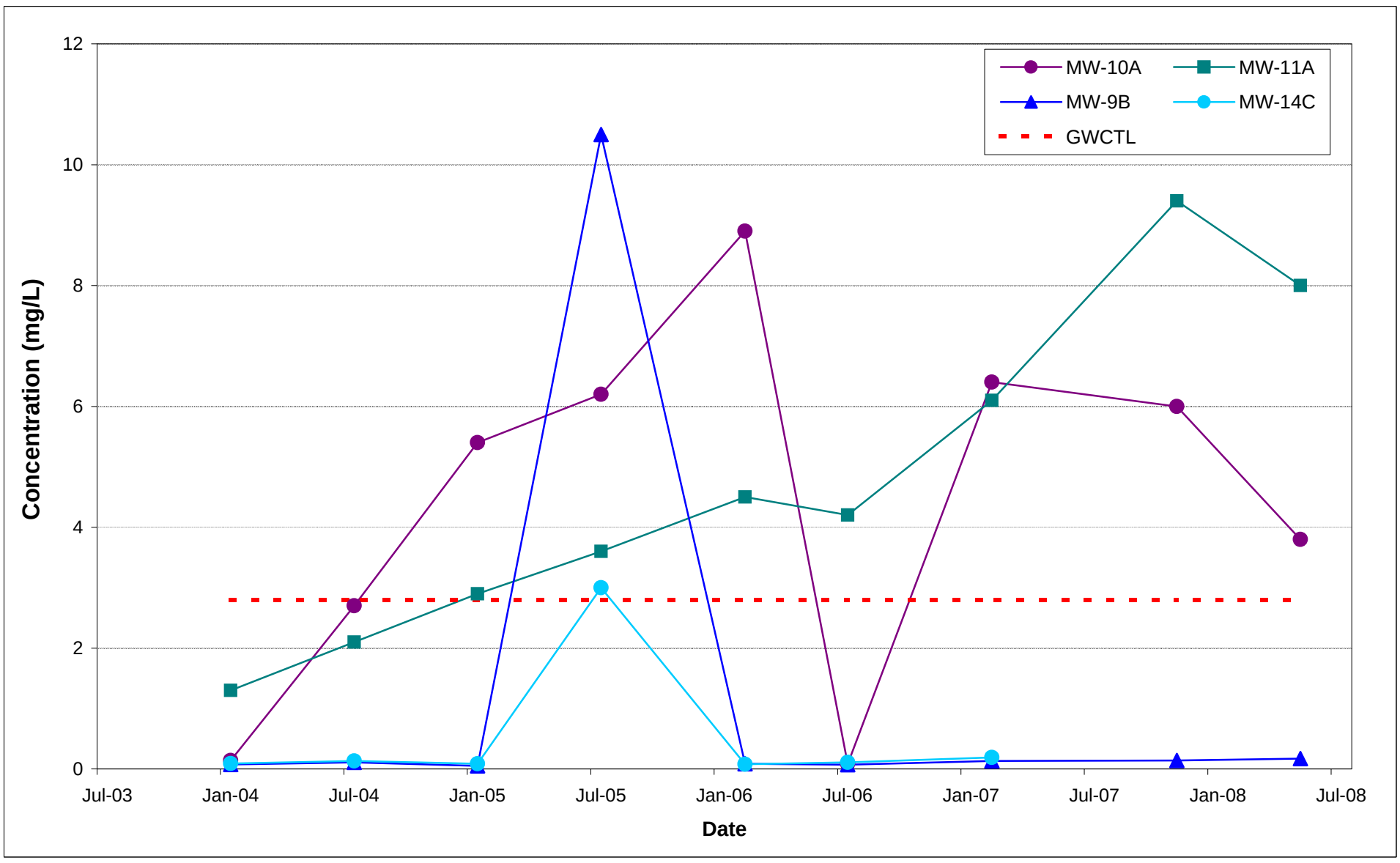
Notes:

GWCTL = Groundwater Cleanup Target Level (10 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-2
Groundwater Trends - Ammonia-N
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



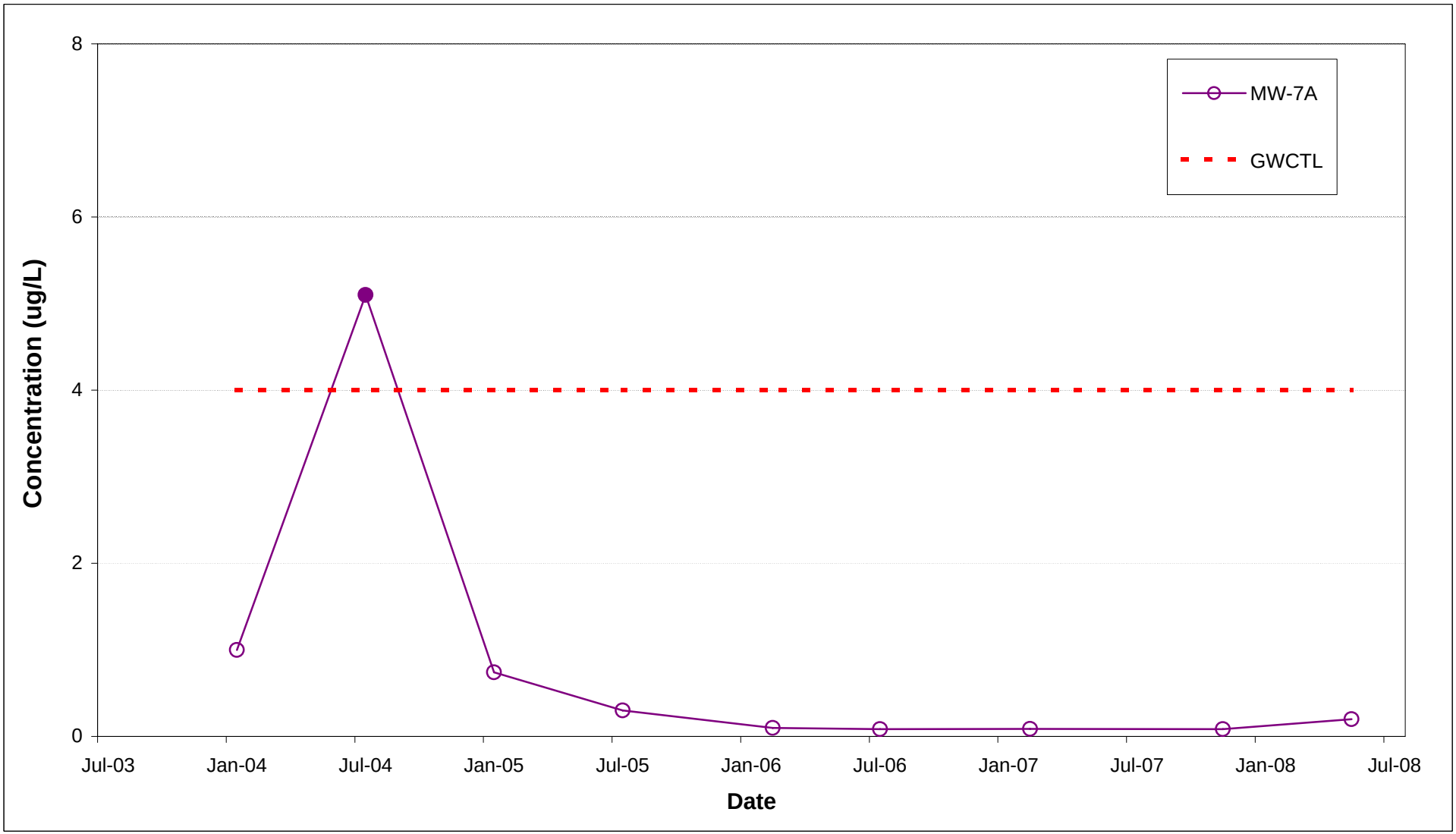


Notes:

GWCTL = Groundwater Cleanup Target Level (2.8 mg/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-3
Groundwater Trends - Beryllium
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

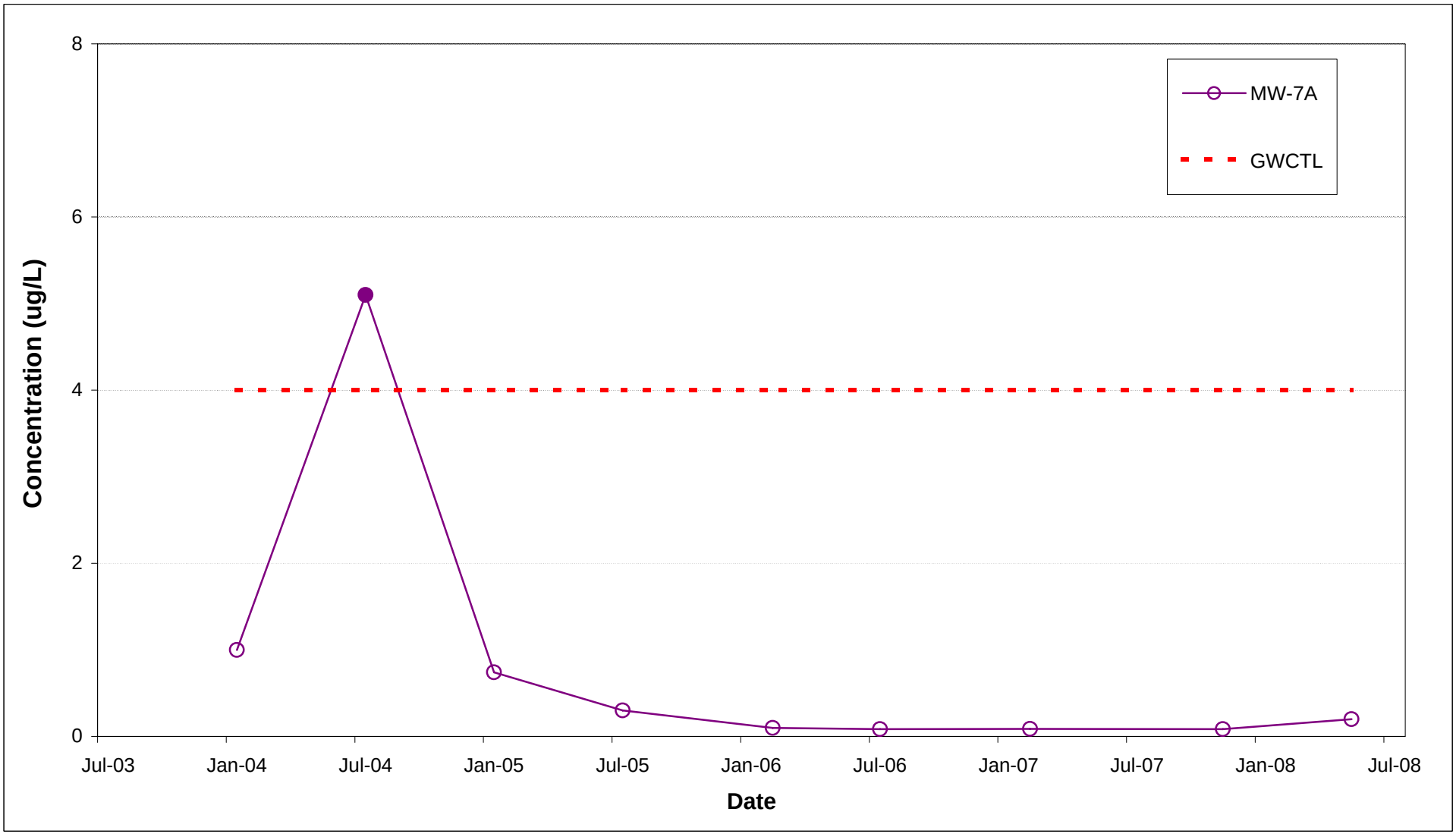


Notes:

GWCTL = Groundwater Cleanup Target Level (4 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-3
Groundwater Trends - Beryllium
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

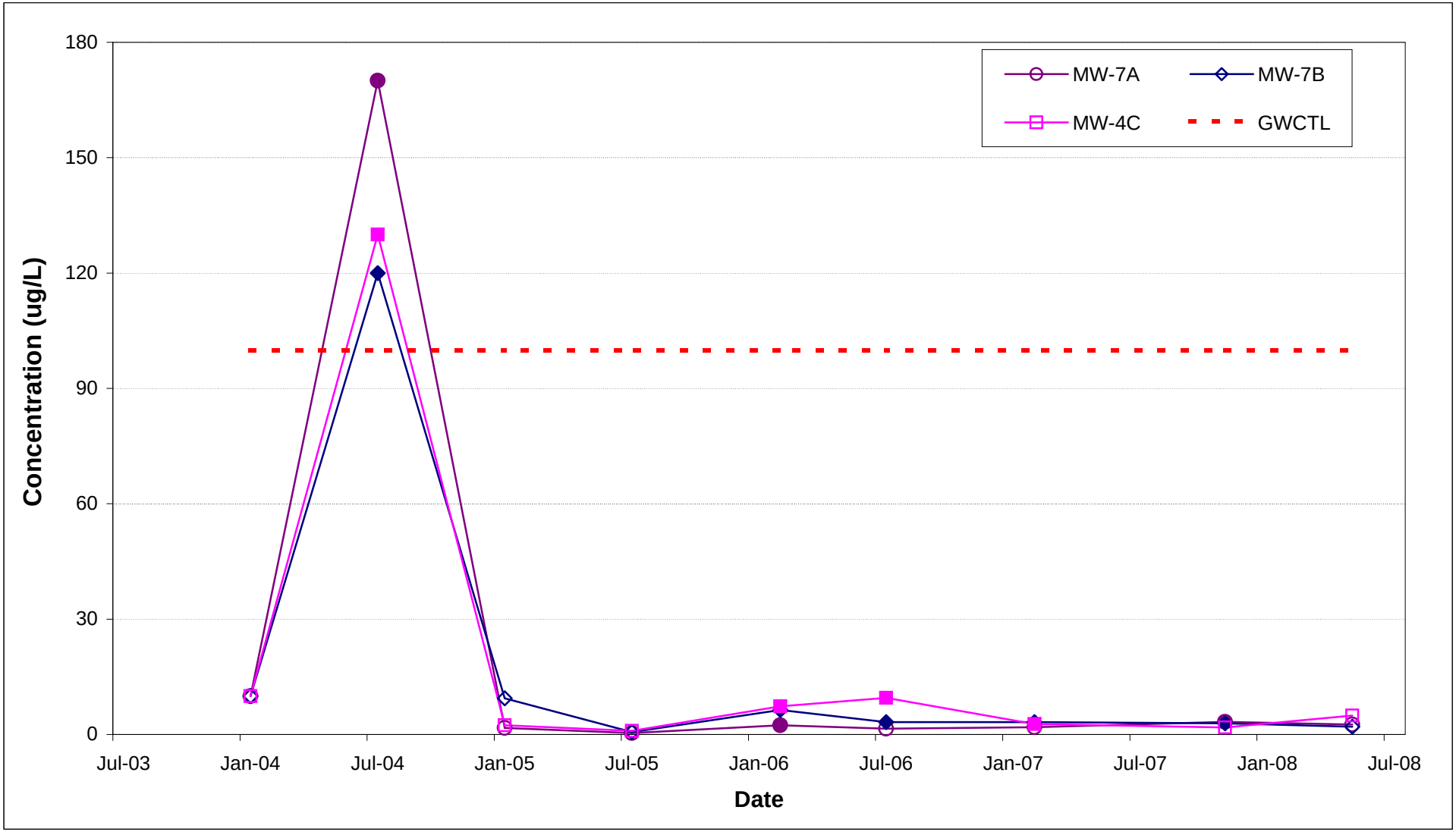


Notes:

GWCTL = Groundwater Cleanup Target Level (4 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-4
Groundwater Trends - Chromium
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

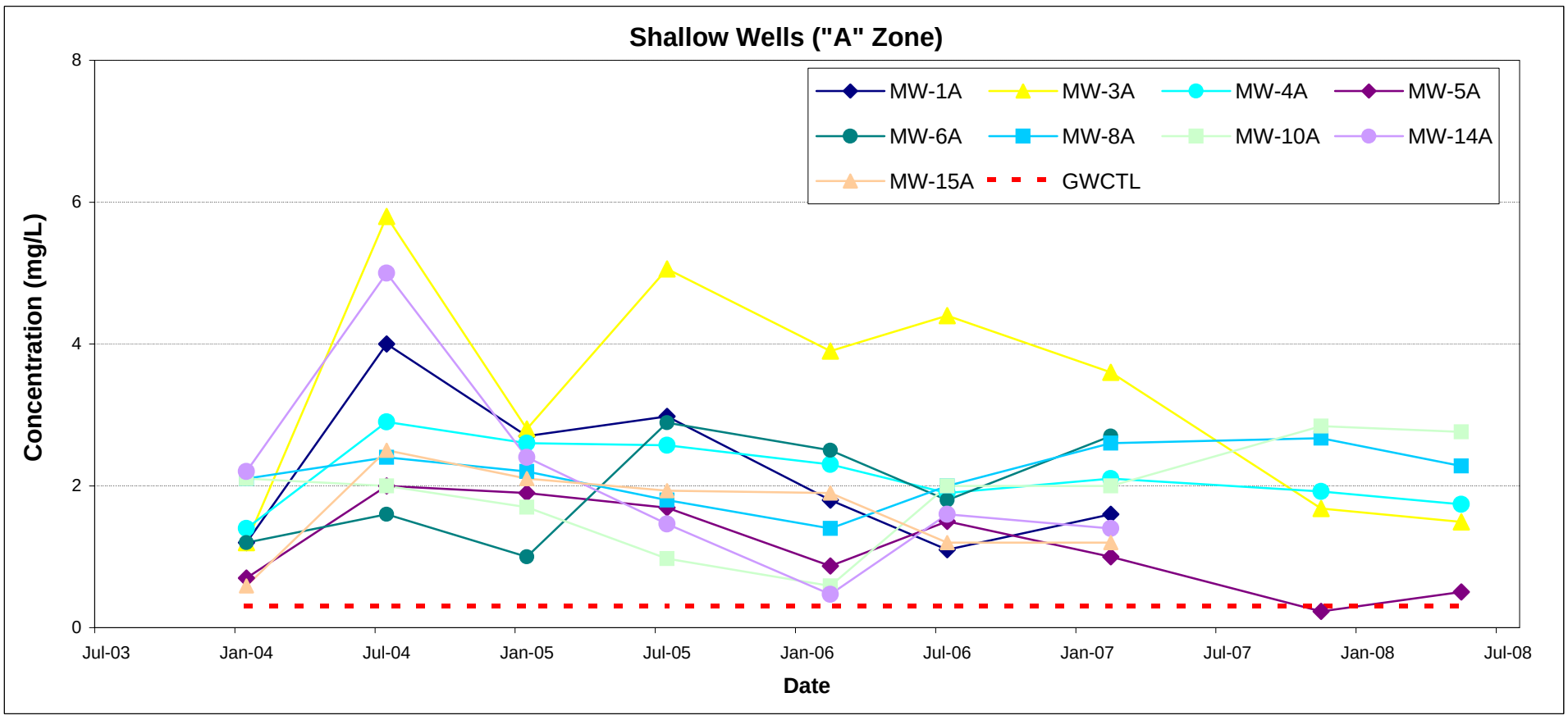


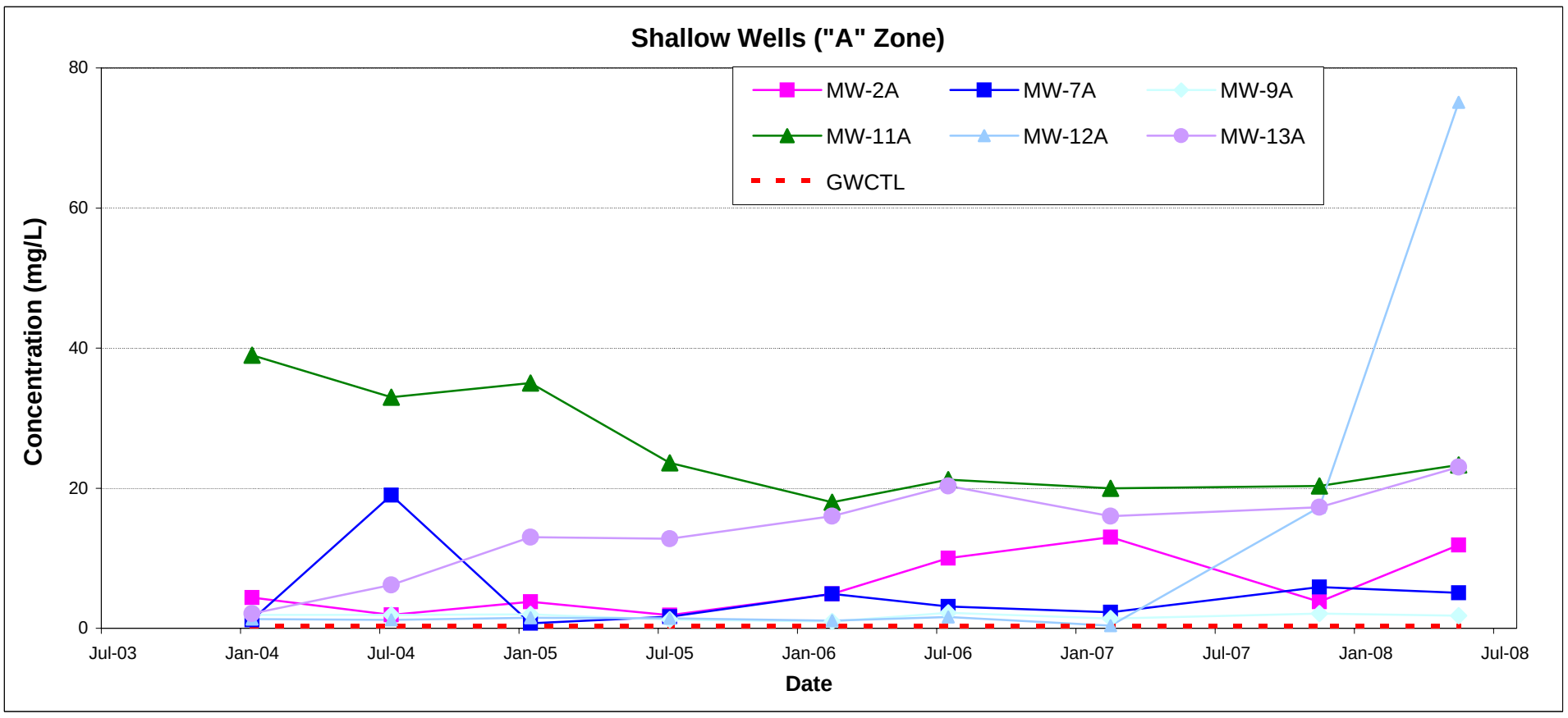
Notes:

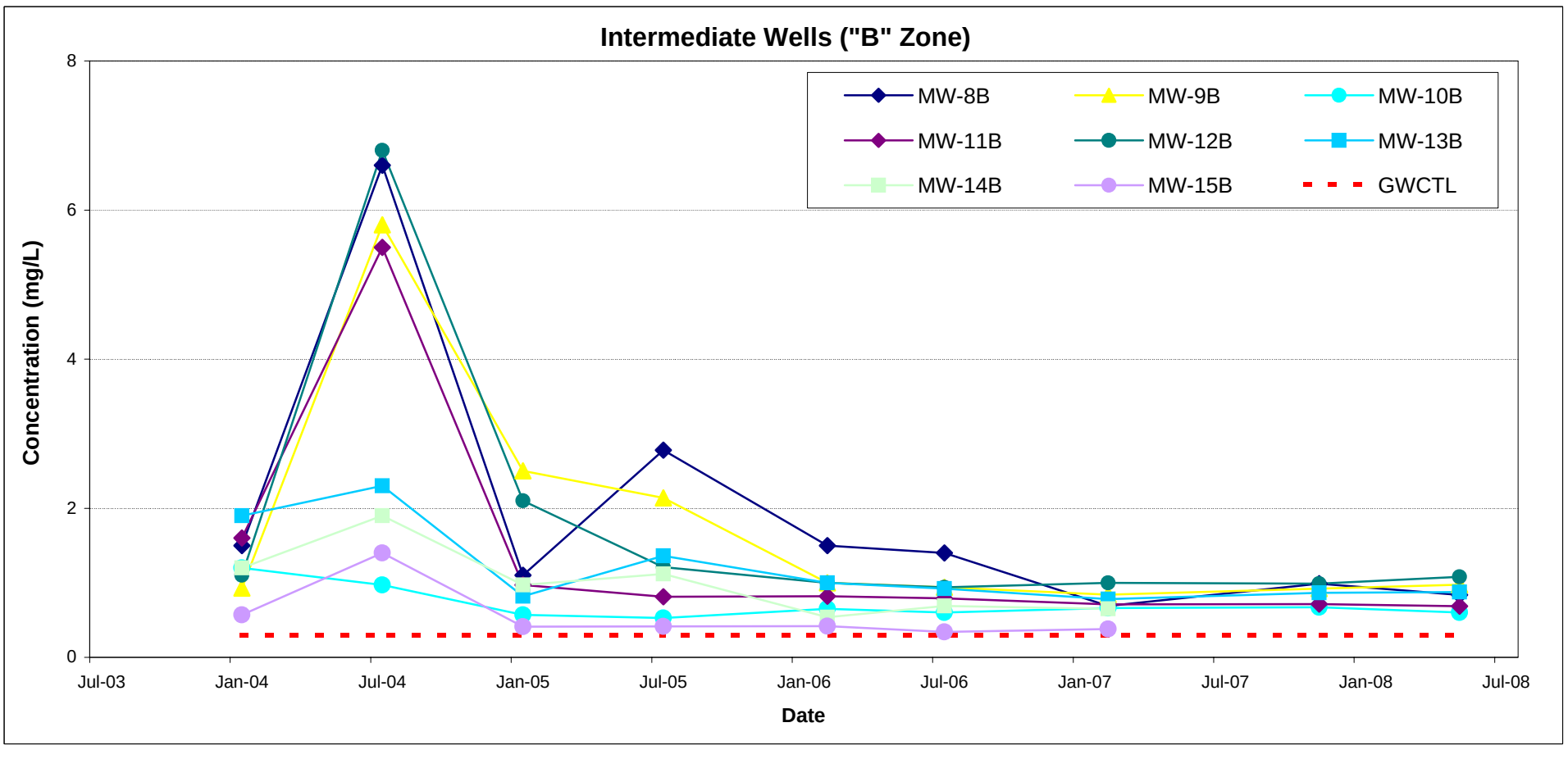
GWCTL = Groundwater Cleanup Target Level (100 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-5 (1 of 2)
Groundwater Trends - Iron
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility





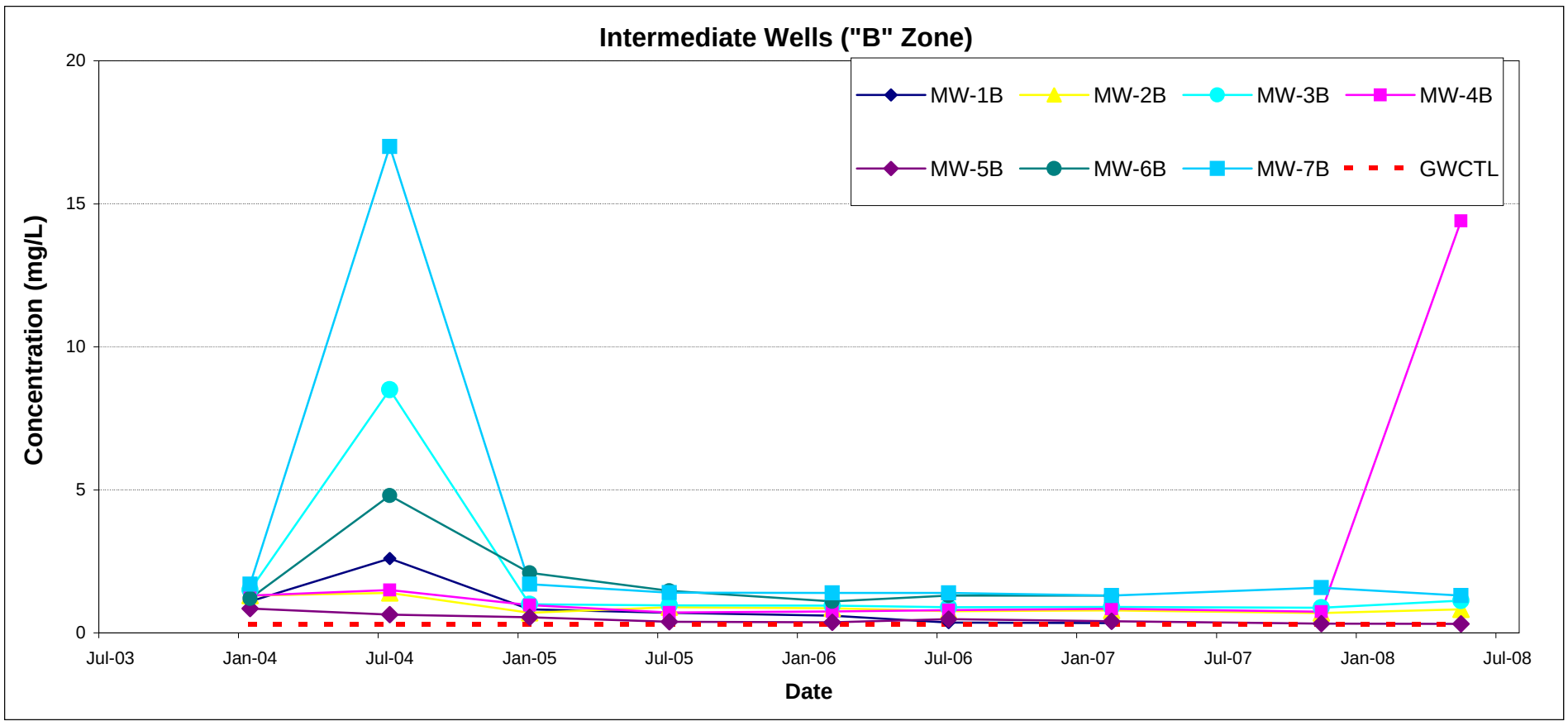


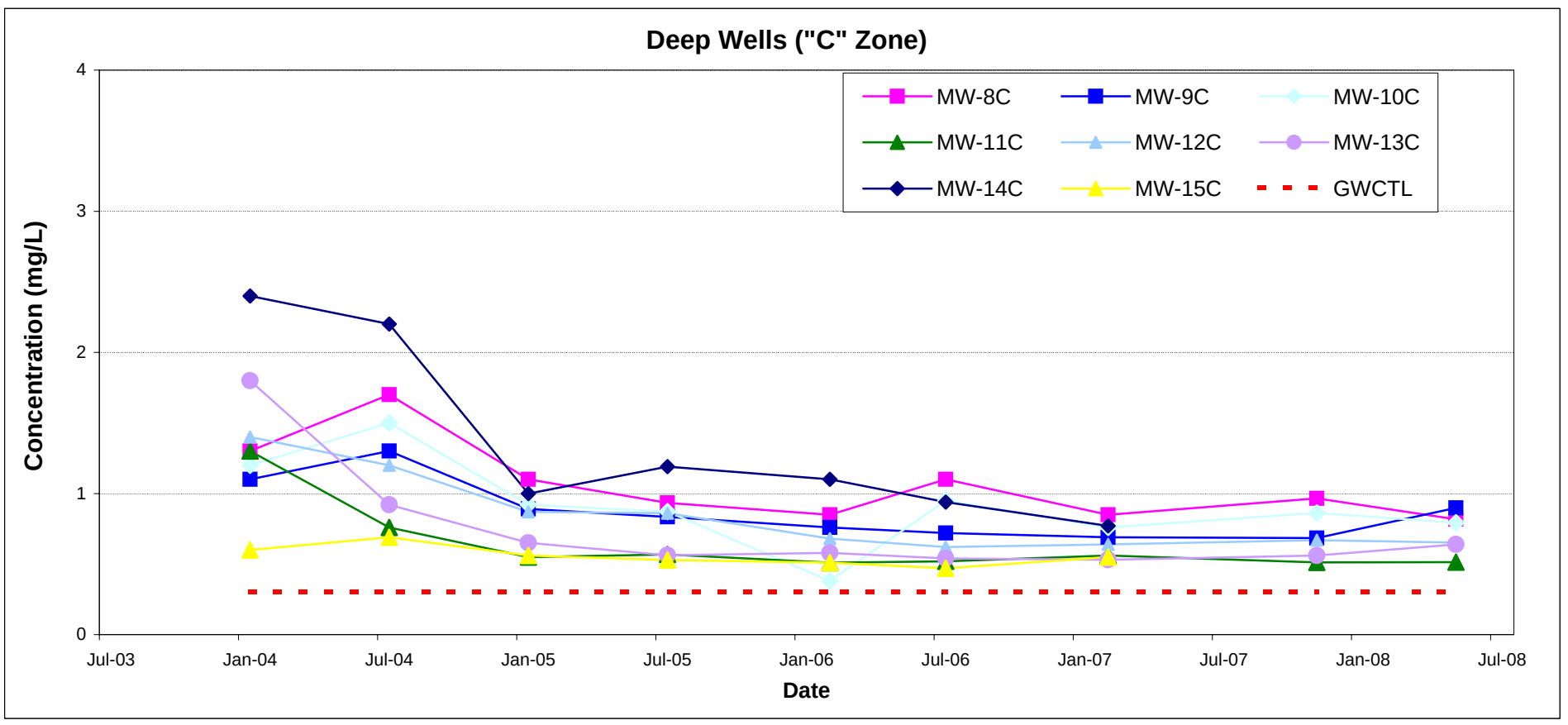
Notes:

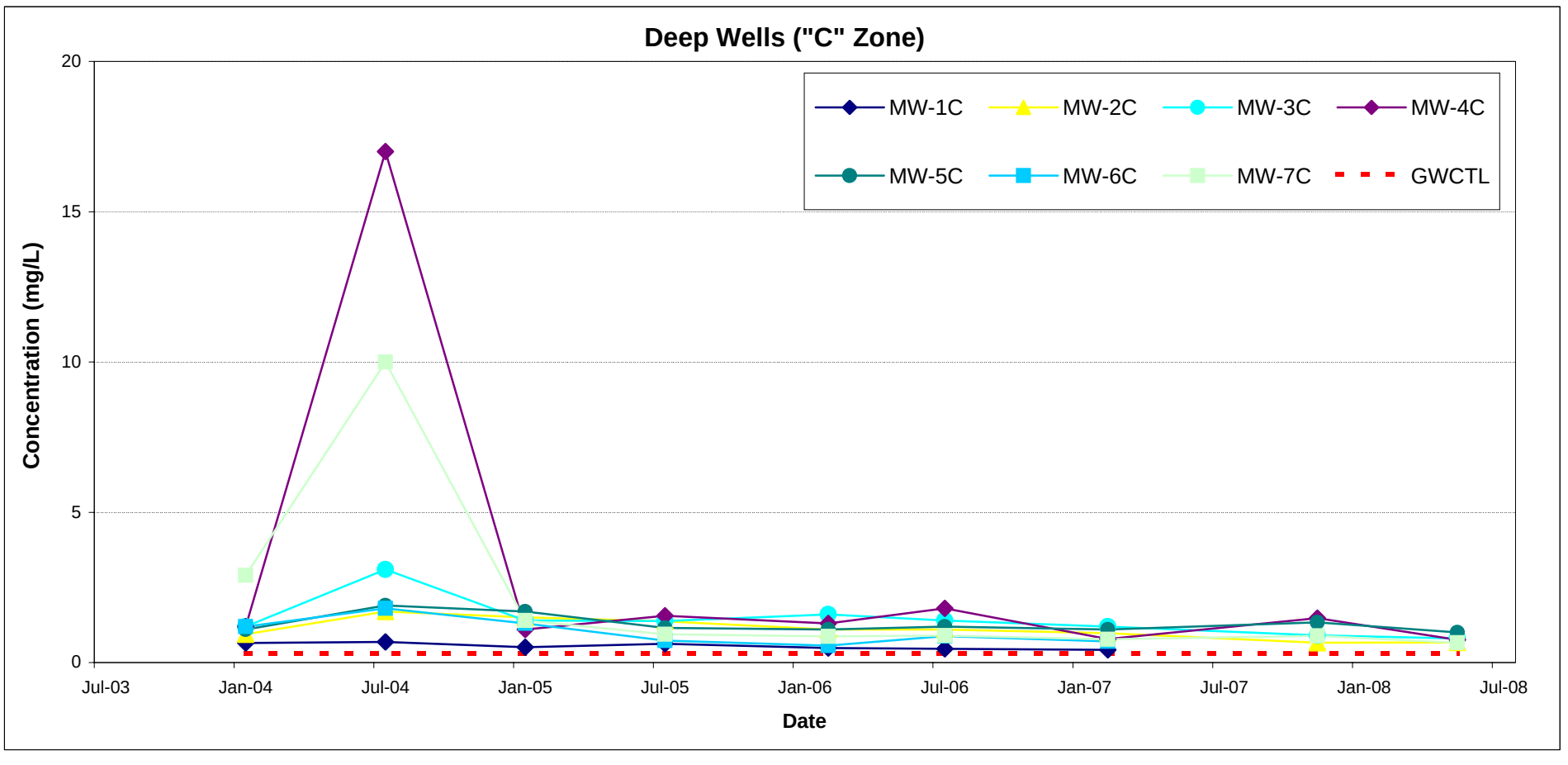
GWCTL = Groundwater Cleanup Target Level (2.8 mg/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-5 (2 of 2)
Groundwater Trends - Iron
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility





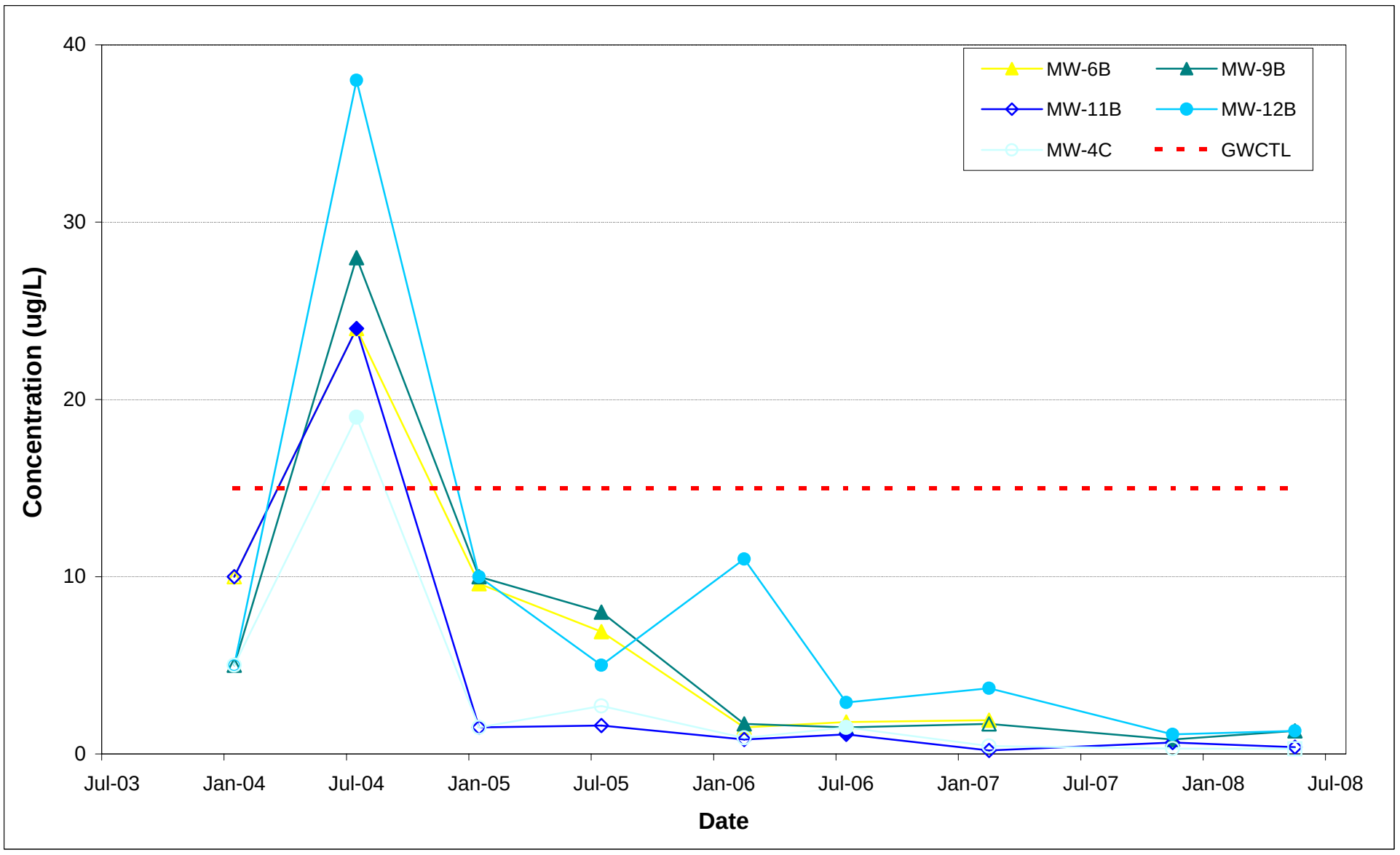


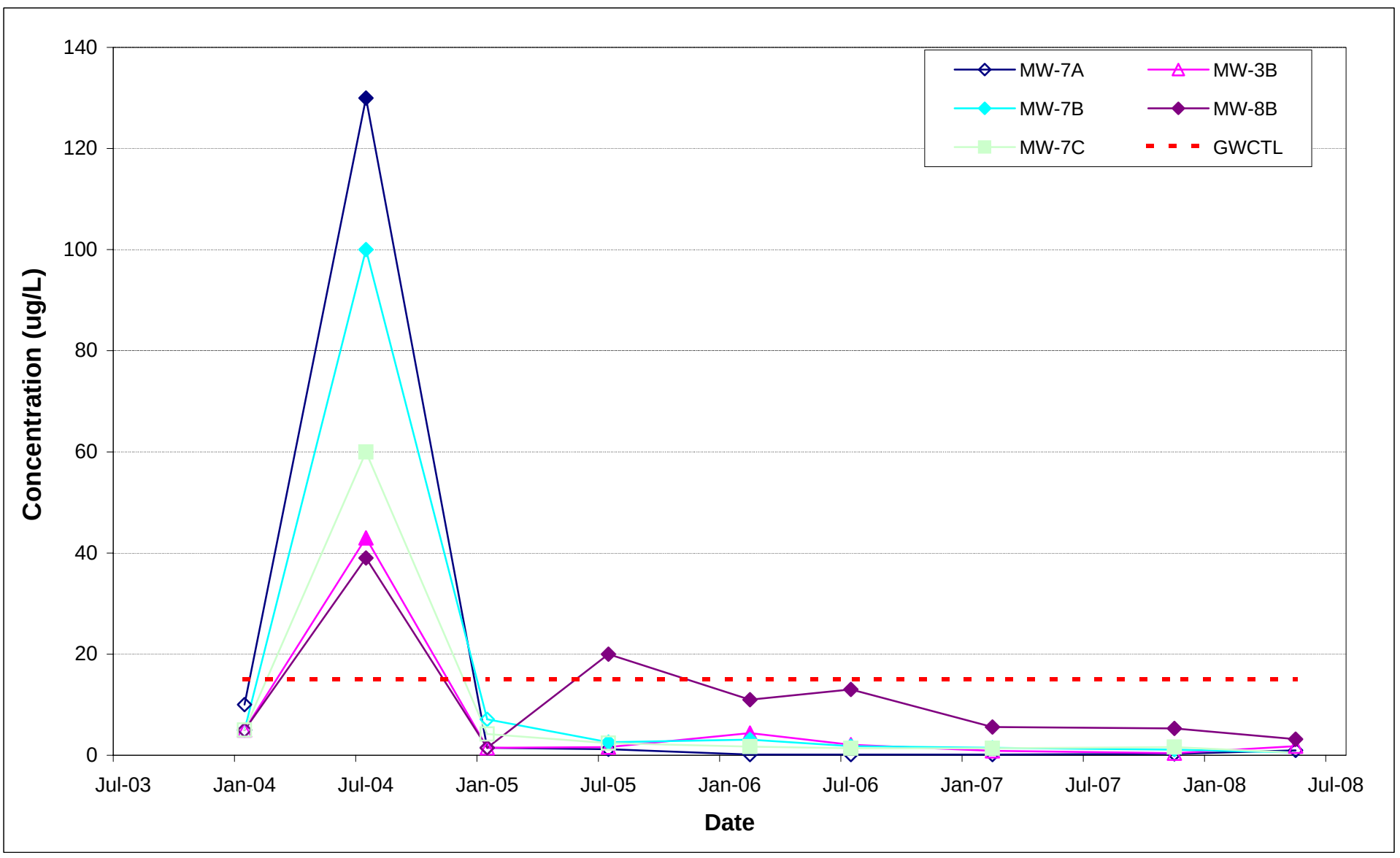
Notes:

GWCTL = Groundwater Cleanup Target Level (2.8 mg/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-6
Groundwater Trends - Lead
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



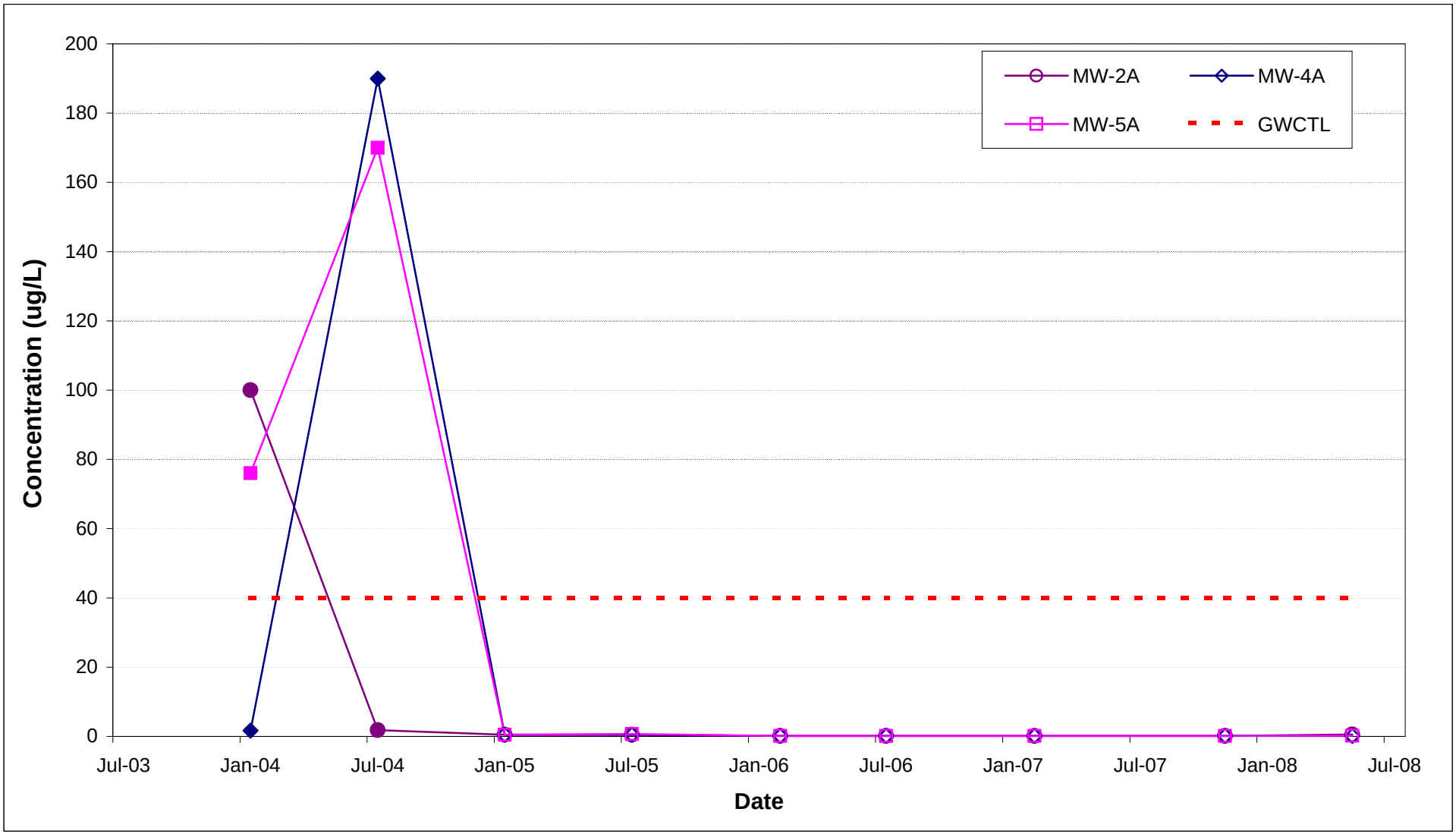


Notes:

GWCTL = Groundwater Cleanup Target Level (15 mg/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-7
Groundwater Trends - Toluene
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

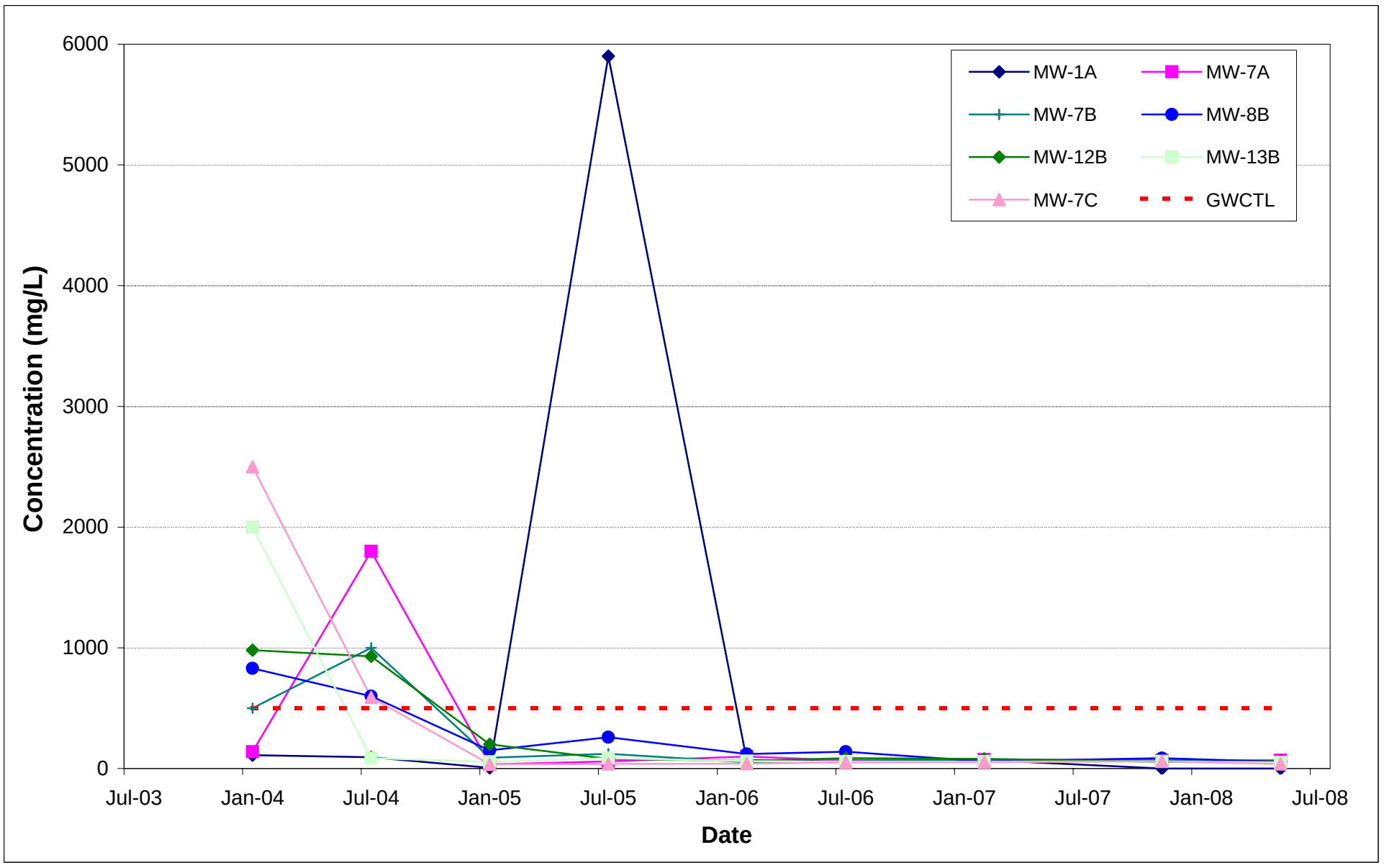


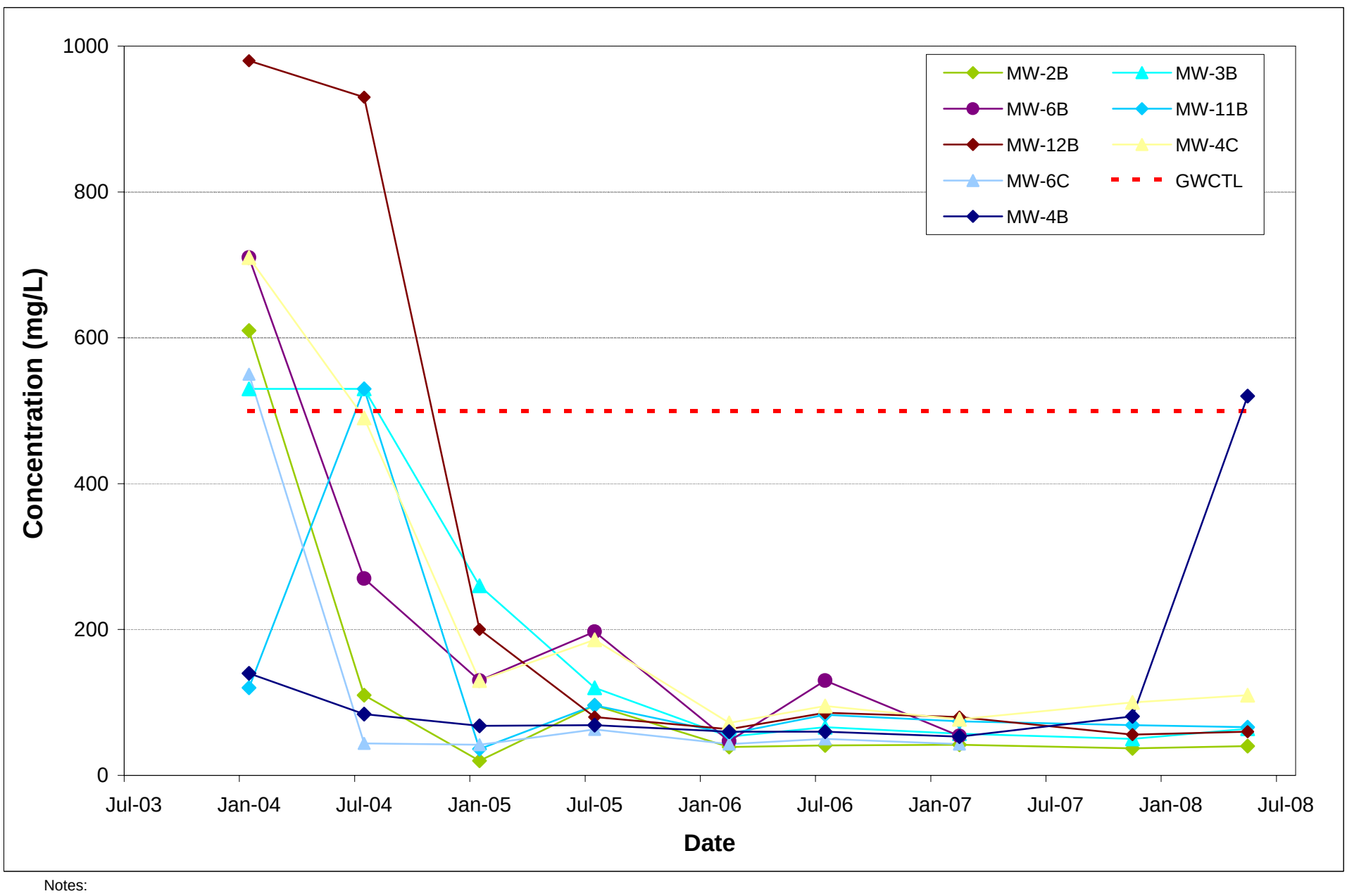
Notes:

GWCTL = Groundwater Cleanup Target Level (40 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-8
Groundwater Trends - Total Dissolved Solids
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



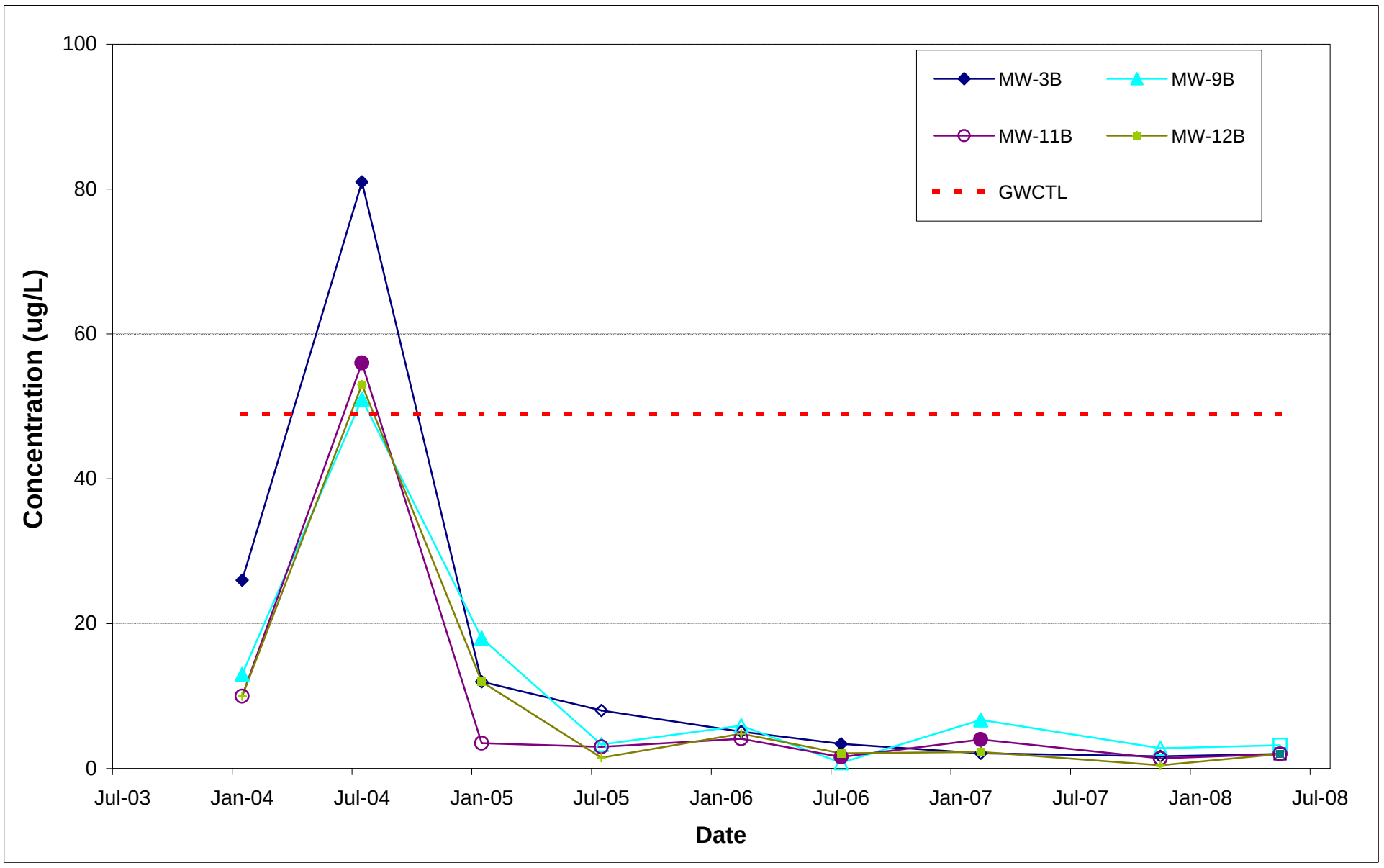


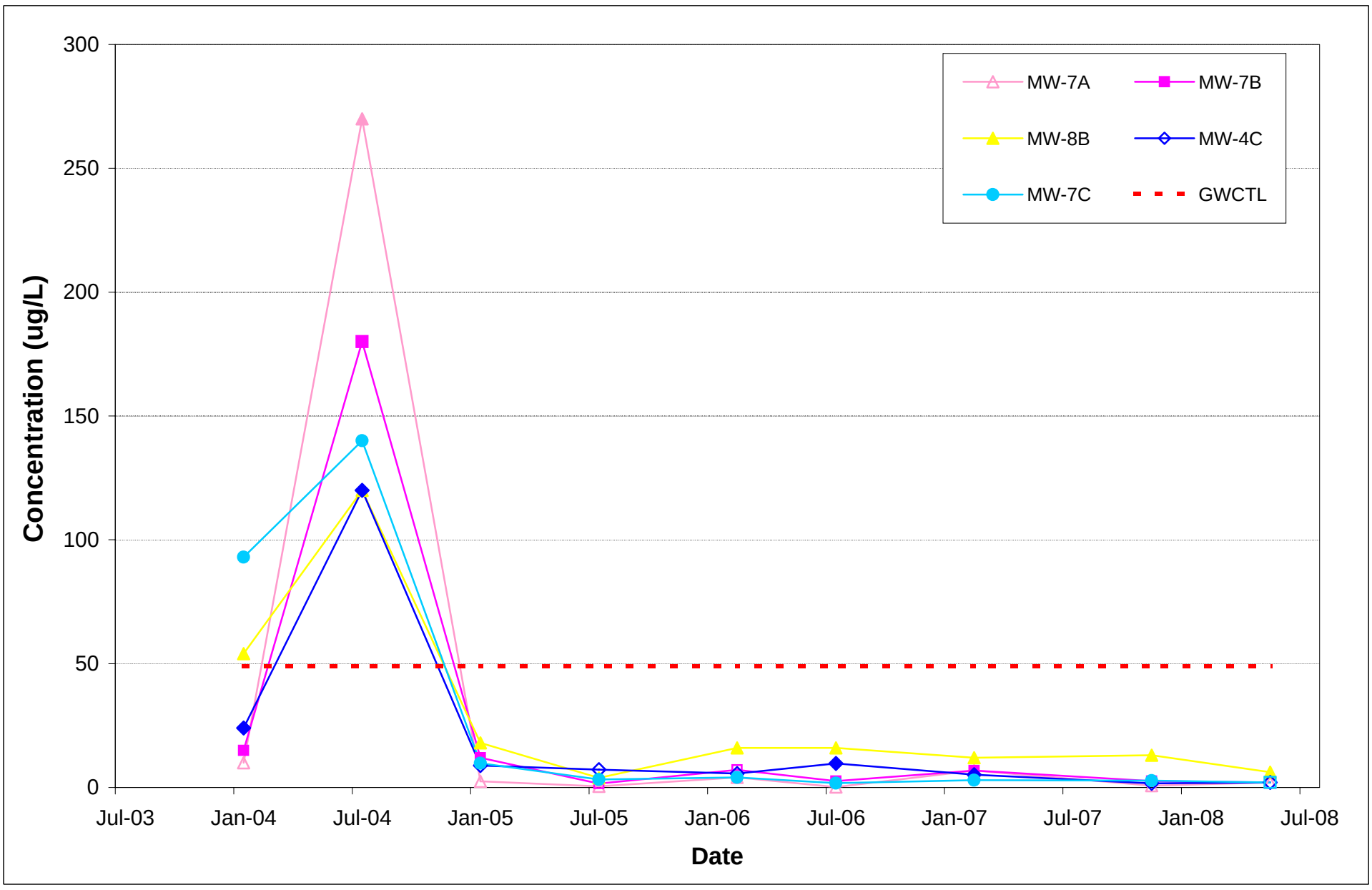
Notes:

GWCTL = Groundwater Cleanup Target Level (500 mg/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-9
Groundwater Trends - Vanadium
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



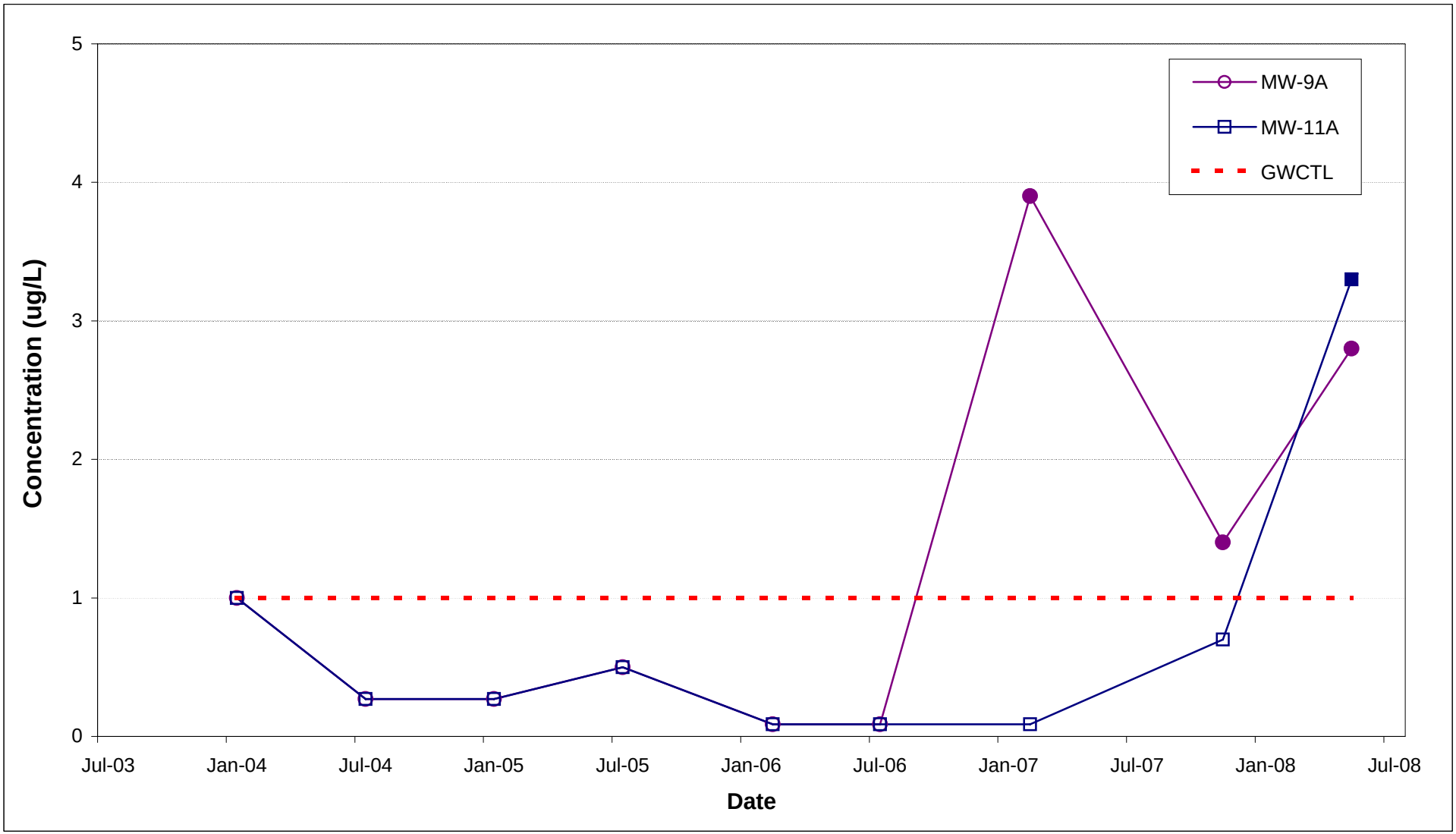


Notes:

GWCTL = Groundwater Cleanup Target Level (49 mg/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-10
Groundwater Trends - Benzene
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



Notes:

GWCTL = Groundwater Cleanup Target Level (1 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

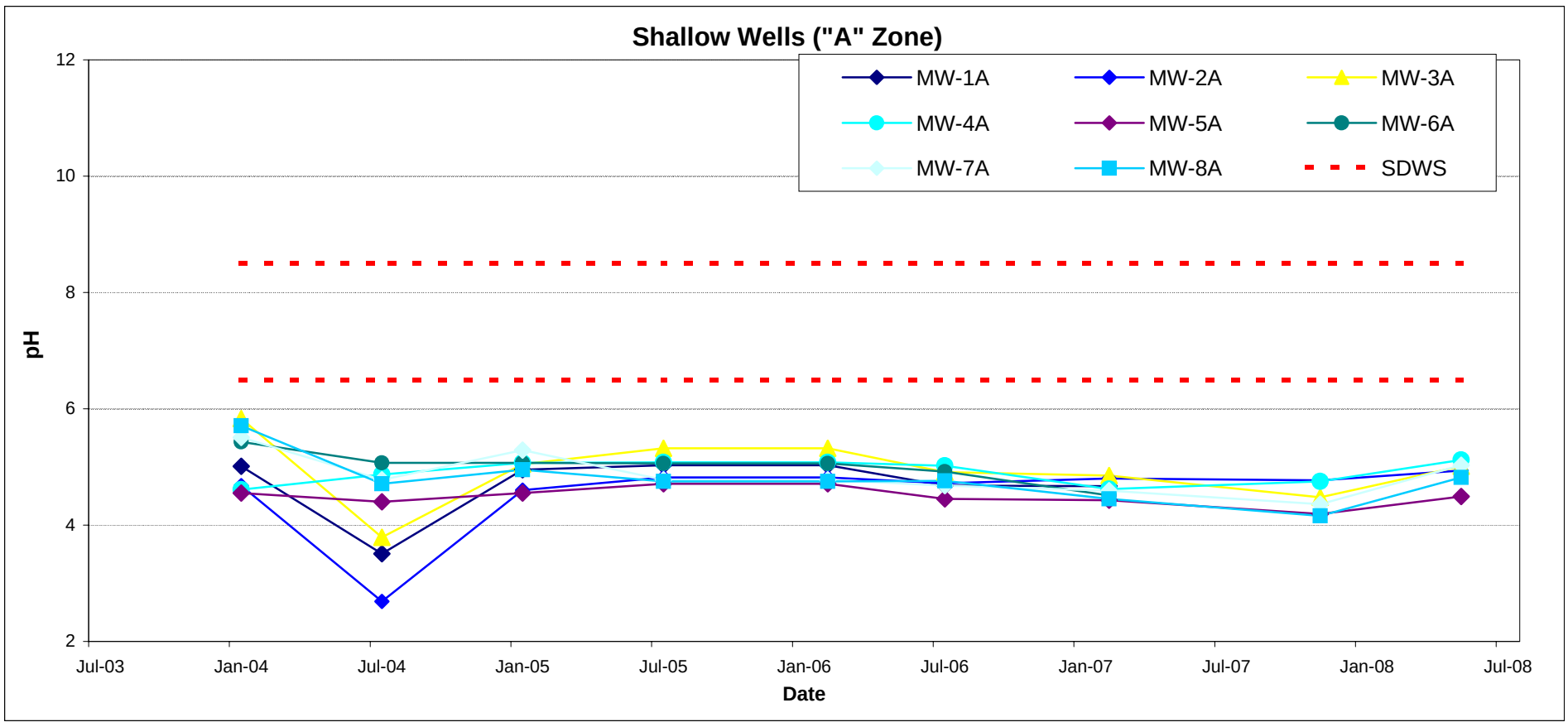
Figure 6-11
Groundwater Trends - Vinyl Chloride
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

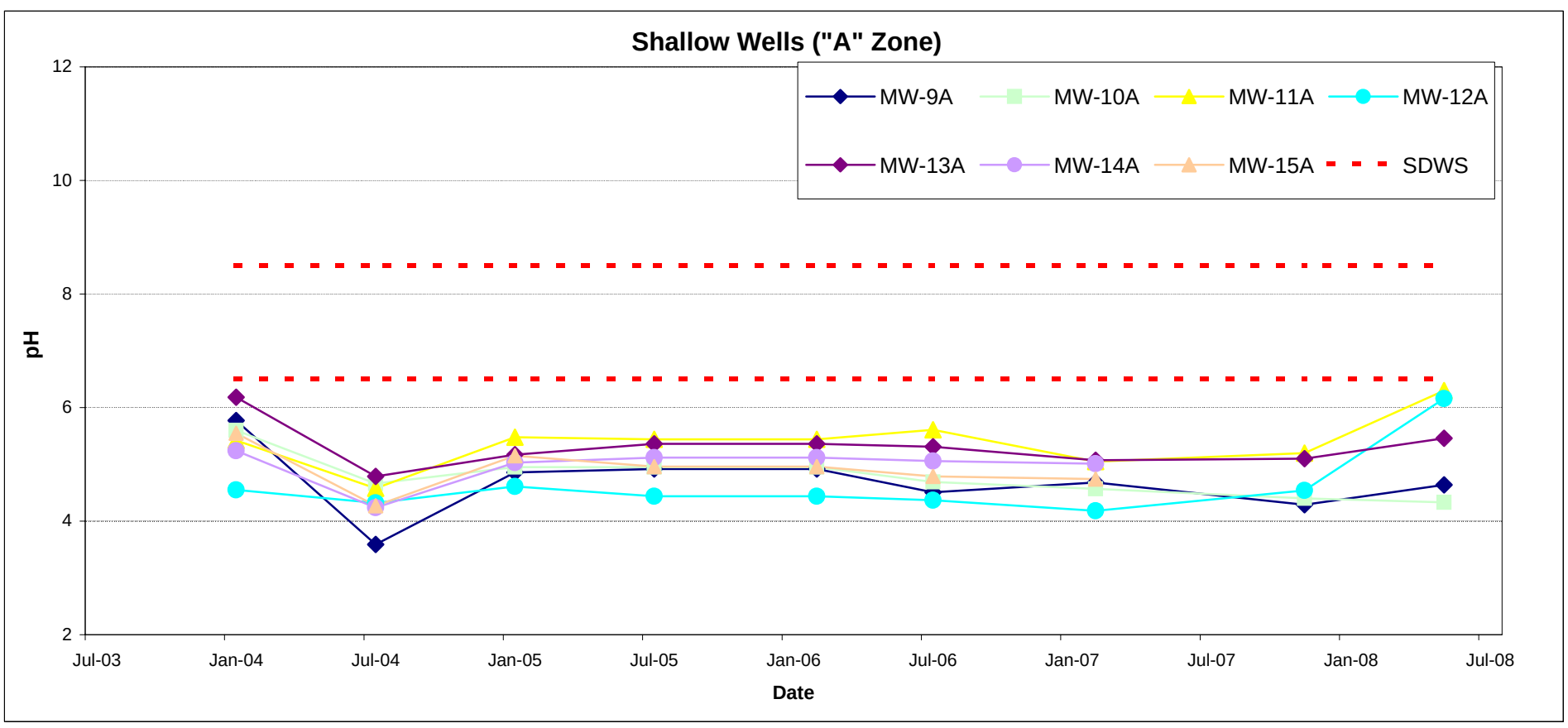
Notes:

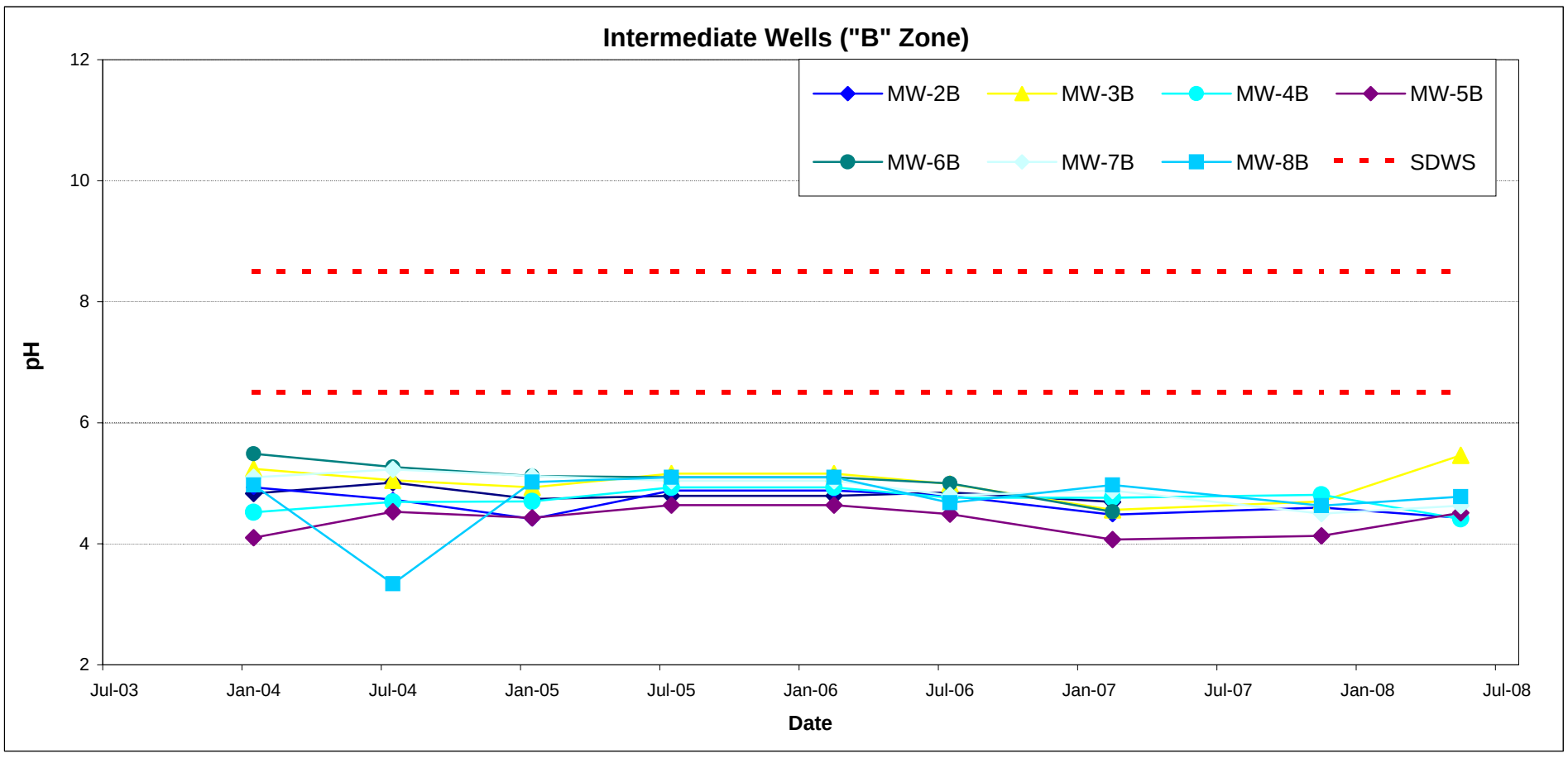
GWCTL = Groundwater Cleanup Target Level (1 ug/L)

Open symbols indicate non-detects and closed symbols indicate detections.

Figure 6-12 (1 of 2)
Groundwater Trends - pH
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



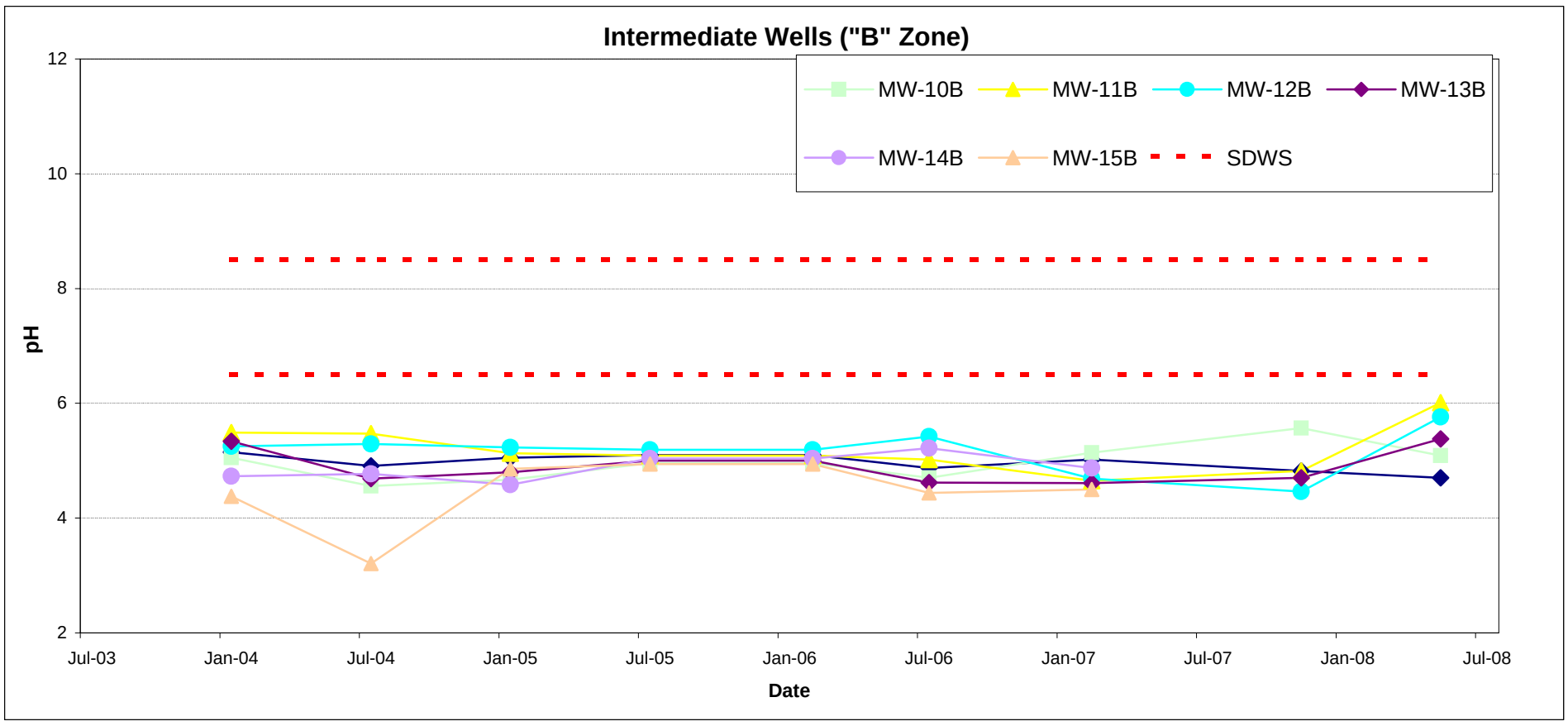


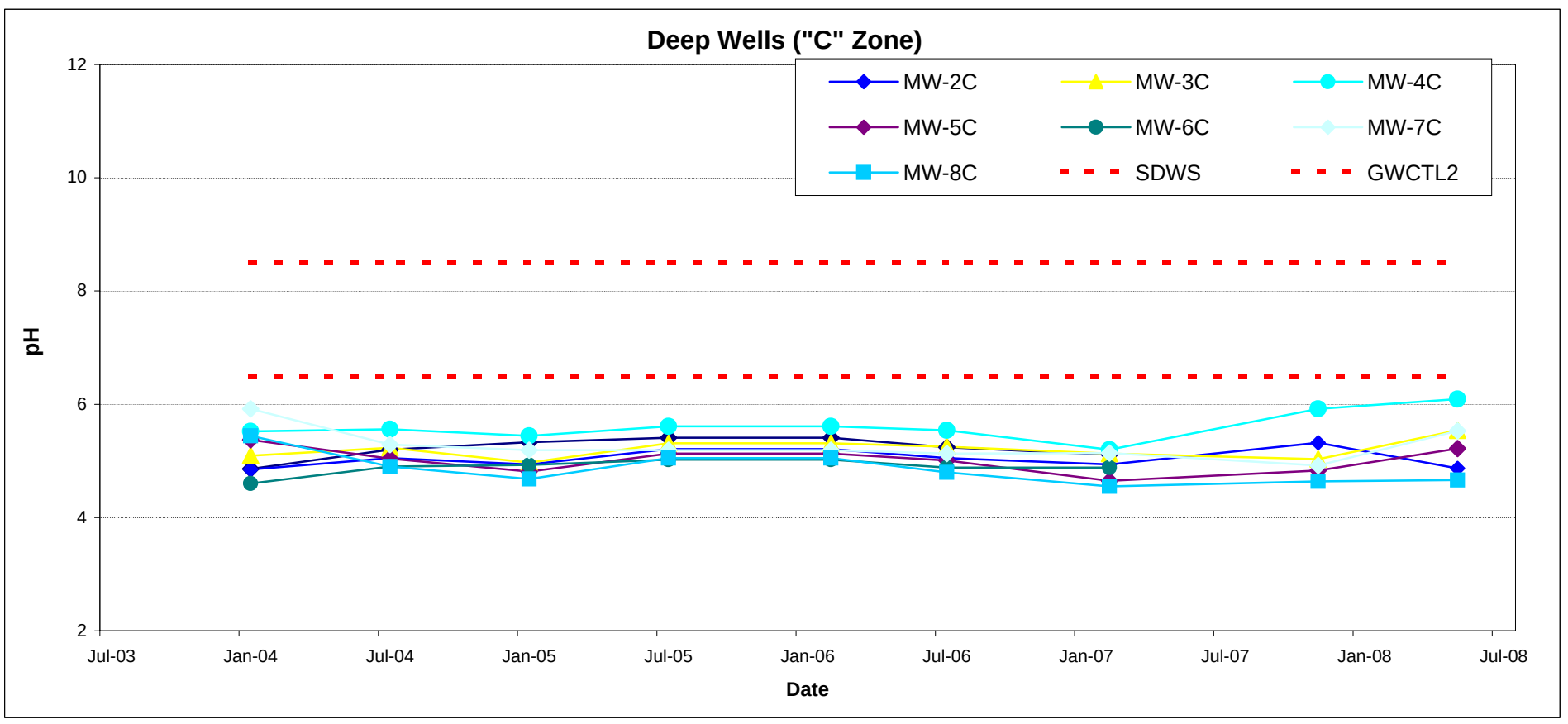


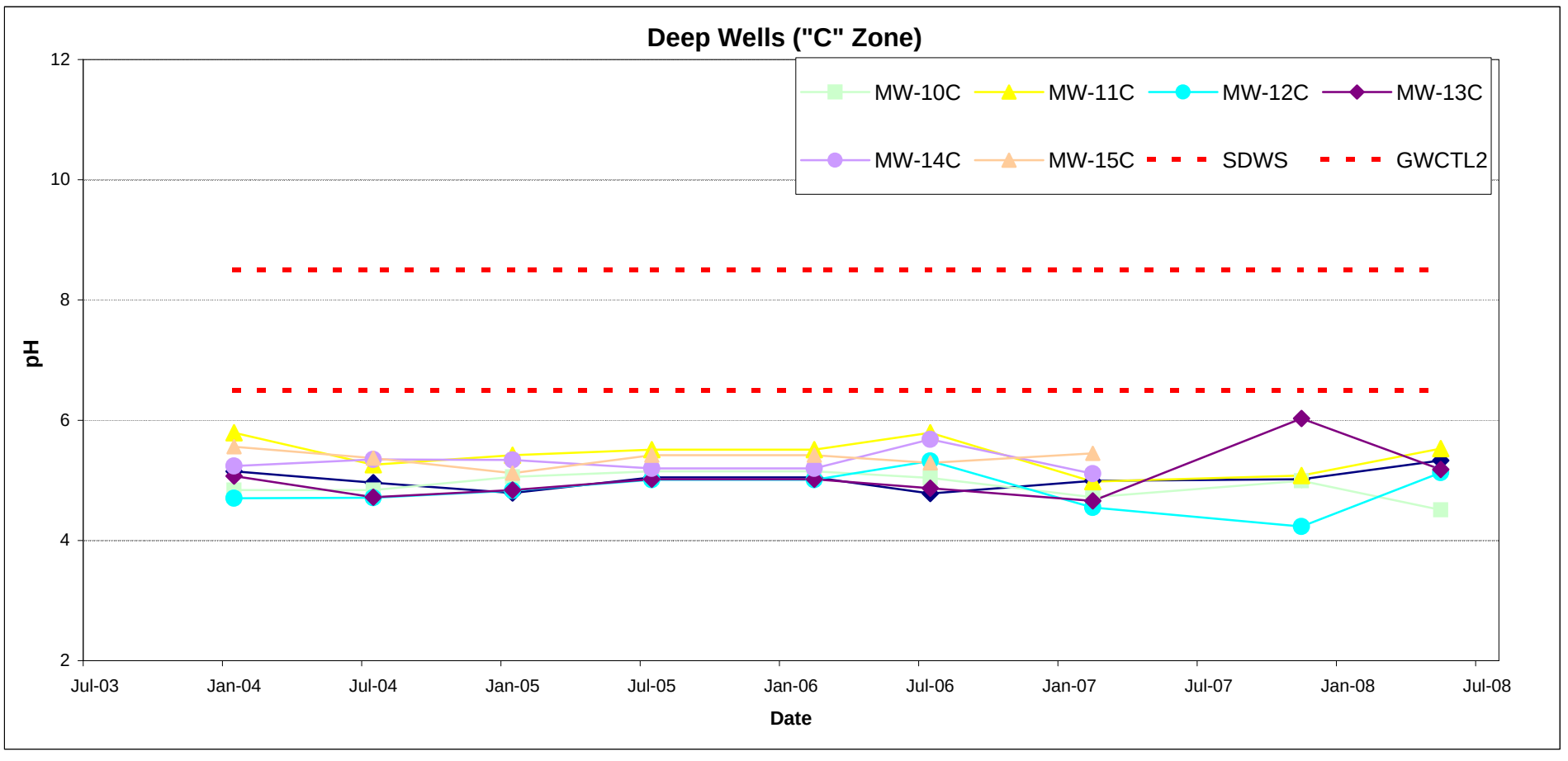
Note:

SDWS = Secondary Drinking Water Standard (Between 6.5 and 8.5)

Figure 6-12 (2 of 2)
Groundwater Trends - pH
2008 Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



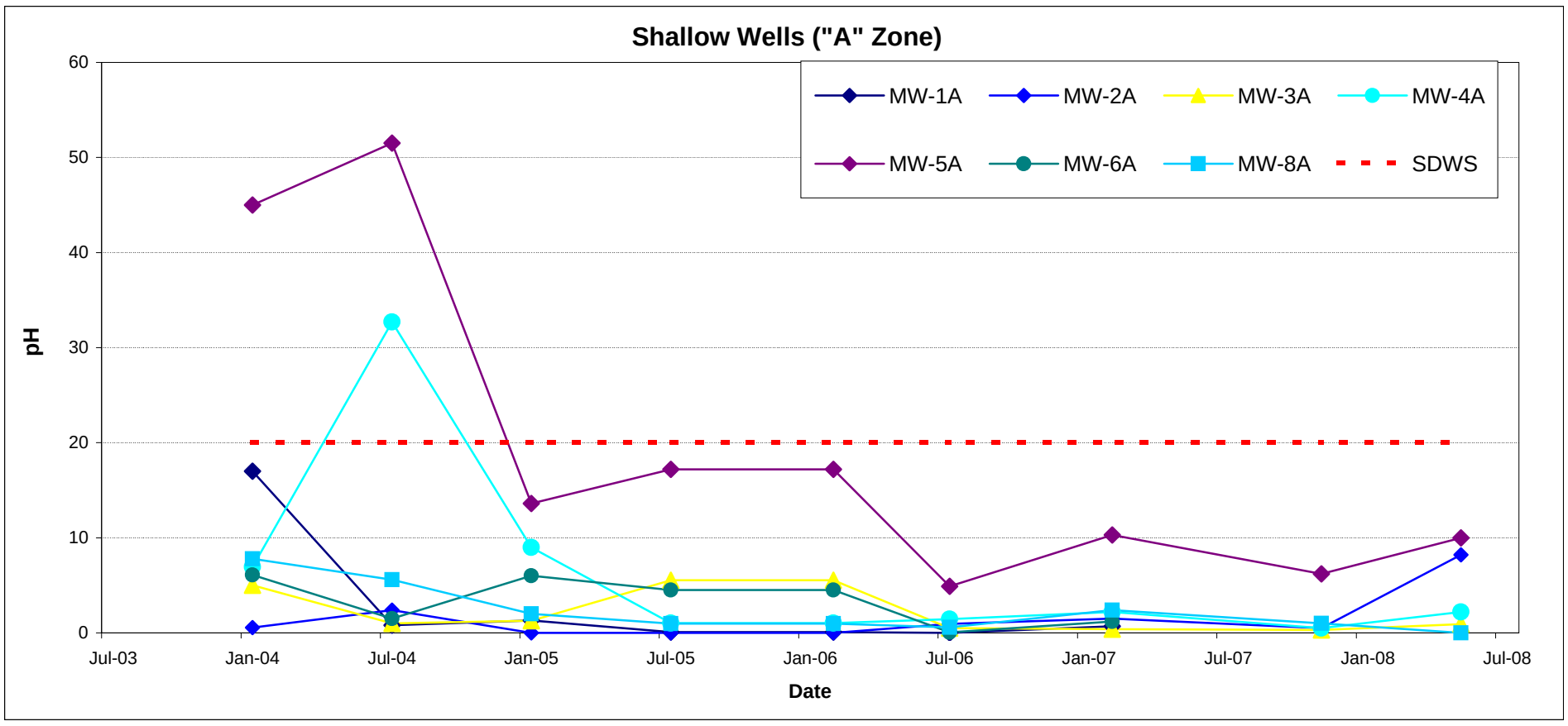


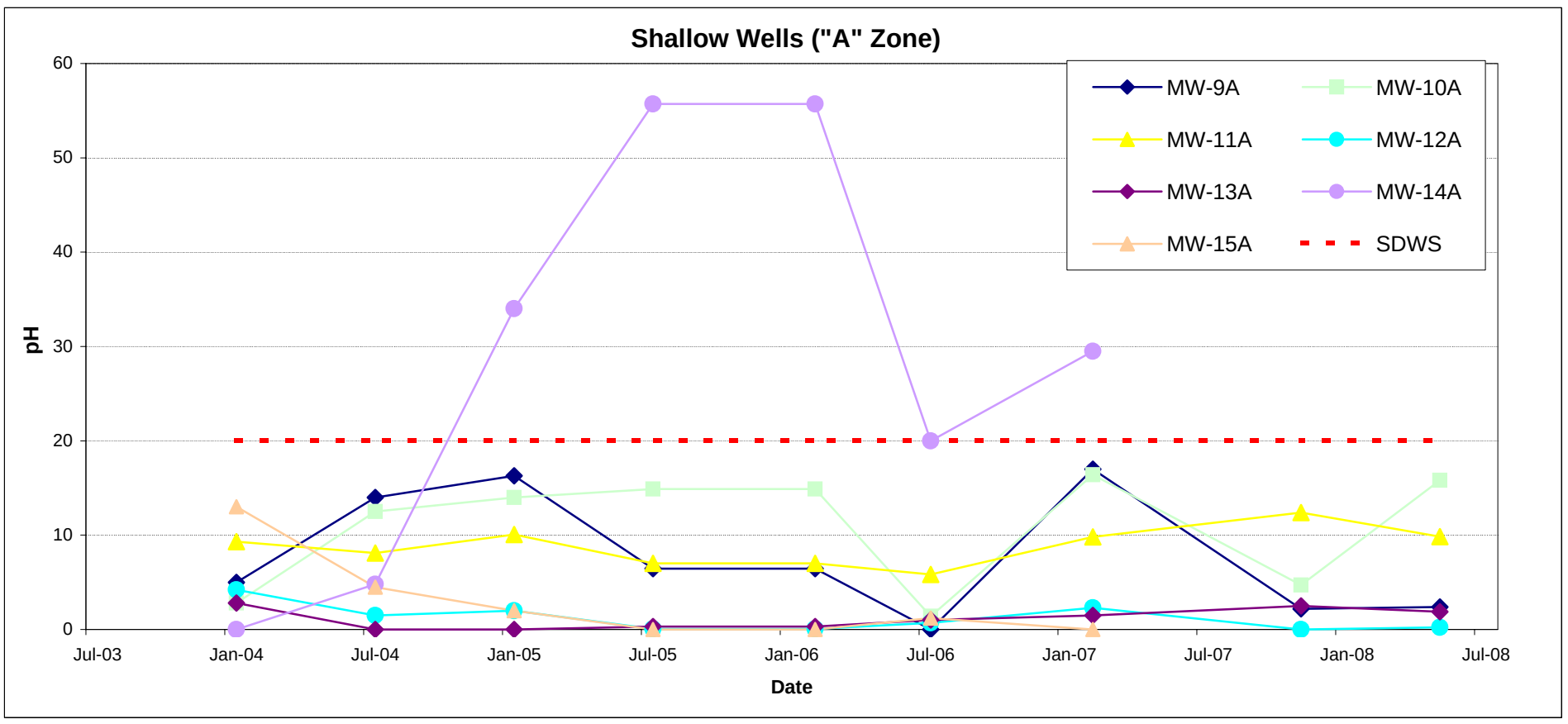


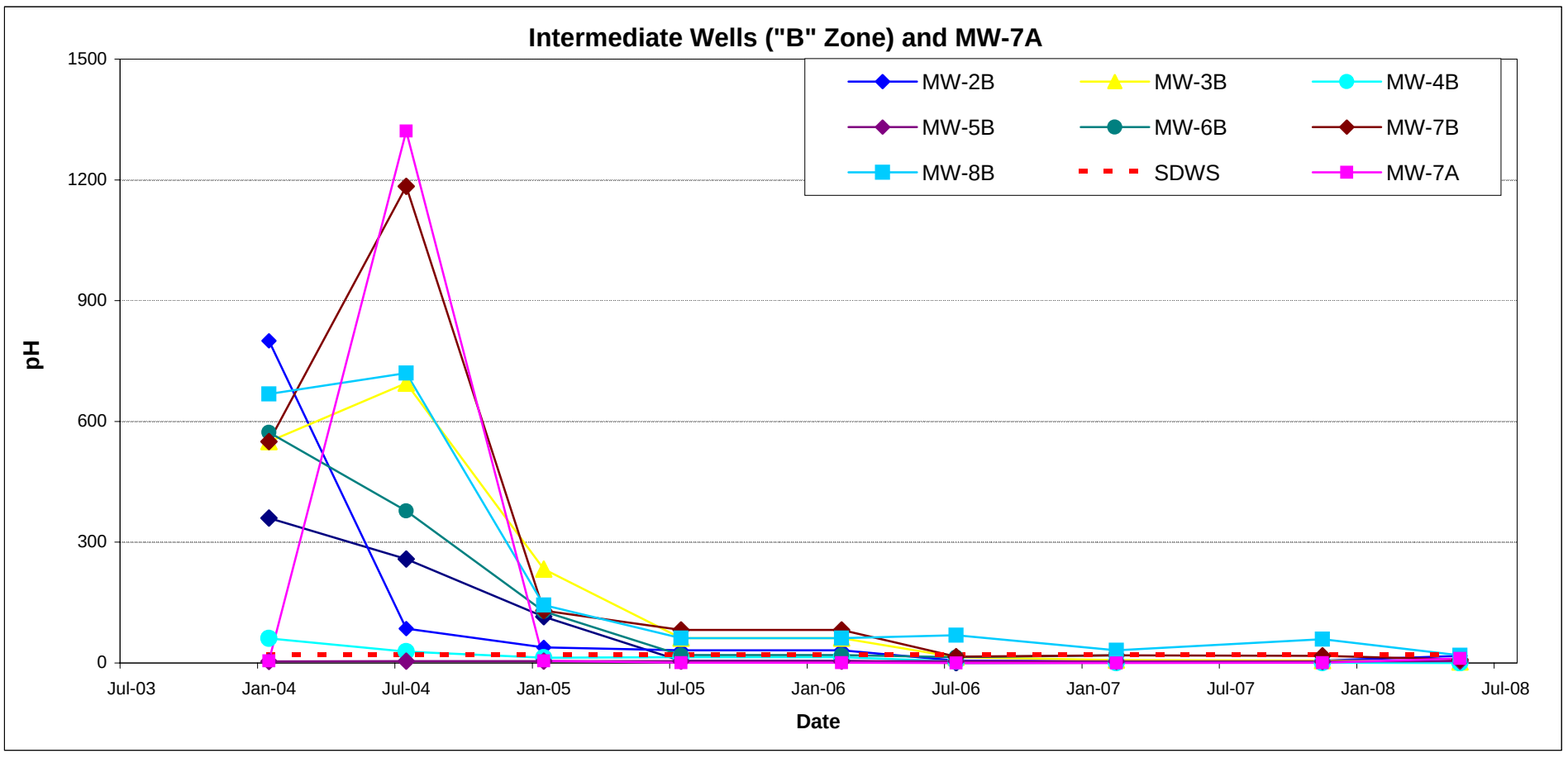
Note:

SDWS = Secondary Drinking Water Standard (Between 6.5 and 8.5)

Figure 6-13 (1 of 2)
Groundwater Trends - Turbidity
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



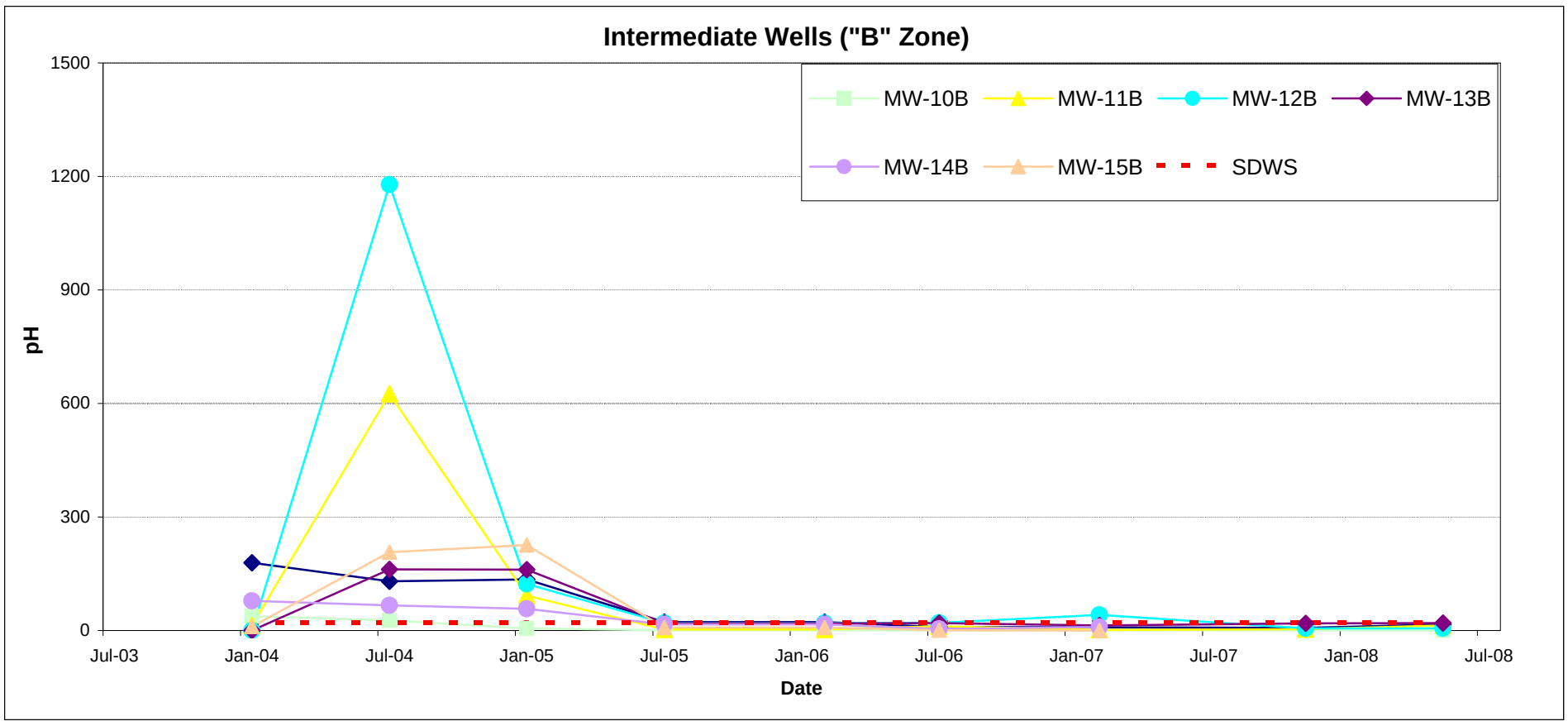


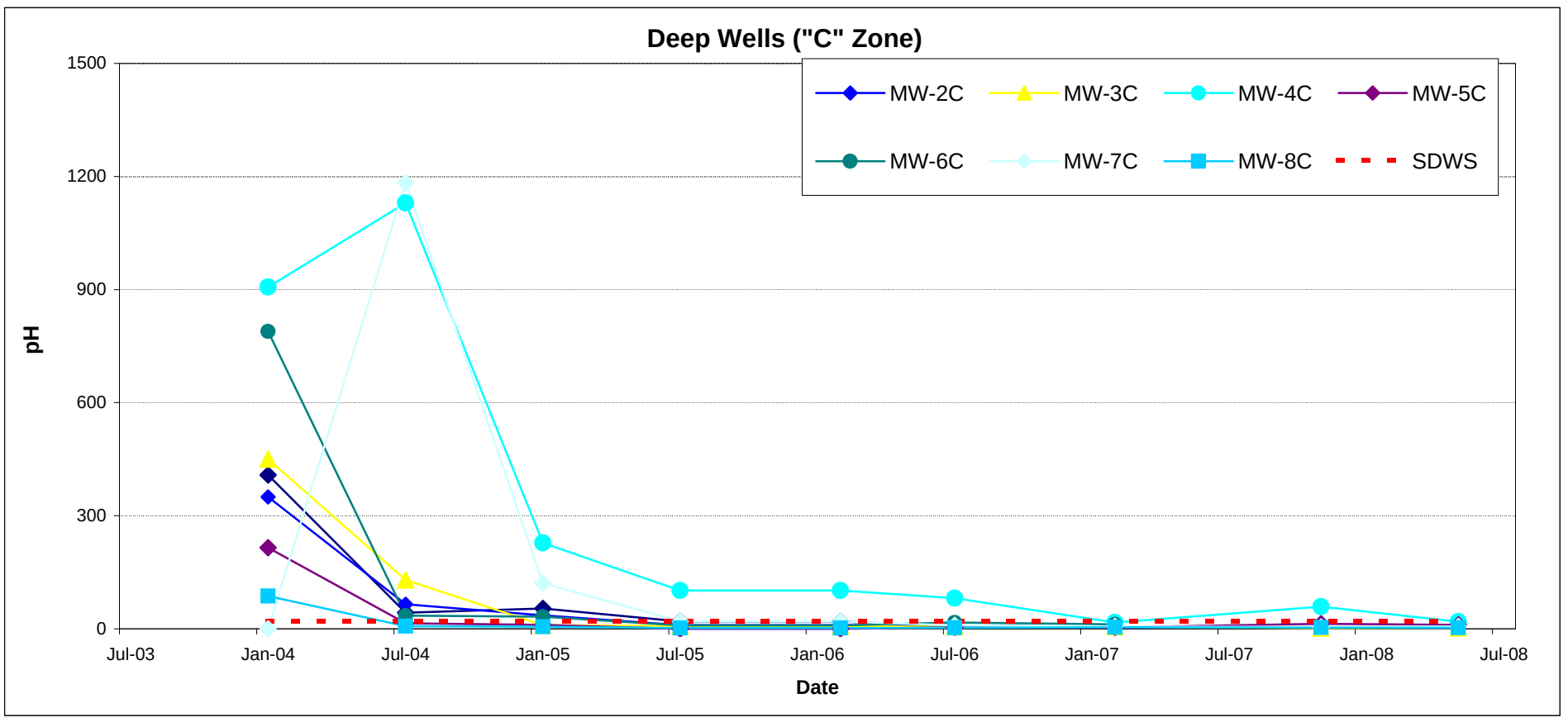


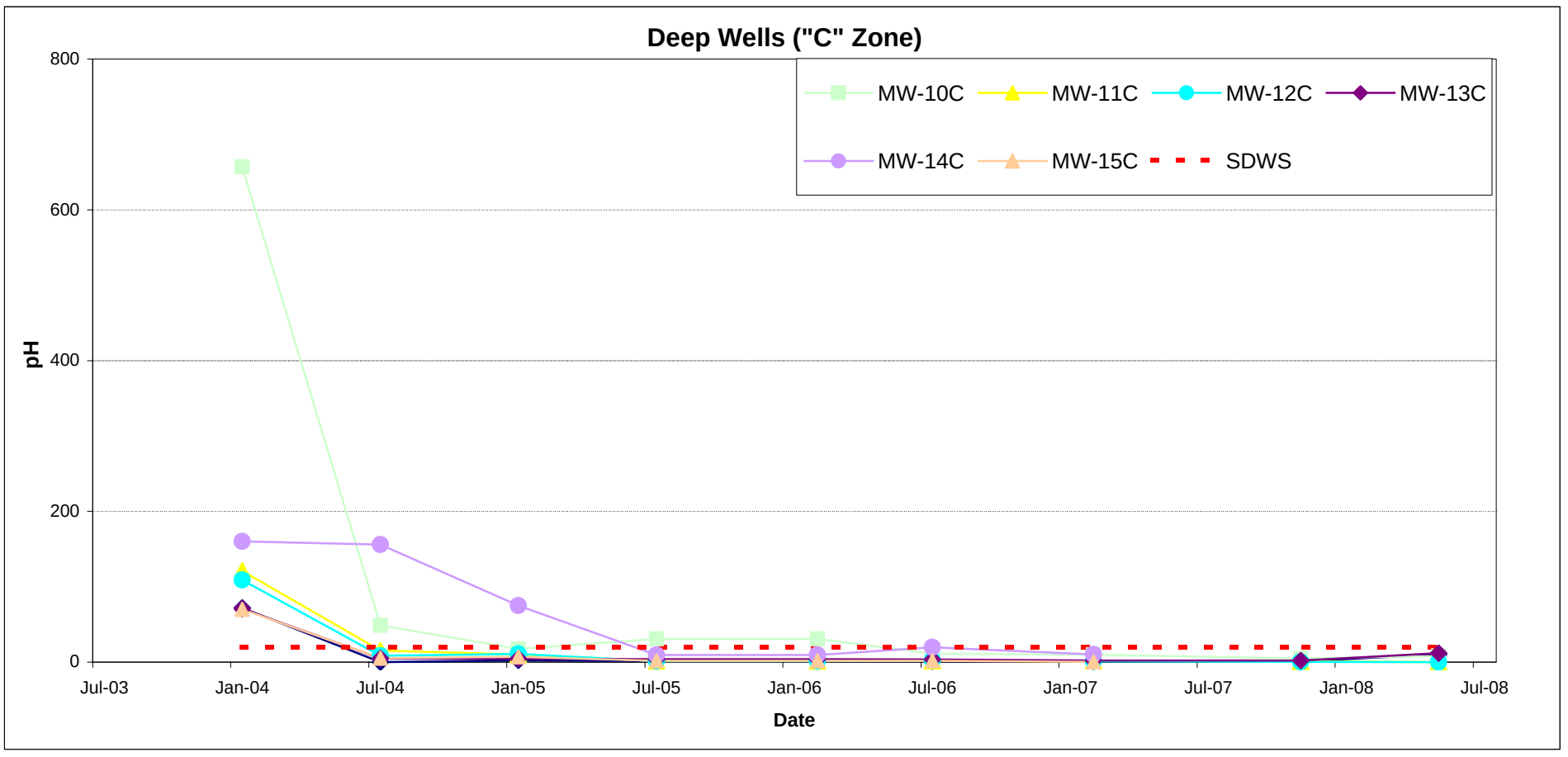
Note:

SDWS = Secondary Drinking Water Standard (Below 20 NTUs)

Figure 6-13 (2 of 2)
Groundwater Trends - Turbidity
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



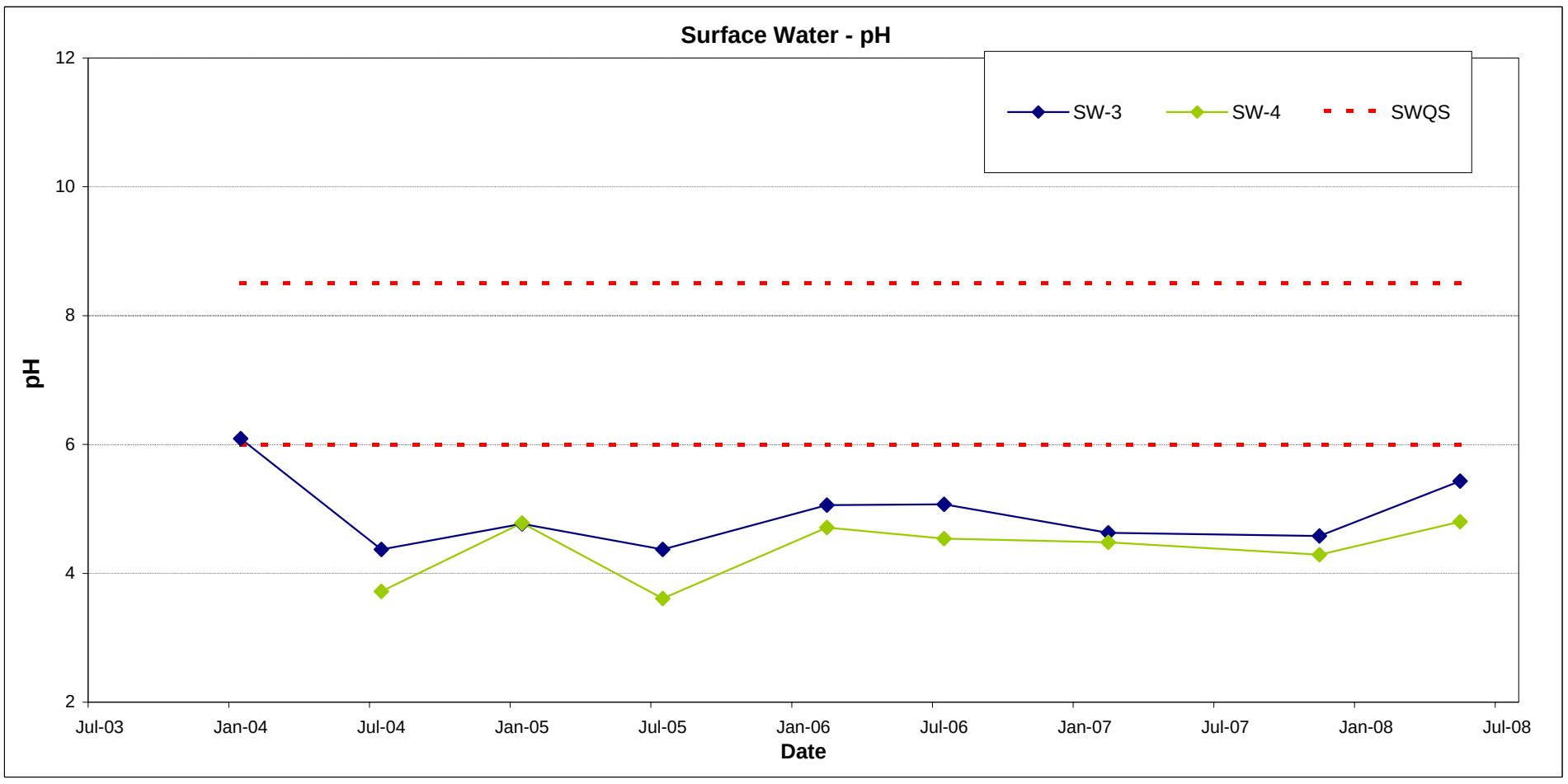


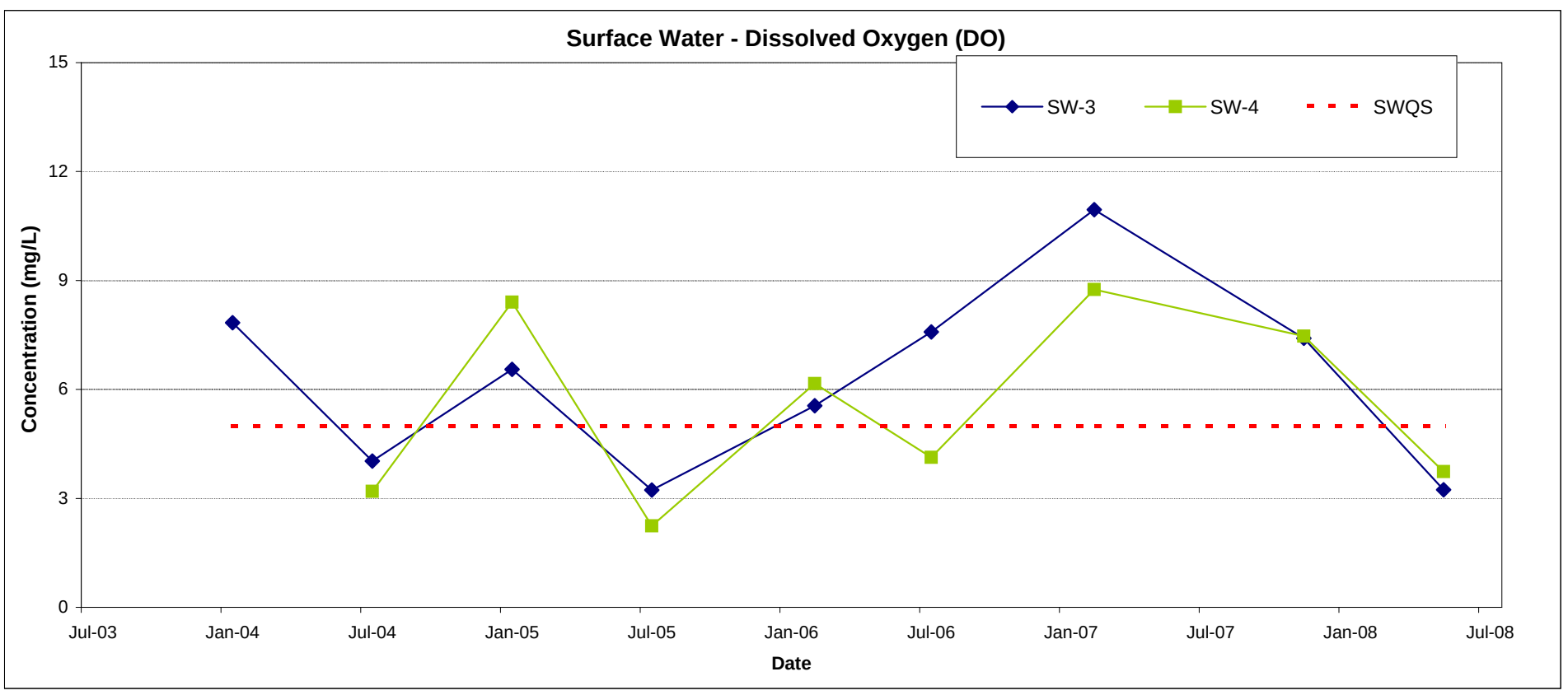


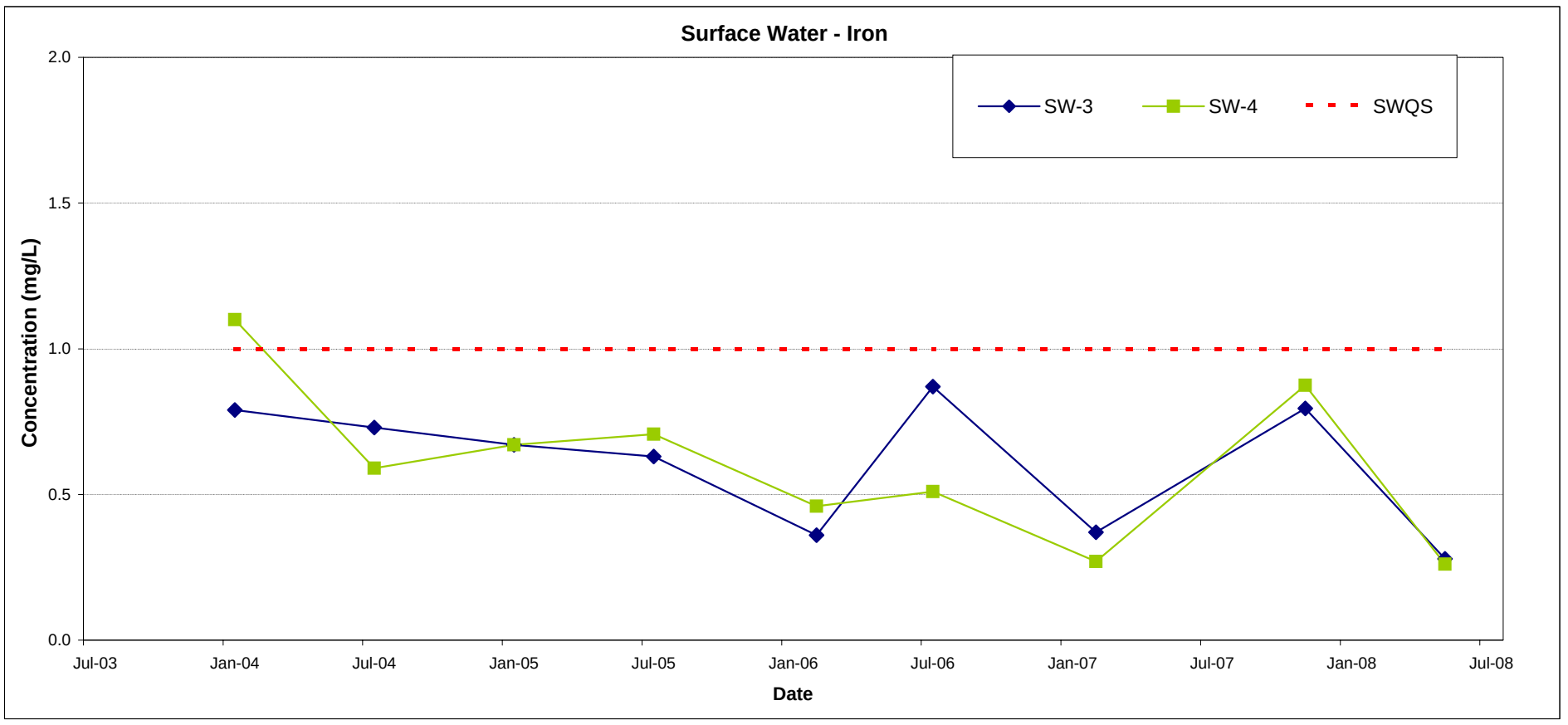
Note:

SDWS = Secondary Drinking Water Standard (Below 20 NTUs)

Figure 6-14
Surface Water Summary Data - pH, DO, and Iron
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility







Note:

SWQS = Secondary Water Quality Standard

7. COMPARISON AMONG WELLS IN DIFFERENT HYDROLOGIC ZONES

7.1 Overview

Rule 62-701.510(9)(b)3, F.A.C. requires comparisons among shallow, intermediate, and deep zone wells. The well construction and layout details were described previously in Section 2 of this report. As discussed in Section 5, analytical laboratory results have been summarized to show all parameters reported above the practical quantitative limit (PQL). The tables generated which show all parameters detected above the PQL's have been included in Appendix B. These detection summary tables and the groundwater field measured parameters tables (Tables 4-1 through 4-5) were used to compare water quality among the wells in the different zones at the JED facility.

7.2 Field-Measured Parameters

Based on a review of the field measured parameters recorded during each monitoring event (Tables 4-1 through 4-5) there appears to be no major discernable differences between the shallow ("A"), intermediate ("B"), and deep ("C") zones. For the three zones, the pH is relatively consistent between 4 and 6 standard units. Dissolved oxygen levels are slightly higher in the "A" zone wells, but this is expected due to the shallow nature of these wells. For each well cluster, the conductivity levels are slightly higher in the "A" zones wells as compared to the deeper zones and are fairly consistent between the "B" and "C" zone wells. Turbidity levels have been historically higher in the intermediate and deep zones than the shallow zone. These higher turbidities can be attributed to the subsurface formation properties.

7.3 Detected Parameters

Overall, based on a review of the tables generated showing all parameters detected above the PQL, there is no significant differences between the three zones ("A", "B", and "C"). A few parameters, such as arsenic, iron, toluene, chloride, and ammonia-N had slightly more detections or detections at higher concentrations in the shallow ("A" zone) than the deeper zones.

8. COMPARISON BETWEEN BACKGROUND AND DETECTION WELLS

8.1 Overview

Rule 62-701.510(9)(b)4, F.A.C. requires comparisons between background water quality and the water quality in detection wells. For the Phases 1 through 3 monitoring network at the JED facility, monitoring well clusters MW-1 through MW- 6, and MW-22 and MW-23 have been designated as the background wells and monitoring well clusters MW-7 through MW-21 have been designated as detection wells. The configuration of the monitoring well clusters was discussed in Section 2.

.

8.2 Statistical Analysis

Four parameters were selected to compare water quality between background wells and detection monitoring wells:

- Chloride
- Iron
- Total Dissolved Solids
- pH

These parameters have all been used to document water quality impacts at landfill sites and have the added advantage (from a statistical analysis standpoint) of being "detectable" – that is, each analysis is a quantifiable detection.

The data were tested using the Mann-Whitney test. The Mann-Whitney is a non-parametrical statistical procedure that evaluates whether two populations of data are similar or not. It is the non-parametric "equivalent" of the t-test; a very common statistical procedure. Mann-Whitney is frequently used in water quality applications due to its ability to handle non-normally distributed data (such as most water quality data). In this case, the two populations are the background monitoring wells and the detection monitoring wells.

The analysis involves ranking all of the data from both populations and then summing up the ranks of each. If the populations are similar, the ranks should be very close. A statistic known as the "U" statistic is calculated for each population. If this statistic is greater than 0.05, then there is it can be stated that the water quality parameter is from the same population in both the background and detection monitoring wells. In other words, there is no statistically significant difference between the background wells and the detection monitoring wells. The calculated "U" statistic for the current data set for each of the parameters tested is:

- Chloride – 0.48
- Iron – 0.34
- Total Dissolved Solids – 0.51
- pH – 0.08

None of these parameters indicate a statistically significant difference between the background monitoring wells and the detection monitoring wells. Note that this analysis has a very high "power" due to the large sample size in both populations. This means that the probability of a significant finding that the test may have missed is very low.

9. CORRELATIONS BETWEEN RELATED PARAMETERS

9.1 Overview

Rule 62-701.510(9)(b)5, F.A.C. requires correlations between related parameters such as total dissolved solids and specific conductance. Based upon a technical review of the data, four sets of parameters were identified that might provide meaningful data when correlated responses are evaluated. These are discussed below.

Figure 9-1 contains a correlation plot for TDS versus specific conductance (SC). This is provided because it is recommended in the rule cited above. There is a positive correlation between SC and TDS. This correlation has been well-documented for many years.

Figure 9-2 is a correlation plot between chlorides and dissolved solids. This correlation can sometimes indicate leachate impacts. This correlation shown in Figure 9-2 is poor, however, this may be the result in part, of many outliers. In any case, no evidence of leachate issues can be noted in this plot.

Figure 9-3 is a correlation plot between iron and arsenic. The correlation coefficient is 0.75, indication a positive correlation between the two analytes. GeoSyntec has been involved in arsenic fate and transport at more than 50 landfills in Florida. We have concluded that, in virtually every case, the presence of soluble (ferrous) iron is an excellent predictor of arsenic concentrations. This is due to the fact that arsenic is bound up primarily by ferric hydroxides under natural conditions in Florida. If the ferric hydroxides are exposed to anaerobic conditions, the iron is reduced to its ferrous form and arsenic is released. This appears to be the case at the JED facility. This may become significant if arsenic concentrations are routinely detected about GWCTLs.

Figure 9-4 is a correlation plot between turbidity and lead. Lead was one of the more commonly detected metals throughout all the semi-annual monitoring events. The positive correlation indicated by Figure 9-4 suggests that much of this lead is actually particulate in nature and present primarily in turbid samples. Other metals (e.g. barium, beryllium, vanadium) have also been observed to follow a similar pattern, but to a lesser extent.

Figure 9-1
Correlation Between TDS and Specific Conductance
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J.E.D. Solid Waste Management Facility

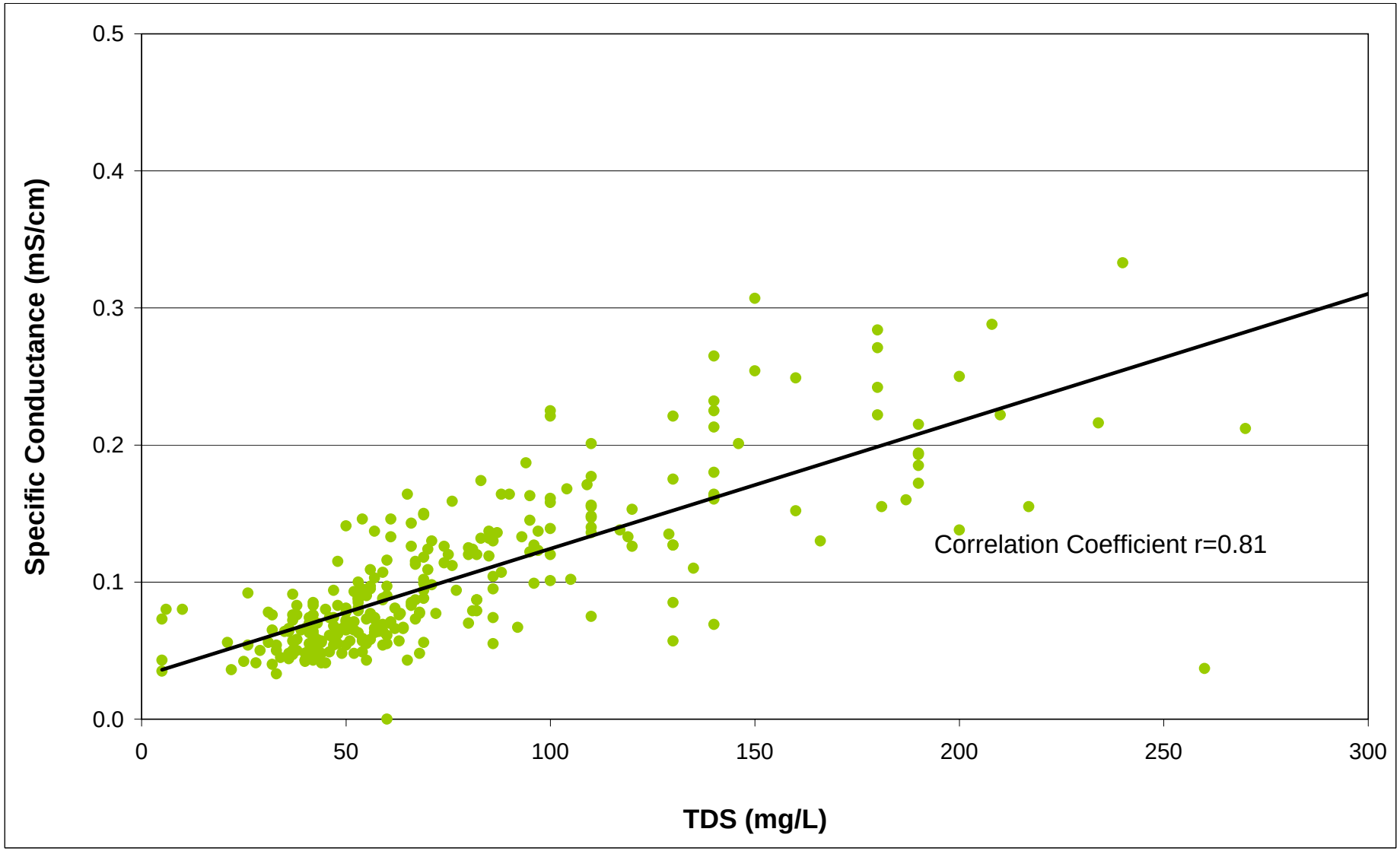

Figure 9-2
Correlation Between Chloride and Total Dissolved Solids
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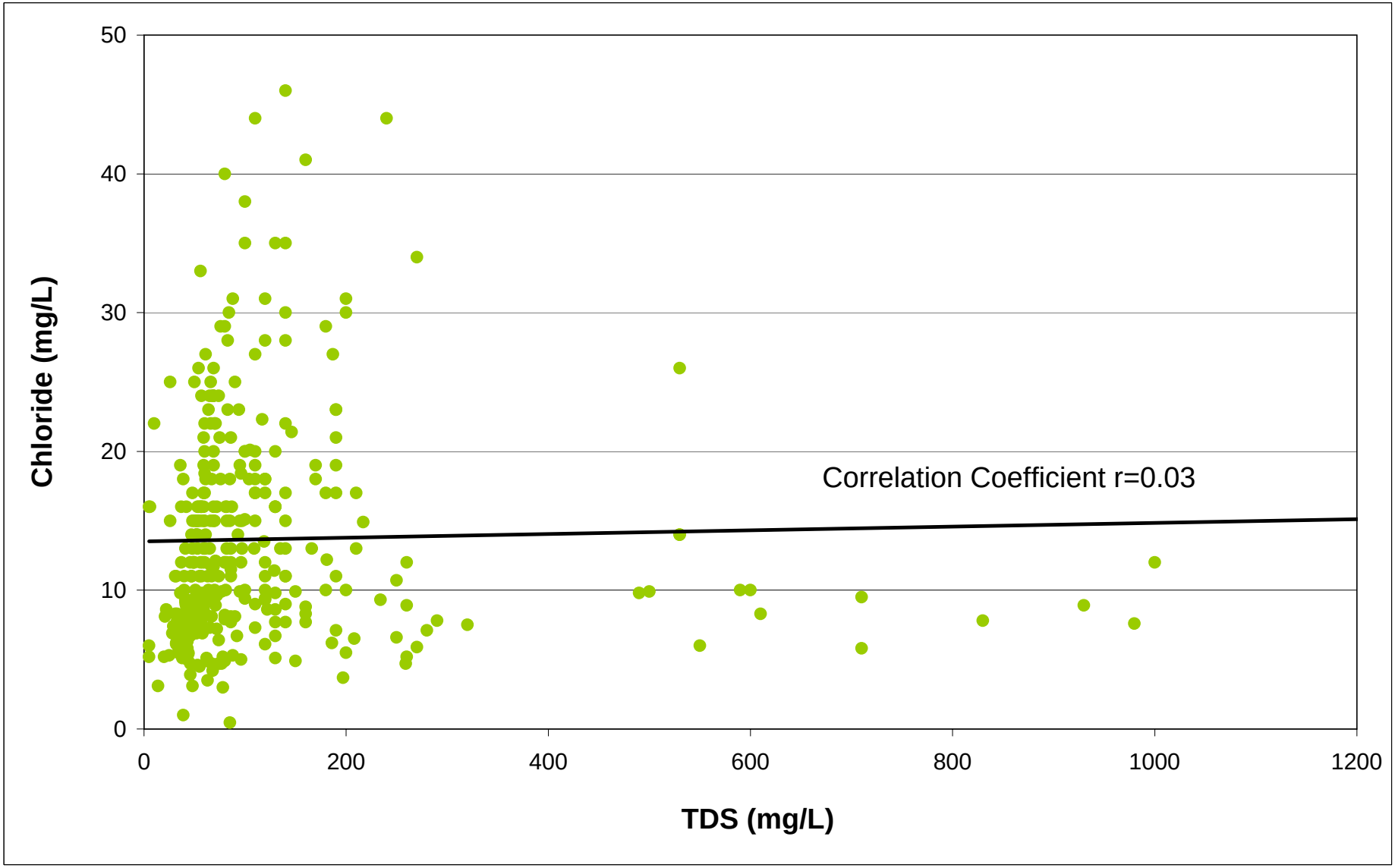


Figure 9-3
Correlation Between Iron and Arsenic
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

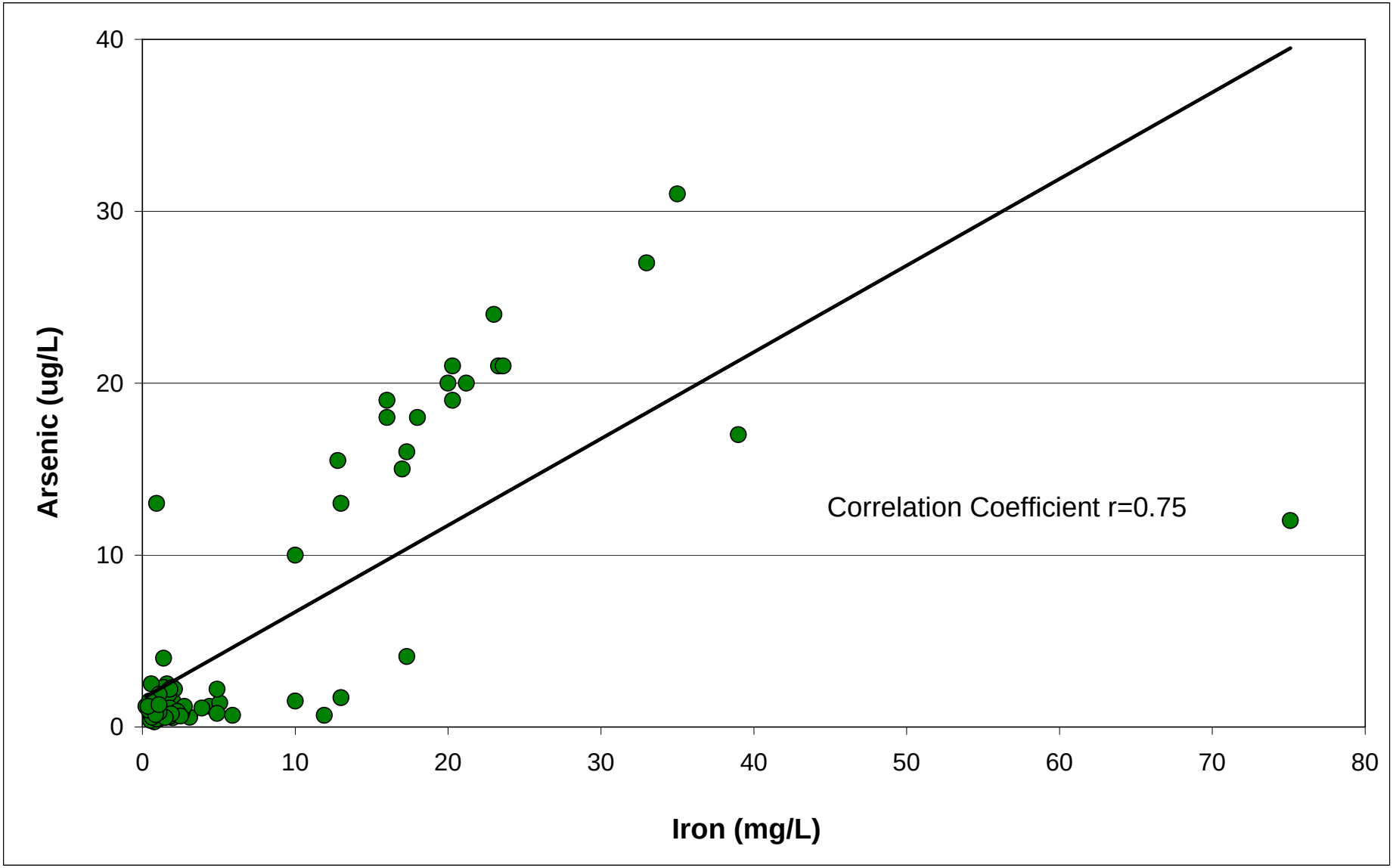
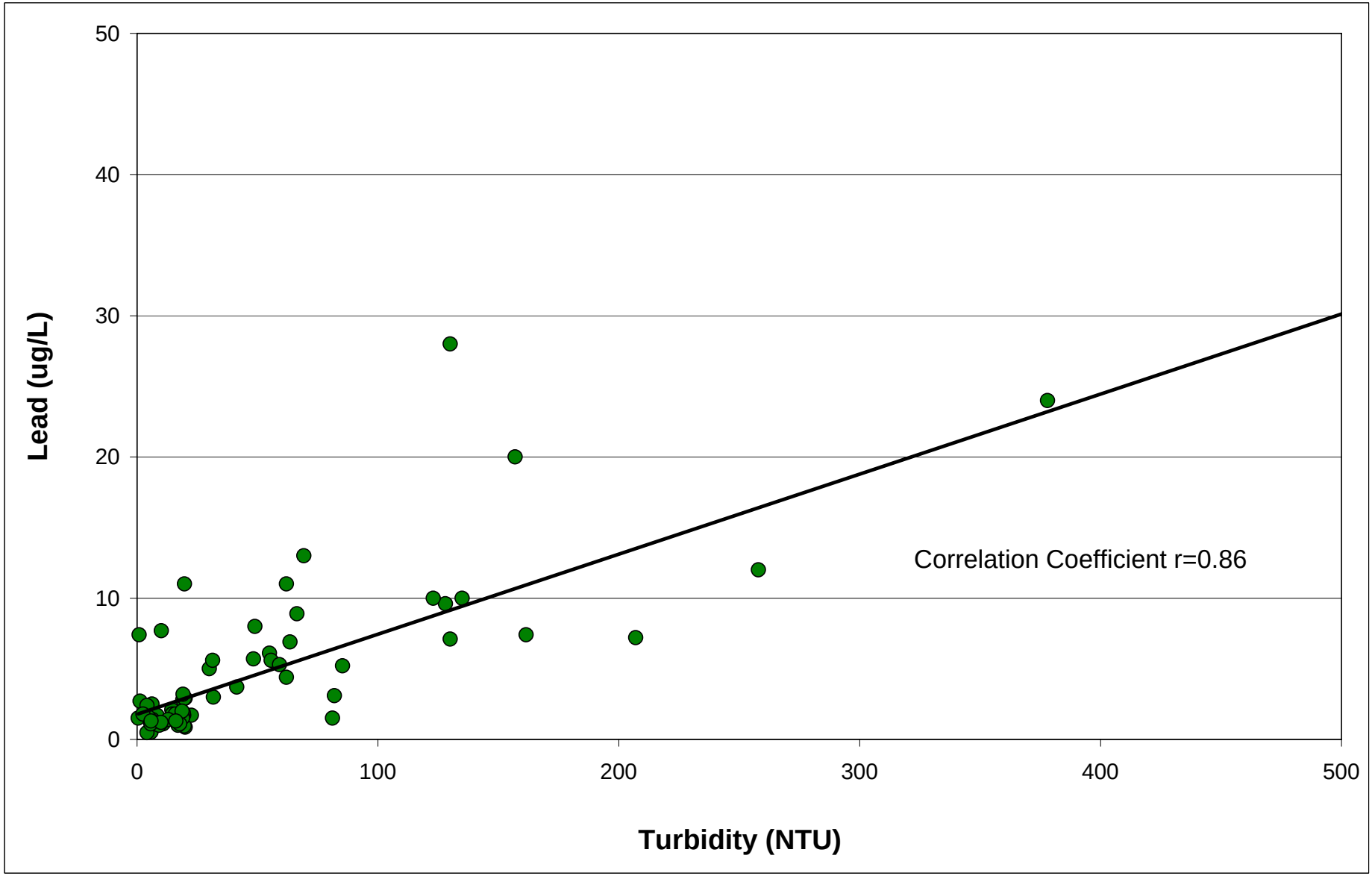


Figure 9-4
Correlation Between Turbidity and Lead
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility



10. DISCUSSION OF ERRATIC OR POORLY CORRELATED DATA

10.1 Overview

Rule 62-701.510(9)(b)5, F.A.C. requires a discussion of erratic and/or poorly correlated data. In an effort to understand the sources of variability in sample data, a limited analysis was conducted to investigate the relationship between contaminant concentrations and sample event parameters, such as seasonal influences or turbidity. While there was some correlation of results within individual sampling events no seasonal influence was noted (i.e. samples collected in the summer were not systematically higher or lower than other seasons). A significant relationship was noted between turbidity and contaminant concentrations, where the turbidity levels exceeded the SDWS of 20 NTU.

As discussed in Section 3, several analytical laboratories were utilized for the first four monitoring events included in this report. As such, each laboratory was capable of achieving different reporting limits for the various parameters. Generally, the laboratory reporting limits decreased over the eight monitoring events. The detection of a parameter above the laboratory reporting limit does not mean that the parameter was not present in the samples prior, but that the actual sample concentration was less than that laboratory's reporting limit for that parameter. However, Columbia Analytical Services, Inc. (CAS) Jacksonville, Florida consistently performed the laboratory analyses for the fourth through eighth monitoring events.

Several parameters have been reported sporadically or in an erratic manner. Erratic data associated with parameters that exceeded the GWCTL during any one monitoring event where reviewed in Section 6. Parameters detected above the PQL but below the GWCTL are discussed below.

10.2 Monitoring Wells

10.2.1 Acetone

Acetone was detected only once during the eight monitoring events performed at a concentration of 13 ug/L. This detection is considered anomalous. The detected concentration was well below the GWCTL of 700 ug/L.

10.2.2 Antimony

Antimony was detected in a few wells during the fifth semi-annual monitoring event at concentrations ranging from 0.0095 to 0.026 ug/L. These detections are considered anomalous. The detected concentrations were all well below the GWCTL of 6 ug/L.

10.2.3 Cadmium

Cadmium was detected in several wells during various semi-annual monitoring events at concentrations ranging from 0.08 to 2.5 ug/L. These detections are considered anomalous. The detected concentrations were all below the GWCTL of 5 ug/L.

10.2.4 Chloroform

Chloroform was detected only once during the eight semi-annual monitoring events performed at a concentration of 3 ug/L. This detection is considered anomalous. The detected concentration was below the GWCTL of 5.7 ug/L.

10.2.5 Cobalt

Cobalt was detected in a few wells during the fourth through eighth semi-annual monitoring events at concentrations ranging from 0.18 to 5.5 ug/L. These detections can be attributed to the lower laboratory reporting limit for cobalt achieved during these events compared with the reporting limits for the previous events. The detected concentrations were all well below the GWCTL of 420 ug/L.

10.2.6 Copper

Copper was detected in several wells during various semi-annual monitoring events at concentrations ranging from 0.37 to 55 ug/L. These detections are considered anomalous. The detected concentrations were all below the GWCTL of 1,000 ug/L.

10.2.7 Cis-1,2-Dichloroethene

Cis1,2-dichloroethene was detected only once during the sixth semi-annual monitoring event at a concentration of 1.4 ug/L. This detection is considered anomalous. The detected concentration was well below the GWCTL of 70 ug/L.

10.2.8 Ethylbenzene

Ethylbenzene was detected in a few wells during various semi-annual monitoring events at concentrations ranging from 1.2 to 3.8 ug/L. These detections are considered anomalous. The detected concentrations were all below the GWCTL of 30 ug/L.

10.2.9 Mercury

Mercury has been detected above the laboratory reporting limit for several wells during the baseline and first semi-annual monitoring events, but has not been detected in any subsequent monitoring events. The field measured turbidity concentrations for all these samples significantly exceeded the SDWS of 20 NTU. The mercury concentrations can be attributed to these high sample turbidity levels. The detected concentrations were well below the GWCTL of 0.002 mg/L.

10.2.10 Nickel

Nickel was only detected in a few wells during the fourth through eighth semi-annual monitoring events at concentrations ranging from 0.7 to 14 ug/L. These detections can be attributed to the lower laboratory reporting limit for nickel achieved during these events compared with the reporting limits for the previous events. The detected concentrations were all below the GWCTL of 100 ug/L.

10.2.11 Nitrate-N

Nitrate was detected sporadically for a few wells during the eight monitoring events at concentrations of ranging between 0.051 and 3.0 mg/L and below. These detections are considered anomalous. The detected concentrations were all below the GWCTL of 10 mg/L.

10.2.12 Selenium

Selenium was reported above the laboratory reporting limit for several wells during the first semi-annual monitoring event. The field measured turbidity concentrations for all these samples significantly exceeded the SDWS of 20 NTU (625-1,321 NTU). The selenium concentrations can be attributed to these high sample turbidity levels. Selenium was also detected in several wells during the fourth through eighth monitoring events except for the sixth monitoring event. These detections can be attributed to the lower laboratory reporting limit for selenium as compared with the previous events. The levels detected in the fourth through eighth semi-annual events are lower than the laboratory reporting limits for the previous monitoring events. The detected concentrations were well below the GWCTL of 0.05 mg/L.

10.2.13 Silver

Silver was detected in a few wells during the fifth semi-annual monitoring event at concentrations of ranging from 1.3 to 48 ug/L. These detections are considered anomalous. The detected concentrations were all well below the GWCTL of 100 ug/L.

10.2.14 Thallium

Thallium was detected in MW-13A and MW-13C during the fifth semi-annual monitoring event at concentrations of 0.13 and 0.15 ug/L, respectively. These detections are considered anomalous. The detected concentrations were all well below the GWCTL of 2 ug/L.

10.2.15 Xylene

Xylene was detected in two wells (MW-9A, and MW-11A) during the seventh and eighth monitoring events at concentrations of ranging between 2.2 and 3.4 ug/L. These detections are considered anomalous. The detected concentrations were well below the GWCTL of 20 ug/L.

10.2.16 Zinc

Zinc has been reported for several wells during various monitoring events. Zinc has only been routinely detected in MW-7A, 14A, and 13B over several events. The field measured turbidity concentrations for the majority of these samples exceeded the SDWS of 20 NTU. The detection of zinc in these samples can be attributed to the elevated turbidity levels. The detected concentrations were well below the GWCTL of 5 mg/L. Zinc has not been detected for the last two (seventh and eighth) monitoring events.

11. GROUNDWATER CONTOUR MAP EVALUATION

11.1 Groundwater Level Contour Map

The depth to water in each monitoring well was measured using a water level meter. Additionally, water level measurements were completed on other site piezometers (installed during the hydro-geological investigation, but not part of the water quality monitoring network), and staff gauges located at surface water monitoring locations SW-3 and SW-4 during each monitoring event. The water level measurements were used to calculate the groundwater level elevations for each monitoring well or piezometer. The groundwater and surface water level elevation data from January 2004 through May 2008 are summarized in Table 11-1.

The groundwater level elevations from the two baseline and subsequent eight semi-annual monitoring events for all monitoring wells and piezometers were plotted over the monitoring period (January 2004 to May 2008). These hydrographs are shown on Figures 11-1 ("A" zone wells), Figure 11-2 ("B" zone wells), Figure 11-3 ("C" zone wells), and Figure 11-4 (piezometers). The hydrographs indicate that, while the water level elevations fluctuate, the relationship between water levels in the monitoring wells is generally consistent throughout the period of record. These hydrographs indicate that the potentiometric surface has remained relatively constant throughout the monitoring period. The exception would be for monitoring well clusters MW-1, 2, 3, 4, 22, and 23. A borrow area was permitted on the property adjacent to the western limit of development of Phases 1 through 3 at the JED facility. Dewatering of the borrow area has created a temporary change in the ground water flow direction as shown on the recent (May 2008) ground water contour maps provided in Appendix C.

To further assess groundwater flow dynamics at the JED facility, water level elevations from the different zones ("A", "B", and "C") for selected monitoring well clusters (i.e., MW-1, MW-5, MW-9, and MW-13) installed around the perimeter of the Phases 1 through 3 development at the site, were plotted over the period from January 2004 to May 2008. These plots are presented in Figures 11-5 and 11-6. The data follows the same trend observed from the hydrographs presented in Figures 11-1 through 11-4. These plots provide further indication of a consistent flow system with very little change in flow direction under normal conditions, except for the MW-1 cluster, which is being influenced by the adjacent borrow area dewatering operations.

Groundwater surface maps for the two baseline and each of the semi-annual monitoring events (January 2004 through May 2008) were previously provided in the respective monitoring event reports. The highest and lowest groundwater elevations were observed during the first (July 2004) and eighth (May 2008) semi-annual monitoring

events, respectively. Copies of groundwater surface maps for the first and eighth monitoring events have been included in Appendix C. The groundwater contours indicate that the horizontal component of groundwater flow is predominately east-northeast toward Bull Creek for the three zones. The average horizontal hydraulic gradient in all three zones is approximately $1E^{-3}$ ft/ft. A comparison of water levels between the A, B, and C wells shows a similar vertical gradient ($1E^{-3}$ ft/ft). These gradients are consistent with the regional gradient in the upper surficial aquifer and indicates an interconnected, sluggish flow regime in the saturated zone above the intermediate confining units.

11.2 Groundwater Flow Rate Calculations

Groundwater flow rates were estimated using site-specific data. To estimate the groundwater flow rate, the average linear velocity of the groundwater unit was calculated using the following equation:

$$\bar{v} = \frac{Ki}{n}$$

where:

$\bar{v}$ = average linear groundwater velocity
K = hydraulic conductivity
i = hydraulic gradient
n = effective porosity (assumed)

The average hydraulic gradient was obtained from the water level maps measured for the eight semi-annual monitoring events, and an effective porosity of 0.30 was estimated for the soil types found in the shallow aquifer (Freeze and Cherry, 1979). The hydraulic conductivity value was obtained from the slug tests that were reported in "Hydrogeologic Investigation Report and Water Quality Monitoring Plan" submitted to FDEP in April 2002. The average hydraulic conductivity for the upper surficial aquifer "A" and "C" zones was calculated to be approximately 5.83 feet per day. The resultant estimated average annual flow velocity for groundwater flowing north and northeast from the landfill was 7.088 ft/yr.

Table 11-1 (1 of 2)
Groundwater Elevation Measurements
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Well ID	PH 1 Baseline Jan-04 (ft, NGVD)	1st Event Jul-04 (ft, NGVD)	2nd Event Jan-05 (ft, NGVD)	3rd Event Jul-05 (ft, NGVD)	4th Event Feb-06 (ft, NGVD)	5th Event Jul-06 (ft, NGVD)	6th Event Feb-07 (ft, NGVD)	PH 2&3 Baseline Sep-07 (ft, NGVD)	7th Event Nov-07 (ft, NGVD)	8th Event May-08 (ft, NGVD)
MW-1A	80.61	81.15	81.00	81.03	78.29	78.25	77.30	75.26	74.76	75.57
MW-2A	80.52	81.41	80.89	81.05	78.40	79.63	77.88	75.88	75.42	77.04
MW-3A	80.12	81.33	80.71	80.98	78.65	78.90	78.33	76.37	76.16	77.44
MW-4A	79.66	80.93	80.26	80.83	78.93	78.15	78.68	76.78	76.91	77.38
MW-5A	79.11	80.47	79.86	80.71	79.47	78.06	78.79	77.04	77.77	77.43
MW-6A	78.46	79.27	79.03	79.39	78.77	77.79	78.49	76.97	77.23	76.37
MW-7A	78.44	79.81	79.40	79.45	78.71	77.71	78.70	76.79	77.33	76.26
MW-8A	78.48	79.83	79.00	79.65	78.91	77.59	78.81	76.61	77.35	76.22
MW-9A	78.22	79.57	78.90	79.42	78.75	77.28	78.51	76.42	77.16	75.98
MW-10A	78.37	79.78	79.09	79.69	78.70	77.22	78.41	76.44	77.00	76.05
MW-11A	78.40	79.61	79.01	79.44	78.56	77.38	78.21	76.36	76.82	76.00
MW-12A	78.80	80.09	79.36	79.85	78.91	77.76	78.47	76.60	77.09	76.29
MW-13A	78.85	79.81	79.28	79.60	78.88	77.86	78.47	76.75	77.21	76.17
MW-14A	79.74	80.78	80.04	80.35	79.34	78.23	78.73	Monitoring Well Abandoned 10 July 2007		
MW-15A	80.37	81.17	80.69	80.98	79.15	78.14	78.36	Monitoring Well Abandoned 10 July 2007		
MW-16A	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							76.82	77.34	76.19
MW-17A								76.54	77.09	75.99
MW-18A								76.98	77.49	76.12
MW-19A								77.29	77.82	76.28
MW-20A								77.49	77.99	76.33
MW-21A								77.37	77.63	75.93
MW-22A								76.32	76.60	74.42
MW-23A								74.65	74.47	72.04
MW-1B	80.60	81.31	81.02	81.03	78.29	78.25	77.28	75.21	74.73	75.51
MW-2B	80.57	81.40	80.90	81.03	78.38	79.62	77.87	75.82	75.40	77.02
MW-3B	80.13	81.33	80.71	81.00	78.65	78.92	78.35	76.39	76.19	77.46
MW-4B	79.61	80.93	80.26	80.78	78.92	78.13	78.65	76.75	76.88	77.34
MW-5B	79.09	80.27	79.74	80.37	79.04	77.92	78.70	76.89	77.35	77.09
MW-6B	78.47	79.17	78.91	79.36	78.71	77.78	78.50	76.96	77.24	76.37
MW-7B	78.44	79.42	78.87	79.39	78.71	77.72	78.69	76.80	77.34	76.26
MW-8B	78.42	79.81	79.10	79.63	78.89	77.58	78.77	76.64	77.30	76.18
MW-9B	78.22	79.51	78.87	79.37	78.72	77.27	78.48	76.40	77.13	75.95
MW-10B	78.34	79.73	79.07	79.65	78.67	77.20	78.38	76.40	76.98	76.02
MW-11B	78.41	79.54	79.00	79.41	78.55	77.38	78.22	76.38	76.82	76.00
MW-12B	78.67	79.91	79.24	79.65	78.76	77.67	78.36	76.52	77.02	76.20
MW-13B	78.84	79.82	79.29	79.60	78.89	77.87	78.46	76.75	77.22	76.18
MW-14B	79.75	80.81	80.03	80.32	79.34	78.25	78.75	Monitoring Well Abandoned 10 July 2007		
MW-15B	80.33	81.18	80.65	80.97	79.15	78.14	78.35	Monitoring Well Abandoned 10 July 2007		
MW-16B	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							76.82	77.32	76.16
MW-17B								76.52	77.07	75.97
MW-18B								76.95	77.48	76.09
MW-19B								77.32	77.82	76.29
MW-20B								77.48	77.98	76.32
MW-21B								77.36	77.66	75.94
MW-22B								76.23	76.56	74.39
MW-23B								74.67	74.48	72.08
MW-1C	80.54	81.26	80.97	80.95	78.25	78.24	77.28	75.18	74.77	75.44
MW-2C	80.44	81.35	80.81	80.96	78.39	79.34	77.87	75.81	75.47	76.87
MW-3C	80.10	81.28	80.64	80.94	78.61	78.87	78.31	76.35	76.17	77.38
MW-4C	79.55	80.94	80.26	80.69	78.88	78.14	78.62	76.76	76.88	77.26
MW-5C	78.93	79.95	79.54	80.04	78.84	77.88	78.59	76.86	77.15	76.82
MW-6C	78.39	79.02	78.75	79.28	78.56	77.75	78.41	76.89	77.13	76.29
MW-7C	78.30	78.87	78.29	79.29	78.61	77.64	78.48	76.75	77.19	76.19
MW-8C	78.31	79.43	78.93	79.31	78.67	77.47	78.52	76.53	77.16	76.05
MW-9C	78.17	79.26	78.80	79.20	78.56	77.22	78.33	76.34	76.99	75.86
MW-10C	78.28	79.46	78.92	79.37	78.50	77.21	78.25	76.36	76.89	75.91
MW-11C	78.40	79.55	78.96	79.36	78.52	77.35	78.19	76.39	76.83	75.99
MW-12C	78.62	79.80	79.17	79.55	78.69	77.62	78.30	76.50	76.98	76.15
MW-13C	78.77	79.64	79.19	79.49	78.80	77.79	78.38	76.69	77.16	76.12
MW-14C	79.66	80.75	79.99	80.30	79.29	78.17	78.67	Monitoring Well Abandoned 10 July 2007		
MW-15C	80.21	81.05	80.90	80.76	79.01	78.11	78.25	Monitoring Well Abandoned 10 July 2007		
MW-16C	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							76.69	77.26	76.08
MW-17C								76.36	77.02	75.90
MW-18C								76.84	77.44	76.06
MW-19C								77.20	77.79	76.25
MW-20C								77.27	77.79	76.22
MW-21C								77.28	77.62	75.89
MW-22C								76.37	76.75	74.98
MW-23C								74.65	74.48	72.08

Notes:
NGVD = National Geodetic Vertical Datum of 1929
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table 11-1 (2 of 2)
Groundwater Elevation Measurements
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Well ID	PH 1 Baseline Jan-04 (ft, NGVD)	1st Event Jul-04 (ft, NGVD)	2nd Event Jan-05 (ft, NGVD)	3rd Event Jul-05 (ft, NGVD)	4th Event Feb-06 (ft, NGVD)	5th Event Jul-06 (ft, NGVD)	6th Event Feb-07 (ft, NGVD)	PH 2&3 Baseline Sep-07 (ft, NGVD)	7th Event Nov-07 (ft, NGVD)	8th Event May-08 (ft, NGVD)
DP-1	Pizometer Abandoned 03 October 2003									
DP-2	Pizometer Abandoned 03 October 2003									
DP-3	79.06	80.23	79.63	79.93	Piezometer Abandoned 16 January 2006					
DP-4	79.14	80.73	79.75	80.16	Piezometer Abandoned 16 January 2006					
DP-5	80.60	80.77	81.13	81.11	79.00	77.42	77.44	Piezometer Abandoned 10 July 2007		
DP-6	80.61	80.73	81.30	81.19	79.01	77.38	77.45	Piezometer Abandoned 10 July 2007		
DP-7	78.61	77.93	78.91	79.50	79.24	77.53	78.28	Piezometer Abandoned 10 July 2007		
DP-8	78.53	77.91	79.34	79.37	79.11	77.32	78.21	Piezometer Abandoned 10 July 2007		
DP-9	77.54	77.13	78.30	78.47	78.42	76.28	77.71	Piezometer Abandoned 10 July 2007		
DP-10	77.65	77.04	78.39	78.51	78.54	76.31	77.91	Piezometer Abandoned 10 July 2007		
DP-11	79.90	80.16	NM	80.63	80.06	78.24	78.96	Piezometer Abandoned 10 July 2007		
DP-12	79.99	80.18	NM	80.62	80.07	78.38	79.13	Piezometer Abandoned 10 July 2007		
DP-13	78.74	77.72	79.68	79.70	79.52	77.22	78.41	Piezometer Abandoned 10 July 2007		
DP-14	77.73	76.90	78.18	78.47	78.64	76.17	77.85	75.69	76.50	74.94
DP-15	77.59	77.00	78.14	78.42	78.55	76.14	77.81	75.78	76.45	74.93
DP-16	78.66	77.62	78.71	79.46	79.32	77.32	78.67	76.68	77.37	75.85
DP-17	78.80	77.65	77.66	79.32	79.29	77.27	78.64	76.63	77.30	75.81
DP-18	80.97	79.67	80.68	80.90	80.95	78.09	79.10	77.20	77.61	75.95
DP-19	80.42	79.59	80.77	80.98	81.01	78.05	79.18	77.27	77.66	75.99
DP-20	79.10	80.48	80.23	79.99	80.01	77.46	79.56	76.80	77.62	76.00
DP-21	78.93	80.41	80.09	79.77	79.77	77.55	79.34	76.87	77.50	75.95
DP-22	78.03	76.06	78.07	78.29	78.22	76.08	78.00	75.22	75.93	74.47
DP-23	77.90	76.89	78.24	78.44	78.51	76.42	78.06	75.59	76.33	74.78
DP-24	78.44	77.67	78.85	78.95	78.98	76.86	78.73	76.22	76.92	75.37
SZ-1	77.08	77.69	77.92	78.14	77.90	76.50	77.47	Piezometer Abandoned 10 July 2007		
SZ-2	77.20	78.02	77.94	78.34	78.11	76.78	77.73	75.94	76.46	75.06
SZ-3	76.55	77.17	77.38	77.72	77.55	76.12	77.12	75.22	75.79	74.42

Notes:

NGVD = National Geodetic Vertical Datum of 1929

NM = Not Measured

MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007

MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Figure 11-1
Hydrograph of "A" Groundwater Zone (Shallow) Monitoring Wells
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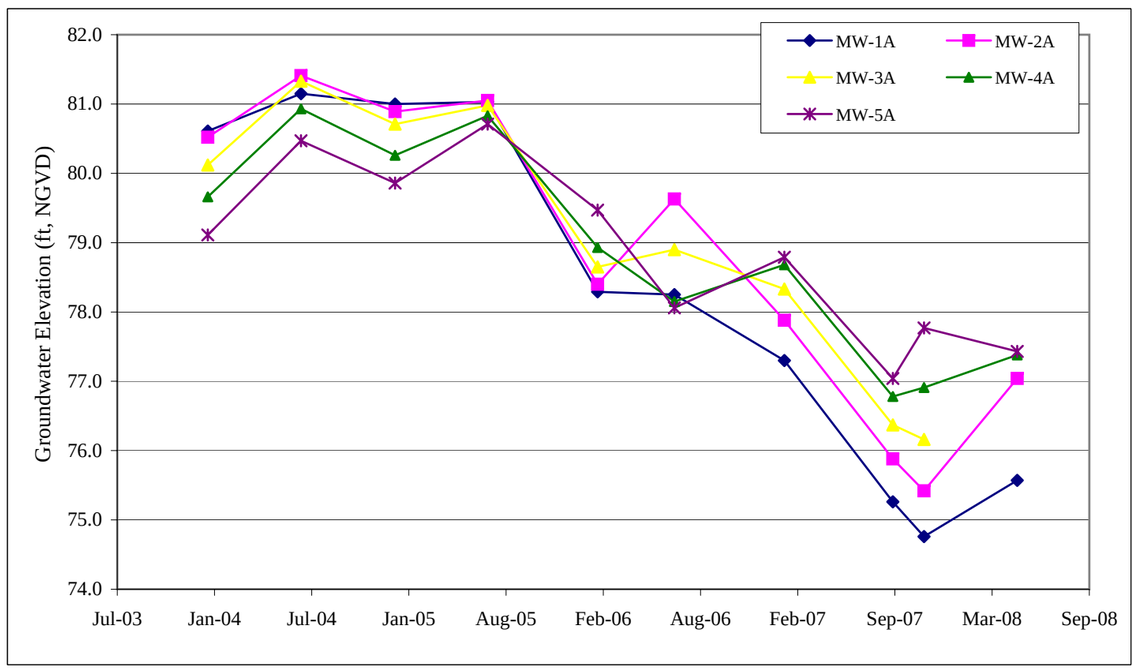

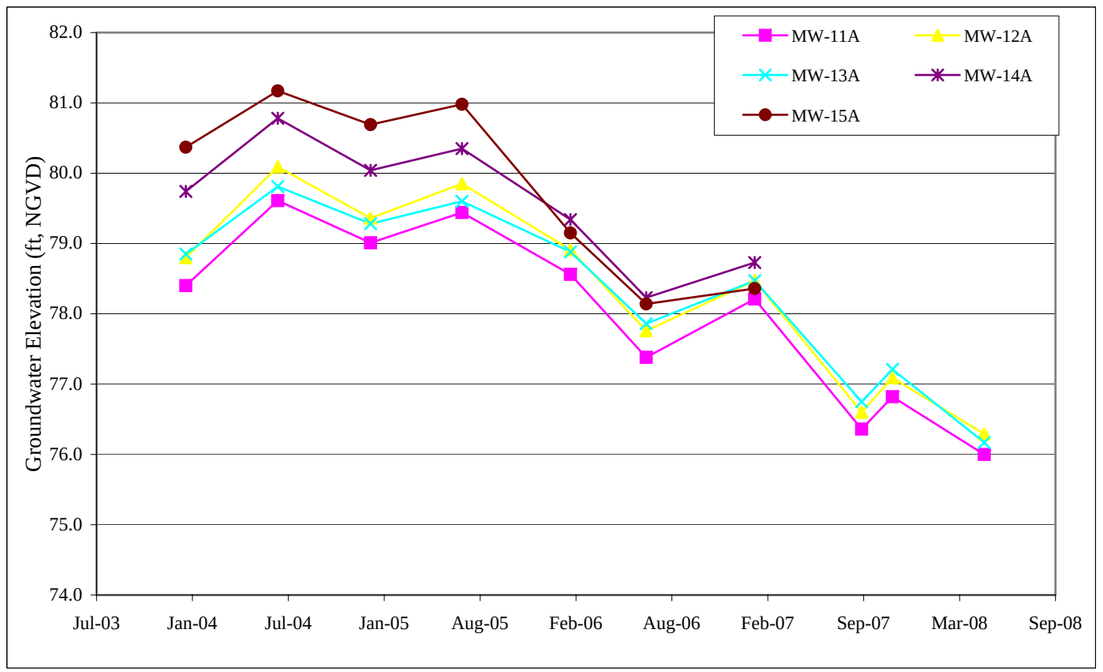

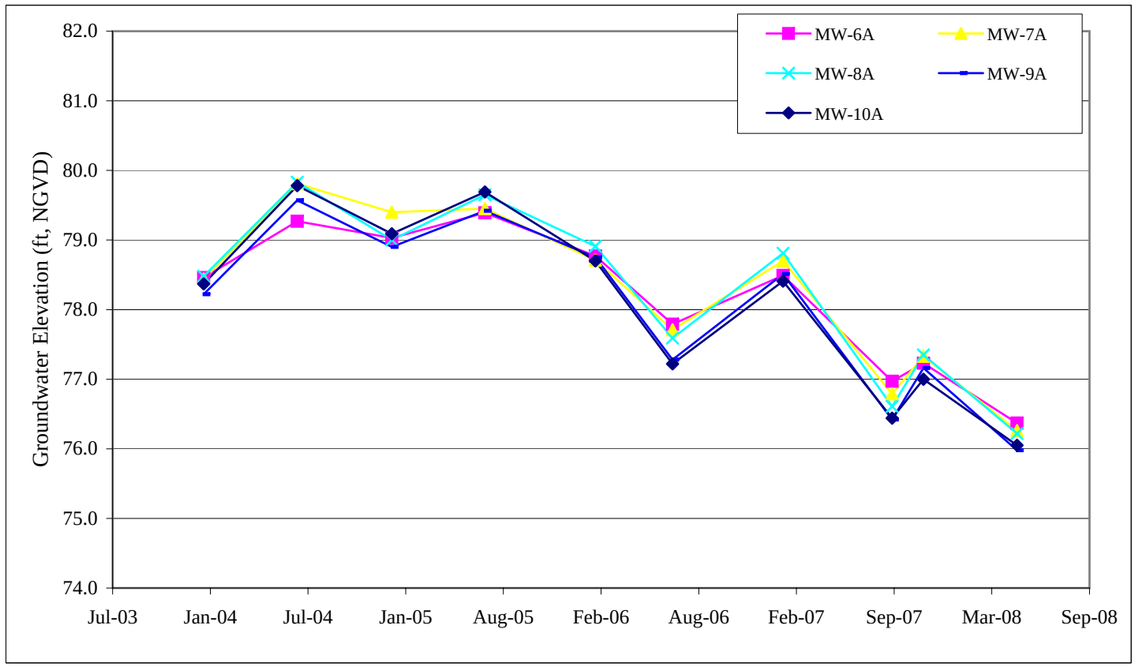

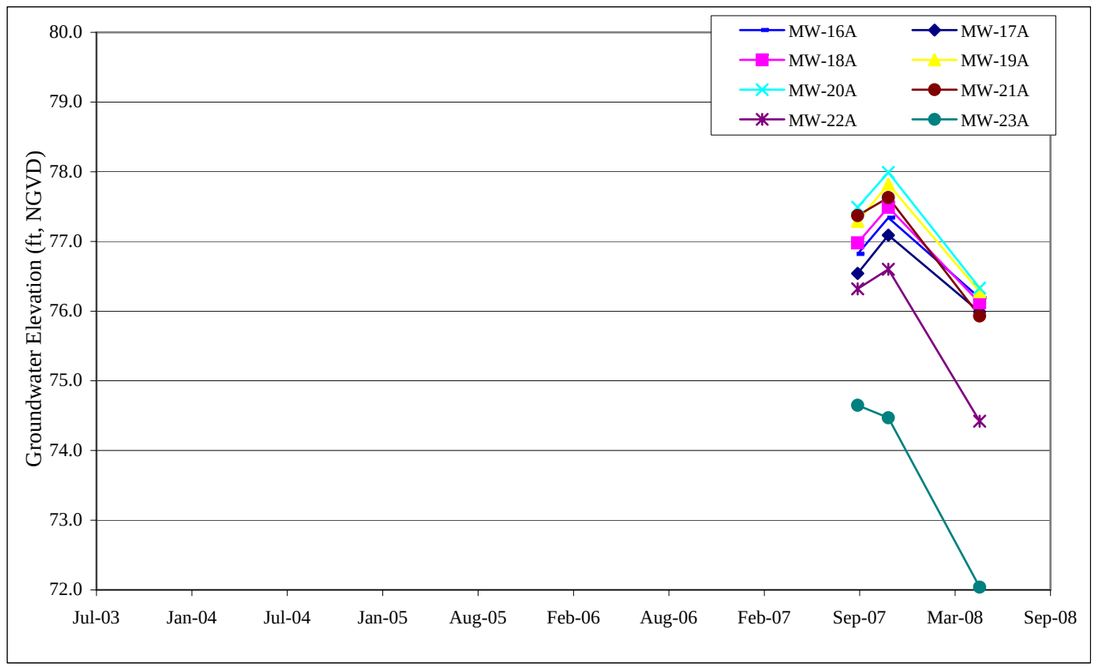

Figure 11-2
ydrograph of "B" Groundwater Zone (Intermediate) Monitoring Well
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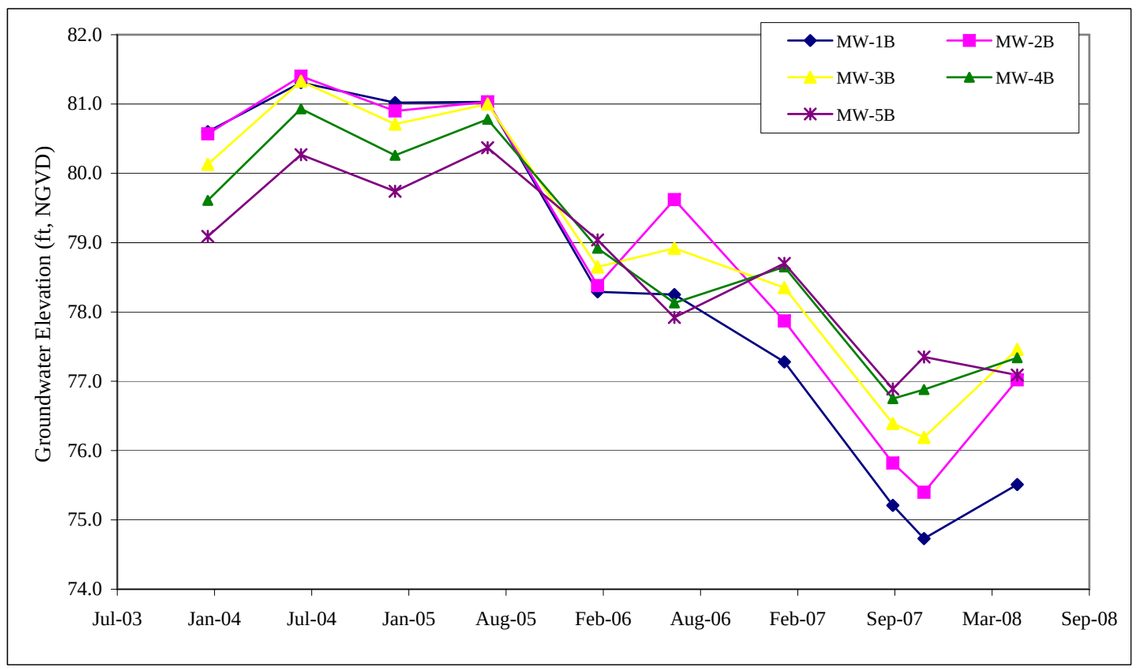

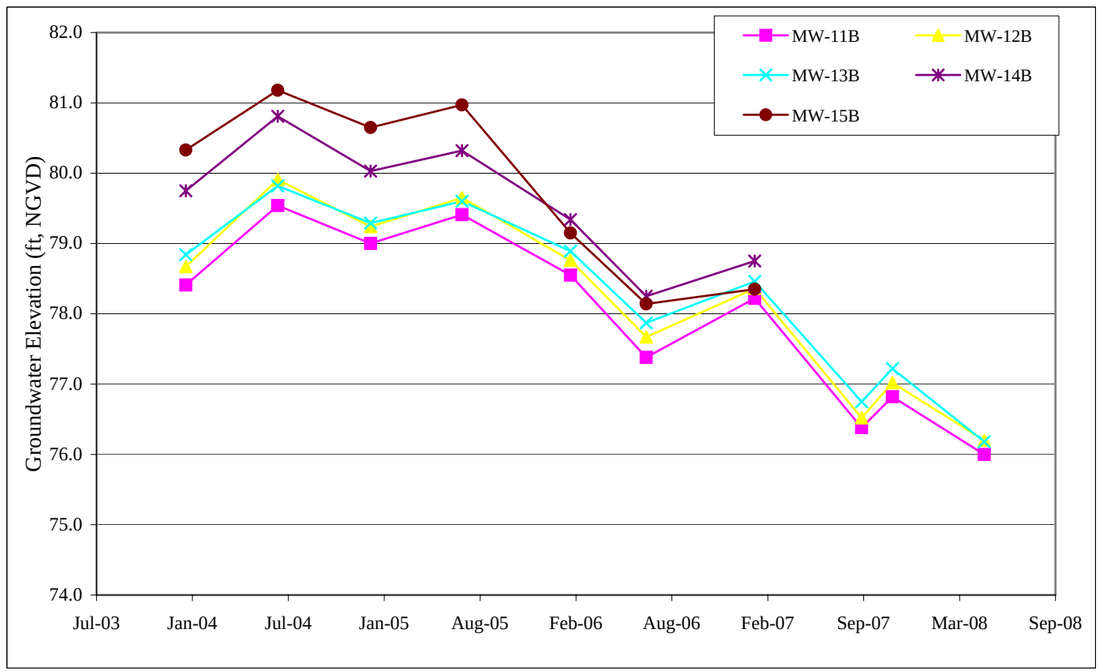

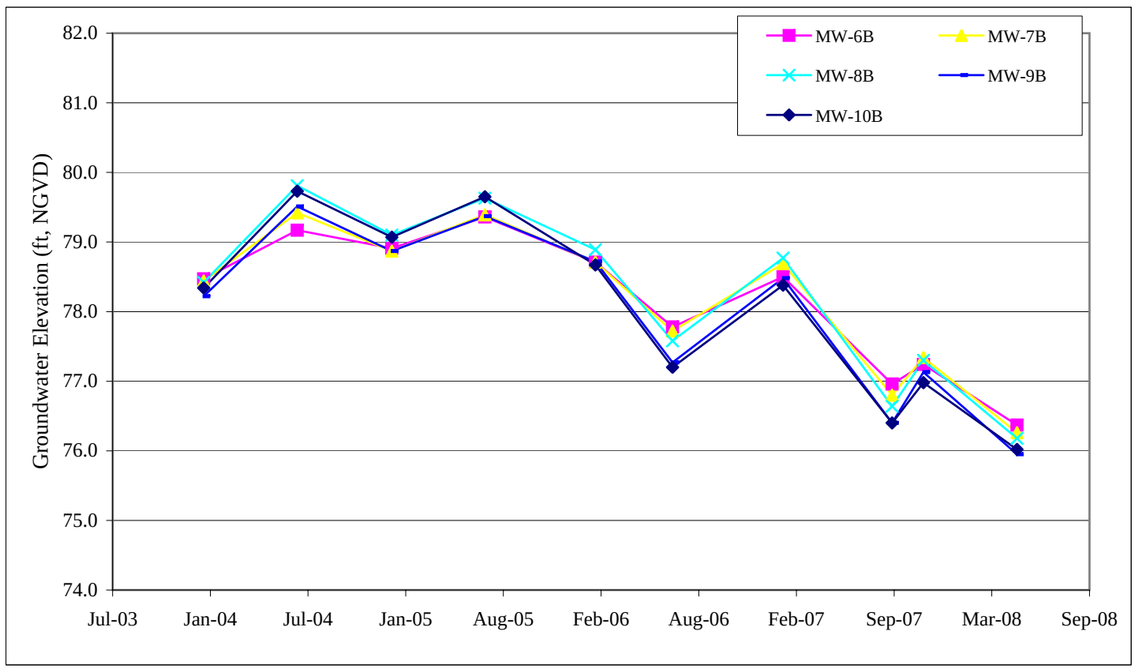

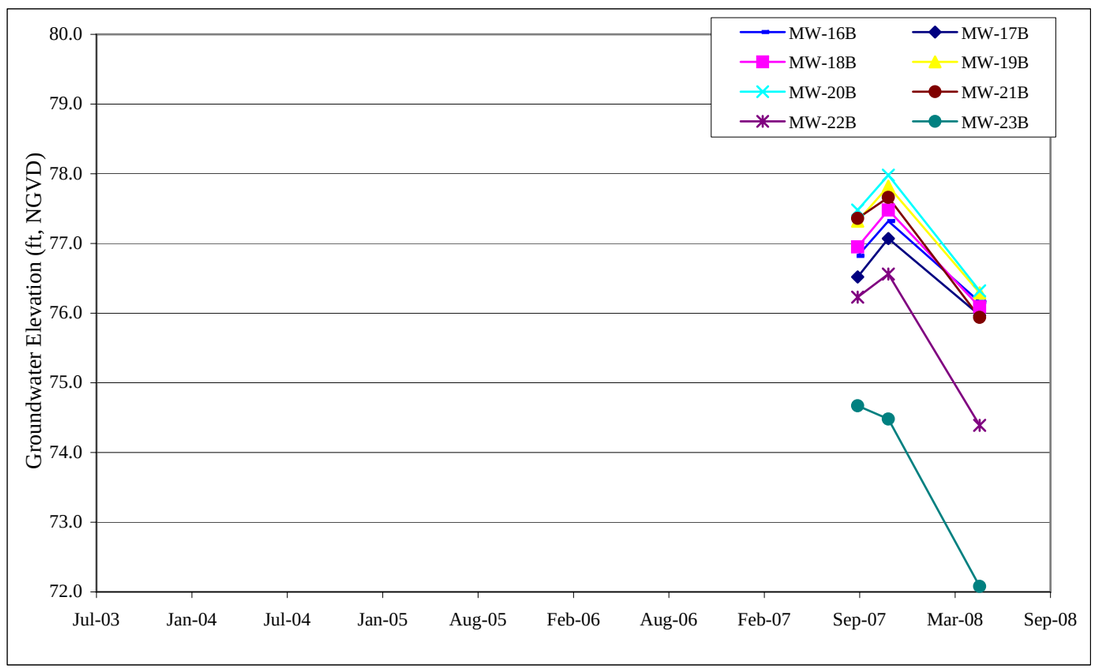

Figure 11-3
Hydrograph of "C" Groundwater Zone (Deep) Monitoring Wells
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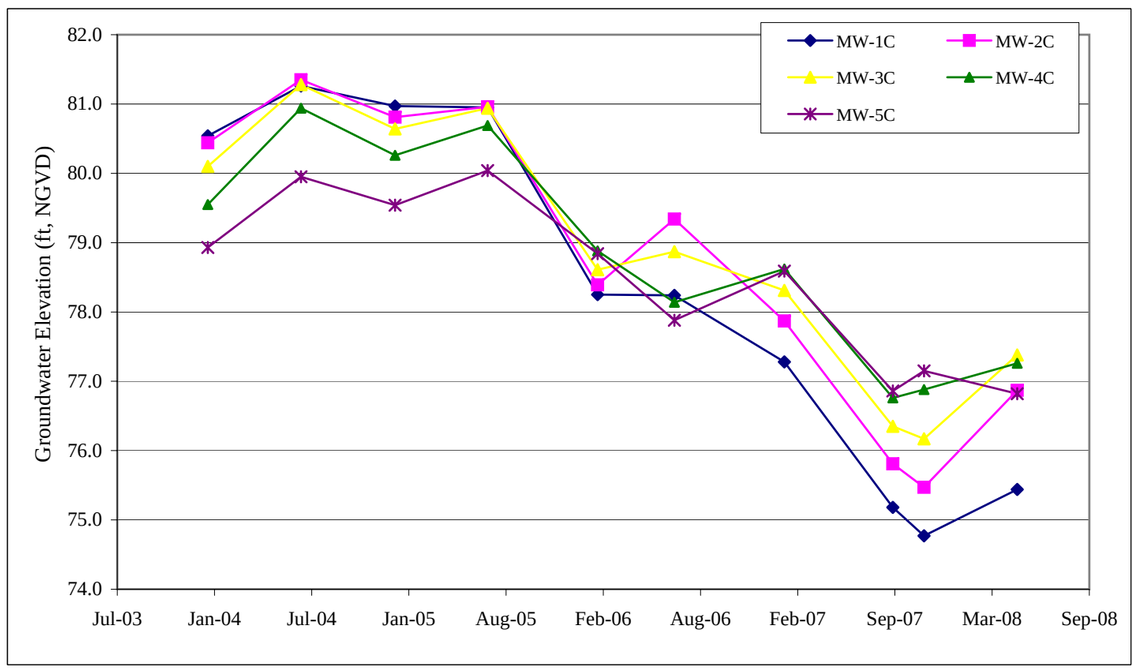

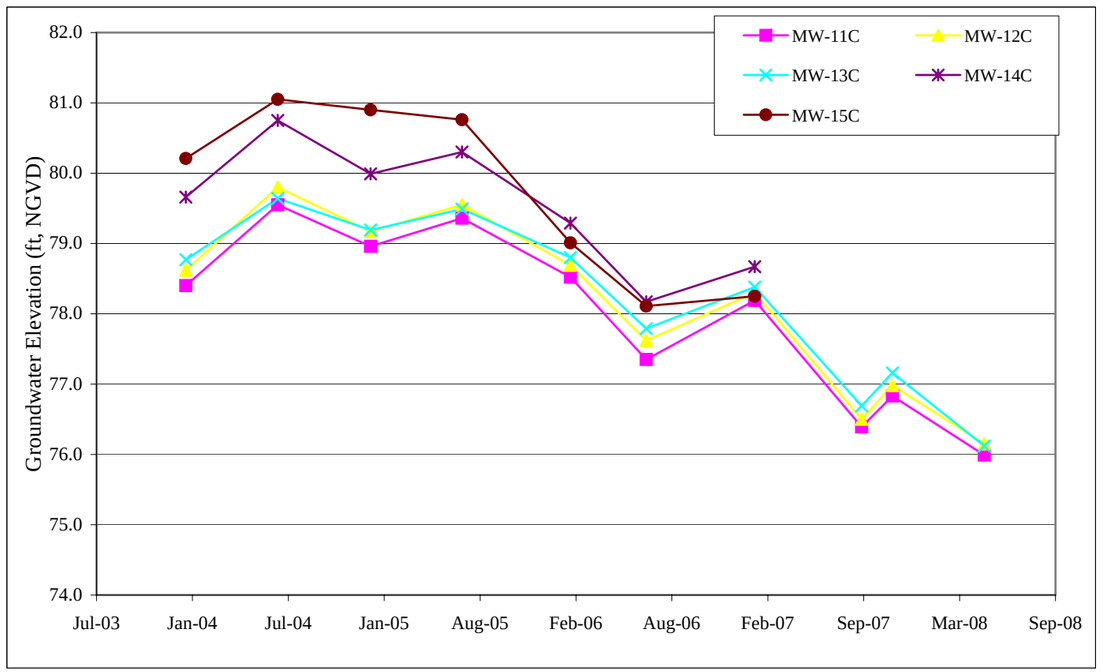

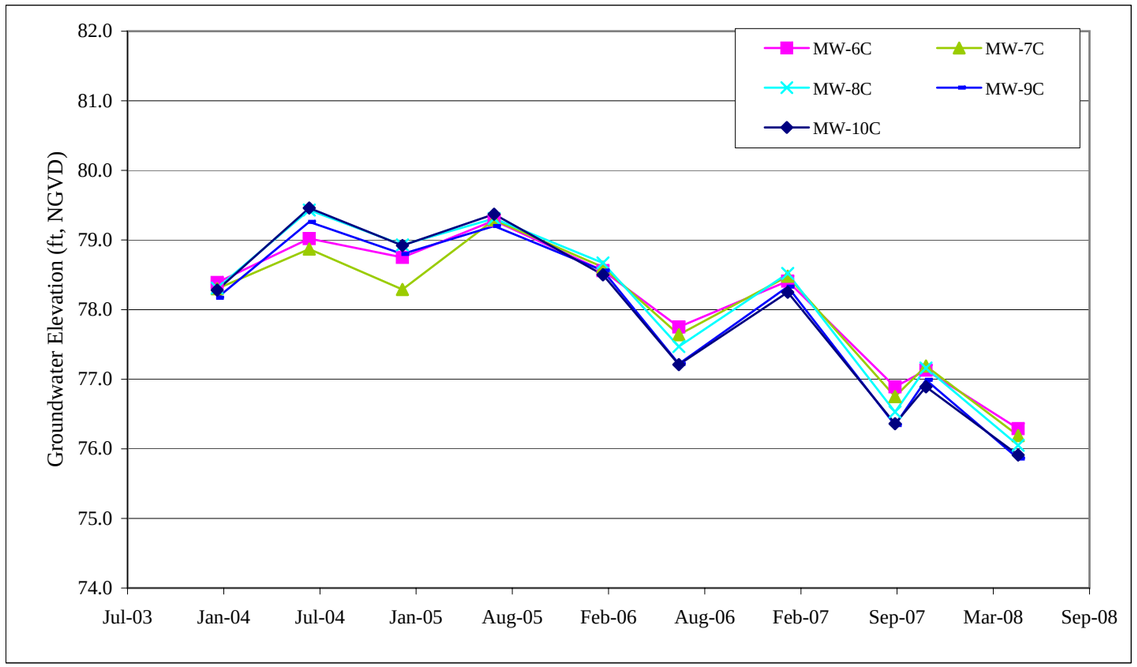

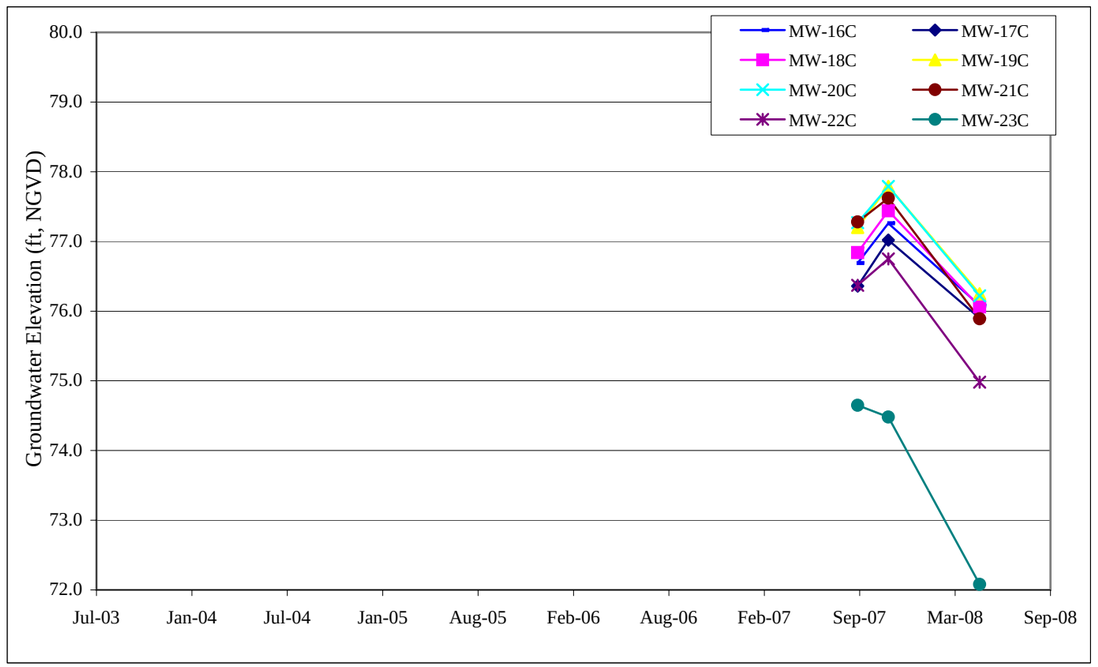

Figure 11-4
Hydrograph for Piezometers
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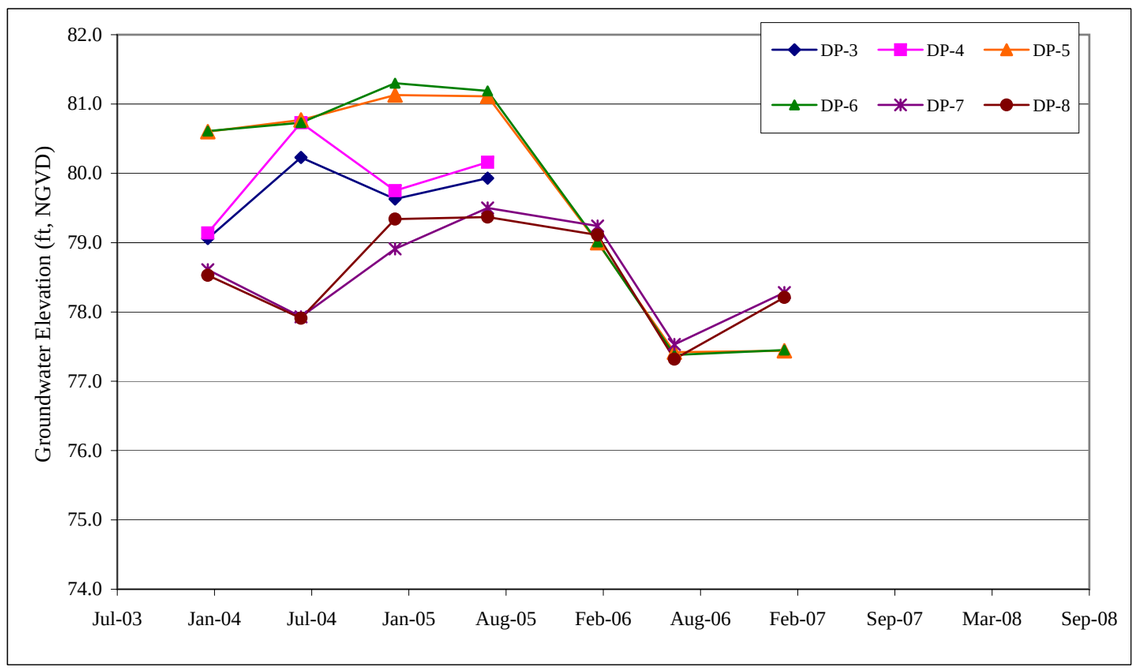

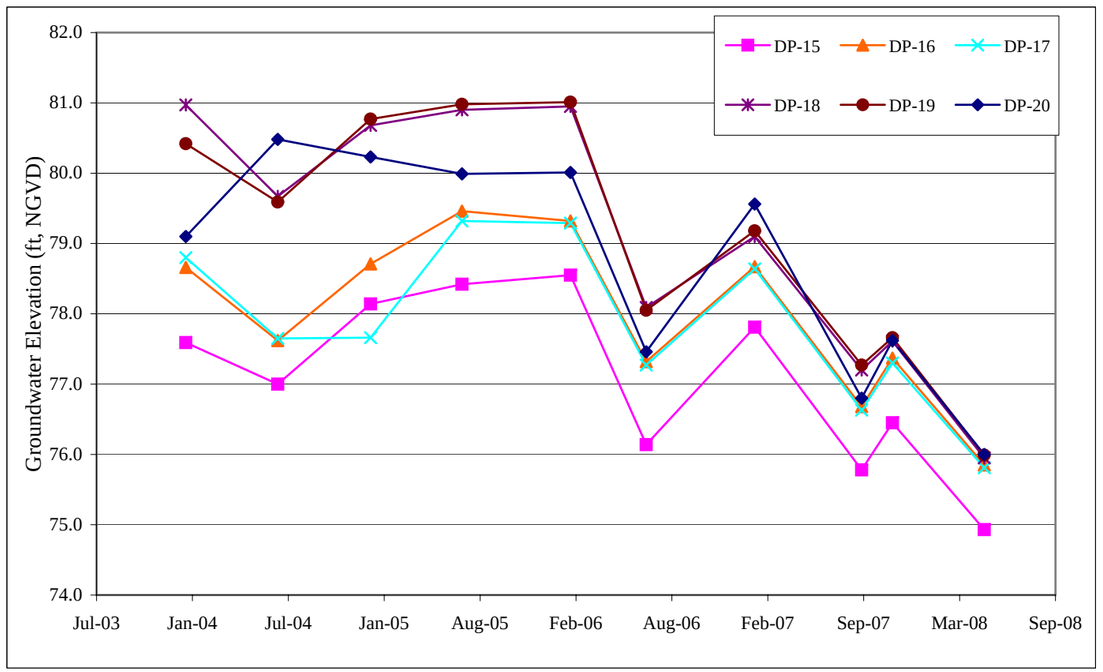

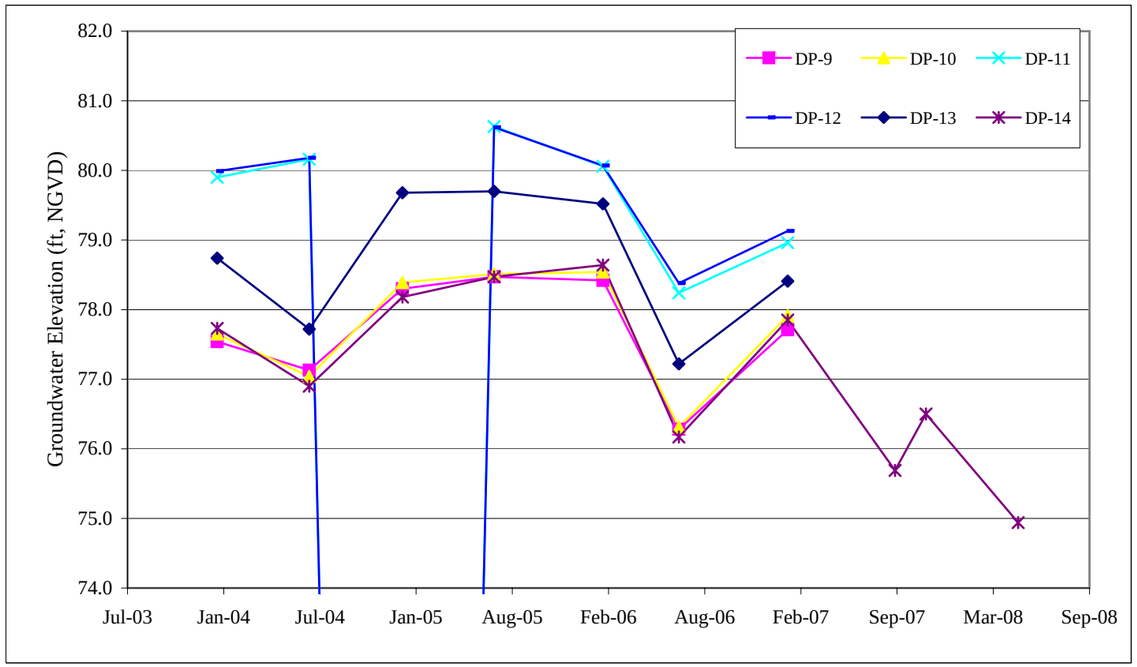

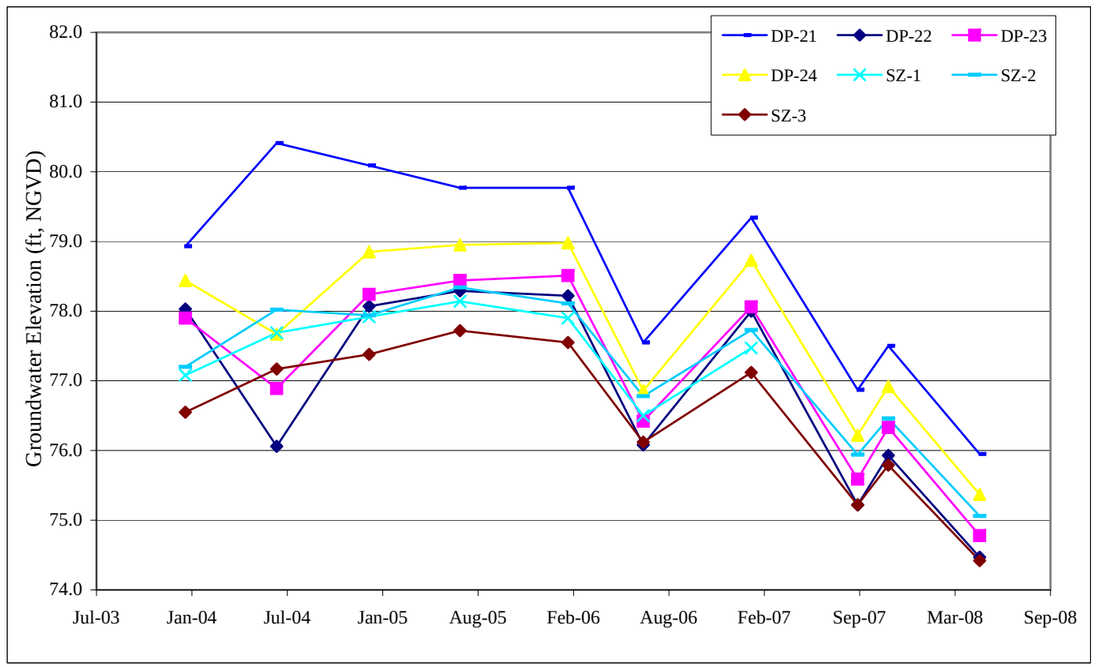

Figure 11-5
Hydrograph of Upgradient Wells (MW-1 and MW-5)
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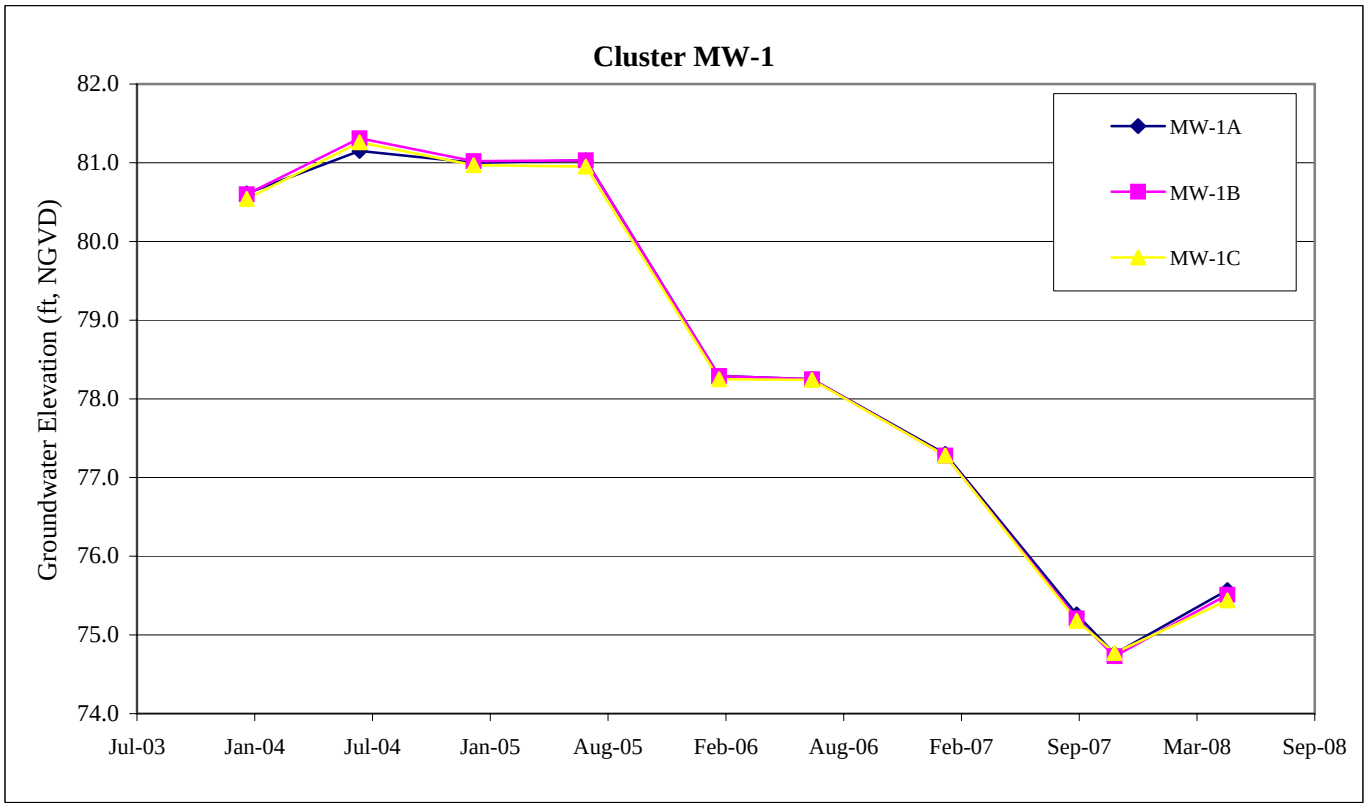
J.E.D. Solid Waste Management Facility



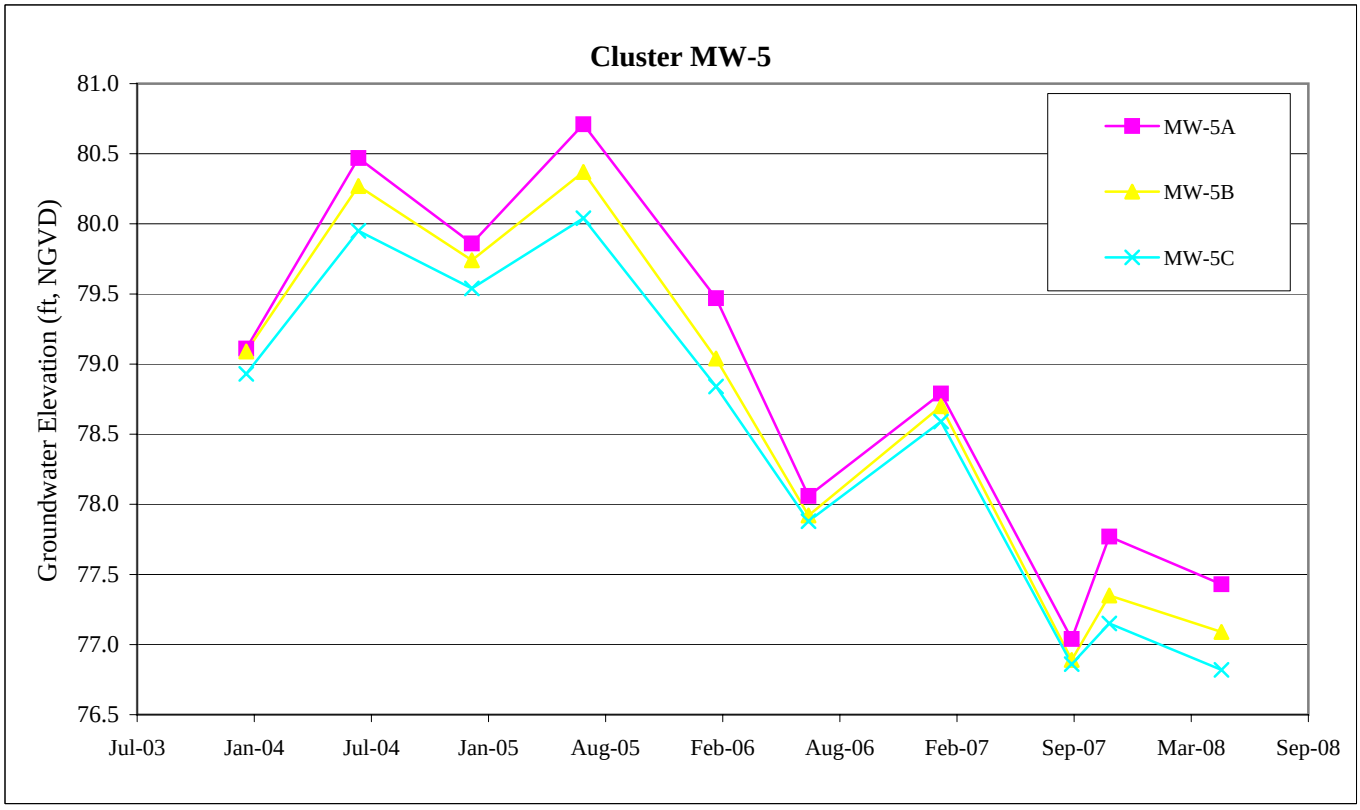
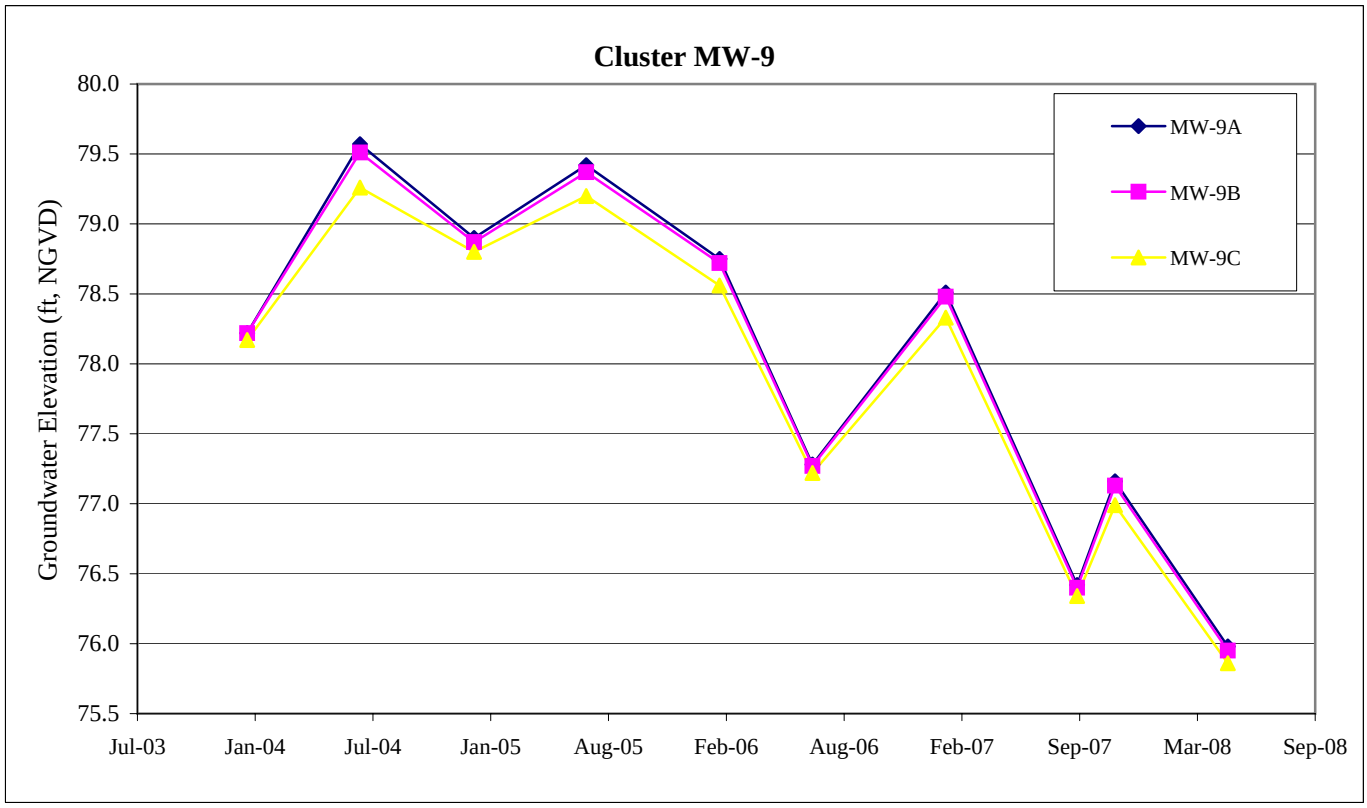
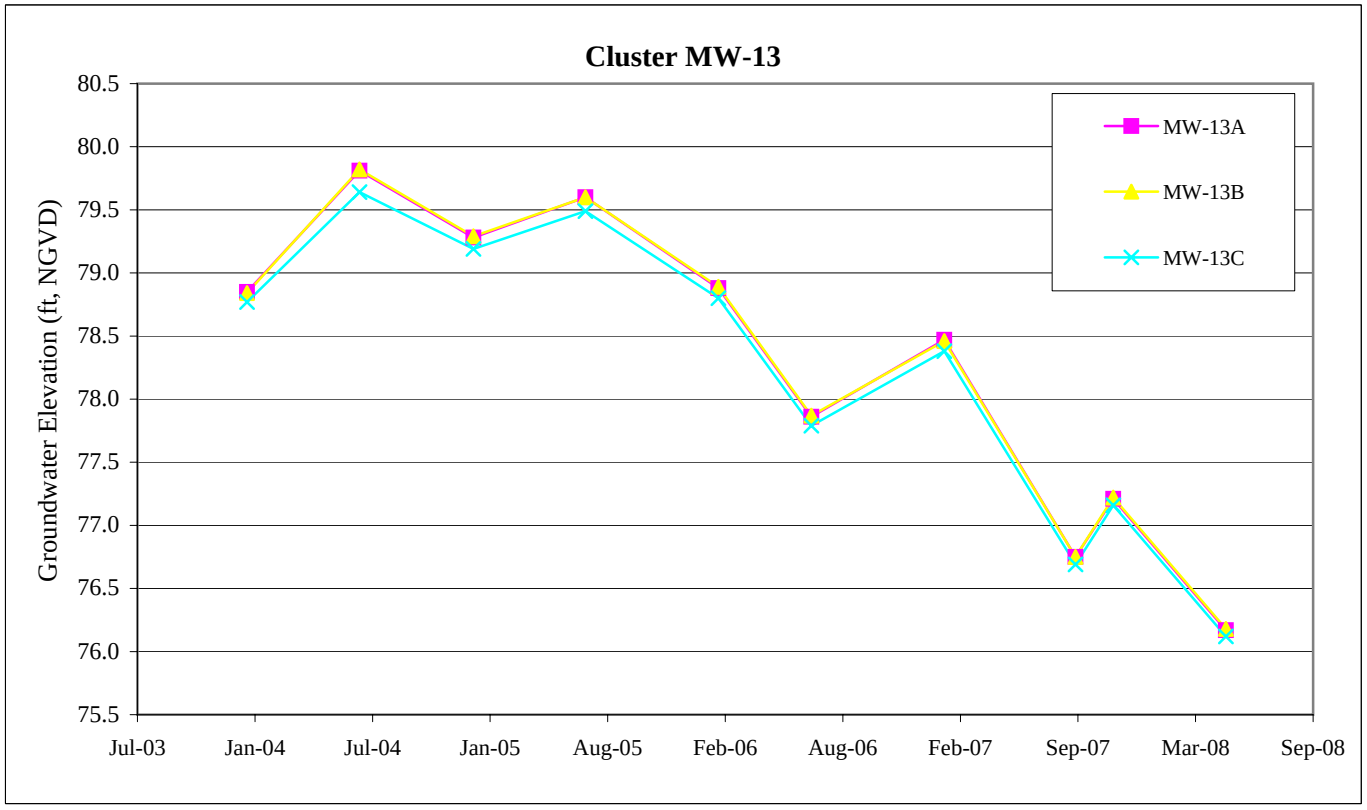


Figure 11-6
Hydrograph of Downgradient Wells (MW-9 and MW-13)
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility





12. EVALUATION OF ADEQUACY OF MONITORING FREQUENCY AND SAMPLING LOCATIONS

For the Phase 1 development, forty five (45) groundwater monitoring wells were installed in fifteen (15) clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. For development of Phases 2 and 3, twenty four (24) additional groundwater monitoring wells were installed in eight (8) clusters (MW-16 through MW-23) around the perimeter of the Phases 2 and 3 development areas. Monitoring well clusters were located such that a well cluster was installed adjacent to each cell sump area and between cell sump areas, so that the spacing between well clusters was no greater than 500 ft for detection wells and 800 ft for background wells, in accordance with the FDEP permit requirements. As part of Phases 2 and 3 development, and as approved by FDEP, six (6) existing Phase 1 monitoring wells (MW-14 A, B, and C, and MW-15 A, B, and C), and ten (10) piezometers were decommissioned. The wells and piezometers were decommissioned for construction of future cells, construction of a storm water retention basin located within Phases 2 and 3, and due to the proximity of piezometers to the new network wells installed.

Vertically, three (3) groundwater monitoring wells were installed to monitor: (i) the upper limit of the surficial aquifer below the ground surface identified as A-zone (shallow) wells; (ii) the lower limit of the upper surficial aquifer above the intermediate clay layer identified as C-zone (deep) wells; and (iii) an intermediate depth between the shallow and deep wells identified as B-zone (intermediate) wells. Of the twenty one (21) monitoring well clusters, six (6) are classified as background wells (clusters MW-2, 3, 4, 5, 22 and 23), thirteen (13) are classified as detection wells (clusters MW-7 through MW-13 and MW-16 through MW-21), and two (2) are classified as piezometers (MW-1 and MW-6).

Geosyntec has completed a careful evaluation of the adequacy of the groundwater monitoring network, and believes that, in its current condition, the network has considerable redundancy. Our evidence for this redundancy can be summarized as follows:

- Hydrogeology – Geosyntec has collected water level data and developed groundwater flow maps for all of the sampling efforts to date. A review of these data suggests that the "A", "B", and "C" wells are all screened in the same hydrogeologic unit. Head differences between the wells screened at different depths are negligible, reflecting only the very low vertical gradient (1E-3) typical of a shallow unconfined system. Moreover, the maps developed for each zone show horizontal flow conditions to be virtually identical in all three zones. In short, the "A", "B", and "C" wells are monitoring the same hydrogeologic unit.

Almost all of the flow at the site is horizontal – vertical gradients are extremely low.

- Geochemistry – Comparison of common ion chemistry (e.g. pH, chloride, iron, TDS) form all three monitored zones show almost no statistically significant differences between them. This provides further evidence that the "A", "B", and "C" wells are monitoring the same hydrogeologic unit.
- Elevation of base of waste – the lowest part of all of the landfill cells (the sumps) is located at approximately elevation 77 ft. (NGVD 1929). A quick review of Table 2-1 indicates that this elevation is approximately at the midpoint of the screened intervals for the "A" wells. When combined with the demonstrated low vertical gradient, this indicates that the "A" wells are in an ideal location (vertically) to monitor for possible releases. The midpoint of the "B" wells screens is approximately elevation 52 ft. (NGVD 1929). This is approximately 25 feet deeper than the lowest point of the landfill cells. Even though flow is predominately horizontal, it may be argued that the "B" wells are important for monitoring in the event of a release of fluids significantly denser than water ("sinkers"). However, the "C" well screens are located about 50 feet deeper than the deepest parts of the landfill. It is Geosyntec's opinion that these wells are redundant with the "B" wells from a monitoring standpoint.

Based on the evidence provided above, Geosyntec would recommend that the "C" wells be converted to piezometers (for water level monitoring only), and removed from the sampling program. In the event that one or more of these wells were ever needed for water quality data, they could still be sampled on a "condition-specific" basis.

The semi-annual monitoring frequency is considered to be adequate for the JED facility. Groundwater flow rates are on the order of 10 feet per year at a maximum (Section 11) due to the lack of a driving hydraulic head. From a purely technical standpoint, a much longer monitoring frequency could be justified, however, a semi-annual monitoring frequency will be more than sufficient to provide maximum detection efficiency at the site.

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[1] Christensen T.H., P. Kjeldsen, P.L. Bjerg, D.L. Jensen, J.B. Christensen, A. Baun, H-J. Albrechtsen, and G. Heron. 2001. Biogeochemistry of landfill leachate plumes. *Applied Geochemistry* 16:659-718.

APPENDIX A

CD ROM OF WATER QUALITY DATABASE

APPENDIX B

TABLES SHOWING DETECTED PARAMETERS WITH NO REGULATORY LEVELS EXCEEDED

Table B-1
Acetone Concentrations in Monitoring Wells
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	50 U	13	9.9 U	5 U	4.0 I	1.9 U	1.9 U		NA	NA
MW-2A	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-3A	B	50 U	9.9 U	9.9 U	5 U	3.7 I	1.9 U	1.9 U		1.9 U	1.7 U
MW-4A	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-5A	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-6A	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA U
MW-7A	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-8A	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-9A	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-10A	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-11A	D	50 U	9.9 U	9.9 U	5 U	5.4 I	5 J	1.9 U		1.9 U	1.7 U
MW-12A	D	50 U	9.9 U	9.9 U	7.20 I	4.6 I	1.9 U	7.2 I		1.9 U	1.7 U
MW-13A	D	50 U	9.9 U	9.9 U	7.70 I	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-14A	D	50 U	9.9 U	9.9 U	6.30 I	1.9 U	4.9 J	1.9 U		NA	NA
MW-15A	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							16 I	32.0 I	1.7 U
MW-17A	D								7.9 I	1.9 U	1.7 U
MW-18A	D								1.9 U	1.9 U	1.7 U
MW-19A	D								49 I	1.9 U	6 I
MW-20A	D								4.9 I	1.9 U	1.7 U
MW-21A	D								1.9 U	1.9 U	1.7 U
MW-22A	B								1.9 U	1.9 U	1.7 U
MW-23A	B								6.1 I	1.9 U	1.7 U
MW-1B	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-2B	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-3B	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-4B	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-5B	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-6B	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-7B	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-8B	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-9B	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-10B	D	50 U	9.9 U	9.9 U	5 U	2.9 I	1.9 U	1.9 U		1.9 U	9.7 I
MW-11B	D	50 U	9.9 U	9.9 U	5 U	1.9 U	2.5 J	1.9 U		1.9 U	1.7 U
MW-12B	D	50 U	9.9 U	9.9 U	5 U	2.9 I	1.9 U	1.9 U		1.9 U	1.7 U
MW-13B	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-14B	D	50 U	9.9 U	9.9 U	5 U	3.3 I	1.9 U	1.9 U		NA	NA
MW-15B	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							5.4 I	1.9 U	1.7 U
MW-17B	D								1.9 U	1.9 U	1.7 U
MW-18B	D								1.9 U	1.9 U	1.7 U
MW-19B	D								3.3 I	6.8 I	1.7 U
MW-20B	D								3.8 I	5.7 I	1.7 U
MW-21B	D								1.9 U	1.9 U	1.7 U
MW-22B	B								1.9 U	1.9 U	1.7 U
MW-23B	B								1.9 U	1.9 U	1.7 U
MW-1C	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-2C	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-3C	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-4C	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-5C	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-6C	B	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-7C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-8C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-9C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-10C	D	50 U	9.9 U	9.9 U	5 U	3.3 I	1.9 U	1.9 U		1.9 U	1.7 U
MW-11C	D	50 U	9.9 U	9.9 U	5 U	3.7 I	1.9 U	1.9 U		1.9 U	1.7 U
MW-12C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-13C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		1.9 U	1.7 U
MW-14C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-15C	D	50 U	9.9 U	9.9 U	5 U	1.9 U	1.9 U	1.9 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							1.9 U	1.9 U	1.7 U
MW-17C	D								1.9 U	1.9 U	1.7 U
MW-18C	D								1.9 U	1.9 U	1.7 U
MW-19C	D								3.5 I	1.9 U	1.7 U
MW-20C	D								1.9 U	1.9 U	1.7 U
MW-21C	D								1.9 U	1.9 U	1.7 U
MW-22C	B								1.9 U	1.9 U	1.7 U
MW-23C	B								1.9 U	1.9 U	1.7 U

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-2
Antimony Concentrations in Monitoring Wells
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)		1st Event Jul-04 (µg/L)		2nd Event Jan-05 (µg/L)		3rd Event Jul-05 (µg/L)		4th Event Feb-06 (µg/L)		5th Event Jul-06 (µg/L)		6th Event Feb-07 (µg/L)		PH 2&3 Baseline Sep-07 (µg/L)		7th Event Nov-07 (µg/L)		8th Event May-08 (µg/L)	
MW-1A	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.12	i	0.088	U			NA		NA	
MW-2A	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	I	0.740	I
MW-3A	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.200	I	0.410	I
MW-4A	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.1	I	0.088	U			0.088	U	0.400	U
MW-5A	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.097	I			0.200	I	0.400	U
MW-6A	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.280	I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-7A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.092	I	0.088	U			0.088	U	0.400	U
MW-8A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-9A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-10A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.150	I			0.180	U	0.400	U
MW-11A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-12A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.470	I			0.088	U	0.400	U
MW-13A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.26		0.088	U			0.088	U	0.400	U
MW-14A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.13		0.170	I			NA		NA	
MW-15A	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.099	I			NA		NA	
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007														0.088	U	0.310	I	0.480	I
MW-17A	D															0.088	U	0.210	I	0.400	U
MW-18A	D															0.14	I	0.088	U	0.400	U
MW-19A	D															0.3	I	0.140	I	0.400	U
MW-20A	D															0.088	U	0.510	I	0.530	I
MW-21A	D															0.088	U	0.380	I	0.560	I
MW-22A	B															0.088	U	0.130	I	0.400	U
MW-23A	B															0.088	U	0.100	I	0.400	U
MW-1B	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-2B	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.49	I	0.088	U			0.088	U	0.400	U
MW-3B	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.089	I	0.400	U
MW-4B	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.17	I	0.140	I			0.088	U	0.480	I
MW-5B	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-6B	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.14	I	0.170	I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-7B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-8B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.240	I			0.180	U	0.400	U
MW-9B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-10B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-11B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-12B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.270	I			0.088	U	0.400	U
MW-13B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.13		0.088	U			0.088	U	0.400	U
MW-14B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-15B	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007														0.088	U	0.250	I	1.100	I
MW-17B	D															0.088	U	0.180	U	0.400	U
MW-18B	D															0.099	I	0.088	U	0.400	U
MW-19B	D															0.088	U	0.150	I	0.400	U
MW-20B	D															0.1	U	0.250	I	0.400	U
MW-21B	D															0.3	I	0.350	I	0.400	U
MW-22B	B															0.3	I	0.088	U	0.400	U
MW-23B	B															0.088	U	0.088	U	0.400	U
MW-1C	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-2C	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-3C	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-4C	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-5C	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-6C	B	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.110	I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-7C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-8C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-9C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-10C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.180	U	0.400	U
MW-11C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-12C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			0.088	U	0.400	U
MW-13C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.12		0.088	U			0.088	U	0.400	U
MW-14C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.095		0.088	U			NA		NA	
MW-15C	D	5	U	2.9	U	2.9	U	1.5	U	0.088	U	0.088	U	0.088	U			NA		NA	
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007														0.088	U	0.180	U	0.400	U
MW-17C	D															0.088	U	0.088	U	0.400	U
MW-18C	D															0.29	I	0.130	I	0.400	U
MW-19C	D															0.088	U	0.190	I	0.400	U
MW-20C	D															0.088	U	0.120	I	0.400	U
MW-21C	D															0.088	U	0.100	I	0.400	U
MW-22C	B															0.088	U	0.088	U	0.400	U
MW-23C	B															0.088	U	0.088	U	0.400	U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-3
Barium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	100 U	18	11	15.1 I	8.9	5.8	8.3	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	100 U	15	12	12.8 I	12	9.7	9.7		11	15
MW-3A	B	100 U	18	19	14.9 I	14	26	16		41	31
MW-4A	B	100 U	11	8.3 I	21.2 I	14	13	12		18	18
MW-5A	B	100 U	7 I	5.4 I	5 I	6.1	8.1	5.9		2.7	3.6
MW-6A	B	100 U	3.2 I	2.7 I	3.7 I	3.6	3.5	3.9		NA	NA
MW-7A	D	100 U	1500	28	6.4 I	16	8.5	18		15	12
MW-8A	D	100 U	16	17	15.8 I	12	10	36		39	22
MW-9A	D	100 U	9.6 I	4 I	5.4 I	4.7	11	4.7		5.6	7.8
MW-10A	D	100 U	11	4.2 I	7.4 I	2.7	3.2	3.3		4.5	3.1
MW-11A	D	100 U	9.2 I	11	9.9 I	8	8.3	9.2		8.4	9.4
MW-12A	D	100 U	14	13	12.7 I	9	10	7.8		9.5	15
MW-13A	D	100 U	14	11	9.6 I	8.4	8.4	8.8		8.5	10
MW-14A	D	100 U	15	7.1 I	5.7 I	7.3	4.9	7.8		NA	NA
MW-15A	D	100 U	11	10	10.9 I	11	12	8.2		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							16	24	19
MW-17A	D								9	15	15
MW-18A	D								10	8	5.7
MW-19A	D								33	26	46
MW-20A	D								9.9	13	18
MW-21A	D								6.9	50	23
MW-22A	B								20	17	9.8
MW-23A	B								10	10	15
MW-1B	B	100 U	99	18	16.9 I	9.9	6.3	6.1	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	100 U	71	13	45 I	41	14	11		11	12
MW-3B	B	100 U	350	25	43.9 I	47	27	17		16	19
MW-4B	B	100 U	35	12	16.7 I	11	15	9		7.8	171
MW-5B	B	100 U	27	19	12.6 I	12	12	10		11	11
MW-6B	B	100 U	200	86	57.6 I	27	30	29		NA	NA
MW-7B	D	100 U	720	62 I	46.5 I	45	34	36		36	30
MW-8B	D	100 U	290	34	133 I	78	90	50		52	34
MW-9B	D	100 U	180	75	21.9 I	26	29	26		24	27
MW-10B	D	100 U	35	10	12 I	13	11	16		12	11
MW-11B	D	100 U	310	19 I	25.4 I	21	25	19		20	20
MW-12B	D	100 U	310	87	18.2 I	36	36	42		28	33
MW-13B	D	100 U	59	9.7	7.2 I	16	19	12		15	12
MW-14B	D	100 U	83	21	7.1 I	20	7.4	13		NA	NA
MW-15B	D	100 U	70	8.2	8.7 I	7.9	5.1	3.9		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							75	121	213
MW-17B	D								161	94	53
MW-18B	D								72	15	15
MW-19B	D								62	38	69
MW-20B	D								292	234	75
MW-21B	D								268	92	35
MW-22B	B								700	13	38
MW-23B	B								16	18	13
MW-1C	B	270	47	37	55.1 I	32	23	19	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	160	70	33	25.5 I	19	22	17		17	22
MW-3C	B	130	100	24	22.5 I	16	17	16		13	12
MW-4C	B	310	620	71	6.7 I	38	60	18		6.7	20
MW-5C	B	110	47	35	28.4 I	26	24	24		32	25
MW-6C	B	310	97	60	36.9 I	28	42	33		NA	NA
MW-7C	D	210	800	77	35.5 I	38	35	36		40	26
MW-8C	D	100 U	29	18	18.6 I	15	16	17		20	14
MW-9C	D	100 U	26	17	17.4 I	15	16	16		19	27
MW-10C	D	250	48	27	25.8 I	41	26	21		19	19
MW-11C	D	100 U	15	11	10.2 I	8.9	8.1	9.4		7.6	8.3
MW-12C	D	100 U	41	32	34.9 I	21	19	18		19	18
MW-13C	D	100 U	28	23	19.2 I	20	19	18		18	22
MW-14C	D	130	110	37	32.6 I	32	39	28		NA	NA
MW-15C	D	100 U	12	7.8 I	8.6 I	11	13	13		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							34	33	23
MW-17C	D								57	25	20
MW-18C	D								381	109	77
MW-19C	D								248	267	85
MW-20C	D								104	112	155
MW-21C	D								172	87	79
MW-22C	B								29	22	17
MW-23C	B								130	15	8.2

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-4
Dissolved Barium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	12	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	100 U	29 I	NA	NA	2.8	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7A	D	NA	13	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	6.8	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	9.4	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	6.6 I	7.8 I	23	NA	6.9		NA	NA
MW-15A	D	NA	NA	NA	NA	52	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								10	NA	NA
MW-19A	D								13	NA	36.0
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	100 U	8.6 I	8.8 I	NA	NA	NA	NA		NA	NA
MW-2B	B	100 U	29	7.3 I	9.3 I	NA	NA	NA		NA	NA
MW-3B	B	100 U	9.3 I	12	15.4 I	NA	NA	NA		NA	NA
MW-4B	B	100 U	13	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	100 U	21	17	16.8 I	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7B	D	100 U	12	18	19.4 I	NA	NA	NA		NA	NA
MW-8B	D	100 U	19	18	22.2 I	NA	34	22		51	NA
MW-9B	D	100 U	21	18	56.5 I	NA	NA	NA		NA	NA
MW-10B	D	100 U	12	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	15	16	NA	NA	NA	NA		NA	NA
MW-12B	D	100 U	19	16	47.9 I	NA	NA	19		NA	NA
MW-13B	D	100 U	12	7.2 I	32.2 I	6.1	NA	NA		NA	NA
MW-14B	D	100 U	36	6.4 I	33.7 I	NA	NA	NA		NA	NA
MW-15B	D	NA	5 I	4.4 I	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							19	129	13
MW-17B	D								19	87	28
MW-18B	D								8.7	NA	NA
MW-19B	D								20	NA	18.0
MW-20B	D								29	20	12
MW-21B	D								74	12	9.7
MW-22B	B								77	14	13
MW-23B	B								NA	NA	NA
MW-1C	B	100 U	14	14	NA	17	NA	NA		NA	NA
MW-2C	B	100 U	25	16	NA	NA	NA	NA		NA	NA
MW-3C	B	100 U	15	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	100 U	12	7.9 I	44 I	NA	6.4	NA		9.9	NA
MW-5C	B	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	100 U	65	33	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7C	D	100 U	43	23	NA	NA	NA	NA		NA	NA
MW-8C	D	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	100 U	14	NA	NA	NA	NA	NA		NA	NA
MW-11C	D	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	100 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	100 U	15	22	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								17	NA	NA
MW-18C	D								32	38	25
MW-19C	D								49	39	30
MW-20C	D								34	37	34
MW-21C	D								31	30	27
MW-22C	B								NA	NA	NA
MW-23C	B								9.8	5.5	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-5
Cadmium Concentrations in Monitoring Wells
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)		1st Event Jul-04 (µg/L)		2nd Event Jan-05 (µg/L)		3rd Event Jul-05 (µg/L)		4th Event Feb-06 (µg/L)		5th Event Jul-06 (µg/L)		6th Event Feb-07 (µg/L)		PH 2&3 Baseline Sep-07 (µg/L)		7th Event Nov-07 (µg/L)		8th Event May-08 (µg/L)	
MW-1A	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2A	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-3A	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-4A	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-5A	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-6A	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			NA		NA	
MW-7A	D	1.0	U	0.73	I	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-8A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.73	I	0.2	U
MW-9A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.76	I	0.2	U
MW-10A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.12	I	0.07	I			0.76	I	0.2	U
MW-11A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-12A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.26	I			0.12	U	0.2	U
MW-13A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-14A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			NA		NA	
MW-15A	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.094	i	0.07	U			NA		NA	
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007														0.12	U	0.14	I	0.2	U
MW-17A	D															0.12	U	0.12	U	0.2	U
MW-18A	D															0.12	U	0.12	U	0.2	U
MW-19A	D															0.23	I	0.12	U	0.26	I
MW-20A	D															0.12	U	0.12	U	0.25	I
MW-21A	D															0.12	U	0.72	I	0.37	I
MW-22A	B															0.12	U	0.12	U	0.2	U
MW-23A	B															0.12	U	0.12	U	0.2	U
MW-1B	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2B	B	1.0	U	0.71	U	0.71	U	0.3	U	0.23	I	0.21	I	0.07	U			0.12	U	0.2	U
MW-3B	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-4B	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-5B	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-6B	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.096	I	0.10	I			NA		NA	
MW-7B	D	1.0	U	1.1	I	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-8B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.14	I			0.78	I	0.2	U
MW-9B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.76	I	0.2	U
MW-10B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.71	I	0.2	U
MW-11B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.11		0.07	U			0.12	U	0.2	U
MW-12B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.12		0.12	I			0.12	U	0.2	U
MW-13B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-14B	D	1.0	U	0.97	I	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			NA		NA	
MW-15B	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			NA		NA	
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007														0.12	U	0.91	I	0.24	I
MW-17B	D															0.21	I	0.77	I	0.2	U
MW-18B	D															0.19	I	0.12	U	0.2	U
MW-19B	D															0.19	I	0.12	U	0.2	U
MW-20B	D															0.61		0.21	I	0.27	I
MW-21B	D															0.9		0.19	I	0.2	U
MW-22B	B															2.5		0.12	U	0.3	I
MW-23B	B															0.12	U	0.12	U	0.25	I
MW-1C	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development		NA		NA	
MW-2C	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-3C	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-4C	B	1.0	U	0.8	I	0.71	U	0.3	U	0.12	U	0.13	I	0.07	U			0.12	U	0.2	U
MW-5C	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-6C	B	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			NA		NA	
MW-7C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.09	I			0.12	U	0.2	U
MW-8C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.73	I	0.2	U
MW-9C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.8	I	0.2	U
MW-10C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.72	I	0.2	U
MW-11C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-12C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.07	U	0.07	U			0.12	U	0.2	U
MW-13C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.079		0.08	I			0.12	U	0.2	U
MW-14C	D	1.0	U	0.71	U	0.71	U	0.3	U	0.12	U	0.14		0.07	U			NA		NA	
MW-15C	D	1.0	U	1.00	I	0.71	U	0.3	U	0.12	U	0.0810	i	0.07	U			NA		NA	
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007														0.14	I	0.76	I	0.2	U
MW-17C	D															0.27	I	0.12	U	0.2	U
MW-18C	D															0.91		0.12	U	0.2	U
MW-19C	D															0.9		0.87		0.24	I
MW-20C	D															0.35	I	0.24	I	0.54	
MW-21C	D															0.58		0.15	I	0.21	I
MW-22C	B															0.12	U	0.12	U	0.2	U
MW-23C	B															0.54		0.12	U	0.2	U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-6
Chloride Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	17.0	23.0	16.0	27.2	20.0	18	22.0	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	30.0	25.0	22.0	20.1	24.0	28	31.0		27	40
MW-3A	B	35.0	41.0	33.0	6.5	35.0	52	46.0		5	89
MW-4A	B	6.7	18.0	9.3	21.4	18.0	11	15.0		18	31
MW-5A	B	12.0	18.0	20.0	13.0	16.0	21	27.0		23	31
MW-6A	B	12.0	12.0	9.8	11.5	15.0	14	16.0		NA	NA
MW-7A	D	22.0	12.0	7.8	18.4	38.0	22	21.0		24	26
MW-8A	D	23.0	29.0	25.0	13.5	16.0	15	35.0		52	44
MW-9A	D	8.8	15.0	14.0	11.4	20.0	15	17.0		19	21
MW-10A	D	5.3	15.0	15.0	12.2	15.0	14	16.0		13	13
MW-11A	D	34.0	29.0	19.0	9.3	13.0	17	17.0		10	11
MW-12A	D	9.6	13.0	16.0	11.8	11.0	11	8.1		10	17
MW-13A	D	44.0	25.0	20.0	14.9	13.0	16	17.0		17	16
MW-14A	D	29.0	27.0	19.0	10.7	18.0	30	13.0		NA	NA
MW-15A	D	15.0	15.0	17.0	22.3	26.0	19	22.0		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							15	16	11
MW-17A	D								25	15	12
MW-18A	D								12	12	12
MW-19A	D								63	15	19
MW-20A	D								31	25	31
MW-21A	D								26	42	31
MW-22A	B								45	36	34
MW-23A	B								16	19	41
MW-1B	B	7.1	7.1	3.1	4.2	8.3	5.3	6.1	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	8.3	7.3	5.2	5.0	18.0	9.2	9.3		8	11
MW-3B	B	14.0	14.0	5.2	9.4	13.0	15	16.0		15	23
MW-4B	B	28.0	30.0	24.0	11.7	20.0	22	14.0		10	89
MW-5B	B	10.0	7.3	8.6	9.1	13.0	12	9.2		9	7.8
MW-6B	B	5.8	5.9	5.1	3.7	7.0	7.7	8.1		NA	NA
MW-7B	D	9.9	12.0	8.1	8.6	14.0	17	16.0		19	21
MW-8B	D	7.8	10.0	9.9	4.7	9.3	7.7	8.7		8	9.1
MW-9B	D	12.0	12.0	10.0	8.9	13.0	11	12.0		14	15
MW-10B	D	11.0	9.8	10.0	9.8	16.0	12	16.0		15	15
MW-11B	D	28.0	26.0	19.0	18.4	24.0	23	24.0		24	25
MW-12B	D	7.6	8.9	5.5	4.9	11.0	12	12.0		16	17
MW-13B	D	11.0	13.0	8.3	7.7	13.0	12	11.0		13	12
MW-14B	D	7.7	8.6	5.2	4.7	8.0	7.9	6.9		NA	NA
MW-15B	D	6.9	9.0	4.7	4.5	8.1	7.4	7.8			NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							14	14	15
MW-17B	D								20	19	229
MW-18B	D								28	23	27
MW-19B	D								31	25	31
MW-20B	D								30.0	25	33
MW-21B	D								29.0	23	28
MW-22B	B								14.0	11	13
MW-23B	B								17	17	15
MW-1C	B	6.1	10	3.9	3 U	6.2	5.7	5.8	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	6.6	6.4	3.1	1	7.0	6.9	6.4		7	6.9
MW-3C	B	7.8	9.8	5.2	4.9	8.0	7.8	7.3		8	7.6
MW-4C	B	9.5	9.8	6.7	6.2	9.6	9.9	9.9		9	9.0
MW-5C	B	13	12	15	12.1	16.0	15	15.0		16	16
MW-6C	B	6	5.4	5.1	3.5	6.3	7	5.8		NA	NA
MW-7C	D	7.5	10	5.5	5.1	8.1	8.7	7.0		8	7.4
MW-8C	D	7.1	7.5	8.9	4.6	7.9	6.7	7.1		8	7.2
MW-9C	D	7.9	9.4	5.5	5	8.2	6.8	7.3		8	8
MW-10C	D	7.5	8	5.5	4.7	7.9	6.9	6.9		8	7.3
MW-11C	D	19	20	16	15.1	18.0	0.45	16.0		18	18
MW-12C	D	8.3	8.4	6	5.3	9.0	8	8.1		8	8.3
MW-13C	D	11	12	8.8	7.8	12.0	11	10.0		11	11
MW-14C	D	10	11	7.2	6.7	11.0	9.3	9.1		NA	NA
MW-15C	D	8	9.0	4.7	5.1	8.3	7.4	7.7		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							20	20	22
MW-17C	D								19	18	19
MW-18C	D								20	19	21
MW-19C	D								17	17	19
MW-20C	D								20	19	21
MW-21C	D								18	18	21
MW-22C	B								9	8	7.6
MW-23C	B								9.9	8	8.8

Notes:
µg/L=micrograms per liter
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NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-7
Chloroform Concentrations in Monitoring Wells
Second Biennial Technical Report on Water Quality
J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-2A	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-3A	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-4A	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-5A	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-6A	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-7A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-8A	D	3	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-9A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-10A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-11A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.90 U
MW-12A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-13A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-14A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-15A	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.12 U
MW-17A	D								0.12 U	0.12 U	0.12 U
MW-18A	D								0.12 U	0.12 U	0.12 U
MW-19A	D								0.12 U	0.12 U	0.12 U
MW-20A	D								0.12 U	0.12 U	0.12 U
MW-21A	D								0.12 U	0.12 U	0.12 U
MW-22A	B								0.12 U	0.12 U	0.12 U
MW-23A	B								0.12 U	0.12 U	0.12 U
MW-1B	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-2B	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-3B	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-4B	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-5B	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-6B	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-7B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-8B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-9B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-10B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-11B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-12B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-13B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-14B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-15B	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.12 U
MW-17B	D								0.12 U	0.12 U	0.12 U
MW-18B	D								0.12 U	0.12 U	0.12 U
MW-19B	D								0.12 U	0.12 U	0.12 U
MW-20B	D								0.12 U	0.12 U	0.12 U
MW-21B	D								0.12 U	0.12 U	0.12 U
MW-22B	B								0.12 U	0.12 U	0.12 U
MW-23B	B								0.12 U	0.12 U	0.12 U
MW-1C	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-2C	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-3C	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-4C	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-5C	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-6C	B	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-7C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-8C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-9C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-10C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-11C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-12C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-13C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-14C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-15C	D	1 U	0.9 U	0.9 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.12 U
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.12 U
MW-17C	D								0.12 U	0.12 U	0.12 U
MW-18C	D								0.12 U	0.12 U	0.12 U
MW-19C	D								0.12 U	0.12 U	0.12 U
MW-20C	D								0.12 U	0.12 U	0.12 U
MW-21C	D								0.12 U	0.12 U	0.12 U
MW-22C	B								0.12 U	0.12 U	0.12 U
MW-23C	B								0.12 U	0.12 U	0.12 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-8
Cobalt Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	50 U	1.4 U	1.4 U	0.5 U	0.39 I	0.23 i	0.37 I		NA	NA
MW-2A	B	50 U	1.4 U	1.4 U	0.5 U	1.2	1.6	1.8		1.4	3.6
MW-3A	B	50 U	1.4 U	1.4 U	0.5 U	0.68 I	1	0.78 I		0.8 I	0.6 I
MW-4A	B	50 U	1.4 U	1.4 U	0.5 U	0.46 I	0.39 I	0.43 I		0.4 I	0.3 I
MW-5A	B	50 U	1.4 U	1.4 U	0.5 U	0.28 I	0.3 I	0.21 I		0.1 I	0.2 U
MW-6A	B	50 U	1.4 U	1.4 U	0.5 U	0.2 I	0.12 I	0.24 I		NA	NA
MW-7A	D	50 U	7.7 I	1.4 U	0.5 U	1.1	0.62 I	0.53 I		1.2	1.1
MW-8A	D	50 U	1.9 I	1.4 U	0.67 I	0.77 I	0.8 I	1.5		1.6 I	1.1
MW-9A	D	50 U	2 I	1.4 U	0.5 U	0.37 I	0.89 I	0.47 I		0.9 I	0.9 I
MW-10A	D	50 U	1.7 I	1.4 U	0.5 U	0.16 I	0.47 I	0.23 I		0.4 I	0.6 I
MW-11A	D	50 U	2.5 I	2.1 I	1.3 I	0.84 I	0.99	1.1		1	1 I
MW-12A	D	50 U	1.7 I	1.4 U	0.5 U	0.89 I	1.2	0.71 I		1.1	1.0 I
MW-13A	D	50 U	1.4 U	1.4 U	0.79 I	1	1	0.88 I		1 I	1 I
MW-14A	D	50 U	1.4 U	1.9 I	0.5 U	0.33 I	1.1	0.41 I		NA	NA
MW-15A	D	50 U	1.4 U	1.4 U	0.5 U	0.098 I	0.074 i	0.12 I			NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.23 I	0.2 I	0.5 I
MW-17A	D								0.41 I	0.3 I	0.4 I
MW-18A	D								0.12 I	0.2 I	0.3 I
MW-19A	D								3.5	0.1 I	2.3
MW-20A	D								0.23 I	0.4 I	0.2 I
MW-21A	D								0.13 I	0.1 I	0.2 U
MW-22A	B								0.27 I	0.3 I	0.2 U
MW-23A	B								0.2 I	0.2 I	0.3 I
MW-1B	B	50 U	1.8 I	1.4 U	0.5 U	0.17 I	0.14 i	0.11 I		NA	NA
MW-2B	B	50 U	1.4 U	1.4 U	0.5 U	0.43 I	0.36 I	0.27 I		0.2 I	0.3 I
MW-3B	B	50 U	3.6 I	1.4 U	0.5 U	0.28 I	0.18 I	0.23 I		0.3 I	0.3 I
MW-4B	B	50 U	1.4 U	1.4 U	0.5 U	0.17 I	0.1 I	0.13 I		0.1 I	1.6
MW-5B	B	50 U	1.4 U	1.4 U	0.5 U	0.16 I	0.17 I	0.14 I		0.1 I	0.2 U
MW-6B	B	50 U	1.4 U	1.4 U	0.5 U	0.26 I	0.2 I	0.28 I		NA	NA
MW-7B	D	50 U	4.3 I	1.4 U	0.5 U	0.31 I	0.17 I	0.23 I		0.2 I	0.2 I
MW-8B	D	50 U	1.6 I	1.4 U	1 I	0.25 I	0.35 I	0.26 I		0.2 I	0.2 U
MW-9B	D	50 U	1.4 U	1.4 U	0.73 I	0.18 I	0.22 I	0.24 I		0.2 I	0.2 I
MW-10B	D	50 U	1.4 U	1.4 U	0.5 U	0.28 I	0.31 I	0.34 I		0.3 I	0.3 I
MW-11B	D	50 U	2 I	1.4 U	0.5 U	0.17 I	0.18	0.12 I		0.1 I	0.2 U
MW-12B	D	50 U	2.4 I	1.4 U	0.5 U	0.14 I	0.2	0.24 I		0.1 I	0.2 U
MW-13B	D	50 U	1.4 U	1.4 U	0.5 U	0.23 I	0.18	0.18 I		0.2 I	0.2 U
MW-14B	D	50 U	2.1 I	1.4 U	0.5 U	0.31 I	0.28	0.31 I		NA	NA
MW-15B	D	50 U	1.4 U	1.4 U	0.5 U	0.14 I	0.13 i	0.16 I		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.45 I	1.2 I	1.1
MW-17B	D								0.51 I	0.5 I	0.3 I
MW-18B	D								0.36 I	0.2 I	0.2 U
MW-19B	D								0.27 I	0.2 I	0.3 I
MW-20B	D								0.46 I	0.4 I	0.2 I
MW-21B	D								0.69 I	0.4 I	0.2 U
MW-22B	B								5.5	0.3 I	0.8 I
MW-23B	B								0.46 I	0.3 I	0.2 I
MW-1C	B	50 U	1.4 U	1.4 U	0.5 U	0.07 I	0.041 U	0.041 U		NA	NA
MW-2C	B	50 U	1.4 U	1.4 U	0.5 U	0.041 U	0.041 U	0.041 U		0.0 U	0.2 U
MW-3C	B	50 U	1.4 U	1.4 U	0.5 U	0.041 U	0.041 U	0.045 I		0.0 U	0.2 U
MW-4C	B	50 U	7.3 I	1.4 U	0.5 U	0.29 I	0.53 I	0.12 I		0.0 I	0.2 U
MW-5C	B	50 U	1.4 U	1.4 U	0.5 U	0.041 U	0.041 U	0.041 U		0.1 I	0.2 I
MW-6C	B	50 U	1.4 U	1.4 U	0.5 U	0.048 I	0.041 U	0.073 I		NA	NA
MW-7C	D	50 U	4.3 I	1.4 U	0.5 U	0.061 I	0.041 U	0.073 I		0.0 I	0.2 U
MW-8C	D	50 U	1.4 U	1.4 U	0.5 U	0.048 I	0.12 I	0.1 I		0.1 I	0.2 U
MW-9C	D	50 U	1.4 U	1.4 U	0.5 U	0.041 U	0.041 U	0.041 U		0.1 U	0.2 U
MW-10C	D	50 U	1.4 U	1.4 U	0.5 U	0.38 I	0.18 I	0.12 I		0.1 I	0.2 U
MW-11C	D	50 U	1.4 U	1.4 U	0.5 U	0.041 U	0.041 U	0.1 I		0.0 U	0.2 U
MW-12C	D	50 U	1.4 U	1.4 U	0.5 U	0.04 U	0.041 U	0.044 I		0.0 U	0.2 U
MW-13C	D	50 U	1.4 U	1.4 U	0.5 U	0.13 I	0.096	0.079 I		0.0 U	0.2 U
MW-14C	D	50 U	3.3 I	1.4 U	0.5 U	0.34 I	0.55	0.17 I		NA	NA
MW-15C	D	50 U	1.8 I	1.4 U	0.5 U	0.041 U	0.041 U	0.041 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.13 I	0.1 I	0.2 U
MW-17C	D								0.78 I	0.2 I	0.2 U
MW-18C	D								5.4	0.8 I	0.5 I
MW-19C	D								1.1	1.1	0.2 I
MW-20C	D								0.59 I	0.3 I	0.4 I
MW-21C	D								0.72 I	0.2 I	0.2 U
MW-22C	B								0.28 I	0.2 I	0.2 U
MW-23C	B								1.0	0.2 I	0.2 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-9
Dissolved Cobalt Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	0.0014 U	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	0.05 U	0.0014 U	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	0.0014 U	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	0.0022 I	0.0005 U	0.00024 I	NA	0.71 I		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								0.1 I	NA	NA
MW-19A	D								0.8 I	NA	1.4
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	50 U	1.4 U	1.4 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	50 U	1.4 U	1.4 U	0.5 U	0.18 I	NA	NA		NA	NA
MW-3B	B	50 U	1.4 U	1.4 U	0.5 U	0.15 I	NA	NA		NA	NA
MW-4B	B	50 U	1.4 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	50 U	1.4 U	1.4 U	0.5 U	NA	NA	NA		NA	NA
MW-7B	D	50 U	1.4 U	1.4 U	0.5 U	0.19 I	NA	NA		NA	NA
MW-8B	D	50 U	1.4 U	1.4 U	0.5 U	0.35 I	0.19 I	0.24 I		0.15 I	NA
MW-9B	D	50 U	1.4 U	1.4 U	0.5 U	0.25 I	NA	NA		NA	NA
MW-10B	D	50 U	1.4 U	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	1.4 U	1.4 U	NA	NA	NA	NA		NA	NA
MW-12B	D	50 U	1.4 U	1.4 U	0.5 U	NA	NA	0.23 I		NA	NA
MW-13B	D	50 U	1.4 U	1.4 U	0.5 U	NA	NA	NA		NA	NA
MW-14B	D	50 U	1.9 I	1.4 U	0.5 U	NA	NA	NA		NA	NA
MW-15B	D	NA	1.4 U	1.4 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.31 I	0.61 I	0.2 U
MW-17B	D								0.23 I	0.32 I	0.27 I
MW-18B	D								0.068 I	NA	NA
MW-19B	D								0.21 I	NA	0.2 U
MW-20B	D								0.2 I	0.17 I	0.2 U
MW-21B	D								0.5 I	0.24 I	0.2 U
MW-22B	B								0.9 I	0.22 I	0.23 I
MW-23B	B								NA	NA	NA
MW-1C	B	50 U	1.4 U	1.4 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	50 U	1.4 U	1.4 U	NA	NA	NA	NA		NA	NA
MW-3C	B	50 U	1.4 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	50 U	1.4 U	1.4 U	0.5 U	0.048 I	0.073 I	NA		0.04 U	NA
MW-5C	B	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	50 U	1.4 U	1.4 U	NA	NA	NA	NA		NA	NA
MW-7C	D	50 U	1.4 U	1.4 U	NA	NA	NA	NA		NA	NA
MW-8C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	50 U	1.4 U	NA	NA	0.16 I	NA	NA		NA	NA
MW-11C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	50 U	1.4 U	1.4 U	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								0.041 U	NA	NA
MW-18C	D								0.088 I	0.07 I	0.2 U
MW-19C	D								0.1 I	0.04 U	0.2 U
MW-20C	D								0.041 U	0.04 U	0.2 U
MW-21C	D								0.041 U	0.17 I	0.2 U
MW-22C	B								NA	NA	NA
MW-23C	B								0.047 I	0.04 U	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-10
Copper Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.29 U	0.29 U		NA	NA
MW-2A	B	50 U	1.3 U	1.3 U	0.4 U	0.6 I	0.29 U	0.29 U		0.29 U	0.3 U
MW-3A	B	50 U	1.3 U	1.3 U	0.4 U	0.38 I	0.89 I	0.29 U		0.29 I	0.45 I
MW-4A	B	50 U	1.3 U	1.3 U	0.4 U	0.41 I	0.29 U	0.29 U		0.29 U	0.3 U
MW-5A	B	50 U	1.6 I	11 I	0.4 U	1.3 I	0.75 I	1.1 I		0.59 I	0.74 I
MW-6A	B	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.29 U	0.29 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7A	D	50 U	18 I	1.3 U	0.4 U	0.29 U	0.29 U	0.29 U		0.29 U	0.36 I
MW-8A	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.29 U	0.29 U		0.85 I	0.3 U
MW-9A	D	50 U	1.3 U	1.3 U	0.4 U	0.56 I	0.29 U	2.1		0.66 I	0.3 U
MW-10A	D	50 U	1.3 U	1.3 U	0.4 U	1.9 I	0.47 I	2.9		0.89 I	0.3 U
MW-11A	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.39	0.29 U		0.29 U	0.3 U
MW-12A	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.37	0.4 I		0.29 U	0.3 U
MW-13A	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.29 U	0.37 I		0.29 U	0.3 U
MW-14A	D	50 U	1.3 U	1.3 U	0.4 U	2	0.83	0.57 I		NA	NA
MW-15A	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.29 U	0.29 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.29 U	0.79 I	0.64 I
MW-17A	D								0.57 I	0.29 U	0.3 U
MW-18A	D								1.1 I	0.52 I	0.41 I
MW-19A	D								5.0	0.29 U	1.2 I
MW-20A	D								0.29 U	0.71 I	0.31 I
MW-21A	D								0.29 U	0.29 I	0.3 U
MW-22A	B								0.29 U	0.29 U	0.3 U
MW-23A	B								0.32 I	0.29 U	0.3 U
MW-1B	B	50 U	1.3 U	1.3 U	0.4 U	0.34 I	0.29 U	0.29 U		NA	NA
MW-2B	B	50 U	2 I	1.3 U	0.4 U	3.1	2.4	3.2		0.7 I	0.62 I
MW-3B	B	50 U	11 I	1.3 U	0.4 U	1.5 I	1 I	0.59 I		0.29 I	0.3 U
MW-4B	B	50 U	2.7 I	1.3 U	0.4 U	1 I	1.8 I	0.29 U		0.29 U	0.3 U
MW-5B	B	50 U	1.3 U	1.7 I	0.4 U	0.29 U	0.29 U	0.29 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	0.29 U	0.3 U
MW-6B	B	50 U	6.6 I	5.3 I	0.4 U	0.66 I	1 I	0.84 I		NA	NA
MW-7B	D	50 U	18 I	1.6 I	0.4 U	1.3 I	3.9	0.48 I		0.5 I	0.3 U
MW-8B	D	50 U	12 I	1.3 U	1.9 I	1.4 I	2.3	1.1 I		1.4 I	0.52 I
MW-9B	D	50 U	13 I	1.9 I	0.4 U	0.6 I	1.4 I	1.5 I		1.6 I	0.42 I
MW-10B	D	50 U	2.8 I	1.6 I	0.4 U	0.29 U	0.29 U	0.29 U		0.58 U	0.3 U
MW-11B	D	50 U	7.3 I	1.3 U	0.4 U	0.82 I	1.6	0.29 U		2.8	0.3 U
MW-12B	D	50 U	23	6.5 I	0.4 U	0.66 I	7.2	3.9		2.9	0.3 U
MW-13B	D	50 U	5.4 I	1.3 U	0.4 U	2.6	4.1	5.6		6.7	0.5 I
MW-14B	D	50 U	5.3 I	1.7 I	0.4 U	0.86 I	0.53	0.49 I		NA	NA
MW-15B	D	50 U	1.3 U	1.3 U	0.4 U	0.3 I	0.29 U	0.29 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							9.4	2.8 I	2.8
MW-17B	D								3.1	2.3 I	0.96 I
MW-18B	D								1.8 I	0.84 I	0.76 I
MW-19B	D								6.0	1.3 I	2.8
MW-20B	D								5.4	2 I	1.3 I
MW-21B	D								15	4	1.8 I
MW-22B	B								22	0.29 U	1.8 I
MW-23B	B								0.38 I	0.29 U	0.3 U
MW-1C	B	50 U	1.3 U	3.2 I	0.4 U	0.29 U	0.68 i	0.29 U		NA	NA
MW-2C	B	50 U	2 I	1.3 U	0.4 U	0.31 I	4.3	0.29 U		0.29 U	3.4
MW-3C	B	50 U	3.4 I	1.3 U	0.4 U	0.37 I	0.29 U	0.29 U		0.29 U	0.3 U
MW-4C	B	50 U	7.2 I	1.3 U	0.4 U	0.69 I	2	0.3 I		0.29 U	0.3 U
MW-5C	B	50 U	1.3 U	1.3 U	0.4 U	0.34 I	0.29 U	0.52 I		0.36 I	0.3 U
MW-6C	B	50 U	1.3 U	2.6 I	0.4 U	1.1 I	0.29 U	0.33 I	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7C	D	50 U	11 I	1.4 I	0.4 U	0.63 I	0.39 I	0.29 I		0.32 I	0.3 U
MW-8C	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.29 U	0.35 I		0.58 U	0.3 U
MW-9C	D	50 U	1.8 I	1.4 I	0.4 U	0.29 I	0.4 I	0.29 U		0.58 U	0.3 U
MW-10C	D	50 U	2.3 I	1.3 U	0.4 U	0.56 I	8.5	1 I		0.79 I	0.3 U
MW-11C	D	50 U	1.3 U	1.3 U	0.4 U	55	0.37	0.3 I		0.29 U	0.3 U
MW-12C	D	50 U	1.6 I	1.3 U	0.4 U	0.29 U	0.29 U	0.29 U		0.29 U	0.3 U
MW-13C	D	50 U	1.8 I	1.3 U	0.4 U	0.32 I	0.39	0.29 U		0.29 U	0.3 U
MW-14C	D	50 U	1.3 I	1.3 U	0.4 U	0.58 I	0.54	0.43 I		NA	NA
MW-15C	D	50 U	1.3 U	1.3 U	0.4 U	0.29 U	0.45 i	0.29 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.78 I	0.99 I	0.3 U
MW-17C	D								1.3 I	2 I	0.3 U
MW-18C	D								12	0.8 I	0.61 I
MW-19C	D								2.4	11	0.7 I
MW-20C	D								3.3	1.6 I	1 I
MW-21C	D								2.2	1.8 I	0.59 I
MW-22C	B								0.48 I	0.29 U	0.59 I
MW-23C	B								3.0	0.48 I	0.3 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-11
Dissolved Copper Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	1.3 U	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	50 U	1.3 U	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	1.3 U	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	1.3 U	4 U	1 I	NA	0.71 I		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								0.73 I	NA	NA
MW-19A	D								0.46 I	NA	0.6 I
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	50 U	1.3 U	1.3 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	50 U	1.3 U	1.3 U	4 U	0.37 I	NA	NA		NA	NA
MW-3B	B	50 U	1.3 U	1.3 U	4 U	0.34 I	NA	NA		NA	NA
MW-4B	B	50 U	1.3 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	50 U	1.3 U	1.3 U	4 U	NA	NA	NA		NA	NA
MW-7B	D	50 U	2.8 I	1.3 U	4 U	0.5 I	NA	NA		NA	NA
MW-8B	D	50 U	1.3 U	1.3 U	4 U	0.84 I	0.75 I	0.14 I		1.2 I	NA
MW-9B	D	50 U	1.3 U	1.3 U	4 U	0.43 I	NA	NA		NA	NA
MW-10B	D	50 U	1.4 I	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	1.3 U	1.3 U	NA	NA	NA	NA		NA	NA
MW-12B	D	50 U	1.3 U	1.3 U	4 U	NA	NA	0.23 I		NA	NA
MW-13B	D	50 U	1.3 U	1.3 U	4 U	NA	NA	NA		NA	NA
MW-14B	D	50 U	1.3 U	1.3 U	4 U	NA	NA	NA		NA	NA
MW-15B	D	NA	1.3 U	1.3 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.29 U	3.6	0.3 I
MW-17B	D								0.29 U	2.1	0.3 U
MW-18B	D								0.29 U	NA	NA
MW-19B	D								0.29 U	NA	0.3 I
MW-20B	D								0.48 I	0.29 U	0.3 U
MW-21B	D								3.7	0.29 U	0.3 U
MW-22B	B								3.5	0.29 U	0.3 U
MW-23B	B								NA	NA	NA
MW-1C	B	50 U	1.3 U	1.3 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	50 U	1.3 U	1.3 U	NA	NA	NA	NA		NA	NA
MW-3C	B	50 U	1.3 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	50 U	1.3 U	1.3 U	4 U	0.87 I	0.29 U	NA		0.3 I	NA
MW-5C	B	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	50 U	1.3 U	1.3 U	NA	NA	NA	NA		NA	NA
MW-7C	D	50 U	1.3 U	1.3 U	NA	NA	NA	NA		NA	NA
MW-8C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	50 U	1.3 U	NA	NA	0.52 I	NA	NA		NA	NA
MW-11C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	50 U	1.3 U	1.3 U	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								0.29 U	NA	NA
MW-18C	D								0.29 U	0.29 U	2.9
MW-19C	D								0.48 I	1 I	0.35 I
MW-20C	D								0.41 I	0.29 U	0.3 U
MW-21C	D								0.29 U	0.3 I	0.3 U
MW-22C	B								NA	NA	NA
MW-23C	B								0.79 I	0.29 U	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-12
Cis-1, 2-Dichloroethene Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	0.12 U	0.12 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	0.12 U	0.2 U
MW-2A	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-3A	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-4A	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-5A	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-6A	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-7A	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-8A	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-9A	D	NA	NA	NA	NA	NA	0.12 U	1.40		0.12 U	0.88 I
MW-10A	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-11A	D	NA	NA	NA	NA	NA	0.45 J	0.12 U		0.42 I	1 I
MW-12A	D	NA	NA	NA	NA	NA	0.36 J	0.12 U		0.12 U	0.2 U
MW-13A	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-14A	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-15A	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.2 U
MW-17A	D								0.12 U	0.12 U	0.2 U
MW-18A	D								0.12 U	0.12 U	0.2 U
MW-19A	D								0.12 U	0.12 U	0.2 U
MW-20A	D								0.12 U	0.12 U	0.2 U
MW-21A	D								0.12 U	0.12 U	0.2 U
MW-22A	B								0.12 U	0.12 U	0.2 U
MW-23A	B								0.12 U	0.12 U	0.2 U
MW-1B	B	NA	NA	NA	NA	NA	0.12 U	0.12 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	0.12 U	0.2 U
MW-2B	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-3B	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-4B	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-5B	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-6B	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-7B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-8B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-9B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-10B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-11B	D	NA	NA	NA	NA	NA	0.51 J	0.12 U		0.12 U	0.2 U
MW-12B	D	NA	NA	NA	NA	NA	0.34 J	0.12 U		0.12 U	0.2 U
MW-13B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-14B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-15B	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.2 U
MW-17B	D								0.12 U	0.12 U	0.2 U
MW-18B	D								0.12 U	0.12 U	0.2 U
MW-19B	D								0.12 U	0.12 U	0.2 U
MW-20B	D								0.12 U	0.12 U	0.2 U
MW-21B	D								0.12 U	0.12 U	0.2 U
MW-22B	B								0.12 U	0.12 U	0.2 U
MW-23B	B								0.12 U	0.12 U	0.2 U
MW-1C	B	NA	NA	NA	NA	NA	0.12 U	0.12 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	0.12 U	0.2 U
MW-2C	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-3C	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-4C	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-5C	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-6C	B	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-7C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-8C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-9C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-10C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-11C	D	NA	NA	NA	NA	NA	0.46 J	0.12 U		0.12 U	0.2 U
MW-12C	D	NA	NA	NA	NA	NA	0.35 J	0.12 U		0.12 U	0.2 U
MW-13C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-14C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-15C	D	NA	NA	NA	NA	NA	0.12 U	0.12 U		0.12 U	0.2 U
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.2 U
MW-17C	D								0.12 U	0.12 U	0.2 U
MW-18C	D								0.12 U	0.12 U	0.2 U
MW-19C	D								0.12 U	0.12 U	0.2 U
MW-20C	D								0.12 U	0.12 U	0.2 U
MW-21C	D								0.12 U	0.12 U	0.2 U
MW-22C	B								0.12 U	0.12 U	0.2 U
MW-23C	B								0.12 U	0.12 U	0.2 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-13
Ethyl Benzene Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-2A	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-3A	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.16 I		0.12 U	0.29 I
MW-4A	B	1 U	1.8	0.83 U	0.55 I	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-5A	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-6A	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-7A	D	1 U	0.83 U	0.83 U	0.5 U	0.14 I	0.12 U	0.12 U		0.12 U	0.2 U
MW-8A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-9A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	1.2		1.70	1.5
MW-10A	D	1 U	0.83 U	0.83 U	0.5 U	0.36 I	0.12 U	0.12 U		0.12 U	0.2 U
MW-11A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	3.8
MW-12A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-13A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-14A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-15A	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.2 U
MW-17A	D								0.12 U	0.12 U	0.2 U
MW-18A	D								0.12 U	0.12 U	0.2 U
MW-19A	D								0.12 U	0.12 U	0.2 U
MW-20A	D								0.12 U	0.12 U	0.2 U
MW-21A	D								0.12 U	0.12 U	0.2 U
MW-22A	B								0.12 U	0.12 U	0.2 U
MW-23A	B								0.12 U	0.12 U	0.2 U
MW-1B	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-2B	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-3B	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-4B	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-5B	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-6B	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-7B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.18 I	0.12 U		0.12 U	0.26 I
MW-8B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-9B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.33 I	0.12 U		0.12 U	0.2 U
MW-10B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-11B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-12B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-13B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-14B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-15B	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.2 U
MW-17B	D								0.12 U	0.12 U	0.2 U
MW-18B	D								0.12 U	0.12 U	0.2 U
MW-19B	D								0.12 U	0.12 U	0.39 I
MW-20B	D								0.12 U	0.12 U	0.2 U
MW-21B	D								0.12 U	0.12 U	0.2 U
MW-22B	B								0.12 U	0.12 U	0.2 U
MW-23B	B								0.12 U	0.12 U	0.2 U
MW-1C	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-2C	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-3C	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-4C	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-5C	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-6C	B	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-7C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-8C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-9C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-10C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-11C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-12C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-13C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		0.12 U	0.2 U
MW-14C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-15C	D	1 U	0.83 U	0.83 U	0.5 U	0.12 U	0.12 U	0.12 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.12 U	0.12 U	0.15 I
MW-17C	D								0.12 U	0.12 U	0.2 U
MW-18C	D								0.12 U	0.12 U	0.2 U
MW-19C	D								0.12 U	0.12 U	0.2 U
MW-20C	D								0.12 U	0.12 U	0.2 U
MW-21C	D								0.12 U	0.12 U	0.2 U
MW-22C	B								0.12 U	0.12 U	0.2 U
MW-23C	B								0.12 U	0.12 U	0.2 U

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-14
Nickel Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	50 U	4.7 U	4.7 U	1.1 U	1.8 I	0.69 U	0.69 U		NA	NA
MW-2A	B	50 U	4.7 U	4.7 U	1.1 U	1.7 I	0.69 U	0.72 I		0.7 U	1.0 I
MW-3A	B	50 U	4.7 U	4.7 U	1.1 U	0.9 I	0.69 U	0.69 U		1.4 I	0.5 I
MW-4A	B	50 U	4.7 U	4.7 U	1.8 I	1.6 I	0.89 I	1.1 I		0.9 I	0.9 I
MW-5A	B	10 U	4.7 U	4.7 U	1.1 I	0.95 I	0.94 I	3.3		1.4 I	1.7 I
MW-6A	B	50 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		NA	NA
MW-7A	D	50 U	36 I	4.7 U	1.1 U	2.1	0.97 I	0.91 I		0.8 I	1.1 I
MW-8A	D	50 U	4.7 U	4.7 U	9.7 I	1.6 I	1.4 I	3.1		3.4 I	2.5
MW-9A	D	50 U	4.7 U	5.7 I	4.3 I	1.7 I	2.9	2.6		3.6 I	3.1
MW-10A	D	50 U	4.7 U	4.7 U	1.1 I	1.2 I	2.3	1.4 I		2.7 I	3.2
MW-11A	D	50 U	4.7 U	4.7 U	1.6 I	1.3 I	1.4	1.4 I		1.4 I	1.0 I
MW-12A	D	50 U	4.7 U	4.7 U	1.5 I	1.6 I	2.6	1.4 I		1.7 I	0.6 I
MW-13A	D	50 U	4.7 U	4.7 U	1.3 I	0.88 I	0.7	0.69 U		0.7 U	0.4 I
MW-14A	D	50 U	4.7 U	7.3 I	2.5 I	3.5	3	2.2		NA	NA
MW-15A	D	50 U	4.7 U	4.7 U	1.1 U	0.91 I	0.69 U	0.69 U		NA	NA
MW-16A	D								0.9 I	1.1 I	1.1 I
MW-17A	D								0.81 I	0.8 I	0.9 I
MW-18A	D								0.89 I	0.9 I	0.8 I
MW-19A	D								11	1.3 I	9.9
MW-20A	D								0.75 I	1.6 I	1.1 I
MW-21A	D								0.69 U	1.1 I	0.4 I
MW-22A	B								0.69 U	0.7 U	0.3 U
MW-23A	B								1.2 I	1.1 I	0.6 I
MW-1B	B	10 U	5.4 I	4.7 U	1.1 U	1.2 I	0.69 U	0.69 U		NA	NA
MW-2B	B	10 U	4.7 U	4.7 U	1.1 U	2.6	0.69 U	0.69 U		0.7 U	0.4 I
MW-3B	B	10 U	14 I	4.7 U	1.1 U	0.95 I	0.69 U	0.69 U		0.7 U	0.5 I
MW-4B	B	10 U	4.7 U	4.7 U	1.1 U	0.7 I	0.69 U	0.69 U		0.7 I	1.0 I
MW-5B	B	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.75 I	0.69 U		1.0 I	0.4 I
MW-6B	B	10 U	6.8 I	4.7 U	1.1 U	1.2 I	0.82 I	0.78 I		NA	NA
MW-7B	D	10 U	29 I	4.7 U	1.1 U	1.8 I	1.1 I	0.84 I		1.2 I	0.7 I
MW-8B	D	10 U	11 I	4.7 U	4.9 I	1.9 I	1.6 I	0.91 I		1.4 U	0.6 I
MW-9B	D	10 U	7.8 I	4.7 U	5.7 I	0.83 I	0.81 I	0.69 U		1.4 U	0.5 I
MW-10B	D	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		1.4 U	0.3 U
MW-11B	D	50 U	9.4 I	4.7 U	1.1 U	0.81 I	0.69 U	0.69 U		0.7 U	0.4 I
MW-12B	D	10 U	11 I	4.7 U	1.4 I	0.69 U	0.99	0.72 I		0.7 U	0.5 I
MW-13B	D	10 U	4.7 U	4.7 U	1.6 I	3.5	0.9	0.69 U		0.7 U	0.4 I
MW-14B	D	10 U	4.7 U	4.7 U	1.5 I	0.79 I	0.69 U	0.69 U		NA	NA
MW-15B	D	50 U	4.7 U	4.7 U	3.8 I	1 I	0.69 U	0.69 U		NA	NA
MW-16B	D								1.6 I	2.6 I	4.8
MW-17B	D								1.5 I	1.4 U	0.9 I
MW-18B	D								1 I	0.7 I	0.3 I
MW-19B	D								1 I	0.7 U	0.7 I
MW-20B	D								3.5	2.1	1.3 I
MW-21B	D								5.5	2.0	1.0 I
MW-22B	B								14	0.7 U	1.5 I
MW-23B	B								0.75 I	1.7 I	0.8 I
MW-1C	B	10 U	4.7 U	4.7 U	1.1 U	0.84 I	0.69 U	0.69 U		NA	NA
MW-2C	B	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		0.7 U	0.7 I
MW-3C	B	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		0.7 U	0.3 I
MW-4C	B	10 U	22 I	4.7 U	1.1 U	0.93 I	1.6 I	0.96 I		0.7 U	0.9 I
MW-5C	B	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		1.0 I	0.3 U
MW-6C	B	10 U	4.7 U	4.7 U	1.1 U	0.69 I	0.69 U	0.69 U		NA	NA
MW-7C	D	10 U	19 I	4.7 U	1.1 U	0.84 I	0.69 U	0.69 U		0.7 U	0.3 I
MW-8C	D	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		1.8 I	0.3 U
MW-9C	D	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		1.4 U	1.7 I
MW-10C	D	10 U	4.7 U	4.7 U	1.1 U	1.2 I	1.8 I	0.69 U		1.4 U	0.6 I
MW-11C	D	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		0.7 U	0.5 I
MW-12C	D	10 U	4.7 U	4.7 U	1.1 U	0.69 U	0.69 U	0.69 U		0.7 U	0.3 U
MW-13C	D	50 U	4.7 U	4.7 U	1.1 U	0.69 U	0.93	0.69 U		0.9 I	0.4 I
MW-14C	D	50 U	6.7 I	4.7 U	1.3 I	1.8 I	1.4	0.69 U		NA	NA
MW-15C	D	50 U	4.7 U	4.7 U	1.1 U	0.7 I	0.69 U	0.69 U		NA	NA
MW-16C	D								0.83 I	1.4 U	0.4 I
MW-17C	D								2.1	0.9 I	0.5 I
MW-18C	D								15	1.8 I	1.8 I
MW-19C	D								3.3	4.6	0.8 I
MW-20C	D								2.9	1.1 I	1.9 I
MW-21C	D								2.9	3.4	1.0 I
MW-22C	B								2.1	2.5	1.1 I
MW-23C	B								3.9	1.5 I	0.5 I

MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007

MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007

MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-15
Dissolved Nickel Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	4.7 U	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	50 U	4.7 U	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-7A	D	NA	4.7 U	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	7.8 I	1.1 U	1.9 I	NA	1.8 I		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								1.1 I	NA	NA
MW-19A	D								1.9 I	NA	6.0
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	50 U	4.7 U	4.7 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2B	B	50 U	4.7 U	4.7 U	1.1 U	0.69 U	NA	NA		NA	NA
MW-3B	B	50 U	4.7 U	4.7 U	1.1 U	0.69 U	NA	NA		NA	NA
MW-4B	B	50 U	4.7 U	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	50 U	4.7 U	4.7 U	1.1 U	NA	NA	NA		NA	NA
MW-7B	D	50 U	4.7 U	4.7 U	1.1 U	1.1 I	NA	NA		NA	NA
MW-8B	D	50 U	4.7 U	4.7 U	1.1 U	1.6 I	0.8 I	0.69 U		0.77 I	NA
MW-9B	D	50 U	4.7 U	4.7 U	1.1 U	1.9 I	NA	NA		NA	NA
MW-10B	D	50 U	4.7 U	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	4.7 U	4.7 U	NA	NA	NA	NA		NA	NA
MW-12B	D	50 U	4.7 U	4.7 U	1.1 U	NA	NA	0.69 U		NA	NA
MW-13B	D	50 U	4.7 U	4.7 U	1.1 U	NA	NA	NA		NA	NA
MW-14B	D	50 U	4.7 U	4.7 U	1.1 U	NA	NA	NA		NA	NA
MW-15B	D	NA	4.7 U	4.7 U	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.69 U	2.5	0.3 U
MW-17B	D								0.69 U	0.88 I	0.51 I
MW-18B	D								0.69 U	NA	NA
MW-19B	D								0.69 U	NA	0.3 U
MW-20B	D								0.87 I	0.69 U	0.31 I
MW-21B	D								3.3	0.69 U	0.32 I
MW-22B	B								2.7	0.69 U	0.3 U
MW-23B	B								NA	NA	NA
MW-1C	B	50 U	4.7 U	4.7 U	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-2C	B	50 U	4.7 U	4.7 U	NA	NA	NA	NA		NA	NA
MW-3C	B	50 U	4.7 U	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	50 U	4.7 U	4.7 U	1.1 U	1.1 I	0.69 U	NA		1.3 I	NA
MW-5C	B	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	50 U	4.7 U	4.7 U	NA	NA	NA	NA		NA	NA
MW-7C	D	50 U	4.7 U	4.7 U	NA	NA	NA	NA		NA	NA
MW-8C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	50 U	4.7 U	NA	NA	1.1 I	NA	NA		NA	NA
MW-11C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	50 U	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	50 U	4.7 U	4.7 U	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								0.69 U	NA	NA
MW-18C	D								0.69 U	0.84 I	0.46 I
MW-19C	D								1.2 I	0.69 U	0.3 U
MW-20C	D								0.69 U	0.69 U	0.3 U
MW-21C	D								0.69 U	7.2	0.3 U
MW-22C	B								NA	NA	NA
MW-23C	B								0.95 I	0.69 U	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-16
Sodium Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	12	9.5	7.2	9.82	11	11	14		NA	NA
MW-2A	B	13	10	9.1	9.09	12	12	14		10	11
MW-3A	B	18	18	12	15	16	19	22		33	40
MW-4A	B	4.6	7.2	3.1	12	12	6.5	6		6.5	9.2
MW-5A	B	4.2	5.2	4.6	4.86 I	6.3	6.9	11		10	13
MW-6A	B	10	9.1	8.1	9.22	9.3	8.7	10		NA	NA
MW-7A	D	9.9	10	6	7.74	19	11	14		10	11
MW-8A	D	12	12	12	9.59	11	12	19		23	16
MW-9A	D	5.2	4.3	5.2	4.97 I	7.6	5.1	9		7.7	7.1
MW-10A	D	3	6.5	6.2	7.06	8.1	6.4	7.6		6.7	5.9
MW-11A	D	16	14	15	10.1	9.5	11	12		10	9.9
MW-12A	D	7.9	8	9.6	8.7	10	9.7	9.3		10	14
MW-13A	D	21	13	13	7.92	11	9.9	9.1		11	9
MW-14A	D	17	17	14	7.2	15	24	8.1		NA	NA
MW-15A	D	10	9.4	11	11.5	15	12	14		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							8.2	10	8.5
MW-17A	D								15	11	10
MW-18A	D								3.7	4	6.4
MW-19A	D								25	14	18
MW-20A	D								18	20	19
MW-21A	D								15	26	18
MW-22A	B								24	25	20
MW-23A	B								8.7	9.5	14
MW-1B	B	4.8	4.1	3.5	3.33 I	4	3	3.6		NA	NA
MW-2B	B	4.5	4.9	4.6	4.32 I	5.1	5	5.4		5	5.4
MW-3B	B	6.2	7	7	5.19	7	6.8	6.5		6.1	6.6
MW-4B	B	13	15	13	9.18	13	13	11		8.8	54
MW-5B	B	4.5	4.3	4.8	4.01 I	5.4	5.6	4.5		4.3	4.1
MW-6B	B	7.1	6.6	5.1	4.07 I	5.1	5.3	5.5		NA	NA
MW-7B	D	6.7	8.8	6.3	5.31	7.1	7.3	7.7		8	7.7
MW-8B	D	7.4	5.7	5.6	4.75 I	6.2	5.6	6.1		6.1	5.9
MW-9B	D	7.3	7.5	8.2	6.76	8.9	8	8.8		8.6	8.8
MW-10B	D	6.5	6.4	6.9	6.16	9	8	9.8		9	8.5
MW-11B	D	15	21	13	11.3	15	15	16		15	15
MW-12B	D	6	9	6.2	4.57 I	6.4	6.2	6.7		7.2	7
MW-13B	D	8.2	7.1	7.1	5.91	8.5	8.4	7.9		8.3	7.8
MW-14B	D	5.1	5.5	5.9	5.46	7.5	7.1	6.2		NA	NA
MW-15B	D	6.3	7.4	5.8	4.47 I	5.7	5.1	5.7		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							7.9	8.1	8.7
MW-17B	D								11	12	12
MW-18B	D								18	17	16
MW-19B	D								17	17	16
MW-20B	D								17	17	16
MW-21B	D								16	16	15
MW-22B	B								9.4	9.2	8.6
MW-23B	B								10	10	9.1
MW-1C	B	3.6	4.1	4.6	3.69 I	4.7	4.2	4.2		NA	NA
MW-2C	B	3.2	4.8	4.3	3.66 I	4.8	4.7	4.7		4.7	4.6
MW-3C	B	4.2	5.2	4.6	3.63 I	4.9	4.8	5.4		5.2	4.9
MW-4C	B	5.2	8.8	5.8	4.75 I	7	8	7.7		10	8.4
MW-5C	B	6.3	6.6	6.7	5.98	8.2	8.2	8.5		8.5	8.1
MW-6C	B	3.2	4.2	4.2	3.58 I	4.8	4.8	4.7		NA	NA
MW-7C	D	19	8	5.9	4.56 I	6	6	6.3		6.3	5.3
MW-8C	D	4.4	4.8	5	4.12 I	5.6	5.1	5.6		5.7	5.2
MW-9C	D	5	5.6	5.4	4.63 I	6.1	5.9	6.3		6	5.7
MW-10C	D	6.2	5.8	5.6	4.95 I	2.4	6.3	5.5		6.2	5.9
MW-11C	D	7.9	9.3	9.4	7.9	10	10	11		10	10
MW-12C	D	2.6	4.9	4.8	4.12 I	5.5	5.2	5.5		5.5	5.4
MW-13C	D	7.7	6.7	6.7	5.32	7.3	7.4	7.2		7.6	7.8
MW-14C	D	6.7	6.2	7.1	5.12	6.5	8.5	7.2		NA	NA
MW-15C	D	6.7	5.9	5.2	4.14 I	5.3	4.5	5.1		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							10	11	11
MW-17C	D								12	12	12
MW-18C	D								12	12	12
MW-19C	D								9.7	9.5	9.8
MW-20C	D								8.6	9.5	9.4
MW-21C	D								10	10	9.6
MW-22C	B								6.3	6.6	6.4
MW-23C	B								5.3	5.3	5

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

Table B-17
Dissolved Sodium Concentrations in Monitoring Wells
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Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-2A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-3A	B	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-4A	B	NA	7.8	NA	NA	NA	NA	NA		NA	NA
MW-5A	B	4.2	5.1	NA	NA	NA	NA	NA		NA	NA
MW-6A	B	NA	NA	NA	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7A	D	NA	11	NA	NA	NA	NA	NA		NA	NA
MW-8A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-9A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-10A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-11A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-12A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-13A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-14A	D	NA	NA	15	7.5	15	NA	8		NA	NA
MW-15A	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17A	D								NA	NA	NA
MW-18A	D								3.7	NA	NA
MW-19A	D								24	NA	18.0
MW-20A	D								NA	NA	NA
MW-21A	D								NA	NA	NA
MW-22A	B								NA	NA	NA
MW-23A	B								NA	NA	NA
MW-1B	B	5	4.1	3.5	NA	NA	NA	NA		NA	NA
MW-2B	B	4.4	5	4.7	4.31 I	5.3	NA	NA		NA	NA
MW-3B	B	6.4	7.3	7.2	5.6	7.7	NA	NA		NA	NA
MW-4B	B	14	15	NA	NA	NA	NA	NA		NA	NA
MW-5B	B	4	NA	NA	NA	NA	NA	NA		NA	NA
MW-6B	B	7.6	6.5	5.1	4.03 I	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7B	D	6.7	8.5	6.4	5.1	7	NA	NA		NA	NA
MW-8B	D	7	5.8	5.8	4.57 I	6.5	6.1	5.9		6	NA
MW-9B	D	7.8	7.5	8.3	6.9	9.2	NA	NA		NA	NA
MW-10B	D	5.6	6.4	NA	NA	NA	NA	NA		NA	NA
MW-11B	D	NA	22	13	NA	NA	NA	NA		NA	NA
MW-12B	D	6	8.9	6.3	4.48 I	NA	NA	6.9		NA	NA
MW-13B	D	8.8	7.4	7.3	6	NA	NA	NA		NA	NA
MW-14B	D	4.9	5.4	6	5.5	NA	NA	NA		NA	NA
MW-15B	D	NA	7.1	6.1	NA	NA	NA	NA		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							7.3	8.4	8.7
MW-17B	D								10	12	12
MW-18B	D								17	NA	NA
MW-19B	D								17	NA	17
MW-20B	D								17	17	17
MW-21B	D								17	16	15
MW-22B	B								9	9.1	8.6
MW-23B	B								NA	NA	NA
MW-1C	B	3.4	4.1	4.5	NA	NA	NA	NA		NA	NA
MW-2C	B	3.8	4.9	4.2	NA	NA	NA	NA		NA	NA
MW-3C	B	4.3	5.2	NA	NA	NA	NA	NA		NA	NA
MW-4C	B	6.3	9.2	5.8	4.75 I	6.9	8	NA		10	NA
MW-5C	B	6.8	NA	NA	NA	NA	NA	NA		NA	NA
MW-6C	B	3.6	4.2	4.3	NA	NA	NA	NA	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7C	D	18	8.5	5.8	NA	NA	NA	NA		NA	NA
MW-8C	D	4.8	NA	NA	NA	NA	NA	NA		NA	NA
MW-9C	D	5.4	NA	NA	NA	NA	NA	NA		NA	NA
MW-10C	D	5.4	5.8	NA	NA	6.7	NA	NA		NA	NA
MW-11C	D	6.5	NA	NA	NA	NA	NA	NA		NA	NA
MW-12C	D	4.8	NA	NA	NA	NA	NA	NA		NA	NA
MW-13C	D	7.7	NA	NA	NA	NA	NA	NA		NA	NA
MW-14C	D	7.3	6.3	7.1	NA	NA	NA	NA		NA	NA
MW-15C	D	NA	NA	NA	NA	NA	NA	NA		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							NA	NA	NA
MW-17C	D								12	NA	NA
MW-18C	D								12	12	12
MW-19C	D								9.6	9.6	9.8
MW-20C	D								8.8	9.4	9.2
MW-21C	D								9.1	9.4	9.2
MW-22C	B								NA	NA	NA
MW-23C	B								5.3	5.1	NA

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-18
Mercury Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		NA	NA
MW-2A	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-3A	B	0.2 U	0.072 U	0.072 U	0.022 U	0.03 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-4A	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-5A	B	0.2 U	0.099 I	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-6A	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7A	D	0.2 U	0.62	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-8A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.34 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-9A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-10A	D	0.2 U	0.072 U	0.072 U	0.087 I	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-11A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-12A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-13A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.02 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-14A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.06 I	0.14 U	0.14 U		NA	NA
MW-15A	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.14 U	0.14 U	0.08 U
MW-17A	D								0.14 U	0.14 U	0.08 U
MW-18A	D								0.14 U	0.14 U	0.08 U
MW-19A	D								0.21 I	0.14 U	0.08 U
MW-20A	D								0.14 U	0.14 U	0.08 U
MW-21A	D								0.14 U	0.14 U	0.08 U
MW-22A	B								0.14 U	0.14 U	0.08 U
MW-23A	B								0.14 U	0.14 U	0.08 U
MW-1B	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		NA	NA
MW-2B	B	0.57	0.072 U	0.072 U	0.022 U	0.03 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-3B	B	0.37	0.32	0.17 I	0.022 U	0.36 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-4B	B	0.2 U	0.072 U	0.076 I	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-5B	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-6B	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7B	D	0.2 U	0.47	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-8B	D	0.2 U	0.21	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-9B	D	0.2 U	0.077 I	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-10B	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-11B	D	0.2 U	0.18 I	0.076 I	0.022 U	0.08 I	0.14 U	0.14 U		0.14 U	0.08 U
MW-12B	D	0.36	0.21	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-13B	D	0.43	0.072 U	0.078 I	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-14B	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		NA	NA
MW-15B	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.14 U	0.14 U	0.08 U
MW-17B	D								0.14 U	0.14 U	0.08 U
MW-18B	D								0.14 U	0.14 U	0.08 U
MW-19B	D								0.15 I	0.14 U	0.11 I
MW-20B	D								0.23 I	0.14 U	0.08 U
MW-21B	D								0.33 I	0.14 U	0.08 U
MW-22B	B								0.64	0.14 U	0.11 I
MW-23B	B								0.14 U	0.14 U	0.08 U
MW-1C	B	0.2 U	0.072 U	0.072 U	0.022 U	0.33 I	0.14 U	0.14 U		NA	NA
MW-2C	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-3C	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-4C	B	0.2 U	0.076 I	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-5C	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-6C	B	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U	MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development	NA	NA
MW-7C	D	0.33	0.26	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-8C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-9C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-10C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-11C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-12C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-13C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		0.14 U	0.08 U
MW-14C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.01 U	0.14 U	0.14 U		NA	NA
MW-15C	D	0.2 U	0.072 U	0.072 U	0.022 U	0.37 I	0.14 U	0.14 U		NA	NA
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.14 U	0.14 U	0.08 U
MW-17C	D								0.14 U	0.14 U	0.08 U
MW-18C	D								0.14 U	0.14 U	0.08 U
MW-19C	D								0.14 U	0.14 U	0.08 U
MW-20C	D								0.14 U	0.14 U	0.08 U
MW-21C	D								0.14 U	0.14 U	0.08 U
MW-22C	B								0.14 U	0.14 U	0.08 U
MW-23C	B								0.14 U	0.14 U	0.08 U

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-19
Nitrate-N Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (mg/L)	1st Event Jul-04 (mg/L)	2nd Event Jan-05 (mg/L)	3rd Event Jul-05 (mg/L)	4th Event Feb-06 (mg/L)	5th Event Jul-06 (mg/L)	6th Event Feb-07 (mg/L)	PH 2&3 Baseline Sep-07 (mg/L)	7th Event Nov-07 (mg/L)	8th Event May-08 (mg/L)
MW-1A	B	0.1 U	0.05 U	0.015 I	0.05 U	0.004 U	0.051 U	0.023 U		NA	NA
MW-2A	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.160 I
MW-3A	B	0.1 U	0.05 U	0.013 I	3	0.051 U	0.051 U	0.023 U		0.064 U	0.160 I
MW-4A	B	0.1 U	0.05 U	0.011 I	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.160 I
MW-5A	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.170 I
MW-6A	B	0.1 U	0.05 U	0.014 I	0.05 U	0.051 U	0.051 U	0.023 U		NA	NA
MW-7A	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 UQ	0.170 I
MW-8A	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.003 U	0.064 U
MW-9A	D	0.1 U	0.05 U	0.019 I	0.05 U	0.051 U	0.051 U	0.023 U		0.003 U	0.160 I
MW-10A	D	0.1 U	0.11	0.01 U	0.11	0.051 U	0.18 I	0.023 U		0.003 U	0.160 I
MW-11A	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.160 I
MW-12A	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.12 I	0.023 U		0.064 U	0.160 I
MW-13A	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.160 I
MW-14A	D	0.1 U	0.07 I	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		NA	NA
MW-15A	D	0.1 U	0.05 U	0.01 U	0.05 U	0.01 I	0.051 U	0.023 U		NA	NA
MW-16A	D	MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007							0.011 I	0.290	0.064 U
MW-17A	D								0.003 I	0.064 U	0.064 U
MW-18A	D								0.064 U	0.064 U	0.170 I
MW-19A	D								0.064 U	0.064 U	0.190 I
MW-20A	D								0.064 U	0.064 U	0.160 I
MW-21A	D								0.064 U	0.120 I	0.210
MW-22A	B								0.064 U	0.064 U	0.064 U
MW-23A	B								0.007 I	0.064 U	0.160 I
MW-1B	B	0.1 U	0.05 U	0.01 U	0.05 U	0.004 U	0.051 U	0.023 U		NA	NA
MW-2B	B	0.1 U	0.05 U	0.015 I	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.170 I
MW-3B	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-4B	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-5B	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 UQ	0.064 U
MW-6B	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		NA	NA
MW-7B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 UQ	0.064 U
MW-8B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.003 U	0.170 I
MW-9B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.003 U	0.064 U
MW-10B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.003 U	0.064 U
MW-11B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-12B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-13B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-14B	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		NA	NA
MW-15B	D	0.1 U	0.05 U	0.014 I	0.05 U	0.004 U	0.051 U	0.023 U		NA	NA
MW-16B	D	MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007							0.051	0.003 U	0.180 I
MW-17B	D								0.064 U	0.003 U	0.170 I
MW-18B	D								0.064 U	0.064 U	0.064 U
MW-19B	D								0.064 U	0.064 U	0.170 I
MW-20B	D								0.064 U	0.064 U	0.180 I
MW-21B	D								0.064 U	0.064 U	0.180 I
MW-22B	B								0.064 U	0.064 U	0.180 I
MW-23B	B								0.008 I	0.064 U	0.064 U
MW-1C	B	0.1 U	0.05 U	0.094	0.05 U	0.004 U	0.051 U	0.023 U		NA	NA
MW-2C	B	0.1 U	0.05 U	0.021 I	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-3C	B	0.1 U	0.05 U	0.015 I	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-4C	B	0.1 U	0.05 U	0.019 I	0.05 U	0.051 U	0.051 U	0.023 U		0.064 UQ	0.064 U
MW-5C	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		NA	NA
MW-6C	B	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 UQ	0.064 U
MW-7C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.003 U	0.064 U
MW-8C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.23	0.023 U		0.003 U	0.170 I
MW-9C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.21	0.023 U		0.003 U	0.064 U
MW-10C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.18 I	0.023 U		0.064 U	0.064 U
MW-11C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-12C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		0.064 U	0.064 U
MW-13C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.051 U	0.051 U	0.023 U		NA	NA
MW-14C	D	0.1 U	0.05 U	0.012 I	0.05 U	0.004 I	0.051 U	0.023 U		NA	NA
MW-15C	D	0.1 U	0.05 U	0.01 U	0.05 U	0.004 U	0.051 U	0.023 U		0.003 U	0.064 U
MW-16C	D	MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007							0.064 U	0.064 U	0.064 U
MW-17C	D								0.064 U	0.064 U	0.170 I
MW-18C	D								0.064 U	0.064 U	0.180 I
MW-19C	D								0.064 U	0.064 U	0.180 I
MW-20C	D								0.064 U	0.064 U	0.180 I
MW-21C	D								0.064 U	0.064 U	0.180 I
MW-22C	B								0.016 I	0.064 U	0.064 U
MW-23C	B								0.32	0.064 U	0.180 I

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

Table B-20
Selenium Concentrations in Monitoring Wells
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J.E.D. Solid Waste Management Facility

Well ID	Type	PH 1 Baseline Jan-04 (µg/L)	1st Event Jul-04 (µg/L)	2nd Event Jan-05 (µg/L)	3rd Event Jul-05 (µg/L)	4th Event Feb-06 (µg/L)	5th Event Jul-06 (µg/L)	6th Event Feb-07 (µg/L)	PH 2&3 Baseline Sep-07 (µg/L)	7th Event Nov-07 (µg/L)	8th Event May-08 (µg/L)
MW-1A	B	10 U	4.8 U	4.8 U	2 U	1.4 I	0.79 U	0.79 U		NA	NA
MW-2A	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-3A	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.93 I
MW-4A	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-5A	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.8 I
MW-6A	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		NA	NA
MW-7A	D	10 U	23	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-8A	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-9A	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-10A	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-11A	D	10 U	4.8 U	4.8 U	7.7 I	1 U	0.91	1.10 I		1 U	1.3 I
MW-12A	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	2
MW-13A	D	10 U	4.8 U	4.8 U	3 I	1 U	0.79 U	0.79 U		1 U	0.71 I
MW-14A	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		NA	NA
MW-15A	D	10 U	4.8 U	4.8 U	2 U	1.1 I	0.79 U	0.79 U		NA	NA
MW-16A	D								0.85 I	0.8 U	0.7 U
MW-17A	D								0.88 I	0.8 U	0.7 U
MW-18A	D								0.79 U	0.8 U	0.7 U
MW-19A	D								12	0.8 U	4.7
MW-20A	D								0.79 U	2.4	0.82 I
MW-21A	D								0.79 U	0.8 U	0.7 U
MW-22A	B								0.79 U	0.8 U	0.7 U
MW-23A	B								1.1 I	0.8 U	0.7 U
MW-1B	B	10 U	4.8 U	4.8 U	2 U	2 I	0.79 U	0.79 U		NA	NA
MW-2B	B	10 U	4.8 U	4.8 U	2 U	2.6	1.2 I	0.79 U		0.8 U	0.7 U
MW-3B	B	10 U	12	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-4B	B	10 U	4.8 U	4.8 U	2.9 I	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-5B	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-6B	B	10 U	5.7 I	4.8 U	2 I	1 U	0.79 U	0.79 U		NA	NA
MW-7B	D	10 U	25	4.8 U	2.7 I	1 U	0.87 I	0.79 U		0.8 U	0.7 U
MW-8B	D	10 U	8.8 I	4.8 U	2.6 I	1 U	1.3 I	0.79 U		2.9 I	0.7 U
MW-9B	D	10 U	7.6 I	4.8 U	2.5 I	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-10B	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-11B	D	10 U	13	4.8 U	2 U	1 U	1.2	0.79 U		0.8 U	0.7 U
MW-12B	D	10 U	4.8 I	4.8 U	2.6 I	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-13B	D	10 U	6.8 I	4.8 U	2 I	1.6 I	2.8	0.79 U		0.8 U	0.7 U
MW-14B	D	10 U	4.8 U	4.8 U	2 I	1 U	0.79 U	0.79 U		NA	NA
MW-15B	D	10 U	4.8 U	4.8 U	2 U	2.3	0.79 U	0.79 U		NA	NA
MW-16B	D								1.2 I	2.8	4
MW-17B	D								2.4	1.1 I	0.81 I
MW-18B	D								0.79 I	0.8 U	0.7 U
MW-19B	D								1.5 I	0.8 U	1.1 I
MW-20B	D								5.6	2.2	2.2
MW-21B	D								8.6	3.1	1.7 I
MW-22B	B								24	0.8 U	1.4 I
MW-23B	B								0.79 U	0.8 U	0.7 U
MW-1C	B	10 U	4.8 U	4.8 U	2 U	2.3	0.79 U	0.79 U		NA	NA
MW-2C	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-3C	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-4C	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-5C	B	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-6C	B	10 U	4.8 U	4.8 U	3.9 I	1 U	0.79 U	0.79 U		NA	NA
MW-7C	D	10 U	14	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-8C	D	10 U	4.8 U	4.8 U	3.9 I	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-9C	D	10 U	4.8 U	4.8 U	3 I	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-10C	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		1.6 U	0.7 U
MW-11C	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-12C	D	10 U	4.8 U	4.8 U	3 I	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-13C	D	10 U	4.8 U	4.8 U	2 U	1 U	0.79 U	0.79 U		0.8 U	0.7 U
MW-14C	D	10 U	4.8 U	4.8 U	2.4 I	2.2	0.79 U	0.79 U		NA	NA
MW-15C	D	10 U	4.8 U	4.8 U	2 U	2.2	0.79 U	0.79 U		NA	NA
MW-16C	D								0.79 U	1.6 U	0.7 U
MW-17C	D								0.79 U	0.8 U	0.7 U
MW-18C	D								2.2	0.8 U	0.7 U
MW-19C	D								1.1 I	0.8 U	0.7 U
MW-20C	D								1.1 I	0.8 I	0.8 I
MW-21C	D								1.3 I	0.8 U	0.7 U
MW-22C	B								0.79 U	0.8 U	0.7 U
MW-23C	B								1.6 I	0.8 U	0.7 U

MW- 16A through MW-23A were constructed as part of the Phases 2 and 3 development in Sep 2007

MW- 16B through MW-23B were constructed as part of the Phases 2 and 3 development in Sep 2007

MW- 16C through MW-23C were constructed as part of the Phases 2 and 3 development in Sep 2007

MW-1A through MW-15A are monitoring wells constructed as part of the Phase 1 development

Notes:
µg/L=micrograms per liter
U = Not detected at value represented
I = Value is estimated to be between method detection limit and practical quantitation limit.
NA = Not Analyzed
Well type: (B) Background well (D) Detection well
Constituent detections are shown in shaded cells (green color)
Constituent detections exceeding the GWCTL are shown in shaded cells (tan color)
MW-14A, 14B, 14C and MW-15A, 15B, 15C were decommissioned on 10 July 2007
MW-1A, 1B, 1C and MW-6A, 6B, 6C were converted to piezometers starting from the 7th event.

APPENDIX C

GROUNDWATER CONTOUR MAPS FOR THE 1ST AND 8TH SEMI-ANNUAL WATER QUALITY EVENTS