Semiannual Groundwater Monitoring Report

1st Semester 2011

Titanium Metals Corporation Facility

Henderson, Nevada

Submitted to

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September 30, 2011

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SEMIANNUAL GROUNDWATER MONITORING REPORT
1st Semester 2011
Titanium Metals Corporation Facility
Henderson, Nevada

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ABBREVIATIONS AND ACRONYMS

µg/L	Microgram per liter
BMI	Black Mountain Industrial
Broadbent	Broadbent & Associates, Inc.
BRC	Basic Remediation Company
CAB	Cation-anion balance
DVSR	Data validation summary report
EC	Electrical conductivity
ECA	Environmental conditions assessment
ECI	Environmental conditions investigation
ECIA	Environmental conditions investigation addendum
LOU	Letter of understanding
MCL	Maximum contaminant level
MDC	Minimum detectable concentration
mg/L	Milligram per liter
MSSL	Medium-specific screening level
NDEP	State of Nevada, Division of Environmental Protection
Paragon	ALS-Paragon
pCi/L	PicoCurie per liter
Plant Site	TIMET Plant Site Area
QC	Quality control
SAP	Sampling & Analysis Plan
SL	Screening level
SQL	Sample quantitation limit
Tetra Tech	Tetra Tech EM Inc.
TIMET	Titanium Metals Corporation
TOC	Top of casing
TDS	Total Dissolved Solids
VOC	Volatile organic compound

1.0 INTRODUCTION

This Semiannual Groundwater Monitoring Report (hereafter referred to as the "Semiannual Report") was prepared on behalf of Titanium Metals Corporation (TIMET) for the facility located in Henderson, Nevada (see Figure 1-1). The Semiannual Report is being submitted to the State of Nevada, Division of Environmental Protection (NDEP), pursuant to the report requirements of the Groundwater Remedial Action Operation and Maintenance Monitoring Sampling and Analysis Plan (SAP), dated February 22, 2010 (TIMET 2010a) and comments regarding the SAP submitted by the NDEP on March 10, 2010 (NDEP 2010a). The program consists of four main data collection sequences as follows:

- On-going quarterly groundwater data collection for groundwater protection and landfill permit wells (CLD1-R, CLD4-R, J2U2, J2D4, TIMETMW-6R and CMT-101 in lieu of CLD3-R that was abandoned) only;
- Semiannual groundwater data collection for the TIMET Plant Site Area (Plant Site), (BRW-R1, J2D1-R2, J2D2-R2, J2D3-R, J2U1, TIMETMW-1, TIMETMW-2, TIMETMW-3R, TIMETMW-4, TIMETMW-5, M-129, M-130, and former piezometers TMPZ-105 through – TMPZ-110);
- Wells near the former southern site boundary along Lake Mead Parkway considered upgradient (TMMW-101 through TMMW-104);
- Wells located downgradient of the Plant Site (AA-01, AA-09, AA-11, AA-19, AA-20, AA-27, AA-UW1, DBMW-1, DBMW-3, DBMW-4, DBMW-5, PC-24, PC-28, PC-54, PC-67, PC-124, POD2-R, and POU-3) as per the recent SAP (TIMET 2010a) and NDEP guidance (NDEP 2010a).

Data obtained from the quarterly groundwater protection and landfill permit wells are presented in TIMET's quarterly Discharge Monitoring Report to the NDEP and will not be specifically addressed here as they pertain to permit compliance. However the analytical results obtained from these events have been added to the TIMET analytical database and were validated and included in the annual groundwater data validation summary report (DVSR) as Appendix A.

This Semiannual Report summarizes groundwater data collected during the 1st Semester of 2011 at the TIMET facility in Henderson, Nevada (see Figure 1-1). The 1st Semester 2011 sampling event was conducted from April 4 through April 28, 2011. The well locations sampled are shown in Figure 1-2. Water levels and analytical results are summarized, mapped, tabulated, and graphed in this report (trend charts).

Previous analytical results for groundwater samples collected from the TIMET facility are presented in the following reports:

"Final Environmental Conditions Investigation Report" (Tetra Tech 1998a)

"Environmental Conditions Investigation Addendum, Draft Report" (Tetra Tech 1999)

"Quarterly Groundwater Monitoring Report – Semiannual Format, March 2000 to December 2003" (Tetra Tech 2004a)

Quarterly and semiannual reports submitted on a quarterly or semiannual basis from 1st Quarter 2004 through 1st Semester 2010 (Tetra Tech 2004b, 2004d, 2004e, 2005b, 2005c, 2005d, 2005e, 2006a, 2006b, 2006c, 2006d, 2007a, 2007b, 2007c, TIMET 2008a, 2008b, 2009, 2010b, 2010c, 2011)

"Revised Environmental Conditions Investigation Addendum Report" (Tetra Tech 2005a)

This Semiannual Report adds to the data presented in the previous reports listed above. Section 1.1 summarizes the project history, Section 1.2 describes the purpose and scope of the groundwater monitoring program, and Section 1.3 summarizes the report organization.

1.1 PROJECT HISTORY

In 1991, NDEP entered into a Consent Agreement with six of the companies, including TIMET, which had facilities at the BMI Complex. Three phases of corrective action were identified in the Consent Agreement:

- Phase I – Develop environmental conditions assessment (ECA) reports for each "Individual Company Site" and "BMI Common Areas";
- Phase II – Perform an environmental conditions investigation (ECI) to fill data gaps identified during Phase I, if determined necessary by NDEP;
- Phase III – Identify and implement appropriate remedial measures to address conditions identified during Phases I and II, if determined necessary by NDEP.

TIMET's Phase I ECA is presented in the "Phase I Environmental Conditions Assessment Report, Titanium Metals Corporation, Henderson, Nevada" published by Law Engineering (1993).

Based on the information in the Phase I ECA report and subsequent discussions with TIMET, NDEP issued a letter of understanding (LOU) dated August 16, 1994, that identified 54 study items requiring additional information or further investigation (NDEP 1994). On June 7, 1996, TIMET submitted a letter to NDEP that provided complete responses to some action items in the LOU and that identified other

action items requiring additional investigation (Hydro-Search 1996). In June 1996, NDEP entered into a Consent Agreement with TIMET to perform an ECI, remedial alternative studies, interim remedial measures, or additional work.

The action items identified in the LOU response were addressed during the Phase II ECI in accordance with the June 1996 Consent Agreement. Results of the Phase II ECI are discussed in the final ECI report (Tetra Tech 1998a) and the revised ECI addendum (ECIA) report (Tetra Tech 2005a). On December 1, 2003, NDEP sent a letter to TIMET providing NDEP's comments on the ECIA report (NDEP 2003a). On December 11, 2003, NDEP sent a letter to TIMET providing recommendations for accelerated work to abate, mitigate, and eliminate environmental contaminants at the TIMET facility (NDEP 2003b). This Semiannual Report is submitted in partial fulfillment of TIMET's response to NDEP's recommendation for accelerated groundwater work (TIMET 2004) and is in accordance with TIMET's current Generic SAP and the latest groundwater monitoring SAP (TIMET 2007 and TIMET 2010a) and NDEP's comments on the 2010 SAP (NDEP 2010a).

1.2 PURPOSE AND SCOPE

This semiannual groundwater monitoring was conducted as part of the expanded groundwater investigation under the Phase II ECI, as described in Appendix A of the ECIA report (Tetra Tech 1999) and according to the groundwater monitoring SAP (TIMET 2010a, NDEP 2010a). The purpose of the groundwater investigation is to (1) characterize the distribution of inorganic, organic, and radionuclide analytes in groundwater; (2) characterize the hydraulic properties of the aquifer; and (3) evaluate relationships between groundwater chemistry, hydrogeology, and potential sources. The following activities were performed during this groundwater monitoring event.

- Gauged depth to groundwater in wells relative to the top of casing (TOC) of the wells.
- Collected groundwater samples for field and chemical analyses using micro-purge sampling technology.
- Evaluated basic groundwater hydrology and water quality data.
- Analyzed groundwater data for trends, and compared data with NDEP Basic Comparison Levels (BCLs) (NDEP 2010b) or the maximum contaminant levels (MCL) (U.S. Environmental Protection Agency 2003). BCL and MCLs are used herein for preliminary screening only and do not imply a comprehensive evaluation of health effects.

During this semiannual event, data collection was conducted at well locations shown on Figure 1-2. Well locations J2U1, AA-15, AA-19, and POD2-R did not produce sufficient water to collect samples for chemical analysis during this event. Well locations CLD2-R and CLD3-R were properly abandoned on February 2, 2010, due to their location within the slurry wall alignment and CMT-101 was sampled to address this potential data gap. Table 2-1 lists wells and the sampling design implemented for this monitoring event to address specific analyte data needs in accordance with the SAP and subsequent NDEP comments (TIMET 2010a, NDEP 2010a).

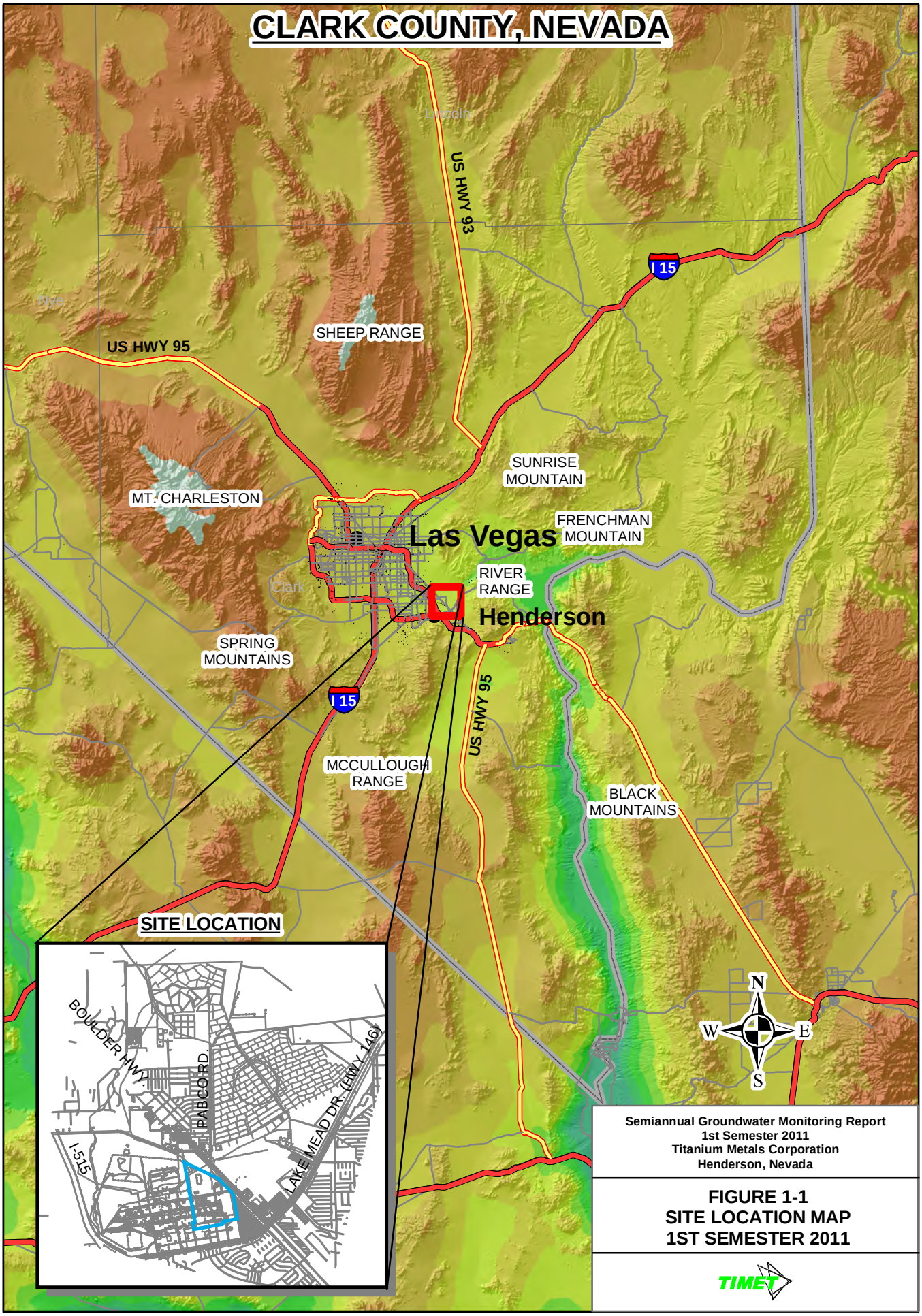
1.3 REPORT ORGANIZATION

The remainder of this report is organized into the following three sections:

- Section 2.0, Groundwater Monitoring Program – Describes each component of the groundwater monitoring program, including field analytical methods used.
- Section 3.0, Groundwater Monitoring Data – Summarizes groundwater conditions and results of groundwater monitoring for the Plant Site.
- Section 4.0, References – Lists the references cited in this report.

Figures and tables follow their respective sections. Appendix A of this report contains the data validation summary report for data collected during this event. Appendix B contains hydrographs of the well locations as shown on Figure 1-2 and as defined by the recent SAP (TIMET 2010a, NDEP 2010a). Appendix C contains concentration trend graphs for selected analytes. Appendix D contains isoconcentration maps for selected analytes. Appendix E contains regional mapping from combined sampling events in 2009 for select analytes.

FIGURES



Semiannual Groundwater Monitoring Report
1st Semester 2011
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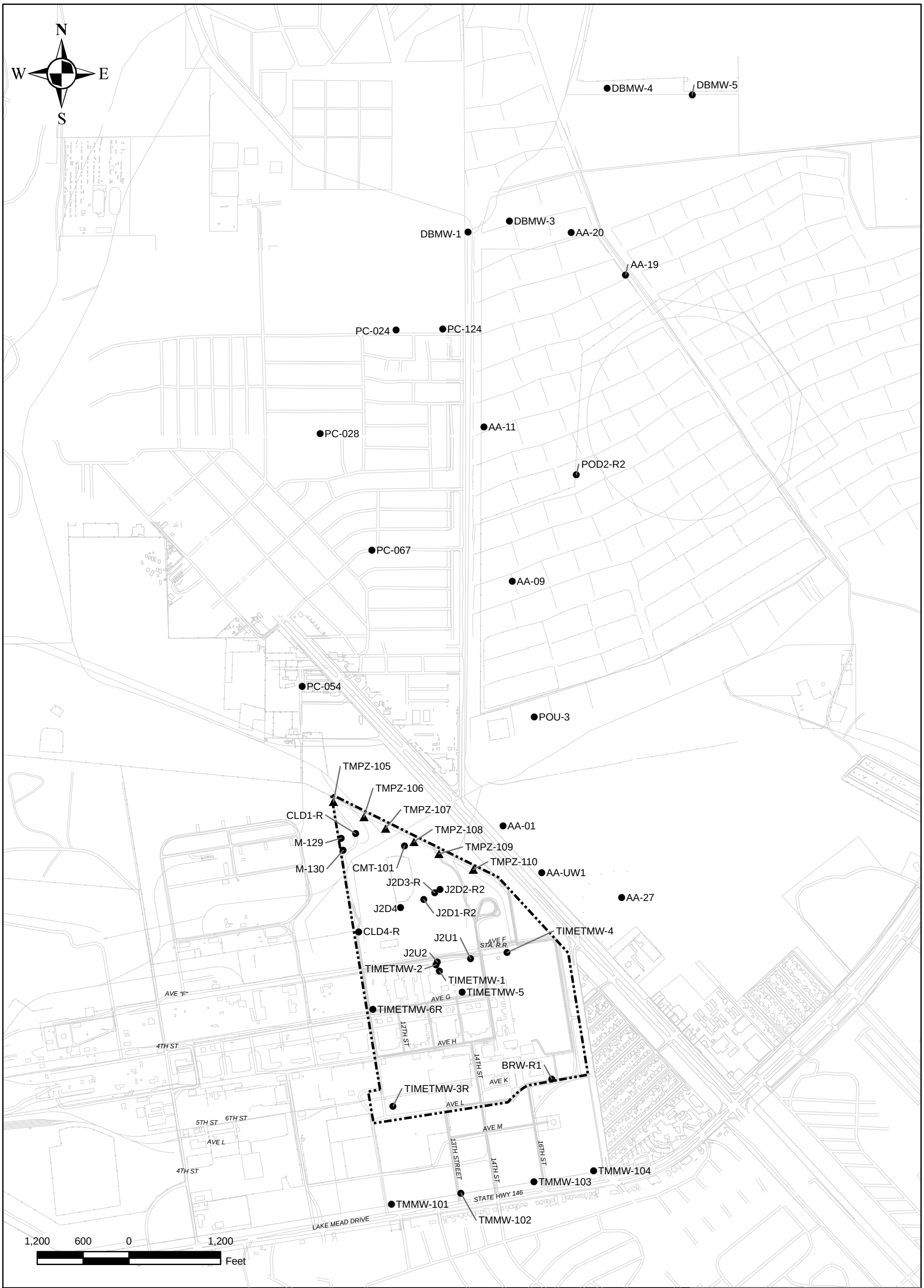
FIGURE 1-1
SITE LOCATION MAP
1ST SEMESTER 2011

TIMET

2011-02-27 C:\TIMET\2ndSEM2010\mxd\location_map.mxd michelle.handley



BRW-R1 ● MONITORING WELL LOCATION

TMPZ-105▲ PIEZOMETER

Semiannual Groundwater Monitoring Report
1st Semester 2011
Titanium Metals Corporation
Henderson, Nevada

FIGURE 1-2
MONITORING WELL LOCATION MAP

TIMET

2011-08-27 C:\TIMET\1stSEM2011\mxd\TIMET_siteMW_S12011.mxd michelle.handley

2.0 GROUNDWATER MONITORING PROGRAM

Historical groundwater sampling procedures are specified in (1) the ECI workplan, Appendix A, Standard Operating Procedure for Soil, Groundwater, Pond Water, and Sediment Sampling, and (2) the Data Quality Assurance Project Plan (Tetra Tech 1998b). Sampling procedures were modified to incorporate the micro-purge sampling protocol for groundwater, with the approval of the NDEP, on August 13, 2004; accordingly, the micro-purge regimen was initiated during the 1st quarter 2005 sampling event (Tetra Tech 2004c) and has been continued thereafter. Current groundwater sampling procedures are specified in the Generic Site-Wide SAP and the Groundwater Remedial Action Operation and Maintenance Monitoring SAP (TIMET 2007 and TIMET 2010a).

Table 2-1 lists the wells included under the groundwater monitoring program, the required analyses, and pertinent notes. Note that Table 2-1 includes the Plant Site wells, Lake Mead Parkway wells (TMMW-101 through TMMW-104), and piezometer locations (TMPZ-105 through TMPZ-110) as well as the offsite wells located downgradient of the Plant Site (AA-01, AA-09, AA-11, AA-15, AA-19, AA-20, AA-27, AA-UW1, DBMW-1, DBMW-3, DBMW-4, DBMW-5, PC-24, PC-28, PC-54, PC-67, PC-124, POD2-R and POU-3). Table 2-2 provides details concerning well construction.

The following sections briefly describe the procedures followed by TIMET personnel when performing groundwater monitoring field activities.

- Section 2.1, Well Measurements
- Section 2.2, Sample Collection
- Section 2.3, Decontamination Procedures
- Section 2.4, Management of Investigation-Derived Waste
- Section 2.5, Analytical Program

2.1 WELL MEASUREMENTS

Before monitoring wells are sampled, depth to groundwater and total well depth relative to TOC are gauged in each well. Water levels and total depth of each well are measured to the nearest 0.01 foot using an electronic water level meter. The water level probe and cable are decontaminated before use at each well.

2.2 SAMPLE COLLECTION

TIMET personnel performed groundwater sampling activities using TIMET-owned equipment. ALS-Paragon (Paragon) of Fort Collins, Colorado supplied TIMET with "certified clean" sample bottles, with chemical preservatives added as applicable; coolers; and the associated chain-of-custody forms.

Wells under the groundwater monitoring program are purged using QED® SamplePro (portable) or QED® Well Wizard (dedicated) bladder pumps. Dedicated pumps have been installed in wells CLD4-R, J2D1-R2, J2D2-R2, J2D4, MW-6R, TMMW-104, BRW-R1, TIMETMW-4, TIMETMW-5, and J2U2. The dedicated pumps are set approximately in the middle of the submerged screen within each well. Wells were purged at low enough flow rates such that drawdown did not exceed 0.3 foot using a QED® MP10 advanced digital controller. Field parameters, including pH, conductivity, temperature, dissolved oxygen, and turbidity were measured at 3-minute intervals and recorded on a groundwater sampling form.

Purging was considered complete after a minimum of three consecutive measurements of field parameters met stabilization criteria that were established to ensure representative formation water was sampled. Stabilization criteria included ± 0.1 pH unit, ± 3 percent for specific conductivity, and ± 10 percent for turbidity and dissolved oxygen. The only internal portion of the pump exposed to groundwater during sampling is the bladder, which is replaced between each well. The discharge tubing for each well is dedicated. Groundwater samples were collected by first filling the pre-preserved vials for analysis of volatile organic compounds (VOC) and radon-222, followed by filling the rest of the sample bottles. Table 5 of the TIMET Generic Site-Wide Sampling and Analysis Plan provides the types and volumes of sampling containers required for each analysis (TIMET 2007).

A sample identification number was recorded on the label attached to each sample container and the chain-of-custody form. Filled sample containers were properly packaged and placed in a cooler containing a temperature blank and bagged ice, when required. Quality control (QC) samples, including field duplicates and trip blanks (when applicable), were also packed with samples in the cooler.

Field personnel were responsible for properly preserving, packaging, labeling, documenting, storing, handling, and shipping samples obtained during the sampling event. Field QC samples were collected to determine if sampling practices affected sample integrity and subsequently the quality of analytical results. Field QC samples collected during each sampling event consist of field duplicates, which are samples collected from the same well immediately after the initial sampling. In addition to QC samples collected in the field, a trip blank (laboratory-prepared vial) was stored and transported with sample

coolers that contained samples for VOC analysis. Groundwater samples were shipped to Paragon in Fort Collins, Colorado, using sample coolers provided by the laboratory.

2.3 DECONTAMINATION PROCEDURES

Non-dedicated purging pumps, sampling equipment, and monitoring instrumentation (such as water level meters) were decontaminated before and after use at each well. The portable pump was decontaminated by replacing the bladder, which is the only internal component exposed to groundwater. The external housing of the pump was submerged in a non-phosphate detergent and tap water solution. The pump was then submerged in rinse water. Water level probes were decontaminated by washing the probes with non-phosphate detergent and tap water, and then rinsing the probes with tap water.

2.4 MANAGEMENT OF INVESTIGATION-DERIVED WASTE

Purge water was collected in designated 55-gallon drums and stored on-site. Miscellaneous waste, such as personal protective equipment, disposable sampling equipment, polyethylene sheeting, and general trash, were disposed of as municipal solid waste.

2.5 ANALYTICAL PROGRAM

Table 5 of the TIMET Generic Site-Wide Sampling and Analysis Plan (TIMET 2007) lists the analytical parameters, analytical methods, containers, preservatives, and maximum holding times for groundwater samples collected as part of the groundwater monitoring program (TIMET 2010a, NDEP 2010a). Samples were collected from the monitoring well locations shown on Figure 1-2 and analyzed for the constituents specified in Table 2-1.

Paragon performed sample analysis for this event. In order to ensure the highest quality review, full data packages (both hardcopy and electronic formats) were received from Paragon. Level 2B validation was conducted on all sample results; with a minimum of 10 percent reviewed at Level 4 (based on the most recent data validation guidance from NDEP). Groundwater data collected is summarized and reported in the DVSR included as Appendix A.

Paragon prepared a Client Analysis Summary that was e-mailed to TIMET for review. The summary was checked against the sampling plan (see Table 2-1) for completeness and accuracy in logging tests and sample identification numbers.

Upon completion of analyses, Paragon conducted an internal QC review of test results before releasing data to the client. As part of the QC review, and as required by the NDEP, three comparison tests were conducted to verify the correctness of analyses using Standard Method 1030E (American Public Health Association 2005). Cation-anion balance (CAB), measured total dissolved solids (TDS) versus calculated TDS, and TDS versus electrical conductivity (EC) were evaluated based on recent NDEP guidance (NDEP 2009). Findings are discussed in Section 3.2.

Data deliverables from Paragon include hardcopy reports, electronic format of hardcopy reports (in portable document format), and electronic data deliverables (EDD). The EDDs for this sampling event were directly loaded into the TIMET analytical database, a Microsoft® Access database. The Access database, updated with this semester's data, is included in electronic form in the DVSR, which is included in Appendix A to this report.

TABLES

TABLE 2-1
CURRENT GROUNDWATER MONITORING PLAN
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1st SEMESTER 2011

Monitoring Well ID	Date Sample Collected	Depth to Water	ANALYTICAL																
			General					Metals						Radionuclides			VOCs		
			Anions					ICP				ICP/MS							
			NO3	Cl	ClO4	Other Anions	TDS	Cr	Mg	V	Other TAL metals	Uranium	Hex Cr	Gross Alpha Gross Beta	Major Radionuclides	Radon-222	PCE	Chloroform	8260
PLANT SITE WELLS																			
BRW-R1	04/07/11	46.89	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
CLD1-R	04/21/11	31.49	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
CLD2-R	WELL ABANDONED																		
CLD3-R	WELL ABANDONED																		
CLD4-R	04/12/11	38.17	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
J2D1-R2	04/20/11	41.78	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
J2D2-R2	04/19/11	43.78	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
J2D3-R	04/28/11	41.09	X	X	X	X	X	X	X	X	X	X	X			X			X
J2D4	04/21/11	38.77	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
J2U1	04/04/11	51.75	Not enough water column to collect sample																
J2U2	04/25/11	46.54	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TIMETMW-1	04/25/11	46.73																	X
TIMETMW-2	04/04/11	47.91																	
TIMETMW-3R	04/07/11	52.94	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TIMETMW-4	04/11/11	52.07	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TIMETMW-5	04/11/11	51.21	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TIMETMW-6R	04/12/11	44.45	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
M-129	04/19/11	30.36	X	X	X	X	X					X	X						X
M-130	04/19/11	29.49	X	X	X	X	X					X	X						X
CMT-101	04/27/11	34.43	X	X	X	X	X	X	X	X	X	X	X						X
TMPZ-105	04/13/11	33.70	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TMPZ-106	04/14/11	31.40	X	X	X	X	X					X	X						X
TMPZ-107	04/13/11	32.67	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TMPZ-108	04/14/11	34.81	X	X	X	X	X					X	X						X
TMPZ-109	04/25/11	37.73	X	X	X	X	X					X	X						X
TMPZ-110	04/21/11	40.85	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X

TABLE 2-1
CURRENT GROUNDWATER MONITORING PLAN
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1st SEMESTER 2011

Monitoring Well ID	Date Sample Collected	Depth to Water	ANALYTICAL																
			General					Metals						Radionuclides			VOCs		
			Anions					ICP				ICP/MS							
			NO3	Cl	ClO4	Other Anions	TDS	Cr	Mg	V	Other TAL metals	Uranium	Hex Cr	Gross Alpha Gross Beta	Major Radionuclides	Radon-222	PCE	Chloroform	8260
OFF-SITE		**WELLS LOCATED UPGRADIENT OF PLANT SITE**																	
TMMW-101	04/06/11	68.39	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
TMMW-102	04/04/11	64.77																	
TMMW-103	04/04/11	68.42																	
TMMW-104	04/06/11	72.21	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
OFF-SITE		**WELLS LOCATED DOWNGRADIENT OF PLANT SITE**																	
AA-01	04/05/11	47.93	X	X	X	X	X	X	X	X	X	X							X
AA-09	04/14/11	38.52	X	X	X	X	X	X	X	X	X	X							X
AA-11	04/12/11	30.74	X	X	X	X	X	X	X	X	X	X							X
AA-15	04/14/11	42.48	Not enough water column to collect sample																
AA-19	04/14/11	DRY	Well Dry																
AA-20	04/12/11	31.67	X	X	X	X	X	X	X	X	X	X							X
AA-27	04/04/11	67.19	X	X	X	X	X	X	X	X	X	X							X
AA-UW1	04/05/11	52.22	X	X	X	X	X	X	X	X	X	X							X
DBMW-1	04/11/11	34.35	X	X	X	X	X	X	X	X	X	X							X
DBMW-3	04/11/11	33.76	X	X	X	X	X	X	X	X	X	X							X
DBMW-4	04/07/11	26.42	X	X	X	X	X	X	X	X	X	X							X
DBMW-5	04/07/11	28.33	X	X	X	X	X	X	X	X	X	X							X
PC-21	04/14/11	Missing	Unable to locate well - Likely buried or destroyed																
PC-24	04/06/11	20.60	X	X	X	X	X	X	X	X	X	X							X
PC-28	04/13/11	11.72	X	X	X	X	X	X	X	X	X	X							X
PC-54	04/18/11	19.21	X	X	X	X	X	X	X	X	X	X							X
PC-67	04/13/11	12.40	X	X	X	X	X	X	X	X	X	X							X
PC-124	04/06/11	24.91	X	X	X	X	X	X	X	X	X	X							X
POD2-R	04/14/11	63.90	Not enough water column to collect sample																
POU-3	04/18/11	39.53	X	X	X	X	X	X	X	X	X	X							X

Notes:

Cl	Chloride	Hex Cr	Hexavalent chromium	Mg	Magnesium
ClO4	Perchlorate	ICP	Inductively coupled plasma	NO3	Nitrate
Cr	Chromiun	ICP/MS	Inductively coupled plasma/mass spectrometry	SC	Specific Conductivity
DO	Dissolved Oxygen	ID	Identification number		

TABLE 2-2
MONITORING WELL CONSTRUCTION DETAILS
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1st SEMESTER 2011

Monitoring Well Identification No.	Status	Aquifer	Replaces[1]	Screened Formation	Date Drilled	Geologic Log & Well Construction Details Available	UTM Y Zone North-South Coordinates in Meters[2]	UTM Y Zone East-West Coordinates in Meters[2]	Ground Elevation[3]	Casing Elevation[4]	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Bottom Screen Elevation	Depth to Water (ft)	GW Elevation
BRW-R1	Active	Shallow	BRW	Qal/xMCf	3/24/1999	Yes	26716928.10	831558.841	1,844	1843.88	40	60	1,784	46.89	1796.99
CLD1-R [5]	Active	Shallow	CLD1	Qal	8/23/1983	No[5]	26720138.24	828993.721	1,743	1745.42	16	29	1,714	29.65	1715.77
CLD2-R [5]	P&A	Shallow	CLD2	Qal	8/23/1983	No[5]	26719965.90	828920.852	1,752	1,753.14	10.5	30.5	1,721	---	---
CLD3-R [5]	P&A	Shallow	CLD3	Qal	8/23/1983	No[5]	26720010.74	829651.410	1,750	1,752.24	20	39	1,711	---	---
CLD4-R [5]	Active	Shallow	CLD4	Qal	8/23/1983	No[5]	26718854.29	829034.278	1,782	1782.07	27	47	1734.5	38.17	1743.90
J2D1-R2	Active	Shallow	J2D1-R	Qal	8/19/1997	Yes	26719274.00	829885.777	1,771	1770.68	18	38	1732.7	41.78	1728.90
J2D2-R2	Active	Shallow	J2D2-R	Qal/xMCf	8/19/1997	Yes	26719406.73	830098.482	1,770	1769.55	19	44	1725.7	43.78	1725.77
J2D3-R	Active	Shallow	J2D3	Qal	8/23/1983	Yes	26719408.27	830353.035	1,770	1,769.90	15	39	1730.9	41.09	1728.81
J2D4	Active	Shallow	--	Qal/xMCf	12/17/1997	Yes	26719171.05	829582.566	1,771	1774.66	15	45	1726.3	38.77	1735.89
J2U1	Active	Shallow	--	Qal	4/13/1983	Yes	26718499.09	830498.140	1,799	1,800.98	42	47	1751.8	51.75	1749.23
J2U2	Active	Shallow	--	Qal/xMCf	8/6/1997	Yes	26718456.02	830063.167	1,799	1798.54	33.5	68.5	1730	46.54	1752.00
TIMETMW-1	Active	Shallow	--	Qal	8/27/1997	Yes	26718339.19	830090.2314	1801.7	1801.69	30	60	1741.7	46.77	1754.92
TIMETMW-2	Active	Shallow	--	Qal	8/27/1997	Yes	26718418.59	830045.4513	1799.6	1,800.00	32	57	1742.6	47.91	1752.09
TIMETMW-3R [6]	Active	Shallow	MW-3	Qal/xMCf	8/22/2008	Yes	26716571.73	829483.251	1,841	1,840.39	41	66	1774.6	52.94	1787.45
TIMETMW-4	Active	Shallow	--	Qal/xMCf	3/25/1999	Yes	26718582.87	830973.924	1,798	1,800.61	38	58	1740.1	52.07	1748.54
TIMETMW-5	Active	Shallow	--	Qal/xMCf	3/30/1999	Yes	26718063.61	830385.808	1,813	1,812.48	40	60	1752.8	51.21	1761.27
TIMETMW-6R	Active	Shallow	MW-6	Qal/xMCf	8/18/1999	Yes	26717834.12	829221.075	1,813	1,812.36	39.7	59.7	1753.3	44.45	1767.91
TMMW-101	Active	Shallow	--	Qal	12/13/2005	Yes	26715285.26	829462.76	1,881	1,881.11	---	---	---	---	---
TMMW-101 [7]	Active	Shallow	--	Qal	12/13/2005	Yes	26715285.26	829462.76	1,876	1,876.91	65	95	1,786	68.39	1808.52
TMMW-102	Active	Shallow	--	Qal/xMCf	12/12/2005	Yes	26715433.08	830371.175	1,882	1,882.34	---	---	---	---	---
TMMW-102 [7]	Active	Shallow	--	Qal/xMCf	12/12/2005	Yes	26715433.08	830371.175	1,880	1,882.46	47	87	1,795	64.77	1817.69
TMMW-103	Active	Shallow	--	xMCf	12/11/2005	Yes	26715583.05	831325.82	1,884	1,884.95	---	---	---	---	---
TMMW-103 [7]	Active	Shallow	--	xMCf	12/11/2005	Yes	26715583.05	831325.82	1,880	1,882.95	57	87	1,797	68.42	1814.53
TMMW-104	Active	Shallow	--	xMCf	12/10/2005	Yes	26715722.71	832104.881	1,885	1,885.51	---	---	---	---	---
TMMW-104 [7]	Active	Shallow	--	xMCf	12/10/2005	Yes	26715722.71	832104.881	1,884	1,885.78	57	87	1,798	72.21	1813.57
M-129	Active	Shallow	--			Yes	26720079.64	828806.43		1,747.26				30.36	1716.90
M-130	Active	Shallow	--			Yes	26719919.7	828832.01		1,749.23				29.49	1719.74
CMT-101	Active	Shallow	CLD3-R	xMCf	12/13/2007	Yes	26719980.31	829635.1691	1,749	1,751.42	48	48.5	1,703	34.43	1716.99
AA-01	Active	Shallow	--	Qal	2/25/2004	Yes	26720238.47	830921.121	1,755	1,757.13	29	49	1,708	47.93	1709.20
AA-09	Active	Shallow	--	Qal	6/9/2004	Yes	26723441.4	831041.587	1,694	1,696.23	30	65	1,631	38.52	1657.71
AA-11	Active	Shallow	--	Qal	4/1/2004	Yes	26725458.78	830672.661	1,658	1,660.05	9	29	1,631	30.74	1629.31
AA-19	Active	Shallow	--	Qal	7/10/2004	Yes	26727447.1	832521.435	1,640	1,642.32	22	42	1,600	DRY	
AA-20	Active	Shallow	--	Qal	7/11/2004	Yes	26728007.71	831811.844	1,626	1,628.49	10	30	1,598	31.67	1596.82

TABLE 2-2
MONITORING WELL CONSTRUCTION DETAILS
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1st SEMESTER 2011

Monitoring Well Identification No.	Status	Aquifer	Replaces[1]	Screened Formation	Date Drilled	Geologic Log & Well Construction Details Available	UTM Y Zone North-South Coordinates in Meters[2]	UTM Y Zone East-West Coordinates in Meters[2]	Ground Elevation[3]	Casing Elevation[4]	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Bottom Screen Elevation	Depth to Water (ft)	GW Elevation
AA-27	Active	Shallow	--	Qal	7/7/2004	Yes	26719301.66	832471.341	1,787	1,789.38	61.5	81.5	1,708	67.19	1722.19
AA-UA1	Active	Shallow	--	Qal	7/30/2007	Yes	26719624.99	831427.2049	1,772	1,774.63	55	65	1,710	52.22	1722.41
DBMW-1	Active	Shallow	--	Qal	6/19/2007	Yes	26728009.64	830462.8978	1,623	1,626.46	19	49	1,578	34.35	1592.11
DBMW-3	Active	Shallow	--	Qal	6/20/2007	Yes	26728157	831004.7895	1,611	1,625.86	19	39	1,587	33.76	1592.10
DBMW-4	Active	Shallow	--	Qal	7/23/2007	Yes	26729895.86	832282.9325	1,614	1,605.81	10	30	1,576	26.42	1579.39
DBMW-5	Active	Shallow	--	Qal	7/22/2007	Yes	26729807.16	833395.0435	1,599	1,609.65	15	35	1,575	28.33	1581.32
PC-24	Active	Shallow	--	Qal	4/1/1998	Yes	26726729.82	829524.184	1,634	1,633.48	15	30	1,604	20.6	1612.88
PC-28	Active	Shallow	--	Qal	4/1/1998	Yes	26725375.67	828530.649	1,651	1,650.85	10	19.5	1,631	11.72	1639.13
PC-54	Active	Shallow	--	Qal	5/1/1998	Yes	26722067.79	828296.339	1,704	1,704.43	9.5	34.5	1,670	19.21	1685.22
PC-67	Active	Shallow	--	Qal	5/1/1998	Yes	26723846.88	829207.58	1,674	1,673.82	11	35.6	1,638	12.4	1661.42
PC-124	Active	Shallow	--	Qal/xMCf/UMCf	3/1/2004	Yes	26726741.58	830132.953	1,636	1,635.73	20.3	35.3	1,600	24.91	1610.82
POD2-R	Active	Shallow	--	Qal	4/27/1982	Yes	26724825.4	831955.5	1,674	1,673.40	60	45	1,628	63.9	1609.50
POU-3	Active	Shallow	--	Qal	4/1/1999	Yes	26721664.71	831329.9801	1,728	1,730.00				39.53	1690.47
TMPZ-105	Active	Shallow	--	Qal/xMCf	12/6/2005	Yes	26720557.27	828703.771	1,736	1,736.68	19	39	1,697	33.7	1702.98
TMPZ-106	Active	Shallow	--	Qal	12/7/2005	Yes	26720359.15	829102.418	1,742	1,742.25	19	39	1,703	31.4	1710.85
TMPZ-107	Active	Shallow	--	Qal/xMCf	12/7/2005	Yes	26720209.59	829386.703	1,745	1,745.60	19	39	1,706	32.67	1712.93
TMPZ-108	Active	Shallow	--	Qal/xMCf	12/8/2005	Yes	26720032.09	829756.757	1,750	1,750.46	26	46	1,704	34.81	1715.65
TMPZ-109	Active	Shallow	--	Qal/xMCf	12/8/2005	Yes	26719874.25	830082.661	1,756	1,756.59	26	46	1,710	37.61	1718.98
TMPZ-110	Active	Shallow	--	Qal/xMCf	12/8/2005	Yes	26719668.76	830531.856	1,763	1,764.00	25	45	1718	40.64	1723.36
TMPZ-111	Active	Shallow	--	Qal	12/9/2005	Yes	26719015.17	831186.734	1,783	1,783.93	37	57	1,726	44.88	1739.05
TMPZ-112	Active	Shallow	--	Qal	12/10/2005	Yes	26718652.39	831559.744	1,795	1,795.94	37	57	1738	48.64	1747.30

Notes:

--	Not applicable
BAI	Broadbent & Associates, Inc.
P&A	Plugged and abandoned
JHK	J.H. Kleinfelder and Associates
NA	Not available
QAL	Quaternary alluvium
Tetra Tech	Tetra Tech EM Inc.
TMC	Tertiary-age Muddy Creek Formation
UTM	Universal Transverse Mercator
WT	Water Table
1	Replacement wells are collocated with P&A wells because of inadequate construction specifications, inadequate depth, improper screen intervals, or damage.
2	UTM Zones in meters relative to North American Datum 27 from the DRI database (DRI 2004).
3	Ground elevations estimated from surveyed top-of-casing elevations and tape-measured stickup.
4	Casing elevations surveyed to North American Vertical Datum (NAVD) 1988 reported in feet above mean sea level; surveyed by licensed surveyor.
5	Geologic log available for collocated (or replaced) P&A well.
6	Replaced well location MW-3; geologic log provided as Figure
7	Top of casing elevations of wells TMMW-101, TMMW-102, TMMW-103, and TMMW-104 were changed and resurveyed in 2008

3.0 GROUNDWATER MONITORING DATA

This section summarizes the groundwater conditions (see Section 3.1) and analytical results (see Section 3.2). Figure 1-2 shows the location of each monitoring well located on and off the Plant Site sampled during this event. Table 2-1 summarizes the analytical suite conducted for each of the sampled wells.

Wells BRW-R1 and the MW-3 replacement (TIMETMW-3R) are generally considered upgradient of the current plant operations, and wells CLD1-R, and CMT-101 are considered downgradient of current plant operations. The six "J2" series wells (J2D1-R2, J2D2-R2, J2D3-R, J2D4, J2U1, and J2U2) serve as compliance monitoring points for the J2 Landfill, and may be upgradient of some potential sources and downgradient of others. Additionally, five wells (CLD1-R, CLD4-R, J2U2, J2D4, and TIMETMW-6R) serve as compliance points for the groundwater protection permit for ponds HP-1 and HP-6 (CLD2-R and CLD3-R were abandoned during the last reporting period and CMT-101 was sampled as a replacement). Four wells (TMMW-101, TMMW-102, TMMW-103, and TMMW-104) are positioned upgradient of the current plant operations along Lake Mead Parkway, however only TMMW-101 and TMMW-104 were scheduled for analysis this semester. Water level measurements and samples for selected analytes were obtained from six piezometers (TMPZ-105, TMPZ-106, TMPZ-107, TMPZ-108, TMPZ-109 and TMPZ-110) positioned just inside the northern fence line (downgradient). Monitoring wells M-129 and M-130, installed by Tronox, were monitored and sampled for select analytes as sentinel wells for the western flank of groundwater plumes emanating from the Tronox facility. In accordance with recent guidance from NDEP and the Groundwater Remedial Action Operation and Maintenance Monitoring Sampling and Analysis Plan (NDEP 2010a, TIMET 2010a), data were obtained from nineteen additional offsite wells (AA-01, AA-09, AA-11, AA-15, AA-19, AA-20, AA-27, AA-UW1, DBMW-1, DBMW-3, DBMW-4, DBMW-5, PC-24, PC-28, PC-54, PC-67, PC-124, POD2-R and POU-3) that are considered downgradient of the Plant Site. Monitoring wells AA-15, AA-19 and POD2-R were gauged for water levels; however, they did not yield sufficient water for collection of water samples this semester.

Figures and tables for the Plant Site are presented after this section. Figure 3-1 presents a potentiometric surface map using data from the well locations shown in Figure 1-2 that were gauged during this event. The tables presented in this section summarize analytical results and laboratory qualifiers by well for each sampling event conducted from 2nd Semester 2009 through 1st Semester 2011. Hydrographs, concentration trend graphs, and isoconcentration maps are presented in Appendices B, C and D, respectively.

Hydrographs present groundwater elevations for field measurements taken during 1st Quarter 2000 through 1st Semester 2011 at the Plant Site. Note that hydrographs for piezometers and Lake Mead Parkway wells contain fewer data points; as these were measured beginning in 2007.

Concentration trend graphs present analytical data for selected analytes from 1st Quarter 2000 through 1st Semester 2011. Analytical data from monitoring events conducted by Basic Remediation Company in the Common Areas (dowgradient wells) have been imported into the TIMET analytical database and are presented on their respective trend graphs to provide a historical perspective dating back to 2007.

For select analytes (chromium, hexavalent chromium, nitrate, perchlorate, and total dissolved solids), isoconcentration contours reported by the Nevada Environmental Response Trust (NERT) (NERT 2011) for the former Tronox facility have been overlain on TIMET contours in an attempt to provide a regional picture of groundwater plumes at the BMI Complex and in the downgradient areas. It should be noted that the two datasets are not combined and therefore the contours are not integrated. Isoconcentration maps suggest that the plumes are relatively stable with no major shift in geometry for the selected analytes during 1st Semester 2011.

Since groundwater monitoring data from the former Tronox site was more comprehensive in 2009, as part of their source area investigation, this data was integrated into TIMET's environmental database and plotted. Figures in Appendix E report groundwater data for the TIMET Plant Site and former Tronox site for 2009 monitoring events. As suggested by the data, in particular increasing concentration gradients observed to the west of the plant site, it appears that contaminants "encroach" onto the Plant Site from source areas residing on the former Tronox facility, cross- and upgradient of the TIMET Plant Site. It is believed these source areas influence groundwater conditions in downgradient wells located on the northern portion of the TIMET Plant Site. The significant hexavalant chromium and perchlorate plumes on TIMET are considered the eastern flank of the Tronox plumes, and are not TIMET related.

3.1 GROUNDWATER CONDITIONS

The following sections discuss the general hydrogeologic characteristics of the water table aquifer (for example, depth to groundwater and potentiometric surface of groundwater) at the TIMET facility for this reporting period.

3.1.1 Depth to Groundwater

Table 3-1 summarizes groundwater levels for the well locations shown in Figure 1-2. Hydrographs showing water level trends for the well locations shown in Figure 1-2 are presented in Appendix B. Water levels in wells J2U1, AA-15, AA-19, and POD-2R were gauged this event; however, insufficient screen submergence precluded sampling these wells for chemical analysis. CLD2-R and CLD3-R were not gauged during this reporting period as these wells were abandoned on February 2, 2010.

Existing wells were surveyed to confirm coordinates and TOC elevations. The TOC elevations were subsequently revised in four wells; J2D1-R2, J2U2, J2D2-R2 and J2D4. J2D1-R2 TOC elevation was 2.7 feet less than previously determined, J2U2 TOC elevation increased by 0.19 feet, J2D2-R2 TOC elevation decreased by 2.91 feet and J2D4 TOC elevation increased by 0.37 feet. Table 2-2 presents updated information.

3.1.2 Potentiometric Surface of Groundwater

Figure 3-1 shows the potentiometric surface for the water table aquifer and the direction of groundwater flow for the 1st Semester 2011 sampling event based on data from the well locations shown on Figure 1-2. The hydraulic gradient is approximately 0.02 to 0.03 ft/ft in a northerly direction, mimicking the topographic slope toward the Las Vegas Wash.

3.2 ANALYTICAL RESULTS

This section summarizes the distribution of analytes in groundwater for the 1st Semester 2011. All data from this event were validated according to current NDEP guidelines and have been assigned validation qualifiers based on quality control measurements, as defined in the table below.

Stable Chemistry Validation Qualifiers and Definitions	
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
UJ	The analyte was analyzed for, but was not detected. The reported sample quantitation limit is approximate and may be estimated.
J	The result is an estimated quantity. The associated numerical value is an approximate concentration of the analyte in the sample.
R	The result is rejected. The associated numerical value is rejected due to quality issues that seriously affect the result.

The U qualifier indicates that the analyte was not detected, and the value reported is the sample quantitation limit (SQL). The U qualifier does not imply any data quality issue, but is simply a statement that the analyte was not detected at the reported SQL. The other qualifiers listed in the table above imply that because of some issue with associated QC samples or criteria, the sample result or SQL may be questioned. During the course of data validation, the reviewer evaluated each of the QC criteria and determined if the issue had an impact on data quality. For all analytes, the J qualifier indicates that the reported value is estimated and the R qualifier indicates that the reported value is rejected. Results are considered estimated or rejected when QC issues could affect data quality and are assigned a bias (+/-) where applicable.

Tables 3-2 through 3-46 summarize the results of groundwater monitoring at the well locations shown in Figure 1-2, including the validation qualifiers. These tables are provided electronically on the enclosed compact disc. Reported values that exceed the relevant screening level are highlighted in bold in the tables. The tables were generated from the TIMET electronic database and contain a set of notes defining data qualifiers. Not all notes may be pertinent to every table. Note that values highlighted in bold font in Tables 3-2 through 3-46 indicate that either the result or the reporting limit exceeds the screening level during this reporting period.

Concentration trend graphs for selected analytes for the 1st quarter 2000 through 1st Semester 2011 are provided in Appendix C. Isoconcentration maps for selected analytes during 1st Semester 2011 are provided in Appendix D.

3.2.1 Anions and TDS and Cation-Anion Balance and TDS Ratios

The dominant anions comprising the TDS observed in Plant Site groundwater are sulfate and chloride with notable concentrations of perchlorate (Figure D-6). Perchlorate is ubiquitous throughout the Plant Site. When mapped on a regional scale, perchlorate contours on TIMET Plant Site represent the eastern edge of the perchlorate plume sourced from the Tronox facility located to the immediate west of the Plant Site.

Of the 12 wells monitored for anions, sulfate concentrations in groundwater exceeded chloride in 9 wells. The ratios of sulfate to chloride varied from 9.47 to 0.32. The sulfate to chloride ratios were greatest in the upgradient monitoring locations (sulfate dominated) and generally decreased in the northern property boundary wells.

Within the Plant Site, the highest TDS concentrations were reported in wells TMPZ-108 (16,000 mg/L), TMPZ-107 (16,000 mg/L) and J2D4 (10,000 mg/L). TMPZ-107, TMPZ-108, and J2D4 comprise the south end of the 10,000 mg/L TDS contour depicted on Figure D-10. However, it should be noted that regionally TDS is significantly elevated throughout the BMI Complex and Common Areas where TDS has been reported at concentrations orders of magnitude greater than those observed at the Plant Site. In fact, encroachment of TDS impacted groundwater on to the TIMET's northwestern property continues to be observed when mapped on a regional scale (Figure D-10 and E-6).

During the past semester, anions and TDS concentrations in most Plant Site wells remained relatively unchanged and were generally within the historical range of concentrations when compared to the last reporting period with the following noted exception:

- Nitrate in monitoring well J2D4 had been increasing almost reaching the historical peak of 54 mg/L. Beginning in October 2010, nitrate concentrations have decreased to 32 mg/L. It is suspected that the BMI Complex sanitary sewer main line, located upgradient of the well, may have contributed to localized elevated nitrate. Recent rehabilitation of sections of the line corresponds with the decrease in nitrate concentrations. This issue will continue to be monitored and reported, as necessary.

Downgradient groundwater conditions for anions and TDS are best summarized by Figures D-5 Nitrate and D-10 TDS. Both figures depict multiple source areas within the BMI Complex contributing to the downgradient conditions. Concentrations of TDS have remained relatively unchanged and were generally within the historical range of concentrations when compared to the last reporting period with the following noted exceptions:

- TDS concentrations in monitoring well DBMW-3 have been increasing since monitored by BRC in June 2008 (6,590 ug/L) to a peak of 8,300 ug/L in October 2010. TDS concentrations in this reporting cycle are at 8,200 ug/L, a slight decrease.

- TDS concentrations in monitoring well PC-024 have been decreasing from 13,100 ug/L, reported in May 2008, to the current concentration of 7,400 ug/L. Monitoring well PC-67, located upgradient of PC-24, is following a similar trend.

In late September 2009, NDEP released a letter regarding the analysis and evaluation of cation-anion balance (CAB) in groundwater (NDEP 2009). This analysis and evaluation was conducted during this

reporting semester and included: (1) cation-anion balance, (2) measured TDS versus calculated TDS, and (3) TDS versus EC. For the CAB evaluation, the anions and cations used in the calculation include the following:

- Anions – Bicarbonate, carbonate, chloride, fluoride, nitrate as nitrogen, perchlorate, and sulfate
- Cations – Calcium, magnesium, potassium and sodium

Note that hydroxide was not included in the anion calculation, because the pH of the groundwater was less than 10. The acceptable difference between the anion and cation sums is 5 percent. Most of the wells in this event exhibited acceptable CAB results (less or equal to 5%). The following wells did not meet the 5% CAB criterion:

- CLDR-4, DBMW-3, PC-124, PC-24, PC-28, PC-67, TMMW-104, TMPZ-107

All wells had differences less than 10 percent between the cation and anion sums.

CAB evaluations were not conducted on the following wells for the reasons stated below:

- CMT-101, J2D3, M-129, M-130, TMPZ-106, TMPZ-108, and TMPZ-109

These wells were not evaluated because either they were not scheduled for sampling/analysis, or one or more analytes was rejected making the calculation inaccurate.

For the evaluation of measured TDS versus calculated TDS, the same anions and cations listed in the CAB discussion above were used. The ratios of measured TDS (reported directly from Paragon) and calculated TDS were computed according to the formula recommended by NDEP. The acceptable ratio is greater than or equal to 1.0, but less than or equal to 1.2. The TDS ratio at PC-28 was unacceptable.

For the evaluation of TDS versus EC, the ratio of TDS against the field measurement of EC was calculated. NDEP's acceptable limits are 0.54 to 0.96. A plot of TDS versus EC results is included as Figure 3-2. All wells in this event exhibited acceptable results for TDS to EC ratio.

CAB analysis, TDS ratios, and TDS to EC ratios are summarized in Table 3-47. The calculated percent differences and ratios were compared to the appropriate acceptance criteria and reported as "acceptable" or "unacceptable" accordingly. Based on the findings shown in Table 3-47, the anion, cation, and/or TDS results were qualified as estimated when acceptance criteria were not met.

3.2.2 Metals

Metals exceeding EPA National Drinking Water Standards Maximum Contaminant Levels (MCLs) or secondary MCLs are arsenic, chromium, uranium, and manganese in Plant Site groundwater. Metals exceeding Basic Comparison Levels for residential water in at least one well include: molybdenum, lithium, aluminum, vanadium, and iron. The following discussion focuses on metals exceeding the MCL which generally represent the greatest risk.

Arsenic (Figure D-1) exceeds the MCL (10 ug/L) in every well monitored within the Plant Site. Wells located along the western property boundary report the highest Plant Site arsenic concentrations with concentrations decreasing to the east. When analyzed from a regional perspective, elevated arsenic in groundwater is encroaching from facilities west of the Plant Site on to TIMET property (Figure E-1).

Chromium (Figure D-2) exceeds the MCL (100 ug/L) in wells located in the northwestern portion of the TIMET Plant Site. The chromium observed in groundwater is primarily comprised of hexavalent chromium (Figure D-3). As the contours depict, chromium observed on the TIMET Plant Site represents the eastern edge of the well documented hexavalent chromium plume encroaching from the western Tronox facility.

Uranium (Figure D-12) exceeds the MCL (30 ug/L) in most wells located in the north half of the TIMET Plant Site. The highest uranium concentrations are observed in J2U2 and TMPZ-108 at 140 ug/L and 130 ug/L, respectively. As depicted on Figure D-12 elevated uranium is centered in the middle of the Plant Site. From a regional perspective, there are similar (>100 ug/L) uranium concentrations in groundwater in monitoring wells located on Tronox and within an "encroachment corridor" which may influence uranium concentrations in wells located on the western TIMET property boundary (Figure E-3).

Manganese (Figure D-4) in Plant Site groundwater is highest in monitoring wells located along the western property boundary with Tronox. The highest manganese concentrations for this monitoring event are reported in CLD1-R at 130 ug/L. This well represents the edge of the 50 ug/L contour extending onto

the TIMET Plant Site. From a regional perspective, manganese contours suggest a plume of elevated manganese is sourced at Tronox.

During the semester, analyte concentrations in most Plant Site wells remained relatively unchanged and were generally within the historical range of concentrations when compared to the last reporting period with the following noted exception:

- Since 2001 vanadium concentrations in monitoring well CLD4-R have varied between 8,000 ug/L to 10,000 ug/L with a notable decrease (<3,000 ug/L) in July 2004 followed by a peak (>12,000 ug/L) in the fourth quarter of 2004 (see Figure C-39). Vanadium concentrations rebounded to about 11,000 ug/L during 2005 and then experienced another notable drop (<6,000 ug/L) in July 2006. In 2007, vanadium concentrations once again rebounded to about 11,000 ug/L with another albeit modest decrease (<7,000 ug/L) in July 2008. Since the last seasonal decrease, vanadium concentrations in CLD4-R have increased to a peak concentration of 13,000 ug/L in April 2010. Current vanadium concentrations are reported at 12,000 ug/L. Inspection of the vanadium data in monitoring locations within the vicinity of CLD4-R report concentrations at or less than 100 ug/L. The highest vanadium concentration reported in 2009 at the Tronox facility was 127 ug/L (Figure E-4). It appears that elevated vanadium of this magnitude is relatively isolated to this location. Close attention to the vanadium concentration in this well will be made and discussed within the next-semiannual report.

Regional portrayal of metals in downgradient groundwater varies depending upon the analyte and availability of data. Since chromium is actively remediated by NERT, current isocontours were readily available and overlaid on TIMET's downgradient contours to depict the distribution of chromium as shown on Figure D-2. Because TIMET's downgradient dataset is only a small subset of the existing monitoring well network in the downgradient areas (not routinely sampled and analyzed), depiction of arsenic (Figure D-1), manganese (Figure D-4), and uranium (Figure D-12) do not delineate the extent of these metals within the downgradient areas from all source areas. During the semester, analyte concentrations in most downgradient wells remained relatively unchanged and were generally within the historical range of concentrations when compared to the last reporting period with the following noted exceptions:

- Chromium concentrations in monitoring well POU-3 have been increasing since first reported in August 2007 from 190 ug/L to the current concentration of 530 ug/L. Chromium concentrations

in PC-67 have returned to below 1,000 ug/L after a reported maximum concentration of 1,200 ug/L observed in late 2010.

- Arsenic concentrations in monitoring well AA-11 have been increasing since first reported in April 2010 from 54 ug/L to 65 ug/L.

- Iron concentrations in monitoring well DBMW-3 have decreased from 2,700 ug/L (maximum) in 2010 to not detected above the laboratory detection limit.

- Uranium concentrations in monitoring well PC-54 were decreasing from the maximum reported value of 160 ug/L in August 2007 until this semester where they have slightly increased to a reported value of 110 ug/L. Uranium in monitoring well PC-67 is also decreasing albeit as a slower rate. In addition, DBMW-4 has continued to report uranium below the MCL for three sampling events since originally observed at 70.5 ug/L in May 2008. However, uranium concentrations in PC-28 have increased since the historic low of 90 ug/L first reported in August 2007 to a current concentration of 120 ug/L.

3.2.3 Radionuclides

No radio isotopes exceeded their respective MCLs during this monitoring event. Several of the "J2" wells reported detectable levels albeit less than 5 pCi/L combined radium as depicted on Figure D-7. Radon in groundwater is prevalent throughout the BMI Complex and Plant Site. Upgradient (Lake Mead) wells have exceeded the screening level of 300 pCi/L (proposed rule) when monitored. Radon concentrations in groundwater increase at the northern property boundary to a historical average of 1,700 pCi/L. Radon 222 is a decay isotope of uranium-238 and the distribution of uranium as a metal is presented on Figure D-12 and discussed in the previous section 3.2.2.

3.2.4 Volatile Organic Compounds

Volatiles exceeding their respective MCLs in Plant Site groundwater include tetrachloroethene (PCE), trichloroethene (TCE), total trihalomethanes (TTHM), and carbon tetrachloride. A stable and well defined PCE plume is depicted on Figure D-9. Off-site migration of the PCE plume is evident and is monitored under this program. A significantly smaller TCE plume exists within the PCE plume. Carbon tetrachloride is elevated above the MCL in two monitoring wells located along the western Plant Site boundary (CLD3-R [historic], and CLD4-R). The report authors are not aware of a regional plume of carbon tetrachloride. However, TTHMs have been reported throughout the BMI Complex and are

believed to be sourced at the Olin, Stauffer, Pioneer, and Montrose facilities (Figure E-5). TTHMs, depicted on Figure D-11, are prevalent throughout the northwestern TIMET Plant Site and have been found at depth.

During the past quarter, VOC concentrations in onsite wells remained relatively unchanged and were within the historical range of concentrations when compared to the last reporting period with the following noted exceptions:

- Trichloroethene (TCE) and 1,2-Dichloropropane concentrations in monitoring well TIMETMW-3R continue to be elevated (24 ug/L and 26 ug/L, respectively) above the MCL (see Figure C-37 and Table 3-14). TCE concentrations are the highest reported value observed at this location since monitoring began in 2009. This well was installed in 2009 as a replacement well for TIMETMW-3 which was abandoned for utility construction associated with the Lake Mead Shopping Center. TCE and 1,2-Dichloropropane concentrations in former well TIMETMW-3 were repeatedly not detected above laboratory detection limits. Insufficient upgradient monitoring data exist to evaluate whether the source is located upgradient (and potentially off-site) or generalized to the area. This represents a data gap under the Environmental Conditions Investigation and will be carried forward as such.

- Total trihalomethanes (TTHMs) in the Lake Mead (upgradient) monitoring well TMMW-104 have been increasing since 2008 to a new maximum concentration of 13 ug/L. This well is located within the landscaping “green-belt” of the Lake Mead Shopping Center with no identifiable sources. The current concentration is significantly below the MCL of 80 µg/L.

The occurrence of VOCs in the downgradient areas are generally dominated by TTHMs PCE and TCE. Further west, groundwater is impacted by the former Olin, Syngenta, Stauffer, and Montrose (OSSM) facility with benzene, chlorobenzenes and organochlorine pesticides. In fact, this site is believed to be one of the main sources of trihalomethanes, in the form of chloroform, observed in groundwater throughout the BMI Complex and in downgradient areas. TIMET understands the OSSM investigators have an extensive downgradient monitoring program in place to monitor and report on the regional downgradient conditions as they pertain to site releases and their remediation program. TIMET, however, developed its downgradient monitoring program specifically to monitor PCE in the downgradient areas. PCE concentrations in groundwater are well defined as depicted on Figure D-9 with the exception of the eastern flank since sentinel wells (AA-15 and AA-19) have recently become dry.

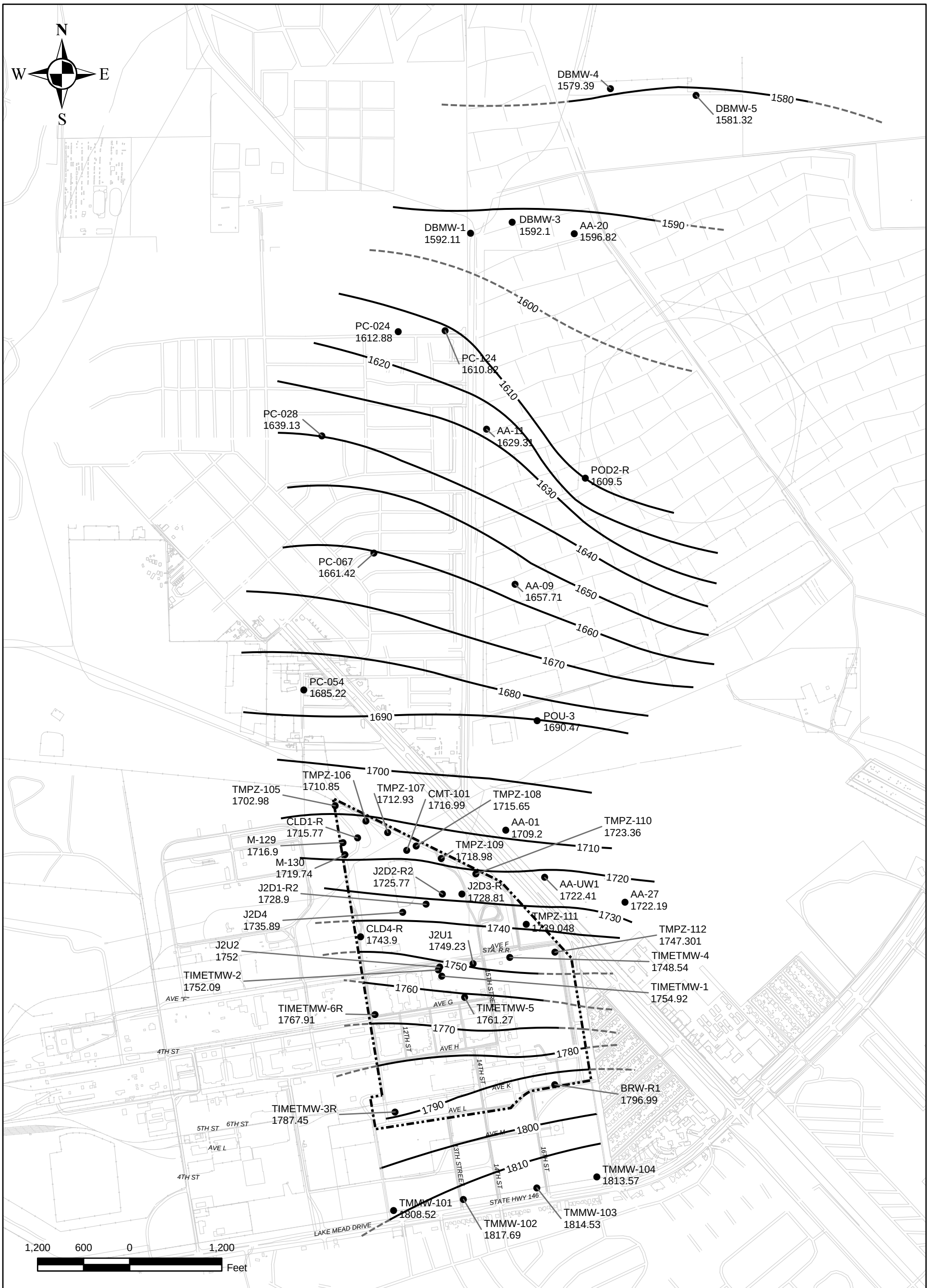
During the past semester, VOC concentrations in downgradient wells remained relatively unchanged and were within the historical range of concentrations when compared to the last reporting period with the following noted exceptions:

- PCE concentrations in monitoring well AA-01 have been decreasing since first monitored in January 2007 (175 ug/L) to the current concentration of 69 ug/L. PCE concentrations in monitoring well AA-UW1 were increasing until this semester, during which the PCE concentration dropped from a peak of 61 ug/L to 27 ug/L.

- TTHMs are generally decreasing in monitoring wells PC-67 and PC-24 albeit with concentrations remaining an order of magnitude above the MCL of 80 µg/L. TTHMs have also been decreasing in monitoring wells PC-54 and PC-28 and are now below the MCL. Monitoring well POU-3 reports the highest TTHMs concentrations at above 1,000 µg/L with a peak concentration observed last semester of 1,258 ug/L. Recent TTHMs concentrations report a drop in POU-3 to 1,131 µg/L. It should be noted that this network of wells does not accurately portray the complete regional extent of TTHMs since they are not located far enough west to monitor areas immediately downgradient from the OSSM facility.

- Carbon tetrachloride in monitoring wells POU-3 and PC-67 reported maximum concentrations during the last semester 2010. This semester, carbon tetrachloride returned to historical levels (8.4 ug/L) in PC-67 and decreased dramatically in POU-3 to 15 ug/L. Nonetheless, carbon tetrachloride in both these wells remains above the MCL of 5 ug/L.

FIGURES



BRW-R1
1796.99 ● MONITORING WELL WITH GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

WATER LEVEL CONTOUR

APPROXIMATE WATER LEVEL CONTOUR

NOTE: All wells gauged April 4, 2011.

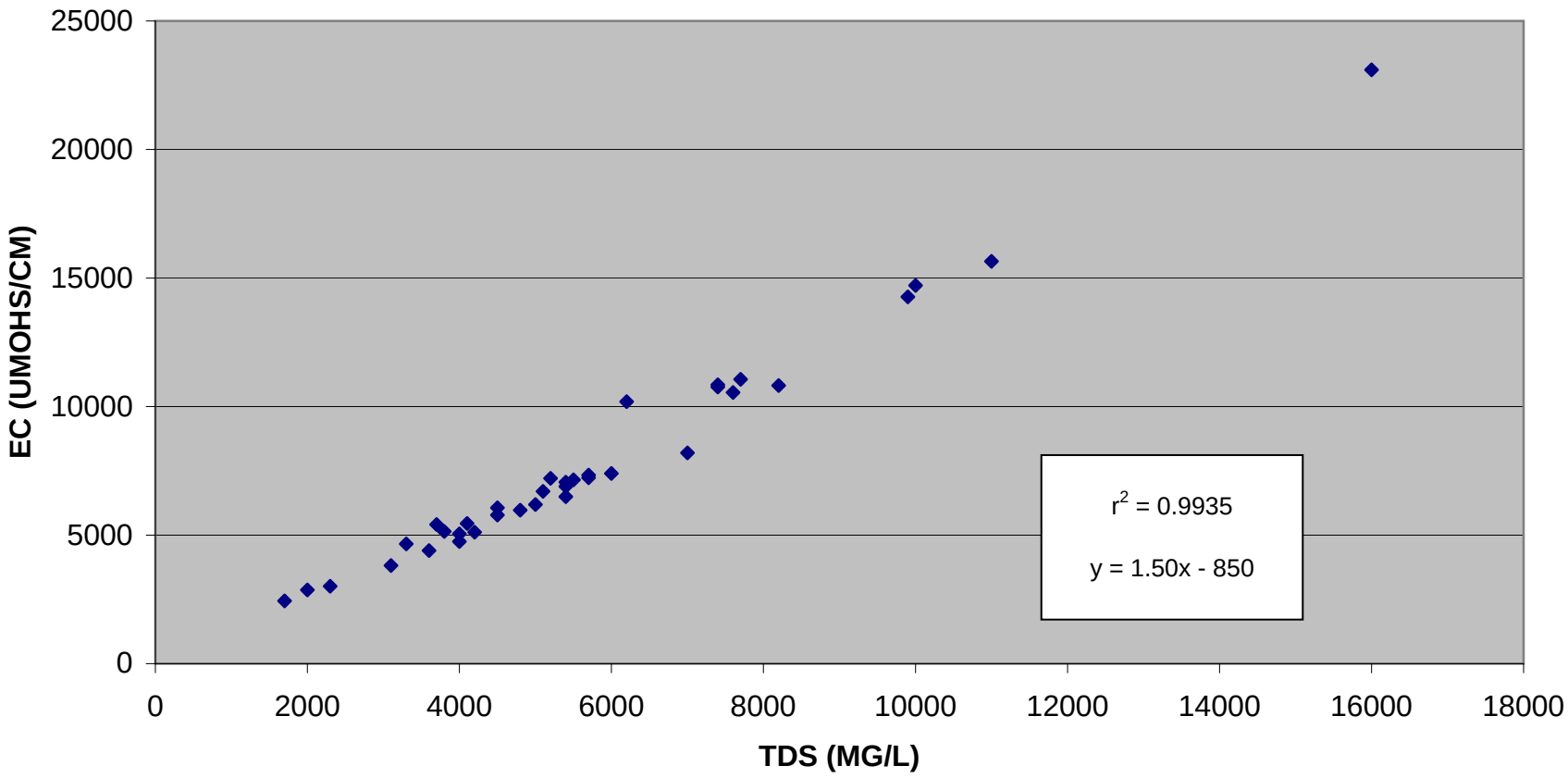
Semiannual Groundwater Monitoring Report
1st Semester 2011
Titanium Metals Corporation
Henderson, Nevada

FIGURE 3-1
POTENTIOMETRIC SURFACE MAP
1ST SEMESTER 2011

TIMET

2011-07-27 C:\TIMET\1stSEM2011\mxd\TIMET_siteWL_S12011.mxd michelle.handley

Figure 3-2 TDS versus Electrical Conductivity



TABLES

Table 3-1
GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
AA-01	26720238.47	830921.12	1757.13	20-Apr-10	47.33	1709.80
AA-01	26720238.47	830921.12	1754.93	06-Oct-10	47.90	1707.03
AA-01	26720238.47	830921.12	1757.13	04-Apr-11	47.93	1709.20
AA-09	26723441.40	831041.59	1696.23	22-Apr-10	38.23	1658.00
AA-09	26723441.40	831041.59	1694.11	13-Oct-10	38.57	1655.54
AA-09	26723441.40	831041.59	1696.23	04-Apr-11	38.52	1657.71
AA-11	26725458.78	830672.66	1660.05	28-Apr-10	30.38	1629.67
AA-11	26725458.78	830672.66	1658.00	12-Oct-10	30.76	1627.24
AA-11	26725458.78	830672.66	1660.05	04-Apr-11	30.74	1629.31
AA-19	26727447.10	832521.44	1642.32	22-Apr-10	N/A	N/A
AA-20	26728007.71	831811.84	1628.49	22-Apr-10	32.22	1596.27
AA-20	26728007.71	831811.84	1626.07	12-Oct-10	31.56	1594.51
AA-20	26728007.71	831811.84	1628.49	04-Apr-11	31.67	1596.82
AA-27	26719301.66	832471.34	1789.38	20-Apr-10	67.91	1721.47
AA-27	26719301.66	832471.34	1786.85	05-Oct-10	68.17	1718.68
AA-27	26719301.66	832471.34	1789.38	04-Apr-11	67.19	1722.19
AA-UW1	26719624.99	831427.20	1774.63	19-Apr-10	51.79	1722.84
AA-UW1	26719624.99	831427.20	1774.63	05-Oct-10	52.25	1722.38
AA-UW1	26719624.99	831427.20	1774.63	04-Apr-11	52.22	1722.41
BRW-R1	26716928.10	831558.84	1844.15	21-Mar-00	47.13	1797.02
BRW-R1	26716928.10	831558.84	1844.15	20-Jun-00	47.57	1796.58
BRW-R1	26716928.10	831558.84	1844.15	19-Sep-00	47.75	1796.40
BRW-R1	26716928.10	831558.84	1844.15	13-Dec-00	47.51	1796.64
BRW-R1	26716928.10	831558.84	1844.15	13-Mar-01	47.16	1796.99
BRW-R1	26716928.10	831558.84	1844.15	12-Jun-01	47.05	1797.10
BRW-R1	26716928.10	831558.84	1844.15	25-Sep-01	47.50	1796.65
BRW-R1	26716928.10	831558.84	1844.15	11-Dec-01	47.20	1796.95
BRW-R1	26716928.10	831558.84	1844.15	12-Mar-02	47.04	1797.11
BRW-R1	26716928.10	831558.84	1844.15	11-Jun-02	47.70	1796.45
BRW-R1	26716928.10	831558.84	1844.15	25-Sep-02	48.00	1796.15
BRW-R1	26716928.10	831558.84	1844.15	17-Dec-02	47.55	1796.60
BRW-R1	26716928.10	831558.84	1844.15	25-Mar-03	47.50	1796.65
BRW-R1	26716928.10	831558.84	1844.15	25-Jun-03	48.09	1796.06
BRW-R1	26716928.10	831558.84	1844.15	24-Sep-03	49.08	1795.07
BRW-R1	26716928.10	831558.84	1844.15	22-Dec-03	47.77	1796.38
BRW-R1	26716928.10	831558.84	1844.15	10-Feb-04	47.87	1796.28
BRW-R1	26716928.10	831558.84	1844.15	28-Apr-04	48.17	1795.98
BRW-R1	26716928.10	831558.84	1844.15	21-Jul-04	48.42	1795.73
BRW-R1	26716928.10	831558.84	1844.15	25-Oct-04	48.45	1795.70
BRW-R1	26716928.10	831558.84	1844.15	11-Feb-05	47.85	1796.30
BRW-R1	26716928.10	831558.84	1844.15	26-Apr-05	46.80	1797.35
BRW-R1	26716928.10	831558.84	1844.15	28-Jul-05	47.20	1796.95
BRW-R1	26716928.10	831558.84	1844.15	27-Oct-05	45.75	1798.40
BRW-R1	26716928.10	831558.84	1844.15	24-Jan-06	46.48	1797.67
BRW-R1	26716928.10	831558.84	1844.15	21-Apr-06	47.38	1796.77
BRW-R1	26716928.10	831558.84	1844.15	20-Jul-06	47.99	1796.16

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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
BRW-R1	26716928.10	831558.84	1844.15	18-Oct-06	46.40	1797.75
BRW-R1	26716928.10	831558.84	1844.15	23-Jan-07	47.34	1796.81
BRW-R1	26716928.10	831558.84	1844.15	09-Apr-07	47.80	1796.35
BRW-R1	26716928.10	831558.84	1844.15	17-Jul-07	47.98	1796.17
BRW-R1	26716928.10	831558.84	1844.15	23-Oct-07	N/A	N/A
BRW-R1	26716928.10	831558.84	1844.15	21-Jan-08	47.13	1797.02
BRW-R1	26716928.10	831558.84	1844.15	28-Apr-08	47.35	1796.80
BRW-R1	26716928.10	831558.84	1844.15	21-Jul-08	47.98	1796.17
BRW-R1	26716928.10	831558.84	1844.15	12-Jan-09	46.21	1797.94
BRW-R1	26716928.10	831558.84	1844.15	06-Jul-09	46.58	1797.57
BRW-R1	26716928.10	831558.84	1843.88	13-Apr-10	46.34	1797.54
BRW-R1	26716928.10	831558.84	1843.88	06-Oct-10	46.87	1797.01
BRW-R1	26716928.10	831558.84	1843.88	04-Apr-11	46.89	1796.99
CLD1-R	26720138.24	828993.72	1745.19	23-Mar-00	25.20	1719.99
CLD1-R	26720138.24	828993.72	1745.19	22-Jun-00	25.98	1719.21
CLD1-R	26720138.24	828993.72	1745.19	21-Sep-00	26.40	1718.79
CLD1-R	26720138.24	828993.72	1745.19	14-Dec-00	26.82	1718.37
CLD1-R	26720138.24	828993.72	1745.19	15-Mar-01	26.37	1718.82
CLD1-R	26720138.24	828993.72	1745.19	14-Jun-01	27.29	1717.90
CLD1-R	26720138.24	828993.72	1745.19	27-Sep-01	27.74	1717.45
CLD1-R	26720138.24	828993.72	1745.19	13-Dec-01	27.85	1717.34
CLD1-R	26720138.24	828993.72	1745.19	12-Mar-02	27.90	1717.29
CLD1-R	26720138.24	828993.72	1745.19	11-Jun-02	27.30	1717.89
CLD1-R	26720138.24	828993.72	1745.19	01-Sep-02	28.15	1717.04
CLD1-R	26720138.24	828993.72	1745.19	19-Dec-02	28.20	1716.99
CLD1-R	26720138.24	828993.72	1745.19	27-Mar-03	28.16	1717.03
CLD1-R	26720138.24	828993.72	1745.19	26-Jun-03	28.60	1716.59
CLD1-R	26720138.24	828993.72	1745.19	25-Sep-03	28.88	1716.31
CLD1-R	26720138.24	828993.72	1745.19	23-Dec-03	29.15	1716.04
CLD1-R	26720138.24	828993.72	1745.19	11-Feb-04	29.31	1715.88
CLD1-R	26720138.24	828993.72	1745.19	29-Apr-04	29.08	1716.11
CLD1-R	26720138.24	828993.72	1745.19	22-Jul-04	29.65	1715.54
CLD1-R	26720138.24	828993.72	1745.19	26-Oct-04	29.79	1715.40
CLD1-R	26720138.24	828993.72	1745.19	11-Feb-05	26.85	1718.34
CLD1-R	26720138.24	828993.72	1745.19	28-Apr-05	27.26	1717.93
CLD1-R	26720138.24	828993.72	1745.19	27-Jul-05	27.29	1717.90
CLD1-R	26720138.24	828993.72	1745.19	27-Oct-05	25.57	1719.62
CLD1-R	26720138.24	828993.72	1745.19	19-Jan-06	26.85	1718.34
CLD1-R	26720138.24	828993.72	1745.19	18-Apr-06	24.99	1720.20
CLD1-R	26720138.24	828993.72	1745.19	17-Jul-06	27.44	1717.75
CLD1-R	26720138.24	828993.72	1745.19	17-Oct-06	26.73	1718.46
CLD1-R	26720138.24	828993.72	1745.19	24-Jan-07	25.53	1719.66
CLD1-R	26720138.24	828993.72	1745.19	09-Apr-07	28.67	1716.52
CLD1-R	26720138.24	828993.72	1745.19	17-Jul-07	29.26	1715.93
CLD1-R	26720138.24	828993.72	1745.19	22-Oct-07	29.81	1715.38
CLD1-R	26720138.24	828993.72	1745.19	21-Jan-08	30.03	1715.16

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GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
CLD1-R	26720138.24	828993.72	1745.19	28-Apr-08	30.25	1714.94
CLD1-R	26720138.24	828993.72	1745.19	21-Jul-08	30.81	1714.38
CLD1-R	26720138.24	828993.72	1745.19	12-Jan-09	30.46	1714.73
CLD1-R	26720138.24	828993.72	1745.19	06-Jul-09	30.45	1714.74
CLD1-R	26720138.24	828993.72	1745.42	27-Apr-10	28.98	1716.44
CLD1-R	26720138.24	828993.72	1745.42	13-Oct-10	29.34	1716.08
CLD1-R	26720138.24	828993.72	1745.42	04-Apr-11	29.65	1715.77
CLD2-R	26719965.90	828920.85	1753.14	23-Mar-00	30.14	1723.00
CLD2-R	26719965.90	828920.85	1753.14	22-Jun-00	30.87	1722.27
CLD2-R	26719965.90	828920.85	1753.14	21-Sep-00	31.28	1721.86
CLD2-R	26719965.90	828920.85	1753.14	14-Dec-00	31.65	1721.49
CLD2-R	26719965.90	828920.85	1753.14	15-Mar-01	31.01	1722.13
CLD2-R	26719965.90	828920.85	1753.14	14-Jun-01	31.94	1721.20
CLD2-R	26719965.90	828920.85	1753.14	27-Sep-01	32.29	1720.85
CLD2-R	26719965.90	828920.85	1753.14	13-Dec-01	32.17	1720.97
CLD2-R	26719965.90	828920.85	1753.14	12-Mar-02	31.95	1721.19
CLD2-R	26719965.90	828920.85	1753.14	11-Jun-02	31.05	1722.09
CLD2-R	26719965.90	828920.85	1753.14	01-Sep-02	31.95	1721.19
CLD2-R	26719965.90	828920.85	1753.14	19-Dec-02	32.00	1721.14
CLD2-R	26719965.90	828920.85	1753.14	27-Mar-03	31.94	1721.20
CLD2-R	26719965.90	828920.85	1753.14	26-Jun-03	32.38	1720.76
CLD2-R	26719965.90	828920.85	1753.14	25-Sep-03	32.42	1720.72
CLD2-R	26719965.90	828920.85	1753.14	23-Dec-03	35.20	1717.94
CLD2-R	26719965.90	828920.85	1753.14	11-Feb-04	35.23	1717.91
CLD2-R	26719965.90	828920.85	1753.14	29-Apr-04	32.40	1720.74
CLD2-R	26719965.90	828920.85	1753.14	22-Jul-04	35.18	1717.96
CLD2-R	26719965.90	828920.85	1753.14	26-Oct-04	32.42	1720.72
CLD2-R	26719965.90	828920.85	1753.14	11-Feb-05	30.12	1723.02
CLD2-R	26719965.90	828920.85	1753.14	26-Apr-05	30.74	1722.40
CLD2-R	26719965.90	828920.85	1753.14	27-Jul-05	30.40	1722.74
CLD2-R	26719965.90	828920.85	1753.14	28-Oct-05	28.59	1724.55
CLD2-R	26719965.90	828920.85	1753.14	19-Jan-06	30.48	1722.66
CLD2-R	26719965.90	828920.85	1753.14	18-Apr-06	28.45	1724.69
CLD2-R	26719965.90	828920.85	1753.14	17-Jul-06	31.16	1721.98
CLD2-R	26719965.90	828920.85	1753.14	17-Oct-06	29.72	1723.42
CLD2-R	26719965.90	828920.85	1753.14	25-Jan-07	28.85	1724.29
CLD2-R	26719965.90	828920.85	1753.14	09-Apr-07	32.27	1720.87
CLD2-R	26719965.90	828920.85	1753.14	17-Jul-07	32.37	1720.77
CLD2-R	26719965.90	828920.85	1753.14	22-Oct-07	34.24	1718.90
CLD2-R	26719965.90	828920.85	1753.14	21-Jan-08	34.71	1718.43
CLD2-R	26719965.90	828920.85	1753.14	28-Apr-08	34.91	1718.23
CLD2-R	26719965.90	828920.85	1753.14	21-Jul-08	35.44	1717.70
CLD2-R	26719965.90	828920.85	1753.14	12-Jan-09	35.42	1717.72
CLD2-R	26719965.90	828920.85	1753.14	06-Jul-09	35.37	1717.77
CLD3-R	26720010.74	829651.41	1752.24	23-Mar-00	28.89	1723.35
CLD3-R	26720010.74	829651.41	1752.24	20-Jun-00	29.48	1722.76

Table 3-1
GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
CLD3-R	26720010.74	829651.41	1752.24	21-Sep-00	29.87	1722.37
CLD3-R	26720010.74	829651.41	1752.24	14-Dec-00	32.20	1720.04
CLD3-R	26720010.74	829651.41	1752.24	15-Mar-01	30.51	1721.73
CLD3-R	26720010.74	829651.41	1752.24	14-Jun-01	30.81	1721.43
CLD3-R	26720010.74	829651.41	1752.24	01-Sep-01	31.14	1721.10
CLD3-R	26720010.74	829651.41	1752.24	13-Dec-01	31.47	1720.77
CLD3-R	26720010.74	829651.41	1752.24	12-Mar-02	31.90	1720.34
CLD3-R	26720010.74	829651.41	1752.24	11-Jun-02	32.25	1719.99
CLD3-R	26720010.74	829651.41	1752.24	25-Sep-02	32.80	1719.44
CLD3-R	26720010.74	829651.41	1752.24	19-Dec-02	33.10	1719.14
CLD3-R	26720010.74	829651.41	1752.24	27-Mar-03	33.17	1719.07
CLD3-R	26720010.74	829651.41	1752.24	26-Jun-03	33.51	1718.73
CLD3-R	26720010.74	829651.41	1752.24	25-Sep-03	34.03	1718.21
CLD3-R	26720010.74	829651.41	1752.24	23-Dec-03	34.43	1717.81
CLD3-R	26720010.74	829651.41	1752.24	22-Feb-04	34.57	1717.67
CLD3-R	26720010.74	829651.41	1752.24	29-Apr-04	34.59	1717.65
CLD3-R	26720010.74	829651.41	1752.24	22-Jul-04	34.97	1717.27
CLD3-R	26720010.74	829651.41	1752.24	26-Oct-04	35.38	1716.86
CLD3-R	26720010.74	829651.41	1752.24	08-Feb-05	33.61	1718.63
CLD3-R	26720010.74	829651.41	1752.24	28-Apr-05	33.02	1719.22
CLD3-R	26720010.74	829651.41	1752.24	26-Jul-05	33.08	1719.16
CLD3-R	26720010.74	829651.41	1752.24	27-Oct-05	32.88	1719.36
CLD3-R	26720010.74	829651.41	1752.24	18-Jan-06	32.46	1719.78
CLD3-R	26720010.74	829651.41	1752.24	19-Apr-06	32.34	1719.90
CLD3-R	26720010.74	829651.41	1752.24	20-Jul-06	33.18	1719.06
CLD3-R	26720010.74	829651.41	1752.24	17-Oct-06	33.91	1718.33
CLD3-R	26720010.74	829651.41	1752.24	24-Jan-07	33.91	1718.33
CLD3-R	26720010.74	829651.41	1752.24	09-Apr-07	33.98	1718.26
CLD3-R	26720010.74	829651.41	1752.24	17-Jul-07	34.76	1717.48
CLD3-R	26720010.74	829651.41	1752.24	22-Oct-07	35.50	1716.74
CLD3-R	26720010.74	829651.41	1752.24	21-Jan-08	35.58	1716.66
CLD3-R	26720010.74	829651.41	1752.24	28-Apr-08	35.74	1716.50
CLD3-R	26720010.74	829651.41	1752.24	21-Jul-08	35.98	1716.26
CLD3-R	26720010.74	829651.41	1752.24	12-Jan-09	35.96	1716.28
CLD3-R	26720010.74	829651.41	1752.24	06-Jul-09	35.98	1716.26
CLD4-R	26718854.29	829034.28	1781.96	23-Mar-00	36.96	1745.00
CLD4-R	26718854.29	829034.28	1781.96	22-Jun-00	37.73	1744.23
CLD4-R	26718854.29	829034.28	1781.96	21-Sep-00	37.91	1744.05
CLD4-R	26718854.29	829034.28	1781.96	14-Dec-00	37.60	1744.36
CLD4-R	26718854.29	829034.28	1781.96	15-Mar-01	37.30	1744.66
CLD4-R	26718854.29	829034.28	1781.96	14-Jun-01	37.96	1744.00
CLD4-R	26718854.29	829034.28	1781.96	01-Sep-01	38.23	1743.73
CLD4-R	26718854.29	829034.28	1781.96	13-Dec-01	37.62	1744.34
CLD4-R	26718854.29	829034.28	1781.96	12-Mar-02	36.60	1745.36
CLD4-R	26718854.29	829034.28	1781.96	13-Jun-02	36.60	1745.36
CLD4-R	26718854.29	829034.28	1781.96	27-Sep-02	37.70	1744.26

Table 3-1
GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
CLD4-R	26718854.29	829034.28	1781.96	19-Dec-02	38.10	1743.86
CLD4-R	26718854.29	829034.28	1781.96	27-Mar-03	38.00	1743.96
CLD4-R	26718854.29	829034.28	1781.96	26-Jun-03	38.05	1743.91
CLD4-R	26718854.29	829034.28	1781.96	25-Sep-03	38.21	1743.75
CLD4-R	26718854.29	829034.28	1781.96	23-Dec-03	38.35	1743.61
CLD4-R	26718854.29	829034.28	1781.96	11-Feb-04	38.37	1743.59
CLD4-R	26718854.29	829034.28	1781.96	29-Apr-04	37.94	1744.02
CLD4-R	26718854.29	829034.28	1781.96	22-Jul-04	38.18	1743.78
CLD4-R	26718854.29	829034.28	1781.96	26-Oct-04	38.03	1743.93
CLD4-R	26718854.29	829034.28	1781.96	11-Feb-05	36.24	1745.72
CLD4-R	26718854.29	829034.28	1781.96	26-Apr-05	36.18	1745.78
CLD4-R	26718854.29	829034.28	1781.96	27-Jul-05	36.68	1745.28
CLD4-R	26718854.29	829034.28	1781.96	28-Oct-05	36.61	1745.35
CLD4-R	26718854.29	829034.28	1781.96	17-Jan-06	36.87	1745.09
CLD4-R	26718854.29	829034.28	1781.96	25-Apr-06	37.20	1744.76
CLD4-R	26718854.29	829034.28	1781.96	21-Jul-06	37.93	1744.03
CLD4-R	26718854.29	829034.28	1781.96	23-Oct-06	37.94	1744.02
CLD4-R	26718854.29	829034.28	1781.96	25-Jan-07	37.91	1744.05
CLD4-R	26718854.29	829034.28	1781.96	09-Apr-07	38.09	1743.87
CLD4-R	26718854.29	829034.28	1781.96	17-Jul-07	38.29	1743.67
CLD4-R	26718854.29	829034.28	1781.96	22-Oct-07	38.38	1743.58
CLD4-R	26718854.29	829034.28	1781.96	21-Jan-08	38.17	1743.79
CLD4-R	26718854.29	829034.28	1781.96	28-Apr-08	38.45	1743.51
CLD4-R	26718854.29	829034.28	1781.96	21-Jul-08	37.38	1744.58
CLD4-R	26718854.29	829034.28	1781.96	12-Jan-09	37.00	1744.96
CLD4-R	26718854.29	829034.28	1781.96	06-Jul-09	36.13	1745.83
CLD4-R	26718854.29	829034.28	1782.07	20-Apr-10	36.58	1745.49
CLD4-R	26718854.29	829034.28	1782.07	13-Oct-10	37.22	1744.85
CLD4-R	26718854.29	829034.28	1782.07	04-Apr-11	38.17	1743.90
CMT-101	26719980.31	829635.17	1751.42	29-Apr-10	33.43	1717.99
CMT-101	26719980.31	829635.17	N/A	02-Nov-10	30.10	N/A
CMT-101	26719980.31	829635.17	1751.42	04-Apr-11	34.43	1716.99
DBMW-1	26728009.64	830462.90	1626.46	27-Apr-10	34.03	1592.43
DBMW-1	26728009.64	830462.90	1626.46	07-Oct-10	35.17	1591.29
DBMW-1	26728009.64	830462.90	1626.46	04-Apr-11	34.35	1592.11
DBMW-3	26728157.00	831004.79	1625.86	26-Apr-10	32.75	1593.11
DBMW-3	26728157.00	831004.79	1625.86	07-Oct-10	33.83	1592.03
DBMW-3	26728157.00	831004.79	1625.86	04-Apr-11	33.76	1592.10
DBMW-4	26729895.86	832282.93	1605.81	28-Apr-10	22.81	1583.00
DBMW-4	26729895.86	832282.93	1605.81	14-Oct-10	26.41	1579.40
DBMW-4	26729895.86	832282.93	1605.81	04-Apr-11	26.42	1579.39
DBMW-5	26729807.16	833395.04	1609.65	14-Oct-10	28.22	1581.43
DBMW-5	26729807.16	833395.04	1609.65	14-Oct-10	28.22	1581.43
DBMW-5	26729807.16	833395.04	1609.65	04-Apr-11	28.33	1581.32
J2D1-R2	26719274.00	829885.78	1773.38	22-Mar-00	37.04	1736.34
J2D1-R2	26719274.00	829885.78	1773.38	20-Jun-00	37.63	1735.75

Table 3-1
GROUNDWATER ELEVATION DATA
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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
J2D1-R2	26719274.00	829885.78	1773.38	21-Sep-00	38.30	1735.08
J2D1-R2	26719274.00	829885.78	1773.38	14-Dec-00	38.59	1734.79
J2D1-R2	26719274.00	829885.78	1773.38	15-Mar-01	38.78	1734.60
J2D1-R2	26719274.00	829885.78	1773.38	13-Jun-01	39.14	1734.24
J2D1-R2	26719274.00	829885.78	1773.38	01-Sep-01	39.81	1733.57
J2D1-R2	26719274.00	829885.78	1773.38	12-Dec-01	39.97	1733.41
J2D1-R2	26719274.00	829885.78	1773.38	12-Mar-02	39.96	1733.42
J2D1-R2	26719274.00	829885.78	1773.38	11-Jun-02	40.00	1733.38
J2D1-R2	26719274.00	829885.78	1773.38	01-Sep-02	40.20	1733.18
J2D1-R2	26719274.00	829885.78	1773.38	18-Dec-02	40.10	1733.28
J2D1-R2	26719274.00	829885.78	1773.38	26-Mar-03	40.00	1733.38
J2D1-R2	26719274.00	829885.78	1773.38	26-Jun-03	40.41	1732.97
J2D1-R2	26719274.00	829885.78	1773.38	25-Sep-03	41.70	1731.68
J2D1-R2	26719274.00	829885.78	1773.38	22-Dec-03	39.91	1733.47
J2D1-R2	26719274.00	829885.78	1773.38	11-Feb-04	41.00	1732.38
J2D1-R2	26719274.00	829885.78	1773.38	29-Apr-04	41.10	1732.28
J2D1-R2	26719274.00	829885.78	1773.38	22-Jul-04	41.27	1732.11
J2D1-R2	26719274.00	829885.78	1773.38	26-Oct-04	41.33	1732.05
J2D1-R2	26719274.00	829885.78	1773.38	14-Feb-05	39.96	1733.42
J2D1-R2	26719274.00	829885.78	1773.38	26-Apr-05	39.46	1733.92
J2D1-R2	26719274.00	829885.78	1773.38	26-Jul-05	39.71	1733.67
J2D1-R2	26719274.00	829885.78	1773.38	26-Oct-05	39.32	1734.06
J2D1-R2	26719274.00	829885.78	1773.38	17-Jan-06	39.19	1734.19
J2D1-R2	26719274.00	829885.78	1773.38	20-Apr-06	39.49	1733.89
J2D1-R2	26719274.00	829885.78	1773.38	19-Jul-06	40.41	1732.97
J2D1-R2	26719274.00	829885.78	1773.38	19-Oct-06	40.71	1732.67
J2D1-R2	26719274.00	829885.78	1773.38	24-Jan-07	40.44	1732.94
J2D1-R2	26719274.00	829885.78	1773.38	09-Apr-07	40.58	1732.80
J2D1-R2	26719274.00	829885.78	1773.38	17-Jul-07	41.19	1732.19
J2D1-R2	26719274.00	829885.78	1773.38	23-Oct-07	N/A	N/A
J2D1-R2	26719274.00	829885.78	1773.38	21-Jan-08	41.39	1731.99
J2D1-R2	26719274.00	829885.78	1773.38	28-Apr-08	41.56	1731.82
J2D1-R2	26719274.00	829885.78	1773.38	21-Jul-08	41.58	1731.80
J2D1-R2	26719274.00	829885.78	1773.38	12-Jan-09	41.26	1732.12
J2D1-R2	26719274.00	829885.78	1773.38	06-Jul-09	41.22	1732.16
J2D1-R2	26719274.00	829885.78	1770.68	28-Apr-10	40.76	1729.92
J2D1-R2	26719274.00	829885.78	1770.68	21-Oct-10	41.99	1728.69
J2D1-R2	26719274.00	829885.78	1770.68	04-Apr-11	41.78	1728.90
J2D2-R2	26719406.73	830098.48	1772.46	22-Mar-00	38.26	1734.20
J2D2-R2	26719406.73	830098.48	1772.46	21-Jun-00	38.83	1733.63
J2D2-R2	26719406.73	830098.48	1772.46	20-Sep-00	39.53	1732.93
J2D2-R2	26719406.73	830098.48	1772.46	14-Dec-00	39.82	1732.64
J2D2-R2	26719406.73	830098.48	1772.46	15-Mar-01	40.50	1731.96
J2D2-R2	26719406.73	830098.48	1772.46	13-Jun-01	40.50	1731.96
J2D2-R2	26719406.73	830098.48	1772.46	26-Sep-01	41.27	1731.19
J2D2-R2	26719406.73	830098.48	1772.46	12-Dec-01	41.40	1731.06

Table 3-1
GROUNDWATER ELEVATION DATA
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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
J2D2-R2	26719406.73	830098.48	1772.46	13-Mar-02	41.40	1731.06
J2D2-R2	26719406.73	830098.48	1772.46	12-Jun-02	41.68	1730.78
J2D2-R2	26719406.73	830098.48	1772.46	27-Sep-02	42.05	1730.41
J2D2-R2	26719406.73	830098.48	1772.46	18-Dec-02	41.80	1730.66
J2D2-R2	26719406.73	830098.48	1772.46	26-Mar-03	41.65	1730.81
J2D2-R2	26719406.73	830098.48	1772.46	26-Jun-03	42.26	1730.20
J2D2-R2	26719406.73	830098.48	1772.46	25-Sep-03	42.72	1729.74
J2D2-R2	26719406.73	830098.48	1772.46	22-Dec-03	42.86	1729.60
J2D2-R2	26719406.73	830098.48	1772.46	11-Feb-04	39.91	1732.55
J2D2-R2	26719406.73	830098.48	1772.46	29-Apr-04	43.05	1729.41
J2D2-R2	26719406.73	830098.48	1772.46	22-Jul-04	43.40	1729.06
J2D2-R2	26719406.73	830098.48	1772.46	26-Oct-04	43.60	1728.86
J2D2-R2	26719406.73	830098.48	1772.46	09-Feb-05	42.07	1730.39
J2D2-R2	26719406.73	830098.48	1772.46	28-Apr-05	41.40	1731.06
J2D2-R2	26719406.73	830098.48	1772.46	26-Jul-05	41.77	1730.69
J2D2-R2	26719406.73	830098.48	1772.46	26-Oct-05	41.39	1731.07
J2D2-R2	26719406.73	830098.48	1772.46	17-Jan-06	41.01	1731.45
J2D2-R2	26719406.73	830098.48	1772.46	20-Apr-06	41.21	1731.25
J2D2-R2	26719406.73	830098.48	1772.46	19-Jul-06	42.18	1730.28
J2D2-R2	26719406.73	830098.48	1772.46	20-Oct-06	42.65	1729.81
J2D2-R2	26719406.73	830098.48	1772.46	25-Jan-07	42.14	1730.32
J2D2-R2	26719406.73	830098.48	1772.46	09-Apr-07	42.34	1730.12
J2D2-R2	26719406.73	830098.48	1772.46	17-Jul-07	43.15	1729.31
J2D2-R2	26719406.73	830098.48	1772.46	23-Oct-07	N/A	N/A
J2D2-R2	26719406.73	830098.48	1772.46	21-Jan-08	43.35	1729.11
J2D2-R2	26719406.73	830098.48	1772.46	28-Apr-08	43.55	1728.91
J2D2-R2	26719406.73	830098.48	1772.46	21-Jul-08	43.05	1729.41
J2D2-R2	26719406.73	830098.48	1772.46	12-Jan-09	43.48	1728.98
J2D2-R2	26719406.73	830098.48	1772.46	06-Jul-09	43.56	1728.90
J2D2-R2	26719406.73	830098.48	1769.55	21-Apr-10	42.84	1726.71
J2D2-R2	26719406.73	830098.48	1769.55	14-Oct-10	43.89	1725.66
J2D2-R2	26719406.73	830098.48	1769.55	04-Apr-11	43.78	1725.77
J2D3	26719443.26	830356.31	1769.90	22-Mar-00	36.06	1733.84
J2D3	26719443.26	830356.31	1769.90	20-Jun-00	36.39	1733.51
J2D3	26719443.26	830356.31	1769.90	20-Sep-00	37.34	1732.56
J2D3	26719443.26	830356.31	1769.90	13-Dec-00	37.42	1732.48
J2D3	26719443.26	830356.31	1769.90	14-Mar-01	37.72	1732.18
J2D3	26719443.26	830356.31	1769.90	12-Jun-01	38.17	1731.73
J2D3	26719443.26	830356.31	1769.90	01-Sep-01	39.10	1730.80
J2D3	26719443.26	830356.31	1769.90	12-Dec-01	39.12	1730.78
J2D3	26719443.26	830356.31	1769.90	12-Mar-02	39.93	1729.97
J2D3	26719443.26	830356.31	1769.90	11-Jun-02	39.37	1730.53
J2D3	26719443.26	830356.31	1769.90	01-Sep-02	N/A	N/A
J2D3	26719443.26	830356.31	1769.90	18-Dec-02	N/A	N/A
J2D3	26719443.26	830356.31	1769.90	26-Mar-03	40.19	1729.71
J2D3	26719443.26	830356.31	1769.90	25-Jun-03	40.05	1729.85

Table 3-1
GROUNDWATER ELEVATION DATA
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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
J2D3	26719443.26	830356.31	1769.90	25-Sep-03	40.56	1729.34
J2D3	26719443.26	830356.31	1769.90	22-Dec-03	40.37	1729.53
J2D3	26719443.26	830356.31	1769.90	11-Feb-04	40.40	1729.50
J2D3	26719443.26	830356.31	1769.90	29-Apr-04	40.62	1729.28
J2D3	26719443.26	830356.31	1769.90	22-Jul-04	41.10	1728.80
J2D3	26719443.26	830356.31	1769.90	26-Oct-04	41.20	1728.70
J2D3	26719443.26	830356.31	1769.90	10-Feb-05	39.21	1730.69
J2D3	26719443.26	830356.31	1769.90	25-Apr-05	38.76	1731.14
J2D3	26719443.26	830356.31	1769.90	01-Aug-05	39.54	1730.36
J2D3	26719443.26	830356.31	1769.90	28-Oct-05	N/A	N/A
J2D3	26719443.26	830356.31	1769.90	19-Jan-06	38.34	1731.56
J2D3	26719443.26	830356.31	1769.90	20-Apr-06	38.72	1731.18
J2D3	26719443.26	830356.31	1769.90	19-Jul-06	39.96	1729.94
J2D3	26719443.26	830356.31	1769.90	19-Oct-06	40.25	1729.65
J2D3	26719443.26	830356.31	1769.90	23-Jan-07	39.47	1730.43
J2D3	26719443.26	830356.31	1769.90	09-Apr-07	39.78	1730.12
J2D3	26719443.26	830356.31	1769.90	17-Jul-07	40.86	1729.04
J2D3	26719443.26	830356.31	1769.90	23-Oct-07	N/A	N/A
J2D3	26719443.26	830356.31	1769.90	21-Jan-08	40.70	1729.20
J2D3	26719443.26	830356.31	1769.90	28-Apr-08	40.99	1728.91
J2D3	26719443.26	830356.31	1769.90	21-Jul-08	41.25	1728.65
J2D3-R	26719408.27	830353.04	1769.90	12-Jan-09	40.86	1729.04
J2D3-R	26719408.27	830353.04	1769.90	06-Jul-09	41.24	1728.66
J2D3-R	26719408.27	830353.04	1769.90	21-Apr-10	40.30	1729.60
J2D3-R	26719408.27	830353.04	1769.90	28-Oct-10	41.23	1728.67
J2D3-R	26719408.27	830353.04	1769.90	04-Apr-11	41.09	1728.81
J2D4	26719171.05	829582.57	1774.29	23-Mar-00	36.38	1737.91
J2D4	26719171.05	829582.57	1774.29	20-Jun-00	36.83	1737.46
J2D4	26719171.05	829582.57	1774.29	21-Sep-00	37.16	1737.13
J2D4	26719171.05	829582.57	1774.29	14-Dec-00	37.27	1737.02
J2D4	26719171.05	829582.57	1774.29	15-Mar-01	37.31	1736.98
J2D4	26719171.05	829582.57	1774.29	13-Jun-01	37.47	1736.82
J2D4	26719171.05	829582.57	1774.29	01-Sep-01	37.88	1736.41
J2D4	26719171.05	829582.57	1774.29	13-Dec-01	37.91	1736.38
J2D4	26719171.05	829582.57	1774.29	12-Mar-02	37.50	1736.79
J2D4	26719171.05	829582.57	1774.29	11-Jun-02	37.60	1736.69
J2D4	26719171.05	829582.57	1774.29	01-Sep-02	37.90	1736.39
J2D4	26719171.05	829582.57	1774.29	18-Dec-02	38.00	1736.29
J2D4	26719171.05	829582.57	1774.29	27-Mar-03	38.11	1736.18
J2D4	26719171.05	829582.57	1774.29	26-Jun-03	38.17	1736.12
J2D4	26719171.05	829582.57	1774.29	25-Sep-03	38.29	1736.00
J2D4	26719171.05	829582.57	1774.29	22-Dec-03	33.38	1740.91
J2D4	26719171.05	829582.57	1774.29	11-Feb-04	38.47	1735.82
J2D4	26719171.05	829582.57	1774.29	29-Apr-04	38.42	1735.87
J2D4	26719171.05	829582.57	1774.29	22-Jul-04	38.51	1735.78
J2D4	26719171.05	829582.57	1774.29	26-Oct-04	38.47	1735.82

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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
J2D4	26719171.05	829582.57	1774.29	11-Feb-05	37.30	1736.99
J2D4	26719171.05	829582.57	1774.29	26-Apr-05	37.09	1737.20
J2D4	26719171.05	829582.57	1774.29	26-Jul-05	37.35	1736.94
J2D4	26719171.05	829582.57	1774.29	27-Oct-05	37.15	1737.14
J2D4	26719171.05	829582.57	1774.29	18-Jan-06	37.15	1737.14
J2D4	26719171.05	829582.57	1774.29	21-Apr-06	N/A	N/A
J2D4	26719171.05	829582.57	1774.29	20-Jul-06	38.11	1736.18
J2D4	26719171.05	829582.57	1774.29	19-Oct-06	38.29	1736.00
J2D4	26719171.05	829582.57	1774.29	22-Jan-07	38.25	1736.04
J2D4	26719171.05	829582.57	1774.29	09-Apr-07	38.33	1735.96
J2D4	26719171.05	829582.57	1774.29	17-Jul-07	38.57	1735.72
J2D4	26719171.05	829582.57	1774.29	22-Oct-07	38.60	1735.69
J2D4	26719171.05	829582.57	1774.29	21-Jan-08	38.53	1735.76
J2D4	26719171.05	829582.57	1774.29	28-Apr-08	38.71	1735.58
J2D4	26719171.05	829582.57	1774.29	21-Jul-08	38.33	1735.96
J2D4	26719171.05	829582.57	1774.29	12-Jan-09	38.01	1736.28
J2D4	26719171.05	829582.57	1774.29	06-Jul-09	37.93	1736.36
J2D4	26719171.05	829582.57	1774.66	04-May-10	37.71	1736.95
J2D4	26719171.05	829582.57	1774.66	27-Oct-10	38.51	1736.15
J2D4	26719171.05	829582.57	1774.66	04-Apr-11	38.77	1735.89
J2U1	26718499.09	830498.14	1800.98	22-Mar-00	47.53	1753.45
J2U1	26718499.09	830498.14	1800.98	20-Jun-00	48.20	1752.78
J2U1	26718499.09	830498.14	1800.98	20-Sep-00	48.80	1752.18
J2U1	26718499.09	830498.14	1800.98	13-Dec-00	48.90	1752.08
J2U1	26718499.09	830498.14	1800.98	14-Mar-01	51.90	1749.08
J2U1	26718499.09	830498.14	1800.98	12-Jun-01	51.85	1749.13
J2U1	26718499.09	830498.14	1800.98	01-Sep-01	51.87	1749.11
J2U1	26718499.09	830498.14	1800.98	12-Dec-01	51.88	1749.10
J2U1	26718499.09	830498.14	1800.98	12-Mar-02	51.88	1749.10
J2U1	26718499.09	830498.14	1800.98	11-Jun-02	50.86	1750.12
J2U1	26718499.09	830498.14	1800.98	01-Sep-02	52.30	1748.68
J2U1	26718499.09	830498.14	1800.98	18-Dec-02	52.30	1748.68
J2U1	26718499.09	830498.14	1800.98	26-Mar-03	52.30	1748.68
J2U1	26718499.09	830498.14	1800.98	25-Jun-03	52.30	1748.68
J2U1	26718499.09	830498.14	1800.98	25-Sep-03	52.30	1748.68
J2U1	26718499.09	830498.14	1800.98	22-Dec-03	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	11-Feb-04	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	29-Apr-04	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	22-Jul-04	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	26-Oct-04	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	10-Feb-05	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	25-Apr-05	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	27-Jul-05	48.72	1752.26
J2U1	26718499.09	830498.14	1800.98	28-Oct-05	48.04	1752.94
J2U1	26718499.09	830498.14	1800.98	19-Jan-06	48.42	1752.56
J2U1	26718499.09	830498.14	1800.98	21-Apr-06	48.93	1752.05

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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
J2U1	26718499.09	830498.14	1800.98	19-Jul-06	51.49	1749.49
J2U1	26718499.09	830498.14	1800.98	20-Oct-06	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	22-Jan-07	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	09-Apr-07	49.04	1751.94
J2U1	26718499.09	830498.14	1800.98	17-Jul-07	50.58	1750.40
J2U1	26718499.09	830498.14	1800.98	23-Oct-07	N/A	N/A
J2U1	26718499.09	830498.14	1800.98	21-Jan-08	51.67	1749.31
J2U1	26718499.09	830498.14	1800.98	28-Apr-08	51.70	1749.28
J2U1	26718499.09	830498.14	1800.98	21-Jul-08	51.68	1749.30
J2U1	26718499.09	830498.14	1800.98	12-Jan-09	51.67	1749.31
J2U1	26718499.09	830498.14	1800.98	06-Jul-09	51.68	1749.30
J2U1	26718499.09	830498.14	1800.98	29-Oct-10	51.72	1749.26
J2U1	26718499.09	830498.14	1800.98	04-Apr-11	51.75	1749.23
J2U2	26718456.02	830063.17	1798.35	22-Mar-00	44.04	1754.31
J2U2	26718456.02	830063.17	1798.35	20-Jun-00	44.46	1753.89
J2U2	26718456.02	830063.17	1798.35	20-Sep-00	44.58	1753.77
J2U2	26718456.02	830063.17	1798.35	13-Dec-00	44.82	1753.53
J2U2	26718456.02	830063.17	1798.35	14-Mar-01	45.21	1753.14
J2U2	26718456.02	830063.17	1798.35	12-Jun-01	45.38	1752.97
J2U2	26718456.02	830063.17	1798.35	01-Sep-01	45.46	1752.89
J2U2	26718456.02	830063.17	1798.35	12-Dec-01	45.68	1752.67
J2U2	26718456.02	830063.17	1798.35	12-Mar-02	45.70	1752.65
J2U2	26718456.02	830063.17	1798.35	11-Jun-02	43.86	1754.49
J2U2	26718456.02	830063.17	1798.35	01-Sep-02	43.58	1754.77
J2U2	26718456.02	830063.17	1798.35	18-Dec-02	43.60	1754.75
J2U2	26718456.02	830063.17	1798.35	26-Mar-03	43.87	1754.48
J2U2	26718456.02	830063.17	1798.35	25-Jun-03	44.20	1754.15
J2U2	26718456.02	830063.17	1798.35	25-Sep-03	44.55	1753.80
J2U2	26718456.02	830063.17	1798.35	22-Dec-03	45.64	1752.71
J2U2	26718456.02	830063.17	1798.35	11-Feb-04	45.76	1752.59
J2U2	26718456.02	830063.17	1798.35	29-Apr-04	45.55	1752.80
J2U2	26718456.02	830063.17	1798.35	22-Jul-04	45.30	1753.05
J2U2	26718456.02	830063.17	1798.35	26-Oct-04	44.52	1753.83
J2U2	26718456.02	830063.17	1798.35	10-Feb-05	44.72	1753.63
J2U2	26718456.02	830063.17	1798.35	27-Apr-05	44.28	1754.07
J2U2	26718456.02	830063.17	1798.35	25-Jul-05	43.63	1754.72
J2U2	26718456.02	830063.17	1798.35	26-Oct-05	42.43	1755.92
J2U2	26718456.02	830063.17	1798.35	17-Jan-06	43.92	1754.43
J2U2	26718456.02	830063.17	1798.35	26-Apr-06	44.75	1753.60
J2U2	26718456.02	830063.17	1798.35	20-Jul-06	44.66	1753.69
J2U2	26718456.02	830063.17	1798.35	20-Oct-06	44.29	1754.06
J2U2	26718456.02	830063.17	1798.35	22-Jan-07	42.97	1755.38
J2U2	26718456.02	830063.17	1798.35	09-Apr-07	45.55	1752.80
J2U2	26718456.02	830063.17	1798.35	17-Jul-07	44.98	1753.37
J2U2	26718456.02	830063.17	1798.35	23-Oct-07	45.61	1752.74
J2U2	26718456.02	830063.17	1798.35	21-Jan-08	46.11	1752.24

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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
J2U2	26718456.02	830063.17	1798.35	28-Apr-08	N/A	N/A
J2U2	26718456.02	830063.17	1798.35	21-Jul-08	45.13	1753.22
J2U2	26718456.02	830063.17	1798.35	12-Jan-09	45.38	1752.97
J2U2	26718456.02	830063.17	1798.35	06-Jul-09	45.10	1753.25
J2U2	26718456.02	830063.17	1798.54	22-Apr-10	45.61	1752.93
J2U2	26718456.02	830063.17	1798.54	28-Oct-10	46.29	1752.25
J2U2	26718456.02	830063.17	1798.54	04-Apr-11	46.54	1752.00
M-129	26720079.64	828806.43	1747.26	13-May-10	30.10	1717.16
M-129	26720079.64	828806.43	1747.26	21-Oct-10	30.29	1716.97
M-129	26720079.64	828806.43	1747.26	04-Apr-11	30.36	1716.90
M-130	26719919.70	828832.01	1749.23	12-May-10	26.76	1722.47
M-130	26719919.70	828832.01	1749.23	01-Nov-10	26.01	1723.22
M-130	26719919.70	828832.01	1749.23	04-Apr-11	29.49	1719.74
PC-024	26726729.82	829524.18	1633.48	03-May-10	20.77	1612.71
PC-024	26726729.82	829524.18	1633.48	11-Oct-10	20.56	1612.92
PC-024	26726729.82	829524.18	1633.48	04-Apr-11	20.60	1612.88
PC-028	26725375.67	828530.65	1650.85	04-May-10	11.53	1639.32
PC-028	26725375.67	828530.65	1650.85	18-Oct-10	11.77	1639.08
PC-028	26725375.67	828530.65	1650.85	04-Apr-11	11.72	1639.13
PC-054	26722067.79	828296.34	1704.43	29-Apr-10	18.55	1685.88
PC-054	26722067.79	828296.34	1704.43	06-Oct-10	18.14	1686.29
PC-054	26722067.79	828296.34	1704.43	04-Apr-11	19.21	1685.22
PC-067	26723846.88	829207.58	1673.82	04-May-10	11.58	1662.24
PC-067	26723846.88	829207.58	1673.82	18-Oct-10	11.90	1661.92
PC-067	26723846.88	829207.58	1673.82	04-Apr-11	12.40	1661.42
PC-124	26726741.58	830132.95	1635.73	03-May-10	24.83	1610.90
PC-124	26726741.58	830132.95	1635.73	11-Oct-10	24.91	1610.82
PC-124	26726741.58	830132.95	1635.73	04-Apr-11	24.91	1610.82
POD2-R	26724825.40	831955.50	1673.40	05-May-10	N/A	N/A
POD2-R	26724825.40	831955.50	1675.99	14-Oct-10	63.73	1612.26
POD2-R	26724825.40	831955.50	1675.99	14-Oct-10	63.73	1612.26
POD2-R	26724825.40	831955.50	1673.40	04-Apr-11	63.90	1609.50
POU-3	26721664.71	831329.98	1730.00	05-May-10	38.67	1691.33
POU-3	26721664.71	831329.98	1728.51	13-Oct-10	39.09	1689.42
POU-3	26721664.71	831329.98	1730.00	04-Apr-11	39.53	1690.47
TIMETMW-1	26718339.19	830090.23	1801.69	04-May-10	45.78	1755.91
TIMETMW-1	26718339.19	830090.23	N/A	29-Oct-10	46.52	N/A
TIMETMW-1	26718339.19	830090.23	1801.69	04-Apr-11	46.77	1754.92
TIMETMW-2	26718418.59	830045.45	N/A	04-Oct-10	45.65	N/A
TIMETMW-2	26718418.59	830045.45	N/A	04-Oct-10	45.65	N/A
TIMETMW-2	26718418.59	830045.45	1800.00	04-Apr-11	47.91	1752.09
TIMETMW-3	26716618.99	830128.14	1843.63	22-Mar-00	55.95	1787.68
TIMETMW-3	26716618.99	830128.14	1843.63	20-Jun-00	56.27	1787.36
TIMETMW-3	26716618.99	830128.14	1843.63	20-Sep-00	56.44	1787.19
TIMETMW-3	26716618.99	830128.14	1843.63	12-Dec-00	56.31	1787.32
TIMETMW-3	26716618.99	830128.14	1843.63	14-Mar-01	56.19	1787.44

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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
TIMETMW-3	26716618.99	830128.14	1843.63	13-Jun-01	56.25	1787.38
TIMETMW-3	26716618.99	830128.14	1843.63	26-Sep-01	57.48	1786.15
TIMETMW-3	26716618.99	830128.14	1843.63	12-Dec-01	56.28	1787.35
TIMETMW-3	26716618.99	830128.14	1843.63	12-Mar-02	56.15	1787.48
TIMETMW-3	26716618.99	830128.14	1843.63	12-Jun-02	56.50	1787.13
TIMETMW-3	26716618.99	830128.14	1843.63	26-Sep-02	56.70	1786.93
TIMETMW-3	26716618.99	830128.14	1843.63	17-Dec-02	56.60	1787.03
TIMETMW-3	26716618.99	830128.14	1843.63	26-Mar-03	56.72	1786.91
TIMETMW-3	26716618.99	830128.14	1843.63	25-Jun-03	56.88	1786.75
TIMETMW-3	26716618.99	830128.14	1843.63	24-Sep-03	56.73	1786.90
TIMETMW-3	26716618.99	830128.14	1843.63	18-Dec-03	56.54	1787.09
TIMETMW-3	26716618.99	830128.14	1843.63	10-Feb-04	56.25	1787.38
TIMETMW-3	26716618.99	830128.14	1843.63	28-Apr-04	56.25	1787.38
TIMETMW-3	26716618.99	830128.14	1843.63	21-Jul-04	56.72	1786.91
TIMETMW-3	26716618.99	830128.14	1843.63	25-Oct-04	56.82	1786.81
TIMETMW-3	26716618.99	830128.14	1843.63	10-Feb-05	56.23	1787.40
TIMETMW-3	26716618.99	830128.14	1843.63	29-Apr-05	55.94	1787.69
TIMETMW-3	26716618.99	830128.14	1843.63	27-Jul-05	56.00	1787.63
TIMETMW-3	26716618.99	830128.14	1843.63	28-Oct-05	55.63	1788.00
TIMETMW-3	26716618.99	830128.14	1843.63	23-Jan-06	55.60	1788.03
TIMETMW-3	26716618.99	830128.14	1843.63	25-Apr-06	55.88	1787.75
TIMETMW-3	26716618.99	830128.14	1843.63	18-Jul-06	56.37	1787.26
TIMETMW-3	26716618.99	830128.14	1843.63	18-Oct-06	56.66	1786.97
TIMETMW-3	26716618.99	830128.14	1843.63	23-Jan-07	56.44	1787.19
TIMETMW-3	26716618.99	830128.14	1843.63	09-Apr-07	56.54	1787.09
TIMETMW-3	26716618.99	830128.14	1843.63	17-Jul-07	56.57	1787.06
TIMETMW-3	26716618.99	830128.14	1843.63	23-Oct-07	N/A	N/A
TIMETMW-3	26716618.99	830128.14	1843.63	21-Jan-08	N/A	N/A
TIMETMW-3	26716618.99	830128.14	1843.63	28-Apr-08	N/A	N/A
TIMETMW-3	26716618.99	830128.14	1843.63	21-Jul-08	N/A	N/A
TIMETMW-3R	26716571.73	829483.25	1840.39	12-Jan-09	52.84	1787.55
TIMETMW-3R	26716571.73	829483.25	1840.39	06-Jul-09	52.53	1787.86
TIMETMW-3R	26716571.73	829483.25	1840.39	13-May-10	53.04	1787.35
TIMETMW-3R	26716571.73	829483.25	1840.39	06-Oct-10	53.93	1786.46
TIMETMW-3R	26716571.73	829483.25	1840.39	04-Apr-11	52.94	1787.45
TIMETMW-4	26718582.87	830973.92	1800.60	22-Mar-00	49.61	1750.99
TIMETMW-4	26718582.87	830973.92	1800.60	20-Jun-00	50.35	1750.25
TIMETMW-4	26718582.87	830973.92	1800.60	20-Sep-00	50.90	1749.70
TIMETMW-4	26718582.87	830973.92	1800.60	12-Dec-00	51.18	1749.42
TIMETMW-4	26718582.87	830973.92	1800.60	14-Mar-01	51.18	1749.42
TIMETMW-4	26718582.87	830973.92	1800.60	13-Jun-01	51.55	1749.05
TIMETMW-4	26718582.87	830973.92	1800.60	26-Sep-01	51.95	1748.65
TIMETMW-4	26718582.87	830973.92	1800.60	12-Dec-01	51.77	1748.83
TIMETMW-4	26718582.87	830973.92	1800.60	12-Mar-02	51.48	1749.12
TIMETMW-4	26718582.87	830973.92	1800.60	12-Jun-02	52.00	1748.60
TIMETMW-4	26718582.87	830973.92	1800.60	26-Sep-02	52.00	1748.60

Table 3-1
GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
TIMETMW-4	26718582.87	830973.92	1800.60	17-Dec-02	51.00	1749.60
TIMETMW-4	26718582.87	830973.92	1800.60	26-Mar-03	51.36	1749.24
TIMETMW-4	26718582.87	830973.92	1800.60	25-Jun-03	52.05	1748.55
TIMETMW-4	26718582.87	830973.92	1800.60	24-Sep-03	52.11	1748.49
TIMETMW-4	26718582.87	830973.92	1800.60	18-Dec-03	51.42	1749.18
TIMETMW-4	26718582.87	830973.92	1800.60	10-Feb-04	52.00	1748.60
TIMETMW-4	26718582.87	830973.92	1800.60	28-Apr-04	52.03	1748.57
TIMETMW-4	26718582.87	830973.92	1800.60	21-Jul-04	52.38	1748.22
TIMETMW-4	26718582.87	830973.92	1800.60	25-Oct-04	52.35	1748.25
TIMETMW-4	26718582.87	830973.92	1800.60	10-Feb-05	50.31	1750.29
TIMETMW-4	26718582.87	830973.92	1800.60	26-Apr-05	49.72	1750.88
TIMETMW-4	26718582.87	830973.92	1800.60	25-Jul-05	50.58	1750.02
TIMETMW-4	26718582.87	830973.92	1800.60	25-Oct-05	50.69	1749.91
TIMETMW-4	26718582.87	830973.92	1800.60	16-Jan-06	50.56	1750.04
TIMETMW-4	26718582.87	830973.92	1800.60	21-Apr-06	50.63	1749.97
TIMETMW-4	26718582.87	830973.92	1800.60	19-Jul-06	51.36	1749.24
TIMETMW-4	26718582.87	830973.92	1800.60	20-Oct-06	47.98	1752.62
TIMETMW-4	26718582.87	830973.92	1800.60	25-Jan-07	50.09	1750.51
TIMETMW-4	26718582.87	830973.92	1800.60	09-Apr-07	51.07	1749.53
TIMETMW-4	26718582.87	830973.92	1800.60	17-Jul-07	51.85	1748.75
TIMETMW-4	26718582.87	830973.92	1800.60	23-Oct-07	N/A	N/A
TIMETMW-4	26718582.87	830973.92	1800.60	21-Jan-08	51.35	1749.25
TIMETMW-4	26718582.87	830973.92	1800.60	28-Apr-08	52.36	1748.24
TIMETMW-4	26718582.87	830973.92	1800.60	21-Jul-08	52.18	1748.42
TIMETMW-4	26718582.87	830973.92	1800.60	12-Jan-09	51.61	1748.99
TIMETMW-4	26718582.87	830973.92	1800.60	06-Jul-09	51.83	1748.77
TIMETMW-4	26718582.87	830973.92	1800.61	14-Apr-10	51.28	1749.33
TIMETMW-4	26718582.87	830973.92	1800.61	11-Oct-10	52.12	1748.49
TIMETMW-4	26718582.87	830973.92	1800.61	04-Apr-11	52.07	1748.54
TIMETMW-5	26718063.61	830385.81	1812.47	22-Mar-00	49.10	1763.37
TIMETMW-5	26718063.61	830385.81	1812.47	20-Jun-00	49.83	1762.64
TIMETMW-5	26718063.61	830385.81	1812.47	20-Sep-00	50.02	1762.45
TIMETMW-5	26718063.61	830385.81	1812.47	12-Dec-00	50.43	1762.04
TIMETMW-5	26718063.61	830385.81	1812.47	14-Mar-01	50.75	1761.72
TIMETMW-5	26718063.61	830385.81	1812.47	13-Jun-01	50.66	1761.81
TIMETMW-5	26718063.61	830385.81	1812.47	26-Sep-01	50.68	1761.79
TIMETMW-5	26718063.61	830385.81	1812.47	12-Dec-01	50.80	1761.67
TIMETMW-5	26718063.61	830385.81	1812.47	12-Mar-02	50.81	1761.66
TIMETMW-5	26718063.61	830385.81	1812.47	12-Jun-02	50.45	1762.02
TIMETMW-5	26718063.61	830385.81	1812.47	26-Sep-02	50.10	1762.37
TIMETMW-5	26718063.61	830385.81	1812.47	17-Dec-02	50.30	1762.17
TIMETMW-5	26718063.61	830385.81	1812.47	26-Mar-03	50.63	1761.84
TIMETMW-5	26718063.61	830385.81	1812.47	25-Jun-03	50.22	1762.25
TIMETMW-5	26718063.61	830385.81	1812.47	24-Sep-03	50.32	1762.15
TIMETMW-5	26718063.61	830385.81	1812.47	18-Dec-03	50.80	1761.67
TIMETMW-5	26718063.61	830385.81	1812.47	10-Feb-04	50.82	1761.65

Table 3-1
GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
TIMETMW-5	26718063.61	830385.81	1812.47	28-Apr-04	50.62	1761.85
TIMETMW-5	26718063.61	830385.81	1812.47	21-Jul-04	50.28	1762.19
TIMETMW-5	26718063.61	830385.81	1812.47	25-Oct-04	49.38	1763.09
TIMETMW-5	26718063.61	830385.81	1812.47	14-Feb-05	49.88	1762.59
TIMETMW-5	26718063.61	830385.81	1812.47	27-Apr-05	48.95	1763.52
TIMETMW-5	26718063.61	830385.81	1812.47	25-Jul-05	49.09	1763.38
TIMETMW-5	26718063.61	830385.81	1812.47	26-Oct-05	48.71	1763.76
TIMETMW-5	26718063.61	830385.81	1812.47	16-Jan-06	49.32	1763.15
TIMETMW-5	26718063.61	830385.81	1812.47	21-Apr-06	49.82	1762.65
TIMETMW-5	26718063.61	830385.81	1812.47	21-Jul-06	50.04	1762.43
TIMETMW-5	26718063.61	830385.81	1812.47	20-Oct-06	50.00	1762.47
TIMETMW-5	26718063.61	830385.81	1812.47	25-Jan-07	50.39	1762.08
TIMETMW-5	26718063.61	830385.81	1812.47	09-Apr-07	50.74	1761.73
TIMETMW-5	26718063.61	830385.81	1812.47	17-Jul-07	50.64	1761.83
TIMETMW-5	26718063.61	830385.81	1812.47	23-Oct-07	N/A	N/A
TIMETMW-5	26718063.61	830385.81	1812.47	21-Jan-08	50.85	1761.62
TIMETMW-5	26718063.61	830385.81	1812.47	28-Apr-08	50.82	1761.65
TIMETMW-5	26718063.61	830385.81	1812.47	21-Jul-08	50.77	1761.70
TIMETMW-5	26718063.61	830385.81	1812.47	12-Jan-09	50.13	1762.34
TIMETMW-5	26718063.61	830385.81	1812.47	06-Jul-09	50.15	1762.32
TIMETMW-5	26718063.61	830385.81	1812.48	14-Apr-10	50.52	1761.96
TIMETMW-5	26718063.61	830385.81	1812.48	12-Oct-10	51.07	1761.41
TIMETMW-5	26718063.61	830385.81	1812.48	04-Apr-11	51.21	1761.27
TIMETMW-6R	26717836.95	829221.18	1812.63	22-Mar-00	43.26	1769.37
TIMETMW-6R	26717836.95	829221.18	1812.63	21-Jun-00	43.57	1769.06
TIMETMW-6R	26717836.95	829221.18	1812.63	20-Sep-00	41.57	1771.06
TIMETMW-6R	26717836.95	829221.18	1812.63	26-Sep-01	43.81	1768.82
TIMETMW-6R	26717836.95	829221.18	1812.63	12-Dec-01	43.78	1768.85
TIMETMW-6R	26717836.95	829221.18	1812.63	14-Mar-02	43.31	1769.32
TIMETMW-6R	26717836.95	829221.18	1812.63	13-Jun-02	43.25	1769.38
TIMETMW-6R	26717836.95	829221.18	1812.63	30-Sep-02	43.40	1769.23
TIMETMW-6R	26717836.95	829221.18	1812.63	18-Dec-02	43.80	1768.83
TIMETMW-6R	26717836.95	829221.18	1812.63	26-Mar-03	43.67	1768.96
TIMETMW-6R	26717836.95	829221.18	1812.63	25-Jun-03	43.71	1768.92
TIMETMW-6R	26717836.95	829221.18	1812.63	24-Sep-03	43.89	1768.74
TIMETMW-6R	26717836.95	829221.18	1812.63	18-Dec-03	43.98	1768.65
TIMETMW-6R	26717836.95	829221.18	1812.63	10-Feb-04	43.83	1768.80
TIMETMW-6R	26717836.95	829221.18	1812.63	28-Apr-04	43.52	1769.11
TIMETMW-6R	26717836.95	829221.18	1812.63	21-Jul-04	43.49	1769.14
TIMETMW-6R	26717836.95	829221.18	1812.63	25-Oct-04	43.36	1769.27
TIMETMW-6R	26717836.95	829221.18	1812.63	14-Feb-05	42.50	1770.13
TIMETMW-6R	26717836.95	829221.18	1812.63	27-Apr-05	42.55	1770.08
TIMETMW-6R	26717836.95	829221.18	1812.63	25-Jul-05	42.86	1769.77
TIMETMW-6R	26717836.95	829221.18	1812.63	26-Oct-05	42.51	1770.12
TIMETMW-6R	26717836.95	829221.18	1812.63	18-Jan-06	43.18	1769.45
TIMETMW-6R	26717836.95	829221.18	1812.63	14-Mar-06	43.23	1769.40

Table 3-1
GROUNDWATER ELEVATION DATA
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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
TIMETMW-6R	26717836.95	829221.18	1812.63	25-Apr-06	43.92	1768.71
TIMETMW-6R	26717836.95	829221.18	1812.63	13-Jun-06	43.51	1769.12
TIMETMW-6R	26717836.95	829221.18	1812.63	21-Jul-06	43.76	1768.87
TIMETMW-6R	26717836.95	829221.18	1812.63	23-Oct-06	43.72	1768.91
TIMETMW-6R	26717836.95	829221.18	1812.63	13-Dec-06	42.75	1769.88
TIMETMW-6R	26717836.95	829221.18	1812.63	24-Jan-07	43.75	1768.88
TIMETMW-6R	26717836.95	829221.18	1812.63	09-Apr-07	46.61	1766.02
TIMETMW-6R	26717836.95	829221.18	1812.63	17-Jul-07	44.10	1768.53
TIMETMW-6R	26717836.95	829221.18	1812.63	22-Oct-07	44.39	1768.24
TIMETMW-6R	26717836.95	829221.18	1812.63	21-Jan-08	43.35	1769.28
TIMETMW-6R	26717836.95	829221.18	1812.63	28-Apr-08	44.23	1768.40
TIMETMW-6R	26717836.95	829221.18	1812.63	21-Jul-08	43.04	1769.59
TIMETMW-6R	26717836.95	829221.18	1812.63	12-Jan-09	43.31	1769.32
TIMETMW-6R	26717836.95	829221.18	1812.63	06-Jul-09	42.41	1770.22
TIMETMW-6R	26717836.95	829221.18	1812.36	15-Apr-10	43.61	1768.75
TIMETMW-6R	26717836.95	829221.18	1812.36	12-Oct-10	44.65	1767.71
TIMETMW-6R	26717836.95	829221.18	1812.36	04-Apr-11	44.45	1767.91
TMMW-101	26715285.26	829462.76	1881.11	17-Jul-07	72.11	1809.00
TMMW-101	26715285.26	829462.76	1881.11	30-Oct-07	75.10	1806.01
TMMW-101	26715285.26	829462.76	1881.11	21-Jan-08	75.46	1805.65
TMMW-101	26715285.26	829462.76	1876.91	28-Apr-08	70.72	1806.19
TMMW-101	26715285.26	829462.76	1876.91	21-Jul-08	N/A	N/A
TMMW-101	26715285.26	829462.76	1876.91	12-Jan-09	70.75	1806.16
TMMW-101	26715285.26	829462.76	1876.91	06-Jul-09	70.05	1806.86
TMMW-101	26715285.26	829462.76	1876.91	21-Apr-10	68.25	1808.66
TMMW-101	26715285.26	829462.76	1876.91	04-Oct-10	69.82	1807.09
TMMW-101	26715285.26	829462.76	1876.91	04-Apr-11	68.39	1808.52
TMMW-102	26715433.08	830371.18	1882.34	17-Jul-07	70.95	1811.39
TMMW-102	26715433.08	830371.18	1882.34	29-Oct-07	71.89	1810.45
TMMW-102	26715433.08	830371.18	1882.34	21-Jan-08	72.67	1809.67
TMMW-102	26715433.08	830371.18	1882.46	28-Apr-08	73.13	1809.33
TMMW-102	26715433.08	830371.18	1882.46	21-Jul-08	N/A	N/A
TMMW-102	26715433.08	830371.18	1882.46	12-Jan-09	71.19	1811.27
TMMW-102	26715433.08	830371.18	1882.46	06-Jul-09	68.54	1813.92
TMMW-102	26715433.08	830371.18	1882.46	21-Apr-10	66.31	1816.15
TMMW-102	26715433.08	830371.18	1882.46	04-Oct-10	65.91	1816.55
TMMW-102	26715433.08	830371.18	1882.46	04-Apr-11	64.77	1817.69
TMMW-103	26715583.05	831325.82	1884.95	17-Jul-07	74.29	1810.66
TMMW-103	26715583.05	831325.82	1884.95	12-Nov-07	73.81	1811.14
TMMW-103	26715583.05	831325.82	1884.95	21-Jan-08	74.77	1810.18
TMMW-103	26715583.05	831325.82	1882.95	28-Apr-08	72.78	1810.17
TMMW-103	26715583.05	831325.82	1882.95	21-Jul-08	N/A	N/A
TMMW-103	26715583.05	831325.82	1882.95	12-Jan-09	69.98	1812.97
TMMW-103	26715583.05	831325.82	1882.95	06-Jul-09	69.75	1813.20
TMMW-103	26715583.05	831325.82	1882.95	26-Apr-10	67.68	1815.27
TMMW-103	26715583.05	831325.82	1882.95	04-Oct-10	68.26	1814.69

Table 3-1
GROUNDWATER ELEVATION DATA
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Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
TMMW-103	26715583.05	831325.82	1882.95	04-Apr-11	68.42	1814.53
TMMW-104	26715722.71	832104.88	1885.51	17-Jul-07	73.64	1811.87
TMMW-104	26715722.71	832104.88	1885.51	23-Oct-07	74.06	1811.45
TMMW-104	26715722.71	832104.88	1885.51	21-Jan-08	73.92	1811.59
TMMW-104	26715722.71	832104.88	1885.78	28-Apr-08	74.11	1811.67
TMMW-104	26715722.71	832104.88	1885.78	21-Jul-08	N/A	N/A
TMMW-104	26715722.71	832104.88	1885.78	12-Jan-09	68.75	1817.03
TMMW-104	26715722.71	832104.88	1885.78	06-Jul-09	71.66	1814.12
TMMW-104	26715722.71	832104.88	1885.78	20-Apr-10	71.15	1814.63
TMMW-104	26715722.71	832104.88	1885.78	04-Oct-10	67.91	1817.87
TMMW-104	26715722.71	832104.88	1885.78	04-Apr-11	72.21	1813.57
TMPZ-105	26720557.27	828703.77	1736.68	17-Jul-07	31.97	1704.71
TMPZ-105	26720557.27	828703.77	1736.68	23-Oct-07	N/A	N/A
TMPZ-105	26720557.27	828703.77	1736.68	21-Jan-08	33.05	1703.63
TMPZ-105	26720557.27	828703.77	1736.68	28-Apr-08	33.47	1703.21
TMPZ-105	26720557.27	828703.77	1736.68	21-Jul-08	33.98	1702.70
TMPZ-105	26720557.27	828703.77	1736.68	12-Jan-09	33.91	1702.77
TMPZ-105	26720557.27	828703.77	1736.68	06-Jul-09	34.05	1702.63
TMPZ-105	26720557.27	828703.77	1736.68	06-May-10	33.35	1703.33
TMPZ-105	26720557.27	828703.77	1736.68	19-Oct-10	33.29	1703.39
TMPZ-105	26720557.27	828703.77	1736.68	04-Apr-11	33.70	1702.98
TMPZ-106	26720359.15	829102.42	1742.25	17-Jul-07	30.54	1711.71
TMPZ-106	26720359.15	829102.42	1742.25	23-Oct-07	N/A	N/A
TMPZ-106	26720359.15	829102.42	1742.25	21-Jan-08	31.41	1710.84
TMPZ-106	26720359.15	829102.42	1742.25	28-Apr-08	31.71	1710.54
TMPZ-106	26720359.15	829102.42	1742.25	21-Jul-08	32.09	1710.16
TMPZ-106	26720359.15	829102.42	1742.25	12-Jan-09	32.05	1710.20
TMPZ-106	26720359.15	829102.42	1742.25	06-Jul-09	32.02	1710.23
TMPZ-106	26720359.15	829102.42	1742.25	06-May-10	30.84	1711.41
TMPZ-106	26720359.15	829102.42	1742.25	19-Oct-10	31.21	1711.04
TMPZ-106	26720359.15	829102.42	1742.25	04-Apr-11	31.40	1710.85
TMPZ-107	26720209.59	829386.70	1745.60	17-Jul-07	31.51	1714.09
TMPZ-107	26720209.59	829386.70	1745.60	23-Oct-07	N/A	N/A
TMPZ-107	26720209.59	829386.70	1745.60	21-Jan-08	32.65	1712.95
TMPZ-107	26720209.59	829386.70	1745.60	28-Apr-08	32.90	1712.70
TMPZ-107	26720209.59	829386.70	1745.60	21-Jul-08	33.15	1712.45
TMPZ-107	26720209.59	829386.70	1745.60	12-Jan-09	33.20	1712.40
TMPZ-107	26720209.59	829386.70	1745.60	06-Jul-09	32.98	1712.62
TMPZ-107	26720209.59	829386.70	1745.60	11-May-10	31.76	1713.84
TMPZ-107	26720209.59	829386.70	1745.60	25-Oct-10	32.41	1713.19
TMPZ-107	26720209.59	829386.70	1745.60	04-Apr-11	32.67	1712.93
TMPZ-108	26720032.09	829756.76	1750.46	17-Jul-07	33.75	1716.71
TMPZ-108	26720032.09	829756.76	1750.46	23-Oct-07	N/A	N/A
TMPZ-108	26720032.09	829756.76	1750.46	21-Jan-08	34.37	1716.09
TMPZ-108	26720032.09	829756.76	1750.46	28-Apr-08	34.51	1715.95
TMPZ-108	26720032.09	829756.76	1750.46	21-Jul-08	34.81	1715.65

Table 3-1
GROUNDWATER ELEVATION DATA
SEMIANNUAL GROUNDWATER MONITORING REPORT, 1ST SEMESTER 2011

Monitor Well	UTM Y Zone North-South Coordinates in Meters	UTM Y Zone East-West Coordinates in Meters	Casing Elevation	Date Measured	Depth to Water	Groundwater Elevation
TMPZ-108	26720032.09	829756.76	1750.46	12-Jan-09	34.78	1715.68
TMPZ-108	26720032.09	829756.76	1750.46	06-Jul-09	34.81	1715.65
TMPZ-108	26720032.09	829756.76	1750.46	11-May-10	33.80	1716.66
TMPZ-108	26720032.09	829756.76	1750.46	25-Oct-10	34.75	1715.71
TMPZ-108	26720032.09	829756.76	1750.46	04-Apr-11	34.81	1715.65
TMPZ-109	26719874.25	830082.66	1756.59	17-Jul-07	N/A	N/A
TMPZ-109	26719874.25	830082.66	1756.59	23-Oct-07	N/A	N/A
TMPZ-109	26719874.25	830082.66	1756.59	21-Jan-08	36.96	1719.63
TMPZ-109	26719874.25	830082.66	1756.59	28-Apr-08	37.29	1719.30
TMPZ-109	26719874.25	830082.66	1756.59	21-Jul-08	37.69	1718.90
TMPZ-109	26719874.25	830082.66	1756.59	12-Jan-09	37.43	1719.16
TMPZ-109	26719874.25	830082.66	1756.59	06-Jul-09	37.73	1718.86
TMPZ-109	26719874.25	830082.66	1756.59	05-May-10	36.45	1720.14
TMPZ-109	26719874.25	830082.66	1756.59	26-Oct-10	37.81	1718.78
TMPZ-109	26719874.25	830082.66	1756.59	04-Apr-11	37.61	1718.98
TMPZ-110	26719668.76	830531.86	1764.00	17-Jul-07	40.88	1723.12
TMPZ-110	26719668.76	830531.86	1764.00	23-Oct-07	N/A	N/A
TMPZ-110	26719668.76	830531.86	1764.00	21-Jan-08	39.90	1724.10
TMPZ-110	26719668.76	830531.86	1764.00	28-Apr-08	40.51	1723.49
TMPZ-110	26719668.76	830531.86	1764.00	21-Jul-08	41.20	1722.80
TMPZ-110	26719668.76	830531.86	1764.00	12-Jan-09	40.46	1723.54
TMPZ-110	26719668.76	830531.86	1764.00	06-Jul-09	41.50	1722.50
TMPZ-110	26719668.76	830531.86	1764.00	05-May-10	39.64	1724.36
TMPZ-110	26719668.76	830531.86	1764.00	26-Oct-10	41.52	1722.48
TMPZ-110	26719668.76	830531.86	1764.00	04-Apr-11	40.64	1723.36
TMPZ-111	26719015.17	831186.73	1783.93	17-Jul-07	44.94	1738.99
TMPZ-111	26719015.17	831186.73	1783.93	23-Oct-07	N/A	N/A
TMPZ-111	26719015.17	831186.73	1783.93	21-Jan-08	44.38	1739.55
TMPZ-111	26719015.17	831186.73	1783.93	28-Apr-08	45.03	1738.90
TMPZ-111	26719015.17	831186.73	1783.93	21-Jul-08	45.50	1738.43
TMPZ-111	26719015.17	831186.73	1783.93	12-Jan-09	44.77	1739.16
TMPZ-111	26719015.17	831186.73	1783.93	06-Jul-09	45.04	1738.89
TMPZ-111	26719015.17	831186.73	1783.93	04-Apr-11	44.88	1739.05
TMPZ-112	26718652.39	831559.74	1795.94	17-Jul-07	48.14	1747.80
TMPZ-112	26718652.39	831559.74	1795.94	23-Oct-07	N/A	N/A
TMPZ-112	26718652.39	831559.74	1795.94	21-Jan-08	47.99	1747.95
TMPZ-112	26718652.39	831559.74	1795.94	28-Apr-08	48.53	1747.41
TMPZ-112	26718652.39	831559.74	1795.94	21-Jul-08	47.83	1748.11
TMPZ-112	26718652.39	831559.74	1795.94	12-Jan-09	48.01	1747.93
TMPZ-112	26718652.39	831559.74	1795.94	06-Jul-09	48.68	1747.26
TMPZ-112	26718652.39	831559.74	1795.94	04-Apr-11	48.64	1747.30
TMPZ-201	26719949.98	829635.35	1753.32	06-Jul-09	35.50	1717.82
TMPZ-202	26719810.45	829972.87	1755.20	06-Jul-09	35.33	1719.87
TMPZ-203	26714505.04	830514.11	1769.02	06-Jul-09	43.47	1725.55
TMPZ-204	26719018.88	832827.15	1784.39	06-Jul-09	45.11	1739.28

TABLE 3-2
ANALYTICAL RESULTS FOR WELL BRW-R1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		60	92	85	77	74	75
ANIONS (reported in mg/L)							
Chloride	250	272	2800	**280**	**290 J**	**310 J**	**320**
Nitrate	10	11	128	**11**	**11 J**	**12 J**	**13**
Perchlorate [g]	0.018	0.24	0.36	**0.28**	**0.28 J**	**0.28 J**	**0.26**
Sulfate	250	1790	21000	**2100**	**2100 J**	**2200 J**	**2000**
GENERAL							
Fluoride	4	1.2	1.8	1.6	1.4	1.3 J	1.4
Nitrite	1	0.5	1	0.5 U	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		-22	30	8.27 ± 3.84	8.14 ± 4.51	2.89 ± 4.59 U	-0.941 ± 3.68 U
Adjusted Gross Alpha (Total) MCL [c]	15	-22.42	27	-0.8	0.9	NA	NA
Beta (Total)	50	-12	72.2	11.2 ± 7.3 U	17.2 ± 7.01	5.77 ± 6.43 U	5.22 ± 7.21 U
Uranium 238		2	4.08	3.73 ± 0.759	2.99 ± 0.632	3.31 ± 0.625	2.84 ± 0.565
Uranium 234		3	6.15	5.18 ± 1	4.2 ± 0.837	4.56 ± 0.828	4.31 ± 0.806
Thorium 230		-0.0484	0.127	0.0626 ± 0.0695 U	-0.0295 ± 0.0619 U	0.034 ± 0.0542 U	-0.0105 ± 0.0512 U
Radium 226	5	-0.94	1	0.59 ± 0.37	0.585 ± 0.382	0.411 ± 0.447 U	0.275 ± 0.205
Radon 222	300	245	649	**535 ± 69**	**544 ± 67.7**	**335 ± 46.7**	**524 ± 68.7**
Lead 214		-7.14	63.2	-1.62 ± 10.8 UJ-	4.92 ± 4.61 UJ-	-6.24 ± 11.4 UJ-	0.349 ± 7.62 UJ-
Bismuth 214		-21	51.3	7.44 ± 13.7 UJ-	4.1 ± 6.28 J-	-5.49 ± 12.9 UJ-	-21 ± 9.61 UJ-
Lead 210		0.0799	0.756	NA	NA	NA	NA
Thorium 232		-0.0111	0.025	-0.0111 ± 0.0222 U	0.00927 ± 0.0221 U	-0.00896 ± 0.0125 U	0.0119 ± 0.0211 U
Radium 228	5	-2.05	1.43	1.02 ± 0.469	0.443 ± 0.348 U	1.05 ± 0.454	0.486 ± 0.366 U
Radium MCL [d]	5	-0.06	1.64	1.61	0.58	1.05	0.28
Actinium-228		-7.31	19.2	-2.65 ± 21.2 U	1.57 ± 11 U	19.2 ± 10.5 J	-4.24 ± 11.2 U
Thorium 228		-0.0228	0.0921	0.00749 ± 0.0814 U	0.0165 ± 0.0808 U	0.000572 ± 0.0599 U	0.0191 ± 0.0564 U
Lead 212		-4.67	3.94	3.23 ± 7.38 U	-2.16 ± 5.43 U	-4.67 ± 9.34 U	1.51 ± 4.51 U
Bismuth 212		-31.1	46.1	46.1 ± 41.3 U	20.1 ± 16.7 U	34.4 ± 37.2 U	29.6 ± 19.6 U
Thallium 208		-1.29	5.76	5.76 ± 2.87 J+	0.108 ± 2.76 U	-0.248 ± 5.89 U	-0.0885 ± 2.58 U
Potassium 40		-55.6	72	60.7 ± 70.8 U	-32.4 ± 42.5 U	-55.6 ± 74.3 U	-20.3 ± 45.8 U

TABLE 3-2
ANALYTICAL RESULTS FOR WELL BRW-R1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-9.56	11.8	0.151 ± 0.108	0.0938 ± 0.0801	0.092 ± 0.0718 U	0.183 ± 0.101
Polonium-210		0.24	0.265	NA	NA	NA	NA
Protactinium-234		-147	559	412 ± 496 U	180 ± 140 U	431 ± 455 U	-55.8 ± 532 U
Radium-224		-4.67	3.94	3.23 ± 7.38 U	-2.16 ± 5.43 U	-4.67 ± 9.34 U	1.51 ± 4.51 U
Thorium-227		-14.6	22.4	-10.4 ± 20.5 U	0.463 ± 12.8 U	-4.63 ± 19.3 U	-10.7 ± 12.5 U
Thorium-234		-31.2	64.8	-10.9 ± 77.8 U	16.4 ± 57.7 U	-6.93 ± 79.2 U	37.7 ± 51.6 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	253	4200	**3800**	**3400**	**3700**	**3600**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	7.7	500	80 U	100 U	500 U	500 U
Antimony	6	7.6	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	17.8	46	**37**	**38**	**41**	**38**
Barium	2000	1.1	18.7	7.1 J-	7.5 U	1.1 J-	9.9 J-
Beryllium	4	0.081	10	0.28 J-	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.33	25	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		205000	460000	390000	340000 J	360000 J-	360000
Chromium	100	9.5	56	43	44	30 J-	43 J-
Chromium VI	100	47	54	53	54	51	47
Cobalt	10.95	0.82	50	10 U	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	0.81	50	10 U	10 U	50 U	50 U
Iron	25550	8.5	539	40 J-	16 U	500 U	500 U
Lead	15	1	15	3 U	3 U	15 U	15 U
Lithium	73	150	230	**180**	**190**	**160 J+**	**160 J+**
Magnesium	206955	140000	200000	170000	170000 J	170000 J-	180000
Manganese	5110	0.18	50	0.44 J-	0.59 U	50 U	50 U
Mercury	2	0.0097	0.22	0.02 J	0.2 U	0.04 J-	0.2 U
Molybdenum	182.5	85	100	93	93	85	96
Nickel	730	0.94	100	20 U	0.94 U	100 U	100 U
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.05 U	0.05 U

TABLE 3-2
ANALYTICAL RESULTS FOR WELL BRW-R1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		12000	17000	15000 J+	16000 J+	12000 J	12000 J+
Selenium	50	2.1	25	3.8 J-	5.4	25 U	25 U
Silicon		15000	18000	15000	16000	16000 J-	18000
Silver	182.5	0.63	50	10 U	10 U	50 U	50 U
Sodium		350000	491000	350000	370000 J+	410000 J-	450000
Thallium	2	0.021	200	0.028 U	0.12 U	0.03 U	0.12 U
Tin	21900	6.2	250	50 U	50 U	250 U	250 U
Titanium	146000	2.4	100	20 U	20 U	100 U	100 U
Uranium	30	7.3	14	12	8.8	9.3	8.3
Vanadium	182.5	13	38.2	19	18	13 U	21 J
Zinc	10950	0.71	100	3.2 U	3 U	100 U	100 U
Zirconium		1	100	20 U	1 U	100 U	14 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	0.8	5	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.123	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	5	1 U	1 U	1 U	1 U
2-Butanone	21262.1	10	20	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	10 U	10 U	10 U	10 U
Acetone	32613.3	2.5	96	10 U	10 U	10 U	10 U
Benzene	5	1	5	1 U	1 U	1 U	1 U
Bromodichloromethane	1.08438	0.13	5	1 U	1 U	1 U	1 U
Bromoform	8.51032	1	5	1 U	1 U	1 U	1 U
Bromomethane	47.7570	1	10	1 U	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	5	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1	5	1 U	1 U	1 U	1 U

TABLE 3-2
ANALYTICAL RESULTS FOR WELL BRW-R1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	1 U	1 U	1 U	1 U
Chloroform	1.61648	2.9	13	**3.7**	**3.4**	**3.9**	**3.5**
Chloromethane	81.1111	1	10	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	1 U	1 U	1 U	1 U
Methylene Chloride	5	0.77	5.8	1 U	1 U	1 U	1 U
Naphthalene	4.29412	1	1	1 U	1 U	1 U	1 U
Styrene	100	1	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1	5	1 U	1 U	1 U	1 U
Toluene	1000	0.29	5	1 U	1 U	1 U	1 U
Total Trihalomethanes [e]	80	3	28	3.7	3.4	3.9	3.5
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	1 U	1 U
Trichloroethene	5	0.48	11	1 U	1 U	1 U	1 U
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	1 U	1 U
Xylene (Total)	10000	2	10	2 U	2 U	2 U	2 U

TABLE 3-2
ANALYTICAL RESULTS FOR WELL BRW-R1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-3
ANALYTICAL RESULTS FOR WELL CLD1-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		66	430	210 J	230	250	210
ANIONS (reported in mg/L)							
Chloride	250	740	5780	**740 J**	**1200 J**	**1100 J**	**930**
Nitrate	10	7.5	60	**14 J**	10 J	9 J	7.5
Perchlorate [g]	0.018	4.3	9700	**9700 J**	**7.5 J**	**5.7 J**	**5.4**
Sulfate	250	710	2780	**710 J**	**1300 J**	**1300 J**	**1000**
GENERAL							
Fluoride	4	1.2	3.7	2.1 J	3.7 J	3.6 J	3.7
Nitrite	1	0.5	1	0.5 U	1 U	0.5 U	0.5 UJ-
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		-34	150	16.9 ± 8.5 J+	9.68 ± 5.15	9.67 ± 5.94 J-	11.6 ± 7.46
Adjusted Gross Alpha (Total) MCL [c]	15	-119.73	50	-1.5	-9.2	-10.1	-0.8
Beta (Total)	50	-14	44	8.42 ± 12.3 U	5.5 ± 8.85 U	14.4 ± 7.2	9 ± 12.4 U
Uranium 238		4.3	22.2	7.82 ± 1.41	7.8 ± 1.45	7.92 ± 1.45	4.98 ± 0.951
Uranium 234		6.2	32.9	10.2 ± 1.8	10.5 ± 1.89	11.5 ± 2.05	7.2 ± 1.32
Thorium 230		-0.0637	0.151	0.0569 ± 0.0711 U	-0.0000816 ± 0.0633 U	-0.0308 ± 0.05 U	0.13 ± 0.0823 J
Radium 226	5	-0.19	1.21	0.342 ± 0.37 U	0.0978 ± 0.174 U	0.482 ± 0.502 U	0.0832 ± 0.289 U
Radon 222	300	311	2140	**1120 ± 133**	**1810 ± 214**	**835 ± 103 J**	**922 ± 112**
Lead 214		-10	367	7.08 ± 10.4 UJ-	106 ± 15.5 J-	-8.25 ± 8.09 UJ-	9.83 ± 8.97 UJ-
Bismuth 214		-13	350	6.22 ± 11.1 UJ-	109 ± 22.7 J-	-8.18 ± 8.39 UJ-	11.2 ± 7.88 UJ-
Lead 210		0.217	127	NA	NA	NA	NA
Thorium 232		-0.0106	0.037	0.0286 ± 0.0279 U	0.0285 ± 0.0258 U	0.00703 ± 0.0203 U	-0.00559 ± 0.0188 U
Radium 228	5	-4.35	0.94	0.071 ± 0.469 U	0.15 ± 0.315 U	0.792 ± 0.38	0.407 ± 0.412 U
Radium MCL [d]	5	0.29	1.75	NA	NA	0.79	NA
Actinium-228		-6.26	25	14.6 ± 12.7 U	20.7 ± 8.71 J+	-6.26 ± 11.8 U	14.9 ± 10.1 U
Thorium 228		-0.0206	0.125	0.0376 ± 0.0416 U	-0.00495 ± 0.048 U	0.0225 ± 0.0539 U	0.0246 ± 0.0739 U
Lead 212		-19.9	6.04	-0.335 ± 8.28 U	4.46 ± 7.73 U	3.35 ± 4.72 U	3.55 ± 6.38 U
Bismuth 212		-50	65	30.9 ± 37 U	-2.04 ± 37.7 U	24.8 ± 20 U	-3.01 ± 33.7 U
Thallium 208		-4.9	6.97	1.19 ± 4.52 U	1.5 ± 4.35 U	-0.183 ± 2.8 U	2.57 ± 4.92 U
Potassium 40		-55	71.6	52.6 ± 71.8 U	7.73 ± 74 U	-30.6 ± 46.8 U	-38.4 ± 63.8 U

TABLE 3-3
ANALYTICAL RESULTS FOR WELL CLD1-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.16	30.9	0.334 ± 0.142	0.548 ± 0.202	0.375 ± 0.159	0.24 ± 0.124
Polonium-210		0.0455	0.283	NA	NA	NA	NA
Protactinium-234		-340	816	-331 ± 964 U	816 ± 491 J+	221 ± 365 U	195 ± 369 U
Radium-224		-1.83	6.04	-0.335 ± 8.28 U	4.46 ± 7.73 U	3.35 ± 4.72 U	3.55 ± 6.38 U
Thorium-227		-18.3	13.7	6.17 ± 19.8 U	-18.3 ± 19.1 U	-6.44 ± 12.8 U	-2.25 ± 10.3 U
Thorium-234		-33.5	48.6	13.5 ± 60.1 U	30.5 ± 61.9 U	10.1 ± 51.9 U	-15.7 ± 74.4 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	3700	12500	**5400 J**	**4100**	**3800**	**3700**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	4.7	500	52 U	100 U	500 U	130 U
Antimony	6	5.5	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	130	493	**180 J+**	**190**	**180**	**170**
Barium	2000	8.4	2000	20 J-	15 J-	11 J-	8.4 J
Beryllium	4	0.081	10	2 U	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.33	50	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		83000	581000	180000 J	160000 J	150000 J	130000
Chromium	100	151	2600	**380 J-**	**400**	**380**	**280**
Chromium VI	100	320	760	**510**	**480**	**420**	**320**
Cobalt	10.95	1.6	50	2.4 J	1.6 J-	**50 U [f]**	**50 U [f]**
Copper	1300	0.56	50	10 U	10 U	50 U	50 U
Iron	25550	3.2	1040	15 U	100 U	500 U	500 U
Lead	15	1.7	30	3 U	3 U	15 U	15 U
Lithium	73	180	500	**400**	**380**	**320 J+**	**290 J**
Magnesium	206955	46000	350000	110000 J	95000 J	100000 J	86000
Manganese	5110	4	358	200	170	130	130
Mercury	2	0.01	0.2	0.016 J	0.01 J	0.2 U	0.2 U
Molybdenum	182.5	96	140	130	110	100	96
Nickel	730	1.3	100	6 J	5.5 J-	4.9 J-	100 U
Phosphorus	0.73	0.067	1000	**200 U [f]**	0.096	0.096	0.067

TABLE 3-3
ANALYTICAL RESULTS FOR WELL CLD1-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		9800	66000	23000 J+	20000 J	12000 J	9800
Selenium	50	3.6	50	3.6 J	5.4	25 U	25 U
Silicon		40000	48000	40000	44000	48000	48000
Silver	182.5	0.51	100	10 U	10 U	50 U	50 U
Sodium		780000	3700000	1500000 J-	1000000 J	910000 J	780000
Thallium	2	0.02	200	0.075 U	0.2 U	0.02 U	0.05 U
Tin	21900	2.8	250	50 U	50 U	250 U	250 U
Titanium	146000	0.31	100	0.77 J-	20 U	100 U	100 U
Uranium	30	13.2	76	23	21	22	15
Vanadium	182.5	41	7670	97	130	150	150
Zinc	10950	0.41	210	6.8 U	20 U	100 U	210
Zirconium		2.8	100	20 U	20 U	100 U	2.8 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	25	1 U	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	25	1 U	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.095	25	1 U	1 U	2 U	1 U
1,1-Dichloroethene	7	0.2	25	0.26 J	1 U	2 U	0.2 J
1,2-Dichloroethane	0.123	1	25	**1 U [f]**	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	25	1 U	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	25	1 U	1 U	2 U	1 U
2-Butanone	21262.1	10	250	10 U	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	250	10 U	10 U	20 U	10 U
Acetone	32613.3	2	100	NA	10 U	20 U	10 U
Benzene	5	0.19	25	1 U	1 U	2 U	1 U
Bromodichloromethane	1.08438	0.64	25	**1.5**	1	**1.3 J**	0.84 J
Bromoform	8.51032	0.92	25	1 U	1 U	2 U	1 U
Bromomethane	47.7570	1	50	1 U	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	25	1 U	1 U	2 U	1 U
Carbon Tetrachloride	5	1	25	2.4	1.8	2.2	1.3

TABLE 3-3
ANALYTICAL RESULTS FOR WELL CLD1-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	0.48	25	1 U	1 U	0.48 J	1 U
Chloroform	1.61648	210	1100	**720**	**300**	**300**	**240**
Chloromethane	81.1111	0.18	50	1 U	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	25	1 U	1 U	2 U	1 U
Dibromochloromethane	0.69718	0.17	25	0.3 J	0.18 J	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	25	1 U	1 U	2 U	1 U
Methylene Chloride	5	0.23	25	1 U	1 U	2 U	1 U
Naphthalene	4.29412	1	2	1 U	1 U	2 U	1 U
Styrene	100	1	25	1 U	1 U	2 U	1 U
Tetrachloroethene	5	0.75	25	1.2	1.2	1.6 J	1.2
Toluene	1000	0.16	25	1 U	1 U	2 U	1 U
Total Trihalomethanes [e]	80	0.84	1110.83	**721.8**	**301.18**	**301.3**	**240.84**
Trans-1,2-Dichloroethene	100	1	25	1 U	1 U	2 U	1 U
Trichloroethene	5	0.18	25	1 U	1 U	2 U	0.18 J
Trichlorofluoromethane	9890.32	1	25	1 U	1 U	2 U	1 U
Vinyl Chloride	2	1	25	1 U	1 U	2 U	1 U
Xylene (Total)	10000	2	50	2 U	2 U	4 U	2 U

TABLE 3-3
ANALYTICAL RESULTS FOR WELL CLD1-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-4
ANALYTICAL RESULTS FOR WELL CLD2-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		170	370	NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	460	1500	NA	NA	NA	NA
Nitrate	10	5.2	12	NA	NA	NA	NA
Perchlorate [g]	0.018	6.2	7.4	NA	NA	NA	NA
Sulfate	250	680	1500	NA	NA	NA	NA
GENERAL							
Fluoride	4	3	3	NA	NA	NA	NA
Nitrite	1			NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	24.79	24.79	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238		9.94	9.94	NA	NA	NA	NA
Uranium 234		14.3	14.3	NA	NA	NA	NA
Thorium 230		-0.0138	-0.0138	NA	NA	NA	NA
Radium 226	5	0.0829	0.0829	NA	NA	NA	NA
Radon 222	300	2380	2380	NA	NA	NA	NA
Lead 214		267	267	NA	NA	NA	NA
Bismuth 214		256	256	NA	NA	NA	NA
Lead 210		0.888	0.888	NA	NA	NA	NA
Thorium 232		0.0111	0.0111	NA	NA	NA	NA
Radium 228	5	0.233	0.233	NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228		17.2	17.2	NA	NA	NA	NA
Thorium 228		-0.029	-0.029	NA	NA	NA	NA
Lead 212		2.97	2.97	NA	NA	NA	NA
Bismuth 212		78.2	78.2	NA	NA	NA	NA
Thallium 208		4.61	4.61	NA	NA	NA	NA
Potassium 40		2.56	2.56	NA	NA	NA	NA

TABLE 3-4
ANALYTICAL RESULTS FOR WELL CLD2-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.549	4.86	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		320	320	NA	NA	NA	NA
Radium-224		2.97	2.97	NA	NA	NA	NA
Thorium-227		-9.42	-9.42	NA	NA	NA	NA
Thorium-234		20	20	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	2400	5000	NA	NA	NA	NA
TOTAL METAL (reported in ug/L)							
Aluminum	36500	9.3	120	NA	NA	NA	NA
Antimony	6	9.7	40	NA	NA	NA	NA
Arsenic	10	130	490	NA	NA	NA	NA
Barium	2000	4.3	2000	NA	NA	NA	NA
Beryllium	4	0.072	2	NA	NA	NA	NA
Cadmium	5	0.54	50	NA	NA	NA	NA
Calcium		74000	484000	NA	NA	NA	NA
Chromium	100	350	1700	NA	NA	NA	NA
Chromium VI	100	330	400	NA	NA	NA	NA
Cobalt	10.95	1.9	4.5	NA	NA	NA	NA
Copper	1300	2	20	NA	NA	NA	NA
Iron	25550	14	5980	NA	NA	NA	NA
Lead	15	2.6	30	NA	NA	NA	NA
Lithium	73	180	180	NA	NA	NA	NA
Magnesium	206955	38000	242000	NA	NA	NA	NA
Manganese	5110	67	2290	NA	NA	NA	NA
Mercury	2	0.011	0.2	NA	NA	NA	NA
Molybdenum	182.5	82	82	NA	NA	NA	NA
Nickel	730	4.3	57	NA	NA	NA	NA
Phosphorus	0.73			NA	NA	NA	NA

TABLE 3-4
ANALYTICAL RESULTS FOR WELL CLD2-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		9500	23000	NA	NA	NA	NA
Selenium	50	3.6	50	NA	NA	NA	NA
Silicon				NA	NA	NA	NA
Silver	182.5	0.59	100	NA	NA	NA	NA
Sodium		5000	2710000	NA	NA	NA	NA
Thallium	2	0.027	200	NA	NA	NA	NA
Tin	21900			NA	NA	NA	NA
Titanium	146000	0.77	0.77	NA	NA	NA	NA
Uranium	30	13	35	NA	NA	NA	NA
Vanadium	182.5	90	170	NA	NA	NA	NA
Zinc	10950	0.66	20	NA	NA	NA	NA
Zirconium				NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	4	NA	NA	NA	NA
1,1,2-Trichloroethane	5	1	4	NA	NA	NA	NA
1,1-Dichloroethane	11.7950	1	4	NA	NA	NA	NA
1,1-Dichloroethene	7	1	4	NA	NA	NA	NA
1,2-Dichloroethane	0.123	1	4	NA	NA	NA	NA
1,2-Dichloropropane	5	1	4	NA	NA	NA	NA
1,3-Dichlorobenzene	109.091	1	4	NA	NA	NA	NA
2-Butanone	21262.1	10	40	NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66	10	40	NA	NA	NA	NA
Acetone	32613.3	40	40	NA	NA	NA	NA
Benzene	5	1	4	NA	NA	NA	NA
Bromodichloromethane	1.08438	0.54	4	NA	NA	NA	NA
Bromoform	8.51032	1	4	NA	NA	NA	NA
Bromomethane	47.7570	1	4	NA	NA	NA	NA
Carbon Disulfide	3524.14	0.43	1	NA	NA	NA	NA
Carbon Tetrachloride	5	0.64	0.74	NA	NA	NA	NA

TABLE 3-4
ANALYTICAL RESULTS FOR WELL CLD2-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	4	NA	NA	NA	NA
Chloroform	1.61648	140	140	NA	NA	NA	NA
Chloromethane	81.1111	1	4	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	1	4	NA	NA	NA	NA
Dibromochloromethane	0.69718	1	4	NA	NA	NA	NA
Ethylbenzene	700	1	4	NA	NA	NA	NA
Methylene Chloride	5	1	4	NA	NA	NA	NA
Naphthalene	4.29412			NA	NA	NA	NA
Styrene	100	1	4	NA	NA	NA	NA
Tetrachloroethene	5	1.9	2.1	NA	NA	NA	NA
Toluene	1000	0.71	1	NA	NA	NA	NA
Total Trihalomethanes [e]	80	140.54	152	NA	NA	NA	NA
Trans-1,2-Dichloroethene	100	1	4	NA	NA	NA	NA
Trichloroethene	5	0.26	4	NA	NA	NA	NA
Trichlorofluoromethane	9890.32	1	4	NA	NA	NA	NA
Vinyl Chloride	2	1	4	NA	NA	NA	NA
Xylene (Total)	10000	2	8	NA	NA	NA	NA

TABLE 3-4
ANALYTICAL RESULTS FOR WELL CLD2-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-5
ANALYTICAL RESULTS FOR WELL CLD3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		72	264	120	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	3050	26300	**4100**	NA	NA	NA
Nitrate	10	16	95.4	**16**	NA	NA	NA
Perchlorate [g]	0.018	2.9	2900	**2900 J**	NA	NA	NA
Sulfate	250	1730	5850	**2100**	NA	NA	NA
GENERAL							
Fluoride	4	2	2	2 U	NA	NA	NA
Nitrite	1	1	2	**2 U** [f]	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		1.43	980	54 ± 18.1	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	-205	395.6	13.3	NA	NA	NA
Beta (Total)	50	-8	390	37.8 ± 27 U	NA	NA	NA
Uranium 238		12.5	437	16.7 ± 2.93	NA	NA	NA
Uranium 234		21	565	23 ± 3.97	NA	NA	NA
Thorium 230		-0.0412	0.81	-0.0238 ± 0.0649 U	NA	NA	NA
Radium 226	5	-0.348	9.6	1.4 ± 0.589	NA	NA	NA
Radon 222	300	517	2080	**1030 ± 123**	NA	NA	NA
Lead 214		-40	132	9.42 ± 7.34 UJ-	NA	NA	NA
Bismuth 214		-20	126	6.29 ± 16.2 UJ-	NA	NA	NA
Lead 210		-110	200	NA	NA	NA	NA
Thorium 232		-0.02	0.045	0.0208 ± 0.028 U	NA	NA	NA
Radium 228	5	-4.14	6.5	0.742 ± 0.393	NA	NA	NA
Radium MCL [d]	5	-0.75	16.1	2.14	NA	NA	NA
Actinium-228		-65	36	10.8 ± 22.4 U	NA	NA	NA
Thorium 228		-0.0358	0.34	0.0435 ± 0.0828 U	NA	NA	NA
Lead 212		-23	10	4.9 ± 8.27 U	NA	NA	NA
Bismuth 212		-29.5	57.9	6.46 ± 40.6 U	NA	NA	NA
Thallium 208		-19	7.4	6.37 ± 3.3 J+	NA	NA	NA
Potassium 40		-60	180	-6.54 ± 80.4 U	NA	NA	NA

TABLE 3-5
ANALYTICAL RESULTS FOR WELL CLD3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.66	24.8	1.02 ± 0.298	NA	NA	NA
Polonium-210		-0.00185	0.306	NA	NA	NA	NA
Protactinium-234		-326	612	-26.4 ± 535 U	NA	NA	NA
Radium-224		-0.535	7.29	4.9 ± 8.27 U	NA	NA	NA
Thorium-227		-27.6	12	4.41 ± 12.8 U	NA	NA	NA
Thorium-234		-56.7	230	-45.5 ± 85.1 U	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	7380	40400	**11000**	NA	NA	NA
TOTAL METAL (reported in ug/L)							
Aluminum	36500	4.2	190	53 U	NA	NA	NA
Antimony	6	7.5	200	**20 U [f]**	NA	NA	NA
Arsenic	10	60.6	237	**130 J+**	NA	NA	NA
Barium	2000	19	5000	27 J-	NA	NA	NA
Beryllium	4	0.14	20	2 U	NA	NA	NA
Cadmium	5	0.36	125	5 U	NA	NA	NA
Calcium		315000	3370000	480000 J	NA	NA	NA
Chromium	100	43	1180	**230 J-**	NA	NA	NA
Chromium VI	100	330	390	**330**	NA	NA	NA
Cobalt	10.95	0.91	100	10 U	NA	NA	NA
Copper	1300	2.5	100	10 U	NA	NA	NA
Iron	25550	2.8	2500	2.8 U	NA	NA	NA
Lead	15	2	75	3 U	NA	NA	NA
Lithium	73	480	750	**550**	NA	NA	NA
Magnesium	206955	210000	2000000	**210000**	NA	NA	NA
Manganese	5110	2.1	379	2.1 U	NA	NA	NA
Mercury	2	0.0082	0.2	0.015 J	NA	NA	NA
Molybdenum	182.5	240	290	**240**	NA	NA	NA
Nickel	730	1.3	20	1.8 J	NA	NA	NA
Phosphorus	0.73	15	200	**200 U [f]**	NA	NA	NA

TABLE 3-5
ANALYTICAL RESULTS FOR WELL CLD3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		21000	78000	49000 J+	NA	NA	NA
Selenium	50	3.1	125	5.9	NA	NA	NA
Silicon		32000	37000	32000	NA	NA	NA
Silver	182.5	1.2	250	2.3 J	NA	NA	NA
Sodium		133000	10800000	3200000 J-	NA	NA	NA
Thallium	2	0.062	78	0.093 U	NA	NA	NA
Tin	21900	4.8	50	50 U	NA	NA	NA
Titanium	146000	5.4	20	20 U	NA	NA	NA
Uranium	30	36.5	1330	**49**	NA	NA	NA
Vanadium	182.5	27.3	1250	33	NA	NA	NA
Zinc	10950	0.53	200	4 U	NA	NA	NA
Zirconium		20	20	20 U	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	50	1 U	NA	NA	NA
1,1,2-Trichloroethane	5	0.19	50	1 U	NA	NA	NA
1,1-Dichloroethane	11.7950	0.14	50	0.39 J	NA	NA	NA
1,1-Dichloroethene	7	0.76	50	3.3	NA	NA	NA
1,2-Dichloroethane	0.123	0.16	50	**0.17 J**	NA	NA	NA
1,2-Dichloropropane	5	0.2	50	1 U	NA	NA	NA
1,3-Dichlorobenzene	109.091	1	50	1 U	NA	NA	NA
2-Butanone	21262.1	10	500	10 U	NA	NA	NA
4-Methyl-2-Pentanone	2900.66	10	500	10 U	NA	NA	NA
Acetone	32613.3	3	200	NA	NA	NA	NA
Benzene	5	1	50	1 U	NA	NA	NA
Bromodichloromethane	1.08438	1.3	50	**1.6**	NA	NA	NA
Bromoform	8.51032	0.44	68	0.44 J	NA	NA	NA
Bromomethane	47.7570	1	100	1 U	NA	NA	NA
Carbon Disulfide	3524.14	1	50	1 U	NA	NA	NA
Carbon Tetrachloride	5	1	50	**6.2**	NA	NA	NA

TABLE 3-5
ANALYTICAL RESULTS FOR WELL CLD3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	50	1 U	NA	NA	NA
Chloroform	1.61648	150	2500	**1600**	NA	NA	NA
Chloromethane	81.1111	0.68	100	1 U	NA	NA	NA
cis-1,2-Dichloroethene	70	0.18	50	0.18 J	NA	NA	NA
Dibromochloromethane	0.69718	0.48	50	0.48 J	NA	NA	NA
Ethylbenzene	700	1	50	1 U	NA	NA	NA
Methylene Chloride	5	0.28	50	1 U	NA	NA	NA
Naphthalene	4.29412	1	1	1 U	NA	NA	NA
Styrene	100	1	50	1 U	NA	NA	NA
Tetrachloroethene	5	1.2	68	**12**	NA	NA	NA
Toluene	1000	1	50	1 U	NA	NA	NA
Total Trihalomethanes [e]	80	2.52	2500	**1602.52**	NA	NA	NA
Trans-1,2-Dichloroethene	100	1	50	1 U	NA	NA	NA
Trichloroethene	5	1	50	1.6	NA	NA	NA
Trichlorofluoromethane	9890.32	1	50	1 U	NA	NA	NA
Vinyl Chloride	2	1	50	1 U	NA	NA	NA
Xylene (Total)	10000	2	100	2 U	NA	NA	NA

TABLE 3-5
ANALYTICAL RESULTS FOR WELL CLD3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-6
ANALYTICAL RESULTS FOR WELL CLD4-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		58	290	230 J	260	260	270
ANIONS (reported in mg/L)							
Chloride	250	1700	11400	**1800 J**	**1700 J**	**1800 J**	**1900 J**
Nitrate	10	9.3	62.8	**13 J**	9.7 J	9.7 J	9.3 J
Perchlorate [g]	0.018	2.2	3.7	**2.5 J**	**2.7 J**	**2.4 J**	**2.2 J**
Sulfate	250	1700	2800	**1700 J**	**1800 J**	**2000 J**	**1800 J**
GENERAL							
Fluoride	4	3.7	5.6	3.7 J	**5.6**	**5.1 J**	**4.7 J**
Nitrite	1	1	1	1 U	1 U	1 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		-18	19.5	8.94 ± 6.85 U	1.56 ± 7.75 U	19.5 ± 10.4 J-	6.62 ± 5.99 U
Adjusted Gross Alpha (Total) MCL [c]	15	-13.19	24.28	NA	NA	13.2	NA
Beta (Total)	50	-12.3	37	2.98 ± 11.1 U	8.59 ± 12.3 U	28.6 ± 13.7	2.42 ± 13.5 U
Uranium 238		2.23	3.69	2.74 ± 0.577	2.42 ± 0.528	2.23 ± 0.48	2.84 ± 0.549
Uranium 234		3	5	4.31 ± 0.843	3.37 ± 0.69	3.85 ± 0.751	3.47 ± 0.652
Thorium 230		-0.0595	0.0965	0.0965 ± 0.081 U	0.0183 ± 0.0694 U	0.0114 ± 0.0509 U	-0.0595 ± 0.0458 U
Radium 226	5	0.0273	0.578	0.202 ± 0.256 U	0.189 ± 0.303 U	0.411 ± 0.468 U	0.578 ± 0.347
Radon 222	300	706	898	**772 ± 94**	**743 ± 92.2**	**706 ± 89.6 J**	**898 ± 110**
Lead 214		-13.6	55.6	13.2 ± 8.91 UJ-	34.5 ± 10.3 J	-13.6 ± 13.3 UJ-	1.44 ± 9.67 UJ-
Bismuth 214		-6.41	52.1	13.4 ± 9.81 UJ-	30.4 ± 11.2 J-	-6.41 ± 15.9 UJ-	10.1 ± 5.35 J-
Lead 210		0.433	0.819	NA	NA	NA	NA
Thorium 232		0.0019	0.03	0.03 ± 0.0317 U	0.00616 ± 0.0266 U	0.012 ± 0.0156 U	0.0087 ± 0.0157 U
Radium 228	5	-0.28	0.59	-0.0392 ± 0.447 U	0.123 ± 0.385 U	0.329 ± 0.294 U	-0.0301 ± 0.291 U
Radium MCL [d]	5	0.09	0.85	NA	NA	NA	0.58
Actinium-228		-9.47	24	22.3 ± 8.37 J+	2.57 ± 19.6 U	24 ± 11 J	14.4 ± 11.2 U
Thorium 228		-0.0408	0.0349	-0.0408 ± 0.0721 U	0.0349 ± 0.0662 U	-0.00581 ± 0.0521 U	0.0223 ± 0.058 U
Lead 212		-2.77	6.62	1.8 ± 7.2 U	4.21 ± 7.8 U	1.5 ± 7.32 U	-2.77 ± 7.25 U
Bismuth 212		12.9	58.5	31.2 ± 57.9 U	16.5 ± 39.6 U	25.9 ± 37.2 U	37.6 ± 37.9 U
Thallium 208		0.565	5.48	3.06 ± 4.9 U	0.978 ± 5.12 U	0.565 ± 4.74 U	3.42 ± 2.53 U
Potassium 40		-35.9	219	28.5 ± 68.1 U	-35.9 ± 77.8 U	-31.3 ± 69.3 U	-23 ± 79.5 U

TABLE 3-6
ANALYTICAL RESULTS FOR WELL CLD4-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.0862	0.28	0.129 ± 0.0903	0.0862 ± 0.0775 U	0.227 ± 0.113	0.133 ± 0.0768
Polonium-210		0.25	0.384	NA	NA	NA	NA
Protactinium-234		191	437	266 ± 444 U	432 ± 495 U	324 ± 456 U	437 ± 459 U
Radium-224		-2.77	6.62	1.8 ± 7.2 U	4.21 ± 7.8 U	1.5 ± 7.32 U	-2.77 ± 7.25 U
Thorium-227		-15.3	7.63	-8.16 ± 18.4 U	-7.68 ± 19.1 U	-12.6 ± 19.1 U	2.8 ± 11 U
Thorium-234		-0.501	78.2	36.7 ± 78.3 U	-0.501 ± 71.3 U	24.7 ± 98.7 U	21.1 ± 51.7 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5700	17600	**6400**	**5800**	**5700**	**6200**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	14	590	590	140 J-	500 U	170 U
Antimony	6	3.3	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	90.2	592	**340**	**440**	**440**	**460**
Barium	2000	3.7	2000	11 J-	9.1 U	3.7 J-	5.1 J-
Beryllium	4	0.081	10	**5.8 J-**	1.5 J-	3.4 U	**8.5 U [f]**
Cadmium	5	0.33	50	1.2 J	1.2 U	**25 U [f]**	**25 U [f]**
Calcium		30000	2500000	120000 J	72000 J	44000 J	37000 J
Chromium	100	175	1030	**300**	**360**	**390**	**440**
Chromium VI	100	320	690	**320**	**510 J-**	**370**	**580**
Cobalt	10.95	0.57	50	10 U	0.57 J-	**50 U [f]**	**50 U [f]**
Copper	1300	0.79	50	10 U	10 U	50 U	50 U
Iron	25550	2.4	1000	4.1 J-	100 U	500 U	500 U
Lead	15	1.1	30	3 U	3 U	15 U	15 U
Lithium	73	130	200	**200**	**160**	**140 J+**	**130 J+**
Magnesium	206955	7500	1290000	31000 J	18000 J	12000 J	10000 J
Manganese	5110	4.4	90.6	12	11	4.4 U	44 J-
Mercury	2	0.01	0.2	0.05 J	0.018 J	0.2 U	0.2 U
Molybdenum	182.5	300	350	**300**	**310**	**310**	**310**
Nickel	730	0.84	100	1.6 J	2.6 U	100 U	100 U
Phosphorus	0.73	0.13	1000	**200 U [f]**	0.13	0.19	0.19

TABLE 3-6
ANALYTICAL RESULTS FOR WELL CLD4-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		7800	15000	11000 J+	12000 J+	8300	7800 J+
Selenium	50	4.8	50	11	10	25 U	25 U
Silicon		38000	41000	38000	39000	38000	41000
Silver	182.5	0.76	100	1.8 J	1.8 J	50 U	50 U
Sodium		450000	4120000	1500000 J	1700000 J+	1800000 J	1800000
Thallium	2	0.051	41	0.092 U	0.1 U	0.08 U	0.08 U
Tin	21900	2.4	250	3.6 J	3.8 U	250 U	250 U
Titanium	146000	0.66	200	20 U	0.71 J-	100 U	200
Uranium	30	6.4	114	8.2	6.4	7.1	8
Vanadium	182.5	30.2	13000	**12000**	**13000**	**12000**	**12000**
Zinc	10950	1.3	100	5.4 U	20 U	100 U	100 U
Zirconium		20	100	20 U	20 U	100 U	100 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	50	5 U	1 U	2 U	2 U
1,1,2-Trichloroethane	5	1	50	5 U	1 U	2 U	2 U
1,1-Dichloroethane	11.7950	0.19	50	5 U	0.28 J	0.53 J	2 U
1,1-Dichloroethene	7	0.57	50	1 J	0.59 J	1.1 J	0.66 J
1,2-Dichloroethane	0.123	0.19	50	**5 U [f]**	**1 U [f]**	**2 U [f]**	**2 U [f]**
1,2-Dichloropropane	5	0.22	50	5 U	0.26 J	0.41 J	2 U
1,3-Dichlorobenzene	109.091	1	50	5 U	1 U	2 U	2 U
2-Butanone	21262.1	10	500	50 U	10 U	20 U	20 U
4-Methyl-2-Pentanone	2900.66	10	500	50 U	10 U	20 U	20 U
Acetone	32613.3	3.9	200	NA	10 U	20 U	20 U
Benzene	5	1	50	5 U	1 U	2 U	2 U
Bromodichloromethane	1.08438	0.85	50	**1.7 J**	**1.9**	**3.7**	**2.8**
Bromoform	8.51032	0.24	50	5 U	1 U	0.86 J	2 U
Bromomethane	47.7570	1	100	5 U	1 U	2 U	2 U
Carbon Disulfide	3524.14	1	50	1.1 J	1 U	2 U	2 U
Carbon Tetrachloride	5	2.4	50	**7.7**	**8.7**	**15**	**9.6**

TABLE 3-6
ANALYTICAL RESULTS FOR WELL CLD4-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	50	5 U	1 U	2 U	2 U
Chloroform	1.61648	290	1400	**700**	**630**	**840**	**900**
Chloromethane	81.1111	0.32	100	5 U	1 U	2 U	2 U
cis-1,2-Dichloroethene	70	1	50	5 U	1 U	2 U	1.5 J
Dibromochloromethane	0.69718	0.32	50	**5 U [f]**	0.32 J	**0.72 J**	0.5 J
Ethylbenzene	700	1	50	5 U	1 U	2 U	2 U
Methylene Chloride	5	0.35	50	5 U	1 U	2 U	0.45 U
Naphthalene	4.29412	1	5	**5 U [f]**	1 U	2 U	2 U
Styrene	100	1	50	5 U	1 U	2 U	2 U
Tetrachloroethene	5	0.49	52	5 U	0.75 J	1.1 J	0.52 J
Toluene	1000	0.55	50	5 U	1 U	2 U	2 U
Total Trihalomethanes [e]	80	1.7	1400	**701.7**	**632.22**	**845.28**	**903.3**
Trans-1,2-Dichloroethene	100	1	50	5 U	1 U	2 U	2 U
Trichloroethene	5	0.29	50	5 U	0.32 J	0.41 J	2 U
Trichlorofluoromethane	9890.32	1	50	5 U	1 U	2 U	2 U
Vinyl Chloride	2	1	50	**5 U [f]**	1 U	2 U	**2.6**
Xylene (Total)	10000	2	100	10 U	2 U	4 U	4 U

TABLE 3-6
ANALYTICAL RESULTS FOR WELL CLD4-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-7
ANALYTICAL RESULTS FOR WELL J2D1-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		84	230	98 J	84	84	87
ANIONS (reported in mg/L)							
Chloride	250	1090	3000	**1600 J**	**1800**	**2300**	**3000**
Nitrate	10	10	65	**11 J**	**12**	**11**	10
Perchlorate [g]	0.018	1.9	2.5	**2 J**	**1.9**	**2**	**1.9**
Sulfate	250	1400	2730	**1400 J**	**1400**	**1400**	**1500**
GENERAL							
Fluoride	4	0.88	1.4	1 J	1.1	1.3	1.2
Nitrite	1	0.5	1	0.5 U	0.5 U	1 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		13.8	159	13.8 ± 6.99	22.5 ± 7.25	22.8 ± 10.8	19.4 ± 10.3
Adjusted Gross Alpha (Total) MCL [c]	15	-85.4	74.43	-17.9	-8.3	-12.3	-20.7
Beta (Total)	50	16.7	83	21.1 ± 11.8	27 ± 9.35	43.9 ± 15.1	25.6 ± 13.8
Uranium 238		11	51	13.2 ± 2.35	12.3 ± 2.18	15.1 ± 2.55	17 ± 3.1
Uranium 234		15	66	18 ± 3.14	17.8 ± 3.09	19.3 ± 3.22	22.2 ± 4
Thorium 230		-0.0482	0.97	0.0761 ± 0.0828 U	0.0204 ± 0.0664 U	-0.00541 ± 0.0546 U	-0.0232 ± 0.0661 U
Radium 226	5	-0.7	2.67	1.16 ± 0.546	0.734 ± 0.396	0.27 ± 0.362 U	1.34 ± 0.574
Radon 222	300	931	2190	**1910 ± 222**	**1760 ± 205**	NA	**1870 ± 218**
Lead 214		-33	439	23.1 ± 8.81 J-	180 ± 22.8 J-	6.91 ± 5.8 UJ-	16.5 ± 9.19 UJ-
Bismuth 214		-24	400	33.3 ± 10.6 J-	176 ± 24.1 J-	3.37 ± 11.9 UJ-	21.1 ± 13.9 UJ-
Lead 210		0.404	210	NA	NA	NA	NA
Thorium 232		-0.013	0.26	0.027 ± 0.0333 U	0.025 ± 0.0252 U	0.00738 ± 0.0169 U	-0.000747 ± 0.0199 U
Radium 228	5	-3.98	1.68	0.855 ± 0.527 U	0.773 ± 0.383	0.872 ± 0.438	0.926 ± 0.425 J
Radium MCL [d]	5	0.02	3.99	1.16	1.51	0.87	2.27
Actinium-228		-28	45	11.9 ± 10.9 U	18.5 ± 7.89 J+	19.8 ± 13 U	9.9 ± 21.9 U
Thorium 228		-0.0338	0.47	0.00358 ± 0.067 U	0.0173 ± 0.0527 U	0.0492 ± 0.0682 U	0.0746 ± 0.0948 U
Lead 212		-32	9.73	1.78 ± 7.42 U	9.73 ± 6.42 U	3.69 ± 8.05 U	-0.8 ± 7.67 U
Bismuth 212		-50	57.2	-8.22 ± 36.9 U	21.6 ± 36.5 U	21.5 ± 41.8 U	4.37 ± 46.4 U
Thallium 208		-21	6.81	-0.105 ± 4.55 U	6.32 ± 2.88 J+	1 ± 4.85 U	0.88 ± 6.22 U
Potassium 40		-110	165	39.6 ± 62.6 U	165 ± 42.9 J+	27 ± 73.4 U	-8.87 ± 90.1 U

TABLE 3-7
ANALYTICAL RESULTS FOR WELL J2D1-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-3.99	14.2	0.494 ± 0.192	0.679 ± 0.227	0.661 ± 0.228	0.939 ± 0.32
Polonium-210		0.0223	0.0999	NA	NA	NA	NA
Protactinium-234		-467	621	376 ± 465 U	193 ± 490 U	482 ± 464 U	284 ± 602 U
Radium-224		-3.14	9.73	1.78 ± 7.42 U	9.73 ± 6.42 U	3.69 ± 8.05 U	-0.8 ± 7.67 U
Thorium-227		-45	6.98	-4.3 ± 19.6 U	-45 ± 14.4 U	-7.35 ± 19.6 U	6.53 ± 23.2 U
Thorium-234		-48.7	159	-48.7 ± 58.1 U	159 ± 43.2 J+	42.9 ± 88.1 U	29.8 ± 87.1 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	4450	8560	**5300**	**4900**	**6000**	**7700**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	14	1000	45 U	1000 U	78 U	500 U
Antimony	6	7.6	200	**20 U [f]**	**200 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	48	318	**120 J+**	**130**	**140**	**140**
Barium	2000	13.5	1530	20 J-	18 J-	29 U	36 J
Beryllium	4	0.081	20	0.22 U	**20 U [f]**	1.9 U	**10 U [f]**
Cadmium	5	0.33	50	5 U	**50 U [f]**	**25 U [f]**	**25 U [f]**
Calcium		540000	1150000	730000 J	640000	760000	910000
Chromium	100	39	321	61 J-	71 U	64	53
Chromium VI	100	59	86	78	79	70	67 J-
Cobalt	10.95	0.82	100	10 U	**100 U [f]**	**50 U [f]**	**50 U [f]**
Copper	1300	1	100	10 U	100 U	50 U	50 U
Iron	25550	2.7	91400	2.7 U	1000 U	42 U	500 U
Lead	15	1.8	45	3 U	**30 U [f]**	15 U	15 U
Lithium	73	420	530	**460**	**430**	**450 J+**	**480 J**
Magnesium	206955	260000	597000	**260000 J**	**310000**	**370000**	**450000**
Manganese	5110	0.16	2080	0.41 U	100 U	1.6 U	50 U
Mercury	2	0.011	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	41	170	58	41 J-	90	170
Nickel	730	0.72	200	2.7 J	200 U	8.7 J	100 U
Phosphorus	0.73	0.05	2000	**200 U [f]**	0.062	0.059	0.05 U

TABLE 3-7
ANALYTICAL RESULTS FOR WELL J2D1-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		17000	34000	28000 J+	17000	27000 J+	32000 J
Selenium	50	4	50	6.7	50 U	25 U	25 U
Silicon		40000	47000	40000	44000	44000	47000
Silver	182.5	0.83	100	10 U	100 U	50 U	50 U
Sodium		450000	730000	640000 J-	500000	590000	730000
Thallium	2	0.02	200	0.063 U	0.2 U	0.04 U	0.05 U
Tin	21900	50	500	50 U	500 U	250 U	250 U
Titanium	146000	4.1	200	20 U	200 U	100 U	100 U
Uranium	30	35	160	**38**	**35**	**43**	**50**
Vanadium	182.5	24	357	88	100	93	92
Zinc	10950	0.36	100	1.1 U	12 U	100 U	4.6 U
Zirconium		8.6	20	20 U	14 J-	8.6 U	9.9 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	10	1 U	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	10	1 U	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.25	10	0.25 J	0.29 J	2 U	1 U
1,1-Dichloroethene	7	2.1	8	2.8	3.1	2.1	2.2
1,2-Dichloroethane	0.123	0.16	10	**0.21 J**	**0.62 J**	**2 U [f]**	**0.29 J**
1,2-Dichloropropane	5	0.14	10	1 U	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	10	1 U	1 U	2 U	1 U
2-Butanone	21262.1	10	40	10 U	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	40	10 U	10 U	20 U	10 U
Acetone	32613.3	3.5	40	NA	10 U	20 R	10 U
Benzene	5	1	10	1 U	1 U	2 U	1 U
Bromodichloromethane	1.08438	0.17	10	1 U	0.17 J	**2 U [f]**	1 U
Bromoform	8.51032	1	10	1 U	1 U	2 U	1 U
Bromomethane	47.7570	1	20	1 U	1 U	2 U	1 U
Carbon Disulfide	3524.14	0.61	10	1 U	1 U	2 U	1 U
Carbon Tetrachloride	5	0.62	10	0.71 J	0.94 J	0.7 J	0.65 J

TABLE 3-7

ANALYTICAL RESULTS FOR WELL J2D1-R2

SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	10	1 U	1 U	2 U	1 U
Chloroform	1.61648	40	88	**48**	**54**	**54**	**55**
Chloromethane	81.1111	1	20	1 U	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	0.24	4	1 U	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	10	**1 U [f]**	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	10	1 U	1 U	2 U	1 U
Methylene Chloride	5	0.18	24	1 U	0.18 U	2 U	1 U
Naphthalene	4.29412	1	2	1 U	1 U	2 U	1 U
Styrene	100	1	10	1 U	1 U	2 U	1 U
Tetrachloroethene	5	36	250	**38**	**36**	**42**	**39**
Toluene	1000	1	10	1 U	1 U	2 U	1 U
Total Trihalomethanes [e]	80	0.17	103	48	54.17	54	55
Trans-1,2-Dichloroethene	100	1	4	1 U	1 U	2 U	1 U
Trichloroethene	5	0.86	15	0.95 J	1	1 J	0.86 J
Trichlorofluoromethane	9890.32	1	4	1 U	1 U	2 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	2 U	1 U
Xylene (Total)	10000	2	20	2 U	2 U	4 U	2 U

TABLE 3-7
ANALYTICAL RESULTS FOR WELL J2D1-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-8
ANALYTICAL RESULTS FOR WELL J2D2-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		66	116	110	100	98	96
ANIONS (reported in mg/L)							
Chloride	250	543	3300	**1400**	**1300**	**1500 J**	**1500**
Nitrate	10	21.4	63.8	**37**	**38**	**40 J**	**39**
Perchlorate [g]	0.018	0.66	0.84	**0.78 J**	**0.8**	**0.67 J**	**0.66**
Sulfate	250	851	2690	**1700**	**1800**	**1800 J**	**1700**
GENERAL							
Fluoride	4	0.94	1.6	1.1	1.2	1.1 J	1.1
Nitrite	1	0.5	1	0.5 U	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		15	78.7	78.7 ± 15.8	34.1 ± 8.83	40.1 ± 11.7 J-	26.1 ± 9.36
Adjusted Gross Alpha (Total) MCL [c]	15	-18.54	92	**18.5**	-35.7	-19.7	-34.1
Beta (Total)	50	14.2	34	14.2 ± 8.16	24.7 ± 8.94	28.6 ± 13.8	16.8 ± 13.1 U
Uranium 238		9.7	39	24.6 ± 4.26	29.7 ± 5.34	26.1 ± 4.48	26.5 ± 4.69
Uranium 234		12	51	34.2 ± 5.87	38.5 ± 6.81	32.4 ± 5.52	32.4 ± 5.69
Thorium 230		-0.0618	0.0797	0.0697 ± 0.0734 U	-0.0551 ± 0.0777 U	-0.0618 ± 0.0527 U	-0.00924 ± 0.0633 U
Radium 226	5	-0.41	1.02	0.202 ± 0.439 U	0.527 ± 0.322	0.248 ± 0.312 U	0.484 ± 0.468 U
Radon 222	300	1360	2070	**1360 ± 160**	**1810 ± 214**	**1660 ± 196**	**2070 ± 240**
Lead 214		-6.8	26.6	6.81 ± 10.3 UJ-	8.24 ± 6.67 UJ-	-6.8 ± 8.24 UJ-	11.9 ± 6.23 J-
Bismuth 214		-24.9	25	9.19 ± 12 UJ-	3.65 ± 7.27 UJ-	-2.78 ± 8.52 UJ-	1.31 ± 14 UJ-
Lead 210		0.254	0.914	NA	NA	NA	NA
Thorium 232		-0.0113	0.0127	0.00619 ± 0.0224 U	0.00417 ± 0.027 U	0.00752 ± 0.0229 U	-0.00844 ± 0.0192 U
Radium 228	5	0.368	1.22	0.39 ± 0.399 U	0.368 ± 0.345 U	1.05 ± 0.478	0.821 ± 0.401 J
Radium MCL [d]	5	0.4	2.24	NA	0.53	1.05	0.82
Actinium-228		-4.57	22.2	19.5 ± 11.4 J+	-4.13 ± 12.1 U	-0.67 ± 12.1 U	10.6 ± 13.1 U
Thorium 228		-0.0138	0.0466	-0.00689 ± 0.0385 U	-0.0138 ± 0.0728 U	0.016 ± 0.0733 U	0.00128 ± 0.0725 U
Lead 212		-2.14	3.77	0.118 ± 6.99 U	-1.17 ± 6.05 U	3.77 ± 4.88 U	-0.872 ± 7.66 U
Bismuth 212		-10.1	34.4	34.4 ± 40.2 U	-10.1 ± 26.2 U	7.49 ± 43.7 U	2.56 ± 48.8 U
Thallium 208		-0.117	4.9	0.665 ± 6.08 U	0.351 ± 3.28 U	-0.117 ± 2.83 U	3.86 ± 3.37 U
Potassium 40		-70.2	27	-7.07 ± 71.2 U	-70.2 ± 48 U	-31.8 ± 47.3 U	-6.53 ± 86.6 U

TABLE 3-8
ANALYTICAL RESULTS FOR WELL J2D2-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.56	2	1.36 ± 0.369	1.58 ± 0.555	1.28 ± 0.346	1.3 ± 0.384
Polonium-210		0.0313	0.101	NA	NA	NA	NA
Protactinium-234		-8.4	505	-8.4 ± 495 U	393 ± 353 U	152 ± 323 U	504 ± 476 U
Radium-224		-2.14	3.77	0.118 ± 6.99 U	-1.17 ± 6.05 U	3.77 ± 4.88 U	-0.872 ± 7.66 U
Thorium-227		-14.1	13.9	3.9 ± 20.2 U	-14.1 ± 20.1 U	-14 ± 13.5 U	13.9 ± 14.7 U
Thorium-234		-39.4	23	14.8 ± 74.2 U	-0.988 ± 54.1 U	6.01 ± 51 U	8.57 ± 96.3 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	4100	9100	**5600**	**5000**	**5300**	**5400**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	4.5	500	35 U	16 J-	500 U	110 U
Antimony	6	7.6	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	96	156	**120 J+**	**130**	**130**	**140**
Barium	2000	12	237	15 J-	16 U	12 J-	14 J
Beryllium	4	0.081	10	0.14 U	0.33 J-	**10 U [f]**	1.1 U
Cadmium	5	0.33	25	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		590000	1100000	650000 J	680000	630000 J	710000
Chromium	100	40	81.9	46	46	47 U	42 J
Chromium VI	100	46	65	62	57 J-	65	52 J-
Cobalt	10.95	1.9	50	1.9 J	2.4 J-	**50 U [f]**	**50 U [f]**
Copper	1300	1	50	10 U	10 U	50 U	50 U
Iron	25550	2	9230	100 U	100 U	500 U	500 U
Lead	15	0.96	15	3 U	1.9 U	15 U	15 U
Lithium	73	480	650	**580**	**580**	**480 J+**	**490 J**
Magnesium	206955	270000	480000	**270000**	**290000**	**280000 J**	**310000**
Manganese	5110	0.2	178	0.34 U	0.48 U	50 U	50 U
Mercury	2	0.0042	0.2	0.01 J	0.2 U	0.2 U	0.017 U
Molybdenum	182.5	19	32	26	28	19 J-	21 J
Nickel	730	1.2	100	2.4 J	3 U	100 U	100 U
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.086	0.05 U

TABLE 3-8
ANALYTICAL RESULTS FOR WELL J2D2-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		15000	30000	20000 J+	21000 J+	15000 J	15000
Selenium	50	4.2	25	4.8 J	6.8	25 U	25 U
Silicon		37000	46000	37000	43000	41000	46000
Silver	182.5	0.61	50	10 U	10 U	50 U	50 U
Sodium		400000	729000	470000 J-	440000 J+	440000 J	470000
Thallium	2	0.025	200	0.056 U	0.13 U	0.05 U	0.04 U
Tin	21900	2.3	250	50 U	50 U	250 U	250 U
Titanium	146000	8.5	100	20 U	20 U	100 U	100 U
Uranium	30	33	115	**81**	**80**	**77**	**79**
Vanadium	182.5	31	74.6	44	48	49 J-	51
Zinc	10950	0.99	100	1.4 U	20 U	100 U	100 U
Zirconium		6.9	100	20 U	20 U	100 U	6.9 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	0.23	5	0.36 J	0.36 J	0.42 J	0.33 J
1,1-Dichloroethene	7	0.41	5	0.57 J	0.64 J	0.79 J	0.58 J
1,2-Dichloroethane	0.123	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	5	1 U	1 U	1 U	1 U
2-Butanone	21262.1	10	50	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	50	10 U	10 U	10 U	10 U
Acetone	32613.3	2	20	NA	10 U	10 U	10 U
Benzene	5	0.068	5	1 U	1 U	1 U	1 U
Bromodichloromethane	1.08438	0.13	5	1 U	1 U	1 U	1 U
Bromoform	8.51032	1	5	1 U	1 U	1 U	1 U
Bromomethane	47.7570	1	10	1 U	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	5	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1.3	3.6	1.3	1.6	1.6	1.4

TABLE 3-8
ANALYTICAL RESULTS FOR WELL J2D2-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	1 U	1 U	1 U	1 U
Chloroform	1.61648	41	140	**41**	**47**	**56**	**48**
Chloromethane	81.1111	0.46	10	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	0.17	5	1 U	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	1 U	1 U	1 U	1 U
Methylene Chloride	5	1	5	1 U	1 U	1 U	1 U
Naphthalene	4.29412	1	1	1 U	1 U	1 U	1 U
Styrene	100	1	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	170	**77**	**77**	**100**	**79**
Toluene	1000	0.17	5	1 U	1 U	1 U	1 U
Total Trihalomethanes [e]	80	41	145	41	47	56	48
Trans-1,2-Dichloroethene	100	1	5	1 U	1 U	1 U	1 U
Trichloroethene	5	6.4	18	**6.4**	**6.9**	**7.7**	**6.9**
Trichlorofluoromethane	9890.32	1	5	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	1 U	1 U
Xylene (Total)	10000	2	10	2 U	2 U	2 U	2 U

TABLE 3-8
ANALYTICAL RESULTS FOR WELL J2D2-R2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-9
ANALYTICAL RESULTS FOR WELL J2D3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		100	130	NA	NA	NA	110
ANIONS (reported in mg/L)							
Chloride	250	870	1300	NA	NA	NA	**870**
Nitrate	10	11	15	NA	NA	NA	**11**
Perchlorate [g]	0.018	1.2	1.9	NA	NA	NA	**1.2**
Sulfate	250	2100	2800	NA	NA	NA	**2100**
GENERAL							
Fluoride	4	0.81	1.5	NA	NA	NA	0.97
Nitrite	1	0.5	1	NA	NA	NA	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		2.03	37	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0.91	39.48	NA	NA	NA	NA
Beta (Total)	50	0.757	39.2	NA	NA	NA	NA
Uranium 238		15.9	17.6	NA	NA	NA	NA
Uranium 234		20.9	23.9	NA	NA	NA	NA
Thorium 230		-0.0709	0.0538	NA	NA	NA	NA
Radium 226	5	0.282	0.983	NA	NA	NA	NA
Radon 222	300	76	3590	NA	NA	103 ± 26.1	133 ± 28.9
Lead 214		-0.931	498	NA	NA	NA	NA
Bismuth 214		-4.8	404	NA	NA	NA	NA
Lead 210		0.573	1.12	NA	NA	NA	NA
Thorium 232		-0.0158	0.0122	NA	NA	NA	NA
Radium 228	5	-2.33	1.35	NA	NA	NA	NA
Radium MCL [d]	5	0.59	1.82	NA	NA	NA	NA
Actinium-228		-2.33	17.6	NA	NA	NA	NA
Thorium 228		-0.0106	0.121	NA	NA	NA	NA
Lead 212		-2.42	9.67	NA	NA	NA	NA
Bismuth 212		-8.8	69.8	NA	NA	NA	NA
Thallium 208		-2.29	6.28	NA	NA	NA	NA
Potassium 40		-2.13	322	NA	NA	NA	NA

TABLE 3-9
ANALYTICAL RESULTS FOR WELL J2D3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-12.4	20.3	NA	NA	NA	NA
Polonium-210		0.409	0.409	NA	NA	NA	NA
Protactinium-234		-239	506	NA	NA	NA	NA
Radium-224		-1.1	9.67	NA	NA	NA	NA
Thorium-227		-23.4	11	NA	NA	NA	NA
Thorium-234		-16.2	109	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	4800	6400	NA	NA	NA	**4800**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	26	640	NA	NA	500 U	450
Antimony	6	20	100	NA	NA	**100 U [f]**	**20 U [f]**
Arsenic	10	29	63	NA	NA	**59**	**63**
Barium	2000	22	36	NA	NA	22 J-	28 J
Beryllium	4	0.22	10	NA	NA	**10 U [f]**	2 U
Cadmium	5	0.74	25	NA	NA	**25 U [f]**	5 U
Calcium		470000	630000	NA	NA	470000	470000
Chromium	100	29	47	NA	NA	29 U	31
Chromium VI	100	20	45	NA	NA	NA	45
Cobalt	10.95	1.5	50	NA	NA	**50 U [f]**	10 U
Copper	1300	10	50	NA	NA	50 U	10 U
Iron	25550	11	530	NA	NA	500 U	310
Lead	15	2.9	15	NA	NA	15 U	3 U
Lithium	73	220	300	NA	NA	**220 J+**	**260**
Magnesium	206955	210000	280000	NA	NA	**230000**	**210000**
Manganese	5110	0.72	90	NA	NA	35 J-	59
Mercury	2	0.0088	0.2	NA	NA	0.012 J-	0.02 J
Molybdenum	182.5	43	49	NA	NA	43 J-	49
Nickel	730	0.83	100	NA	NA	100 U	3.9 J
Phosphorus	0.73	0.05	1000	NA	NA	0.05 U	0.05 U

TABLE 3-9
ANALYTICAL RESULTS FOR WELL J2D3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		13000	19000	NA	NA	13000	15000
Selenium	50	5.2	25	NA	NA	25 U	9.8
Silicon		28000	30000	NA	NA	30000	29000
Silver	182.5	0.61	50	NA	NA	50 U	10 U
Sodium		560000	690000	NA	NA	680000	660000
Thallium	2	0.018	200	NA	NA	0.04 U	0.03 U
Tin	21900	6.2	250	NA	NA	250 U	50 U
Titanium	146000	3.2	100	NA	NA	100 U	16 J
Uranium	30	46	57	NA	NA	**47**	**46**
Vanadium	182.5	21	32	NA	NA	32 U	30
Zinc	10950	1.6	20	NA	NA	6.5 J-	3 J
Zirconium		7.6	20	NA	NA	7.6 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	NA	1 U	1 U
1,1,2-Trichloroethane	5	1	1	NA	NA	1 U	1 U
1,1-Dichloroethane	11.7950	0.18	1	NA	NA	1 U	1 U
1,1-Dichloroethene	7	0.51	2.6	NA	NA	1 U	1 U
1,2-Dichloroethane	0.123	1	1	NA	NA	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	1	NA	NA	1 U	1 U
1,3-Dichlorobenzene	109.091	1	1	NA	NA	1 U	1 U
2-Butanone	21262.1	10	10	NA	NA	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	NA	10 U	10 U
Acetone	32613.3	10	10	NA	NA	10 R	10 U
Benzene	5	1	1	NA	NA	1 U	1 U
Bromodichloromethane	1.08438	1	1	NA	NA	1 U	1 U
Bromoform	8.51032	1	1	NA	NA	1 U	1 U
Bromomethane	47.7570	1	1	NA	NA	1 U	1 U
Carbon Disulfide	3524.14	1	1	NA	NA	1 U	1 U
Carbon Tetrachloride	5	0.35	1	NA	NA	0.54 J	0.72 J

TABLE 3-9
ANALYTICAL RESULTS FOR WELL J2D3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	NA	1 U	1 U
Chloroform	1.61648	8.6	25	NA	NA	**11**	**12**
Chloromethane	81.1111	1	1	NA	NA	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	NA	NA	1 U	1 U
Dibromochloromethane	0.69718	1	1	NA	NA	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	NA	NA	1 U	1 U
Methylene Chloride	5	1	1	NA	NA	1 U	1 U
Naphthalene	4.29412	1	1	NA	NA	1 U	1 U
Styrene	100	1	1	NA	NA	1 U	1 U
Tetrachloroethene	5	5	20	NA	NA	**5.8**	**6.1**
Toluene	1000	0.31	1	NA	NA	1 U	1 U
Total Trihalomethanes [e]	80	8.6	27	NA	NA	11	12
Trans-1,2-Dichloroethene	100	1	1	NA	NA	1 U	1 U
Trichloroethene	5	0.35	1	NA	NA	0.53 J	0.53 J
Trichlorofluoromethane	9890.32	1	1	NA	NA	1 U	1 U
Vinyl Chloride	2	1	1	NA	NA	1 U	1 U
Xylene (Total)	10000	2	2	NA	NA	2 U	2 U

TABLE 3-9
ANALYTICAL RESULTS FOR WELL J2D3-R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-10
ANALYTICAL RESULTS FOR WELL J2D4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		99	480	120	110	110	110
ANIONS (reported in mg/L)							
Chloride	250	184	6300	**5400 J**	**4200 J**	**4200**	**3800**
Nitrate	10	13.1	54	**45 J**	**53 J**	**37**	**32**
Perchlorate [g]	0.018	2.3	3.5	**2.5 J**	**3.5 J**	**3.4**	**3.2**
Sulfate	250	1850	4020	**2200 J**	**2400 J**	**2100**	**1900**
GENERAL							
Fluoride	4	0.29	4.5	1.3 J	2 UJ	2 U	1.6
Nitrite	1	1	2	1 U	**2 U [f]**	**2 U [f]**	1 UJ-
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		12	164	31.3 ± 15.7	13.1 ± 11.9 U	26.2 ± 12.7	12 ± 9.97 U
Adjusted Gross Alpha (Total) MCL [c]	15	-117.71	53.43	-9.3	NA	-5.3	NA
Beta (Total)	50	6.02	94	15.7 ± 22.9 U	7.52 ± 17.4 U	20.2 ± 14.4 U	14.1 ± 14.2 U
Uranium 238		10.3	59	15.6 ± 2.72	16 ± 2.82	13.2 ± 2.26	10.3 ± 1.85
Uranium 234		14.5	84	24.2 ± 4.13	23.4 ± 4.05	17.8 ± 2.99	14.5 ± 2.55
Thorium 230		-0.0679	4.46	-0.0391 ± 0.0597 U	-0.0449 ± 0.0565 U	-0.0485 ± 0.0512 U	0.114 ± 0.0758 U
Radium 226	5	0.0899	4	0.565 ± 0.33	1.14 ± 0.475	0.0899 ± 0.509 U	0.39 ± 0.279 J
Radon 222	300	1280	2390	**1990 ± 1050**	**2300 ± 268**	**1910 ± 223**	**1600 ± 189**
Lead 214		-39	213	21.3 ± 12.2 J-	-0.311 ± 5.59 UJ-	-0.0981 ± 12.3 UJ-	7.87 ± 10.1 UJ-
Bismuth 214		-13	185	22.8 ± 9.78 J-	1.4 ± 6.21 UJ-	-2.9 ± 11.6 UJ-	12.4 ± 13 UJ-
Lead 210		0.12	670	NA	NA	NA	NA
Thorium 232		-0.00286	0.85	0.00522 ± 0.027 U	0.0178 ± 0.0237 U	0.0101 ± 0.0167 U	-0.000777 ± 0.0198 U
Radium 228	5	-1	1.94	0.917 ± 0.521	0.553 ± 0.387 U	0.651 ± 0.444 U	0.349 ± 0.367 U
Radium MCL [d]	5	0.39	4.21	1.48	1.14	NA	0.39
Actinium-228		-35	27.2	15.2 ± 11.1 U	1.72 ± 10.5 U	18.1 ± 9.29 J+	-11.2 ± 26.5 U
Thorium 228		-0.0741	1.24	0.00675 ± 0.0658 U	-0.00552 ± 0.0536 U	0.0441 ± 0.0696 U	-0.0741 ± 0.0672 U
Lead 212		-34	15.4	3.67 ± 4.62 U	-0.713 ± 5.73 U	-0.793 ± 7.01 U	-3.51 ± 8.09 U
Bismuth 212		-27	110	15.1 ± 42.6 U	13.2 ± 22.2 U	28.9 ± 32.7 U	60.1 ± 39.6 U
Thallium 208		-6	6.71	6.71 ± 3.11 J+	-0.607 ± 2.99 U	1.95 ± 5.08 U	5.24 ± 2.73 J
Potassium 40		-140	237	1.97 ± 93.3 U	2.03 ± 45.3 U	-8.54 ± 68.2 U	5.57 ± 80.4 U

TABLE 3-10
ANALYTICAL RESULTS FOR WELL J2D4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-1.88	15.2	0.763 ± 0.24	0.922 ± 0.282	0.514 ± 0.201	0.58 ± 0.208
Polonium-210		-0.025	0.408	NA	NA	NA	NA
Protactinium-234		11.4	538	16.9 ± 488 U	405 ± 263 U	350 ± 399 U	400 ± 431 U
Radium-224		-3.82	3.67	3.67 ± 4.62 U	-0.713 ± 5.73 U	-0.793 ± 7.01 U	-3.51 ± 8.09 U
Thorium-227		-15.1	15.7	-12.5 ± 14.3 U	-13.9 ± 16 U	-6.99 ± 16 U	8.39 ± 11 U
Thorium-234		-44.9	248	11.6 ± 87.8 U	-7.06 ± 54.3 U	-44.9 ± 76.5 U	5.66 ± 52.5 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5810	14000	**13000**	**10000**	**9800**	**10000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	27	500	53 U	170 U	500 U	150 U
Antimony	6	6.4	100	**20 U [f]**	**100 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	93.8	226	**120 J+**	**150**	**140**	**130**
Barium	2000	19	1000	30 J-	21 J-	25 J-	19 J
Beryllium	4	0.12	10	0.2 U	**10 U [f]**	**10 U [f]**	1.6 U
Cadmium	5	0.5	25	5 U	**25 U [f]**	**25 U [f]**	**25 U [f]**
Calcium		640000	1300000	1300000 J	870000 J	770000	700000
Chromium	100	87	290	**280 J-**	**260**	**250**	**240**
Chromium VI	100	220	400	**400**	**310 J-**	**300**	**290 J-**
Cobalt	10.95	0.71	50	10 U	**50 U [f]**	**50 U [f]**	**50 U [f]**
Copper	1300	1.5	50	10 U	50 U	50 U	50 U
Iron	25550	1.5	26500	3.1 U	500 U	500 U	500 U
Lead	15	1.2	17.6	3 U	15 U	15 U	15 U
Lithium	73	560	770	**650**	**620**	**560 J+**	**580 J**
Magnesium	206955	240000	415000	**370000 J**	**340000 J**	**300000**	**280000**
Manganese	5110	0.6	491	1.3 U	0.6 J-	50 U	50 U
Mercury	2	0.011	0.31	0.013 J	0.011 J	0.2 U	0.2 U
Molybdenum	182.5	310	880	**500**	**830**	**880**	**790**
Nickel	730	0.72	100	1.3 J	100 U	100 U	100 U
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.064	0.68

TABLE 3-10
ANALYTICAL RESULTS FOR WELL J2D4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		29000	47000	45000 J+	30000 J	31000	30000
Selenium	50	5	30.8	8.4	25 U	25 U	25 U
Silicon		38000	44000	38000	43000	44000	44000
Silver	182.5	2.2	50	4.7 J	50 U	50 U	7.6 J
Sodium		700000	3000000	3000000 J-	1900000 J	2100000	2000000
Thallium	2	0.017	200	0.098 U	0.2 U	0.04 U	0.04 U
Tin	21900	2.8	250	50 U	250 U	250 U	250 U
Titanium	146000	20	100	20 U	100 U	100 U	100 U
Uranium	30	32	180	**50**	**48**	**39**	**32**
Vanadium	182.5	39	143	47	61	64	68
Zinc	10950	0.35	100	1.7 U	100 U	100 U	100 U
Zirconium		3	20	20 U	3 J-	8.2 U	12 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	25	1 U	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	25	1 U	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.17	25	1 U	1 U	2 U	1 U
1,1-Dichloroethene	7	0.33	25	0.49 J	0.33 J	0.65 J	0.78 J
1,2-Dichloroethane	0.123	0.27	25	**1 U [f]**	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	0.14	25	1 U	1 U	2 U	0.18 J
1,3-Dichlorobenzene	109.091	1	25	1 U	1 U	2 U	1 U
2-Butanone	21262.1	10	250	10 U	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	250	10 U	10 U	20 U	10 U
Acetone	32613.3	3	100	NA	10 U	20 R	10 U
Benzene	5	1	25	1 U	1 U	2 U	1 U
Bromodichloromethane	1.08438	0.17	25	0.21 J	1 U	**2 U [f]**	1 U
Bromoform	8.51032	0.15	25	1.1	1.4	1.7 J	1 U
Bromomethane	47.7570	1	50	1 U	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	25	1 U	1 U	2 U	1 U
Carbon Tetrachloride	5	1	25	2.9	2.6	2.8	3.5

TABLE 3-10
ANALYTICAL RESULTS FOR WELL J2D4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	0.83	25	1 U	1 U	2 U	1 U
Chloroform	1.61648	180	930	**360**	**530**	**600**	**480**
Chloromethane	81.1111	1	50	1 U	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	25	1 U	1 U	2 U	1 U
Dibromochloromethane	0.69718	0.44	25	**1 U [f]**	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	25	1 U	1 U	2 U	1 U
Methylene Chloride	5	0.83	31	1 U	1 U	2 U	1 U
Naphthalene	4.29412	1	2	1 U	1 U	2 U	1 U
Styrene	100	1	25	1 U	1 U	2 U	1 U
Tetrachloroethene	5	3.6	24	3.6	4.9	3.9	4.1
Toluene	1000	1	25	1 U	1 U	2 U	1 U
Total Trihalomethanes [e]	80	0.23	930	**361.31**	**531.4**	**601.7**	**480**
Trans-1,2-Dichloroethene	100	1	25	1 U	1 U	2 U	1 U
Trichloroethene	5	0.3	25	0.31 J	0.31 J	2 U	0.35 J
Trichlorofluoromethane	9890.32	1	25	1 U	1 U	2 U	1 U
Vinyl Chloride	2	1	25	1 U	1 U	2 U	1 U
Xylene (Total)	10000	2	50	2 U	2 U	4 U	2 U

TABLE 3-10
ANALYTICAL RESULTS FOR WELL J2D4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-11
ANALYTICAL RESULTS FOR WELL J2U1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		92	131	NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	690	1230	NA	NA	NA	NA
Nitrate	10	2	14.8	NA	NA	NA	NA
Perchlorate [g]	0.018			NA	NA	NA	NA
Sulfate	250	2230	3140	NA	NA	NA	NA
GENERAL							
Fluoride	4			NA	NA	NA	NA
Nitrite	1			NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		24	24	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	22.44	22.44	NA	NA	NA	NA
Beta (Total)	50	26	26	NA	NA	NA	NA
Uranium 238		19.3	19.3	NA	NA	NA	NA
Uranium 234		25.5	25.5	NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5	0.79	0.79	NA	NA	NA	NA
Radon 222	300	43.4	43.4	NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5	0.33	0.33	NA	NA	NA	NA
Radium MCL [d]	5	1.12	1.12	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-11
ANALYTICAL RESULTS FOR WELL J2U1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		1.64	1.64	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5300	6440	NA	NA	NA	NA
TOTAL METAL (reported in ug/L)							
Aluminum	36500	14	94	NA	NA	NA	NA
Antimony	6	20	40	NA	NA	NA	NA
Arsenic	10	114	148	NA	NA	NA	NA
Barium	2000	8.5	47.5	NA	NA	NA	NA
Beryllium	4	0.27	0.35	NA	NA	NA	NA
Cadmium	5	5	10	NA	NA	NA	NA
Calcium		466000	580000	NA	NA	NA	NA
Chromium	100	31	95.8	NA	NA	NA	NA
Chromium VI	100			NA	NA	NA	NA
Cobalt	10.95	10	20	NA	NA	NA	NA
Copper	1300	4.5	20	NA	NA	NA	NA
Iron	25550	37	4720	NA	NA	NA	NA
Lead	15	3	9.7	NA	NA	NA	NA
Lithium	73	130	130	NA	NA	NA	NA
Magnesium	206955	170000	281000	NA	NA	NA	NA
Manganese	5110	6.2	238	NA	NA	NA	NA
Mercury	2	0.0048	0.2	NA	NA	NA	NA
Molybdenum	182.5	51	51	NA	NA	NA	NA
Nickel	730	2.2	4.5	NA	NA	NA	NA
Phosphorus	0.73			NA	NA	NA	NA

TABLE 3-11
ANALYTICAL RESULTS FOR WELL J2U1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		14000	15000	NA	NA	NA	NA
Selenium	50	4.6	10	NA	NA	NA	NA
Silicon				NA	NA	NA	NA
Silver	182.5	10	20	NA	NA	NA	NA
Sodium		550000	1060000	NA	NA	NA	NA
Thallium	2	0.029	200	NA	NA	NA	NA
Tin	21900			NA	NA	NA	NA
Titanium	146000	10	10	NA	NA	NA	NA
Uranium	30	41	70	NA	NA	NA	NA
Vanadium	182.5	57	66	NA	NA	NA	NA
Zinc	10950	1.2	73	NA	NA	NA	NA
Zirconium				NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	NA	NA	NA	NA
1,1,2-Trichloroethane	5	1	5	NA	NA	NA	NA
1,1-Dichloroethane	11.7950	1	5	NA	NA	NA	NA
1,1-Dichloroethene	7	1	5	NA	NA	NA	NA
1,2-Dichloroethane	0.123	1	5	NA	NA	NA	NA
1,2-Dichloropropane	5	1	5	NA	NA	NA	NA
1,3-Dichlorobenzene	109.091	1	5	NA	NA	NA	NA
2-Butanone	21262.1	10	13	NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66	10	20	NA	NA	NA	NA
Acetone	32613.3	10	20	NA	NA	NA	NA
Benzene	5	1	5	NA	NA	NA	NA
Bromodichloromethane	1.08438	1	5	NA	NA	NA	NA
Bromoform	8.51032	1	5	NA	NA	NA	NA
Bromomethane	47.7570	1	10	NA	NA	NA	NA
Carbon Disulfide	3524.14	1	5	NA	NA	NA	NA
Carbon Tetrachloride	5	0.27	5	NA	NA	NA	NA

TABLE 3-11

ANALYTICAL RESULTS FOR WELL J2U1

SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	NA	NA	NA	NA
Chloroform	1.61648	5.5	7.4	NA	NA	NA	NA
Chloromethane	81.1111	1	10	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	1	1	NA	NA	NA	NA
Dibromochloromethane	0.69718	1	5	NA	NA	NA	NA
Ethylbenzene	700	1	5	NA	NA	NA	NA
Methylene Chloride	5	1	5	NA	NA	NA	NA
Naphthalene	4.29412			NA	NA	NA	NA
Styrene	100	1	5	NA	NA	NA	NA
Tetrachloroethene	5	0.97	1.9	NA	NA	NA	NA
Toluene	1000	0.44	5	NA	NA	NA	NA
Total Trihalomethanes [e]	80	5.5	22.4	NA	NA	NA	NA
Trans-1,2-Dichloroethene	100	1	1	NA	NA	NA	NA
Trichloroethene	5	1	5	NA	NA	NA	NA
Trichlorofluoromethane	9890.32	1	1	NA	NA	NA	NA
Vinyl Chloride	2	1	10	NA	NA	NA	NA
Xylene (Total)	10000	2	5	NA	NA	NA	NA

TABLE 3-11
ANALYTICAL RESULTS FOR WELL J2U1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-12
ANALYTICAL RESULTS FOR WELL J2U2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		82	140	130	130	130	130
ANIONS (reported in mg/L)							
Chloride	250	204	1770	**1300**	**1200**	**1200**	**1100**
Nitrate	10	7.8	85.5	**54**	**50**	**46**	**39**
Perchlorate [g]	0.018	0.52	1	**0.71**	**0.65**	**0.62**	**0.52**
Sulfate	250	1010	2530	**1600**	**1700**	**1800**	**1700**
GENERAL							
Fluoride	4	0.62	1.3	0.77	0.94	0.83	1.3
Nitrite	1	0.5	1	0.5 U	0.5 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		50	164	127 ± 23.2	58.7 ± 12.1	58.5 ± 11.3	52.7 ± 13.3
Adjusted Gross Alpha (Total) MCL [c]	15	-69	93.92	10	-64.8	-57.1	-61.3
Beta (Total)	50	14.3	62.2	30.2 ± 10.4	35.5 ± 10.5	26.2 ± 8.22	14.3 ± 13 U
Uranium 238		20.3	63	47.9 ± 8.14	50.4 ± 8.69	47.2 ± 7.6	46.8 ± 7.81
Uranium 234		28.7	79	66.9 ± 11.3	70.5 ± 12.1	66.2 ± 10.6	64.9 ± 10.8
Thorium 230		-0.0591	1	0.0441 ± 0.0813 U	-0.0435 ± 0.0568 U	-0.0267 ± 0.0512 U	-0.0591 ± 0.0504 U
Radium 226	5	-0.155	1.53	0.443 ± 0.28	0.826 ± 0.425	0.0583 ± 0.309 U	0.222 ± 0.254 U
Radon 222	300	561	1370	**1160 ± 137**	**969 ± 118**	**940 ± 114**	**1110 ± 132**
Lead 214		-24	97.9	14.9 ± 12 UJ-	7.67 ± 6.88 UJ-	-1.56 ± 9.64 UJ-	1.99 ± 11 UJ-
Bismuth 214		-20	91.2	17.4 ± 10.3 UJ-	1.74 ± 7.27 UJ-	5.46 ± 10.2 UJ-	2.55 ± 12.1 UJ-
Lead 210		-90	205	NA	NA	NA	NA
Thorium 232		-0.036	0.22	0.00625 ± 0.0323 U	0.0276 ± 0.0251	0.0105 ± 0.0146	0.0228 ± 0.0248 U
Radium 228	5	0.19	1.19	1.04 ± 0.535	0.643 ± 0.39 U	0.823 ± 0.527 U	0.572 ± 0.364 U
Radium MCL [d]	5	0.4	2.34	1.48	0.83	NA	NA
Actinium-228		-25	21	15.5 ± 8.84 U	-1.79 ± 12.9 U	17.8 ± 11.2 J+	-2.83 ± 21.2 U
Thorium 228		-0.0507	0.38	0.00897 ± 0.0813 U	0.0413 ± 0.0744 U	-0.0507 ± 0.0601 U	-0.0173 ± 0.0491 U
Lead 212		-34	9	1.61 ± 8.62 U	0.982 ± 6.14 U	-2.55 ± 6.79 U	2.27 ± 7.24 U
Bismuth 212		-60	44.8	31.4 ± 28.9 U	38.2 ± 27.1 U	33.5 ± 38.5 U	8.82 ± 41.4 U
Thallium 208		-10.6	4.97	3.34 ± 3.04 U	-0.861 ± 3.31 U	-0.236 ± 5.21 U	2.72 ± 1.9 U
Potassium 40		-59	110	8.21 ± 92.6 U	-5.52 ± 48.6 U	-22.2 ± 76.9 U	32.8 ± 73.5 U

TABLE 3-12
ANALYTICAL RESULTS FOR WELL J2U2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-14.8	17	2.21 ± 0.52	2.57 ± 0.599	2.19 ± 0.501	2.33 ± 0.522
Polonium-210		0.172	0.248	NA	NA	NA	NA
Protactinium-234		-188	819	275 ± 496 U	-49.6 ± 582 U	142 ± 449 U	-113 ± 843 U
Radium-224		-2.55	6.41	1.61 ± 8.62 U	0.982 ± 6.14 U	-2.55 ± 6.79 U	2.27 ± 7.24 U
Thorium-227		-14.3	14.4	8.35 ± 18.9 U	-11.1 ± 20.2 U	-5.78 ± 11.3 U	-11.3 ± 19.1 U
Thorium-234		-28.7	92.7	73 ± 48.9 U	-11.8 ± 54.4 U	43.6 ± 36.5 U	92.7 ± 89.2 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	2000	6000	**5100**	**4900**	**4700**	**4500**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	29	530	38 J-	100 U	500 U	100 U
Antimony	6	7.6	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**20 U [f]**
Arsenic	10	100	171	**100**	**110**	**110**	**120**
Barium	2000	12	68.1	24 U	22 U	18 J-	19 J
Beryllium	4	0.081	10	0.34 U	2 U	**10 U [f]**	2 U
Cadmium	5	0.33	25	0.7 U	5 U	**25 U [f]**	5 U
Calcium		204000	715000	580000	590000	590000	540000
Chromium	100	11.2	82	63	55	56	50
Chromium VI	100	54	95	76	80	65	68
Cobalt	10.95	2.6	50	6 U	4.3 J-	**50 U [f]**	2.6 J
Copper	1300	0.96	50	1.2 U	10 U	50 U	10 U
Iron	25550	25	4920	25 J-	100 U	500 U	100 U
Lead	15	1	15	3 U	2.8 U	15 U	3 U
Lithium	73	340	640	**540**	**520**	**440 J+**	**520**
Magnesium	206955	101000	350000	**320000**	**300000**	**300000**	**270000**
Manganese	5110	0.35	116	2.8 U	0.71 U	50 U	10 U
Mercury	2	0.0064	0.2	0.022 J	0.016 J	0.2 U	0.2 U
Molybdenum	182.5	29	35	32	30	29 J-	31
Nickel	730	1.5	100	4.8 U	3.6 U	100 U	2.7 J
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.05 U	0.2 J+

TABLE 3-12
ANALYTICAL RESULTS FOR WELL J2U2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		15000	23000	20000 J+	20000 J+	15000	18000
Selenium	50	1.3	25	6	5.9	25 U	6.9
Silicon		40000	43000	41000	41000	43000	40000
Silver	182.5	0.64	50	1.2 J	10 U	50 U	10 U
Sodium		5000	470000	400000	400000 J+	430000	410000
Thallium	2	0.04	45	0.091 U	0.09 U	0.1 U	0.08 U
Tin	21900	4.1	250	4.1 J	50 U	250 U	50 U
Titanium	146000	2.1	100	20 U	20 U	100 U	20 U
Uranium	30	29.8	254	**140**	**140**	**150**	**140**
Vanadium	182.5	25	145	29	25	30 U	28
Zinc	10950	0.87	100	4.9 U	20 U	100 U	20 U
Zirconium		6.4	20	20 U	20 U	6.4 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	0.21	5	0.36 J	0.28 J	0.21 J	1 U
1,1-Dichloroethene	7	0.24	5	0.66 J	0.46 J	0.51 J	0.46 J
1,2-Dichloroethane	0.123	0.55	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	5	1 U	1 U	1 U	1 U
2-Butanone	21262.1	10	50	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	50	10 U	10 U	10 U	10 U
Acetone	32613.3	3.6	20	10 U	10 U	10 R	10 U
Benzene	5	0.074	5	1 U	1 U	1 U	1 U
Bromodichloromethane	1.08438	0.2	5	0.37 U	0.25 J	0.25 J	1 U
Bromoform	8.51032	1	5	1 U	1 U	1 U	1 U
Bromomethane	47.7570	1	10	1 U	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	5	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	0.49	5.8	3	3.7	3.6	3.6

TABLE 3-12
ANALYTICAL RESULTS FOR WELL J2U2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	1 U	1 U	1 U	1 U
Chloroform	1.61648	17	160	**140**	**81**	**92**	**63**
Chloromethane	81.1111	0.42	10	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	0.2	5	1 U	1 U	1 U	1 U
Dibromochloromethane	0.69718	0.18	5	0.18 J	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	1 U	1 U	1 U	1 U
Methylene Chloride	5	0.22	5.3	1 U	1 U	1 U	1 U
Naphthalene	4.29412	1	1	1 U	1 U	1 U	1 U
Styrene	100	0.83	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	29	120	**56**	**59**	**75**	**47**
Toluene	1000	0.11	5	1 U	1 U	1 U	1 U
Total Trihalomethanes [e]	80	0.18	160	**140.18**	**81.25**	**92.25**	63
Trans-1,2-Dichloroethene	100	1	5	1 U	1 U	1 U	1 U
Trichloroethene	5	3.5	21	**11**	**12**	**14**	**12**
Trichlorofluoromethane	9890.32	1	5	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	1 U	1 U
Xylene (Total)	10000	2	10	2 U	2 U	2 U	2 U

TABLE 3-12
ANALYTICAL RESULTS FOR WELL J2U2
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-13
ANALYTICAL RESULTS FOR WELL TIMETMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity				NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250			NA	NA	NA	NA
Nitrate	10			NA	NA	NA	NA
Perchlorate [g]	0.018			NA	NA	NA	NA
Sulfate	250			NA	NA	NA	NA
GENERAL							
Fluoride	4			NA	NA	NA	NA
Nitrite	1			NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-13
ANALYTICAL RESULTS FOR WELL TIMETMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900			NA	NA	NA	NA
TOTAL METAL (reported in ug/L)							
Aluminum	36500			NA	NA	NA	NA
Antimony	6			NA	NA	NA	NA
Arsenic	10			NA	NA	NA	NA
Barium	2000			NA	NA	NA	NA
Beryllium	4			NA	NA	NA	NA
Cadmium	5			NA	NA	NA	NA
Calcium				NA	NA	NA	NA
Chromium	100			NA	NA	NA	NA
Chromium VI	100			NA	NA	NA	NA
Cobalt	10.95			NA	NA	NA	NA
Copper	1300			NA	NA	NA	NA
Iron	25550			NA	NA	NA	NA
Lead	15			NA	NA	NA	NA
Lithium	73			NA	NA	NA	NA
Magnesium	206955			NA	NA	NA	NA
Manganese	5110			NA	NA	NA	NA
Mercury	2			NA	NA	NA	NA
Molybdenum	182.5			NA	NA	NA	NA
Nickel	730			NA	NA	NA	NA
Phosphorus	0.73			NA	NA	NA	NA

TABLE 3-13
ANALYTICAL RESULTS FOR WELL TIMETMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium				NA	NA	NA	NA
Selenium	50			NA	NA	NA	NA
Silicon				NA	NA	NA	NA
Silver	182.5			NA	NA	NA	NA
Sodium				NA	NA	NA	NA
Thallium	2			NA	NA	NA	NA
Tin	21900			NA	NA	NA	NA
Titanium	146000			NA	NA	NA	NA
Uranium	30			NA	NA	NA	NA
Vanadium	182.5			NA	NA	NA	NA
Zinc	10950			NA	NA	NA	NA
Zirconium				NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethene	7	1	1	NA	1 U	1 U	1 U
1,2-Dichloroethane	0.123	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	1	NA	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	1	NA	1 U	1 U	1 U
2-Butanone	21262.1	10	10	NA	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	10 U	10 U	10 U
Acetone	32613.3	10	10	NA	10 U	10 R	10 U
Benzene	5	1	1	NA	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	1	NA	1 U	1 U	1 U
Bromoform	8.51032	1	1	NA	1 U	1 U	1 U
Bromomethane	47.7570	1	1	NA	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	1	NA	1 U	1 U	1 U
Carbon Tetrachloride	5	4.1	4.4	NA	4.4	4.1	4.1

TABLE 3-13
ANALYTICAL RESULTS FOR WELL TIMETMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	1 U	1 U
Chloroform	1.61648	52	54	NA	**54**	**53**	**52**
Chloromethane	81.1111	1	1	NA	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	NA	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	NA	1 U	1 U	1 U
Methylene Chloride	5	1	1	NA	1 U	1 U	1 U
Naphthalene	4.29412	1	1	NA	1 U	1 U	1 U
Styrene	100	1	1	NA	1 U	1 U	1 U
Tetrachloroethene	5	28	32	NA	**28**	**32**	**29**
Toluene	1000	1	1	NA	1 U	1 U	1 U
Total Trihalomethanes [e]	80	52	54	NA	54	53	52
Trans-1,2-Dichloroethene	100	1	1	NA	1 U	1 U	1 U
Trichloroethene	5	10	12	NA	**11**	**12**	**10**
Trichlorofluoromethane	9890.32	1	1	NA	1 U	1 U	1 U
Vinyl Chloride	2	1	1	NA	1 U	1 U	1 U
Xylene (Total)	10000	2	2	NA	2 U	2 U	2 U

TABLE 3-13
ANALYTICAL RESULTS FOR WELL TIMETMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-14
ANALYTICAL RESULTS FOR WELL TIMETMW-3R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		110	120	120 J	110	110	110
ANIONS (reported in mg/L)							
Chloride	250	170	340	170 J	200 J	250 J	**340**
Nitrate	10	2.7	3.1	2.8 J	2.7 J	2.9 J	3.1
Perchlorate [g]	0.018	0.06	0.12	**0.071 J**	**0.085 J**	**0.11 J**	**0.12**
Sulfate	250	910	1200	**1100 J**	**1100 J**	**1000 J**	**910**
GENERAL							
Fluoride	4	0.58	0.71	0.58 J	0.68 J	0.67 J	0.71
Nitrite	1	0.2	0.5	0.5 U	0.2 U	0.2 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		6.25	14.1	10.6 ± 3.44	9.71 ± 2.96	8.15 ± 2.94	6.25 ± 3.2
Adjusted Gross Alpha (Total) MCL [c]	15	-0.17	8.36	-3.8	-5.1	-5.9	-8.4
Beta (Total)	50	5.09	16.8	11.1 ± 5.08	16.8 ± 4.16	9.11 ± 3.51	5.09 ± 4.54 U
Uranium 238		5.64	6.19	5.8 ± 1.1	6.19 ± 1.18	5.77 ± 0.985	6.15 ± 1.09
Uranium 234		7.98	8.31	8.22 ± 1.51	8.31 ± 1.53	7.98 ± 1.33	8.17 ± 1.42
Thorium 230		-0.015	0.185	0.0999 ± 0.0659 J+	0.0171 ± 0.0624 U	0.0333 ± 0.0539 U	-0.015 ± 0.0594 U
Radium 226	5	0	0.678	0 ± 0.336 U	0.678 ± 0.447	0.104 ± 0.251 U	0.256 ± 0.269 U
Radon 222	300	206	783	**460 ± 59.4**	206 ± 32.1	**325 ± 45.5**	**783 ± 97.5**
Lead 214		4.07	12.7	6.53 ± 9.66 UJ-	4.07 ± 9.48 UJ-	11.2 ± 5.36 J-	12.7 ± 5.87 J-
Bismuth 214		-2.06	11.4	5.77 ± 12.5 UJ-	3.39 ± 16 UJ-	-2.06 ± 13.4 UJ-	11.4 ± 6.09 J-
Lead 210				NA	NA	NA	NA
Thorium 232		0.00273	0.0399	0.00308 ± 0.0151 U	0.0123 ± 0.0181 U	0.00273 ± 0.0156 U	0.035 ± 0.0274 U
Radium 228	5	0.164	0.76	0.62 ± 0.389 U	0.288 ± 0.337 U	0.76 ± 0.379	0.164 ± 0.298 U
Radium MCL [d]	5	0.39	0.76	NA	0.68	0.76	NA
Actinium-228		7.39	23.1	13.6 ± 13.2 U	16.8 ± 9.82 U	7.39 ± 23.3 U	8.72 ± 18.5 U
Thorium 228		-0.0541	0.0366	0.0219 ± 0.0422 U	0.0237 ± 0.0379 U	-0.00335 ± 0.0611 U	-0.0541 ± 0.0599 U
Lead 212		-5.11	3.06	-5.11 ± 9.3 U	-0.406 ± 7.74 U	-4.55 ± 9.34 U	1.03 ± 8.29 U
Bismuth 212		-11.4	44	36.4 ± 29.5 U	34.2 ± 40.9 U	-11.4 ± 35.7 U	44 ± 40.8 U
Thallium 208		0.0863	7.57	1.29 ± 6.08 U	4.58 ± 2.75 J+	7.57 ± 2.9 J	2.7 ± 2.96 U
Potassium 40		-68.5	86.5	14.7 ± 80.1 U	2.6 ± 82.9 U	-68.5 ± 75.5 U	-7.52 ± 82.7 U

WELL ID: TIMETMW-3R

TABLE 3-14
ANALYTICAL RESULTS FOR WELL TIMETMW-3R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.253	0.388	0.388 ± 0.163	0.357 ± 0.16	0.284 ± 0.102	0.295 ± 0.125
Polonium-210				NA	NA	NA	NA
Protactinium-234		0.56	535	535 ± 534 U	489 ± 498 U	496 ± 452 U	0.56 ± 715 U
Radium-224		-5.11	3.06	-5.11 ± 9.3 U	-0.406 ± 7.74 U	-4.55 ± 9.34 U	1.03 ± 8.29 U
Thorium-227		-8.33	11.4	-8.33 ± 13.5 U	-7.6 ± 20.7 U	0.496 ± 19.8 U	11.4 ± 19.3 U
Thorium-234		-39.2	52.4	17 ± 78.1 U	-16 ± 73.6 U	23 ± 80.9 U	52.4 ± 83.8 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	2000	2100	**2100**	**2000**	**2000**	**2000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	91	600	100 U	91 J-	500 U	500 U
Antimony	6	20	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	190	220	**200**	**190**	**190**	**200**
Barium	2000	13	22	18 J-	20 U	13 J-	18 J-
Beryllium	4	0.2	10	0.2 J-	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	5	25	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		140000	150000	140000 J	140000 J	140000 J-	150000
Chromium	100	21	32	32	30	21 J-	28 J-
Chromium VI	100	30	40	35	32 J-	33	30
Cobalt	10.95	10	50	10 U	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	0.81	50	10 U	10 U	50 U	50 U
Iron	25550	27	500	27 J-	85 U	500 U	500 U
Lead	15	1.3	15	3 U	1.5 U	15 U	15 U
Lithium	73	120	170	**150**	**160**	**120 J+**	**130 J+**
Magnesium	206955	86000	96000	89000 J	91000 J	86000 J-	96000
Manganese	5110	2.3	50	2.3 J-	3.6 U	50 U	50 U
Mercury	2	0.025	0.2	0.2 U	0.2 U	0.025 J-	0.2 U
Molybdenum	182.5	71	92	87	89	71	76
Nickel	730	1.1	100	1.1 J	2.2 U	100 U	100 U
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.053	0.05 U	0.066

TABLE 3-14
ANALYTICAL RESULTS FOR WELL TIMETMW-3R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		9300	13000	12000 J+	13000 J+	9300 J	9300 J+
Selenium	50	4.4	25	4.4 J-	6.6	25 U	25 U
Silicon		32000	38000	32000	35000	33000 J-	38000
Silver	182.5	10	50	10 U	10 U	50 U	50 U
Sodium		250000	310000	250000 J	260000 J+	280000 J-	310000
Thallium	2	0.024	0.2	0.027 U	0.03 U	0.2 U	0.04 U
Tin	21900	50	250	50 U	50 U	250 U	250 U
Titanium	146000	3.2	100	20 U	3.2 J-	100 U	100 U
Uranium	30	17	21	21	18	17	17
Vanadium	182.5	30	32	30	30	30 U	31 J
Zinc	10950	0.73	100	17 U	0.73 U	100 U	100 U
Zirconium		4.4	100	20 U	20 U	100 U	4.4 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	1	1 U	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	1	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	1	1	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.123	0.43	0.48	**0.48 J**	**0.46 J**	**0.46 J**	**0.48 J**
1,2-Dichloropropane	5	24	31	**24**	**24**	**31**	**26**
1,3-Dichlorobenzene	109.091	1	1	1 U	1 U	1 U	1 U
2-Butanone	21262.1	10	10	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	10 U	10 U	10 U	10 U
Acetone	32613.3	10	10	10 U	10 U	10 U	10 U
Benzene	5	1	1	1 U	1 U	1 U	1 U
Bromodichloromethane	1.08438	0.18	1	0.2 J	0.18 J	1 U	1 U
Bromoform	8.51032	1	1	1 U	1 U	1 U	1 U
Bromomethane	47.7570	1	1	1 U	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	1	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1	1	1 U	1 U	1 U	1 U

TABLE 3-14
ANALYTICAL RESULTS FOR WELL TIMETMW-3R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	1 U	1 U	1 U	1 U
Chloroform	1.61648	0.71	0.93	0.71 J	0.74 J	0.9 J	0.93 J
Chloromethane	81.1111	1	1	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	1	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	1 U	1 U	1 U	1 U
Methylene Chloride	5	1	1	1 U	1 U	1 U	1 U
Naphthalene	4.29412	1	1	1 U	1 U	1 U	1 U
Styrene	100	1	1	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1	1	1 U	1 U	1 U	1 U
Toluene	1000	1	1	1 U	1 U	1 U	1 U
Total Trihalomethanes [e]	80	0.73	0.93	0.91	0.92	0.9	0.93
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	1 U	1 U
Trichloroethene	5	19	24	**22**	**19**	**23**	**24**
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1	1	1 U	1 U	1 U	1 U
Xylene (Total)	10000	2	10	2 U	2 U	2 U	2 U

TABLE 3-14
ANALYTICAL RESULTS FOR WELL TIMETMW-3R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-15
ANALYTICAL RESULTS FOR WELL TIMETMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		74	110	110	110	110	110
ANIONS (reported in mg/L)							
Chloride	250	170	2600	170	180 J	200 J	190
Nitrate	10	2	4.1	2.6	2.8	3 J	3
Perchlorate [g]	0.018	0.13	0.27	**0.13 J**	**0.19 J**	**0.16 J**	**0.14**
Sulfate	250	1600	3300	**1600**	**2100 J**	**1900 J**	**1800**
GENERAL							
Fluoride	4	0.5	0.91	0.5 U	0.76 J	0.84 J	0.68
Nitrite	1	0.5	0.5	0.5 U	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		0	29	15.6 ± 5.39	13.6 ± 5.12	28.2 ± 7.2	12.7 ± 4.46
Adjusted Gross Alpha (Total) MCL [c]	15	-2.03	28.3	-11.6	-14.5	0.7	-13.8
Beta (Total)	50	-0.9	22.3	5.46 ± 5.99 U	22.3 ± 7.22	17.2 ± 7.27	4.87 ± 6.96 U
Uranium 238		8.76	12	11.3 ± 1.99	11.4 ± 2.04	11.5 ± 1.9	11.1 ± 1.87
Uranium 234		12.3	16	15.3 ± 2.64	16 ± 2.79	15.5 ± 2.54	14.9 ± 2.49
Thorium 230		-0.0589	0.067	0.0459 ± 0.0714 U	0.0478 ± 0.0671 U	-0.0258 ± 0.0509 U	-0.022 ± 0.0512 U
Radium 226	5	0.0266	0.831	0.607 ± 0.376	0.56 ± 0.29	0.416 ± 0.306	0.0266 ± 0.13 U
Radon 222	300	256	1300	256 ± 38.3	**1130 ± 140**	**1230 ± 145**	**1300 ± 155**
Lead 214		-2.34	59.5	4.44 ± 10.4 UJ-	25.8 ± 10.9 J-	-2.34 ± 7.92 UJ-	1.5 ± 10.9 UJ-
Bismuth 214		-26.4	66.4	0.397 ± 11.8 UJ-	29.7 ± 12.1 J-	-26.4 ± 9.55 UJ-	8.81 ± 12.8 UJ-
Lead 210		0.406	0.664	NA	NA	NA	NA
Thorium 232		-0.00558	0.0363	0.00395 ± 0.0254 U	-0.000958 ± 0.023 U	0.00171 ± 0.0126 U	-0.00392 ± 0.0147 U
Radium 228	5	-0.0637	0.87	0.552 ± 0.44 U	0.227 ± 0.37 U	0.589 ± 0.342	0.145 ± 0.285 U
Radium MCL [d]	5	0.09	1.57	0.61	0.56	1	NA
Actinium-228		-1.28	20.1	19.6 ± 12.1 J+	-1.28 ± 22 U	1.73 ± 11.5 U	14.7 ± 12.3 U
Thorium 228		-0.0558	0.189	0.047 ± 0.0749 U	-0.0107 ± 0.0565 U	0.0128 ± 0.0603 U	-0.00132 ± 0.048 U
Lead 212		-1.06	4.79	-1.06 ± 7.45 U	4.79 ± 7.45 U	3.05 ± 4.75 U	-0.22 ± 7.72 U
Bismuth 212		14	46.6	14.8 ± 41.8 U	26.2 ± 44.5 U	18.6 ± 19.3 U	44.1 ± 44.2 U
Thallium 208		-0.832	5.63	5.16 ± 3.01 J+	3.29 ± 3 U	1.62 ± 2.82 U	-0.832 ± 6.32 U
Potassium 40		-39.4	45	25.6 ± 69.5 U	4.03 ± 75.5 U	9.6 ± 46.9 U	-39.4 ± 89.8 U

TABLE 3-15
ANALYTICAL RESULTS FOR WELL TIMETMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.394	0.77	0.557 ± 0.194	0.666 ± 0.223	0.532 ± 0.158	0.513 ± 0.164
Polonium-210		0.0127	0.353	NA	NA	NA	NA
Protactinium-234		0	559	387 ± 516 U	553 ± 510 U	396 ± 244 J	24.8 ± 576 U
Radium-224		-1.06	4.79	-1.06 ± 7.45 U	4.79 ± 7.45 U	3.05 ± 4.75 U	-0.22 ± 7.72 U
Thorium-227		-13	20.6	9.6 ± 17.4 U	6.95 ± 12.3 U	-13 ± 12.8 U	-3.92 ± 22.9 U
Thorium-234		-34	29.7	6.83 ± 43.7 U	29.7 ± 45.3 U	0.358 ± 55.6 U	-21.4 ± 84.1 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	2830	5690	**3100**	**3300**	**3000**	**3100**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	4.2	500	270	100 U	500 U	500 U
Antimony	6	7.6	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	20	163	**120 J+**	**120**	**130**	**130**
Barium	2000	1.6	293	13 J-	11 U	5 J-	6.7 J-
Beryllium	4	0.081	10	0.12 U	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.33	25	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		50000	500000	280000 J	340000 J	320000 J-	310000
Chromium	100	2.6	117	14 J-	16	5.8 J-	13 J-
Chromium VI	100	15	29	16	20 J-	19	15
Cobalt	10.95	0.82	50	10 U	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	1	50	10 U	10 U	50 U	50 U
Iron	25550	9.3	25500	190	100 U	500 U	500 U
Lead	15	1	23.7	2.2 J	1.8 U	15 U	15 U
Lithium	73	120	170	**150**	**150**	**120 J+**	**120 J+**
Magnesium	206955	26100	310000	140000	160000 J	150000 J-	150000
Manganese	5110	0.5	469	8.1 U	0.51 U	50 U	50 U
Mercury	2	0.0073	0.23	0.2 U	0.2 U	0.2 J-	0.2 U
Molybdenum	182.5	29	66	39	46	30 J-	29 J-
Nickel	730	0.9	100	20 U	3.1 U	100 U	100 U
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.05 U	0.05 U

TABLE 3-15
ANALYTICAL RESULTS FOR WELL TIMETMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		8500	19000	12000 J+	13000 J+	9300 J	8500 J+
Selenium	50	3.1	25	3.6 J	6.8	25 U	25 U
Silicon		35000	42000	36000	40000	39000 J-	42000
Silver	182.5	0.57	50	10 U	10 U	50 U	50 U
Sodium		5000	728000	390000 J-	320000 J+	330000 J-	340000
Thallium	2	0.025	42	0.066 U	0.03 U	0.2 U	0.05 U
Tin	21900	4.6	250	50 U	50 U	250 U	250 U
Titanium	146000	2	100	9.7 J-	20 U	100 U	100 U
Uranium	30	5	42	**34**	**32**	**34**	**33**
Vanadium	182.5	8.4	101	53	48	53	51
Zinc	10950	1.2	100	3.5 U	20 U	100 U	100 U
Zirconium		4.5	100	20 U	20 U	100 U	4.5 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	1 U	1 U	4 U	1 U
1,1,2-Trichloroethane	5	1	5	1 U	1 U	4 U	1 U
1,1-Dichloroethane	11.7950	0.24	5	0.25 J	0.49 J	4 U	0.42 J
1,1-Dichloroethene	7	1	13	1	3.5	3.6 J	3.7
1,2-Dichloroethane	0.123	1	5	**1 U [f]**	**1 U [f]**	**4 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	1 U	1 U	4 U	1 U
1,3-Dichlorobenzene	109.091	1	5	1 U	1 U	4 U	1 U
2-Butanone	21262.1	10	40	10 U	10 U	40 U	10 U
4-Methyl-2-Pentanone	2900.66	10	40	10 U	10 U	40 U	10 U
Acetone	32613.3	3.2	40	10 U	10 U	40 U	10 U
Benzene	5	0.14	5	1 U	1 U	4 U	1 U
Bromodichloromethane	1.08438	0.25	5	1 U	1 U	**4 U [f]**	1 U
Bromoform	8.51032	1	5	1 U	1 U	4 U	1 U
Bromomethane	47.7570	1	10	1 U	1 U	4 U	1 U
Carbon Disulfide	3524.14	1	5	1 U	1 U	4 U	1 U
Carbon Tetrachloride	5	0.14	5	1 U	1 U	4 U	1 U

TABLE 3-15
ANALYTICAL RESULTS FOR WELL TIMETMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	1 U	1 U	4 U	1 U
Chloroform	1.61648	1.1	15	1.1	**2.3**	**2.2 J**	**3**
Chloromethane	81.1111	0.59	10	1 U	1 U	4 U	1 U
cis-1,2-Dichloroethene	70	1	4	1 U	1 U	4 U	1 U
Dibromochloromethane	0.69718	0.36	5	**1 U [f]**	**1 U [f]**	**4 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	1 U	1 U	4 U	1 U
Methylene Chloride	5	1	8.7	1 U	1 U	1.3 U	1 U
Naphthalene	4.29412	1	4	1 U	1 U	4 U	1 U
Styrene	100	1	5	1 U	1 U	4 U	1 U
Tetrachloroethene	5	20	88	**20**	**53**	**53**	**50**
Toluene	1000	0.27	5	1 U	1 U	4 U	1 U
Total Trihalomethanes [e]	80	1.1	27	1.1	2.3	2.2	3
Trans-1,2-Dichloroethene	100	1	4	1 U	1 U	4 U	1 U
Trichloroethene	5	0.3	5	1 U	0.3 J	4 U	0.33 J
Trichlorofluoromethane	9890.32	1	4	1 U	1 U	4 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	**4 U [f]**	1 U
Xylene (Total)	10000	2	10	2 U	2 U	8 U	2 U

TABLE 3-15
ANALYTICAL RESULTS FOR WELL TIMETMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-16
ANALYTICAL RESULTS FOR WELL TIMETMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		76	200	110	100	200	100
ANIONS (reported in mg/L)							
Chloride	250	442	1110	**570**	**620**	**700 J**	**700**
Nitrate	10	6	35.2	7.6	8.7	9.1 J	8.5
Perchlorate [g]	0.018	0.38	0.63	**0.53**	**0.63**	**0.55 J**	**0.48**
Sulfate	250	1680	3860	**1800**	**1900**	**2000 J**	**1900**
GENERAL							
Fluoride	4	1.7	3.1	1.9	2	2 J	1.7
Nitrite	1	0.5	1	0.5 U	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		8	39	22.8 ± 6.43	20.3 ± 5.82	17.6 ± 6.1	19.4 ± 7.65
Adjusted Gross Alpha (Total) MCL [c]	15	-26.8	15.57	4.3	0.2	-5.7	-5
Beta (Total)	50	8.82	36	17.5 ± 6.49	16.1 ± 6.62	15.2 ± 7.08	8.82 ± 14.3 U
Uranium 238		4.75	9.69	8.09 ± 1.47	8.71 ± 1.56	9.69 ± 1.59	9.46 ± 1.63
Uranium 234		5.9	14.3	9.97 ± 1.78	10.9 ± 1.92	13.3 ± 2.16	14.3 ± 2.41
Thorium 230		-0.0747	0.45	0.0382 ± 0.0687 U	0.00362 ± 0.0617 U	-0.0104 ± 0.0547 U	-0.0747 ± 0.049 U
Radium 226	5	-0.89	1.73	0.431 ± 0.316	0.871 ± 0.408	0.42 ± 0.456 U	0.781 ± 0.356
Radon 222	300	717	1750	**1600 ± 187**	**884 ± 111**	**1380 ± 163**	**1380 ± 164**
Lead 214		-3.61	33.2	1.1 ± 11.2 UJ-	16.8 ± 6.42 J	-3.61 ± 6.56 UJ-	-1.15 ± 7.77 UJ-
Bismuth 214		-18.7	37	10.2 ± 13.3 UJ-	17.8 ± 15 UJ-	-0.393 ± 6.73 UJ-	-18.7 ± 9.62 UJ-
Lead 210		0.582	1.07	NA	NA	NA	NA
Thorium 232		-0.0106	0.03	0.00253 ± 0.0229 U	0.0029 ± 0.0188 U	0.00181 ± 0.0134 U	-0.0054 ± 0.016 U
Radium 228	5	0.344	2.1	0.745 ± 0.543 U	0.515 ± 0.362 U	0.876 ± 0.444	0.638 ± 0.352
Radium MCL [d]	5	-0.03	3.46	0.43	0.87	0.88	1.42
Actinium-228		-2.96	22.4	21.4 ± 9.81 J+	22.4 ± 12.4 J+	-1.46 ± 11.5 U	-2.96 ± 11.2 U
Thorium 228		-0.0435	0.23	0.0122 ± 0.0374 U	0.064 ± 0.0514 U	-0.0129 ± 0.0576 U	-0.0435 ± 0.0599 U
Lead 212		-0.0453	16.7	0.465 ± 6.92 U	16.7 ± 4.73 J+	2.65 ± 5.14 U	-0.0453 ± 4.46 U
Bismuth 212		5.61	69.4	69.4 ± 40.6 J+	8.6 ± 40.4 U	25.2 ± 17.1 U	5.61 ± 34 U
Thallium 208		-1.05	6.56	0.577 ± 6 U	6.56 ± 3.12 J+	0.956 ± 2.72 U	0.595 ± 2.7 U
Potassium 40		-51.6	170	50.8 ± 76.9 U	170 ± 44.3 J+	-51.6 ± 43.1 U	-18.8 ± 46.3 U

TABLE 3-16
ANALYTICAL RESULTS FOR WELL TIMETMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.13	0.641	0.454 ± 0.176	0.478 ± 0.175	0.32 ± 0.108	0.641 ± 0.193
Polonium-210		0.224	0.233	NA	NA	NA	NA
Protactinium-234		-155	763	316 ± 484 U	289 ± 551 U	138 ± 212 U	-155 ± 536 U
Radium-224		-0.0453	16.7	0.465 ± 6.92 U	16.7 ± 4.73 J+	2.65 ± 5.14 U	-0.0453 ± 4.46 U
Thorium-227		-6.5	6.91	-5.38 ± 20.2 U	4.09 ± 13.1 U	-5.83 ± 12.6 U	-1.99 ± 13.2 U
Thorium-234		-31.9	242	16.5 ± 75 U	242 ± 46.9 J+	10.7 ± 46.6 U	29.3 ± 52.2 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	3130	4800	**3800**	**4000**	**3900**	**4100**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	14	500	78 U	100 U	500 U	500 U
Antimony	6	2.3	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	120	196	**160 J+**	**180**	**190**	**190**
Barium	2000	7.8	84.9	14 J-	13 U	7.8 J-	8.7 J-
Beryllium	4	0.081	10	2 U	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.33	25	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		340000	618000	400000 J	440000	400000 J	410000
Chromium	100	16	36.9	21 J-	22	22 U	22 J-
Chromium VI	100	23	29	26	27	26	28
Cobalt	10.95	0.82	50	10 U	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	1	50	10 U	10 U	50 U	50 U
Iron	25550	4.2	5900	6.2 U	100 U	500 U	500 U
Lead	15	1	15	2 J	3 U	15 U	15 U
Lithium	73	160	240	**200**	**210**	**170 J+**	**170 J+**
Magnesium	206955	120000	190000	120000	150000	150000 J	160000
Manganese	5110	0.26	158	1.8 U	0.71 U	50 U	50 U
Mercury	2	0.011	0.2	0.026 J	0.2 U	0.017 J-	0.2 U
Molybdenum	182.5	40	58	49	58	51	56
Nickel	730	1.2	100	2 J	2.8 U	100 U	100 U
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.05 U	0.05 U

TABLE 3-16
ANALYTICAL RESULTS FOR WELL TIMETMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		11000	18000	15000 J+	16000 J+	11000 J	11000 J+
Selenium	50	4.6	25	7.8	9.4	25 U	25 U
Silicon		45000	55000	45000	50000	48000	52000
Silver	182.5	0.63	50	10 U	10 U	50 U	50 U
Sodium		5000	661000	580000 J-	490000 J+	530000 J	590000
Thallium	2	0.016	200	0.33	0.04 U	0.02 U	0.04 U
Tin	21900	4.1	250	50 U	50 U	250 U	250 U
Titanium	146000	2.3	100	20 U	20 U	100 U	100 U
Uranium	30	12	98.5	23	26	28	**31**
Vanadium	182.5	49	83	59	57	59	61
Zinc	10950	3.4	100	16 U	20 U	100 U	100 U
Zirconium		20	1000	20 U	20 U	100 U	100 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	1	5	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.123	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	5	1 U	1 U	1 U	1 U
2-Butanone	21262.1	10	20	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	10 U	10 U	10 U	10 U
Acetone	32613.3	3	20	NA	10 U	10 U	10 U
Benzene	5	0.15	5	1 U	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	5	1 U	1 U	1 U	1 U
Bromoform	8.51032	1	5	1 U	1 U	1 U	1 U
Bromomethane	47.7570	1	10	1 U	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	18	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	0.3	5	1.4	1.9	2	1.9

TABLE 3-16
ANALYTICAL RESULTS FOR WELL TIMETMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	1 U	1 U	1 U	1 U
Chloroform	1.61648	1	8.8	**1.7**	**2.2**	**2.3**	**2.2**
Chloromethane	81.1111	1	10	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	1 U	1 U	1 U	1 U
Methylene Chloride	5	1	10	1 U	1 U	1 U	1 U
Naphthalene	4.29412	1	1	1 U	1 U	1 U	1 U
Styrene	100	1	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	0.52	5	1	1.5	1.4	1.2
Toluene	1000	0.27	5	1 U	1 U	1 U	1 U
Total Trihalomethanes [e]	80	1	23.8	1.7	2.2	2.3	2.2
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	1 U	1 U
Trichloroethene	5	0.17	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	1 U	1 U
Xylene (Total)	10000	2	10	2 U	2 U	2 U	2 U

TABLE 3-16
ANALYTICAL RESULTS FOR WELL TIMETMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-17
ANALYTICAL RESULTS FOR WELL TIMETMW-6R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		12	150	150	140	130	140
ANIONS (reported in mg/L)							
Chloride	250	346	3400	**540**	**550**	**850 J**	**730**
Nitrate	10	3	10.9	3.4	4.1	5.4 J	4.7
Perchlorate [g]	0.018	0.76	1.8	**1.7**	**1.5**	**1.4 J**	**1.5**
Sulfate	250	1200	2030	**1300**	**1200**	**1200 J**	**1200**
GENERAL							
Fluoride	4	0.5	1.1	0.97	0.58	0.78 J	0.69
Nitrite	1	0.5	0.5	0.5 U	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		19.4	131	34.8 ± 7.35	23.3 ± 5.97	29.5 ± 7.49	19.4 ± 5.72
Adjusted Gross Alpha (Total) MCL [c]	15	-48.68	83	-5.5	-13.7	-10.4	-19.8
Beta (Total)	50	-13	90	18.4 ± 5.3	14.7 ± 6.68	37.6 ± 8.93	9.02 ± 7.39 U
Uranium 238		13.2	32.6	15.3 ± 2.67	14.6 ± 2.54	15.7 ± 2.54	15.7 ± 2.59
Uranium 234		16.9	50	24.1 ± 4.11	21.6 ± 3.69	23.3 ± 3.74	22.7 ± 3.7
Thorium 230		-0.0577	0.047	0.047 ± 0.0689 U	0.0192 ± 0.0655 U	-0.00882 ± 0.0512 U	-0.0366 ± 0.0447 U
Radium 226	5	-0.119	1.1	0 ± 0.23 U	0 ± 0.217 U	0.145 ± 0.371 U	0.0997 ± 0.201 U
Radon 222	300	262	970	**756 ± 125 J**	**951 ± 117**	**922 ± 111**	**970 ± 118**
Lead 214		0.588	32.7	4.87 ± 10.4 UJ-	10.6 ± 9.62 UJ-	0.588 ± 11.2 UJ-	6.98 ± 6.8 UJ-
Bismuth 214		-2.26	30.5	4.44 ± 12.5 UJ-	9.57 ± 11.9 UJ-	-2.26 ± 13.1 UJ-	12.8 ± 7.13 J-
Lead 210		0.368	0.578	NA	NA	NA	NA
Thorium 232		-0.00292	0.0124	0.00558 ± 0.021 U	0.0118 ± 0.0222 U	0.0048 ± 0.0146 U	-0.00292 ± 0.0107 U
Radium 228	5	-0.22	1.05	0.26 ± 0.479 U	0.251 ± 0.355 U	1.05 ± 0.465	0.501 ± 0.343 U
Radium MCL [d]	5	0.03	1.36	NA	NA	1.05	NA
Actinium-228		0.772	22.5	4.65 ± 18.3 U	0.818 ± 16.9 U	7.7 ± 9.25 U	0.772 ± 15.4 U
Thorium 228		-0.073	0.0816	-0.073 ± 0.0677 U	-0.00912 ± 0.0401 U	-0.0507 ± 0.0526 U	-0.0105 ± 0.0466 U
Lead 212		-4.53	4.45	3.58 ± 7.12 U	-0.164 ± 7.01 U	-3.32 ± 9.63 U	-4.53 ± 11 U
Bismuth 212		-7.6	45.2	8.38 ± 34.3 U	17.5 ± 37.3 U	-7.6 ± 37.3 U	34.6 ± 53.3 U
Thallium 208		-1.41	4.68	0.459 ± 6.56 U	4.68 ± 2.71 J+	1.83 ± 6.32 U	-0.586 ± 6.78 U
Potassium 40		-91.9	113	-0.592 ± 67.7 U	-91.9 ± 80.3 U	-18 ± 75.2 U	-28.2 ± 117 U

TABLE 3-17
ANALYTICAL RESULTS FOR WELL TIMETMW-6R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.58	1.62	0.897 ± 0.266	0.799 ± 0.244	0.85 ± 0.207	0.78 ± 0.207
Polonium-210		0.0728	0.283	NA	NA	NA	NA
Protactinium-234		21.6	481	216 ± 447 U	399 ± 454 U	21.6 ± 442 U	481 ± 686 U
Radium-224		-4.53	4.45	3.58 ± 7.12 U	-0.164 ± 7.01 U	-3.32 ± 9.63 U	-4.53 ± 11 U
Thorium-227		-20.3	14.1	-13.3 ± 18 U	-9.76 ± 19.7 U	-2.48 ± 19.3 U	14.1 ± 23.9 U
Thorium-234		-7.23	32.9	21.9 ± 79.1 U	26.1 ± 85.7 U	32.4 ± 75.9 U	32.9 ± 88.9 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	2900	8080	**3100**	**2900**	**3100**	**3300**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	16	500	36 U	100 U	500 U	500 U
Antimony	6	7.6	100	**20 U [f]**	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	72.5	150	**140 J+**	**140**	**130**	**140**
Barium	2000	9.5	41.8	12 J-	12 U	10 J-	9.5 J-
Beryllium	4	0.08	10	2 U	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.33	25	5 U	5 U	**25 U [f]**	**25 U [f]**
Calcium		190000	792000	190000 J	200000	220000 J	210000
Chromium	100	23	105	75 J-	71	69	77
Chromium VI	100	72	98	89	84	83	88
Cobalt	10.95	0.67	50	10 U	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	0.73	50	10 U	10 U	50 U	50 U
Iron	25550	4.4	1360	4.4 U	11 U	500 U	500 U
Lead	15	1.7	15	3 U	1.7 U	15 U	15 U
Lithium	73	240	360	**320**	**330**	**290 J+**	**280 J+**
Magnesium	206955	120000	506000	130000	130000	150000 J	150000
Manganese	5110	0.83	51.3	0.89 U	2 U	0.96 U	50 U
Mercury	2	0.011	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	16	39	33	32	18 J-	16 J-
Nickel	730	1.9	19	9.9 J	12 U	17 J-	19 J-
Phosphorus	0.73	0.05	1000	**200 U [f]**	0.05 U	0.05 U	0.05 U

TABLE 3-17
ANALYTICAL RESULTS FOR WELL TIMETMW-6R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		14000	22000	20000 J+	20000 J+	17000 J	15000 J+
Selenium	50	3.3	25	7	6.2	25 U	25 U
Silicon		32000	38000	32000	36000	35000	38000
Silver	182.5	0.83	50	10 U	10 U	50 U	50 U
Sodium		5000	1150000	560000 J-	450000 J+	500000 J	510000
Thallium	2	0.032	39	0.056 U	0.11 U	0.06 U	0.07 U
Tin	21900	50	250	50 U	50 U	250 U	250 U
Titanium	146000	1.6	100	20 U	20 U	100 U	100 U
Uranium	30	43	130	**52**	**46**	**43**	**48**
Vanadium	182.5	27	56	38	37	35 J-	39 J
Zinc	10950	1.5	100	3.2 U	20 U	100 U	100 U
Zirconium		3.4	100	20 U	20 U	100 U	3.4 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	5	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	0.27	5	0.49 J	0.27 J	0.31 J	0.3 J
1,2-Dichloroethane	0.123	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	5	1 U	1 U	1 U	1 U
2-Butanone	21262.1	10	20	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	10 U	10 U	10 U	10 U
Acetone	32613.3	2.7	20	NA	10 U	10 U	10 U
Benzene	5	1	5	1 U	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	5	1 U	1 U	1 U	1 U
Bromoform	8.51032	1	5	1 U	1 U	1 U	1 U
Bromomethane	47.7570	1	10	1 U	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	5	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	0.24	5	0.28 J	0.24 J	0.27 J	0.24 J

TABLE 3-17
ANALYTICAL RESULTS FOR WELL TIMETMW-6R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	1 U	1 U	1 U	1 U
Chloroform	1.61648	8.6	79	**11**	**8.6**	**9.9**	**11**
Chloromethane	81.1111	0.48	10	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	5	**1 U [f]**	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	1 U	1 U	1 U	1 U
Methylene Chloride	5	1	8.2	1 U	1 U	1 U	1 U
Naphthalene	4.29412	1	1	1 U	1 U	1 U	1 U
Styrene	100	1	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	0.34	5	0.37 J	0.34 J	0.46 J	0.34 J
Toluene	1000	1	5	1 U	1 U	1 U	1 U
Total Trihalomethanes [e]	80	8.6	94	11	8.6	9.9	11
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	1 U	1 U
Trichloroethene	5	0.61	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1	10	1 U	1 U	1 U	1 U
Xylene (Total)	10000	2	10	2 U	2 U	2 U	2 U

TABLE 3-17
ANALYTICAL RESULTS FOR WELL TIMETMW-6R
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-18
ANALYTICAL RESULTS FOR WELL M-129
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity				NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	1100	1100	NA	**1100**	**1100**	**1100**
Nitrate	10			NA	NA	NA	NA
Perchlorate [g]	0.018	41	51	NA	**41**	**51**	**42**
Sulfate	250			NA	NA	NA	NA
GENERAL							
Fluoride	4			NA	NA	NA	NA
Nitrite	1			NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-18
ANALYTICAL RESULTS FOR WELL M-129
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5500	6100	NA	**6100**	**5500**	**5900**
TOTAL METAL (reported in ug/L)							
Aluminum	36500			NA	NA	NA	NA
Antimony	6			NA	NA	NA	NA
Arsenic	10			NA	NA	NA	NA
Barium	2000			NA	NA	NA	NA
Beryllium	4			NA	NA	NA	NA
Cadmium	5			NA	NA	NA	NA
Calcium				NA	NA	NA	NA
Chromium	100			NA	NA	NA	NA
Chromium VI	100	790	860	NA	**860**	**810**	**790 J-**
Cobalt	10.95			NA	NA	NA	NA
Copper	1300			NA	NA	NA	NA
Iron	25550			NA	NA	NA	NA
Lead	15			NA	NA	NA	NA
Lithium	73			NA	NA	NA	NA
Magnesium	206955			NA	NA	NA	NA
Manganese	5110			NA	NA	NA	NA
Mercury	2			NA	NA	NA	NA
Molybdenum	182.5			NA	NA	NA	NA
Nickel	730			NA	NA	NA	NA
Phosphorus	0.73			NA	NA	NA	NA

TABLE 3-18
ANALYTICAL RESULTS FOR WELL M-129
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium				NA	NA	NA	NA
Selenium	50			NA	NA	NA	NA
Silicon				NA	NA	NA	NA
Silver	182.5			NA	NA	NA	NA
Sodium				NA	NA	NA	NA
Thallium	2			NA	NA	NA	NA
Tin	21900			NA	NA	NA	NA
Titanium	146000			NA	NA	NA	NA
Uranium	30	17	18	NA	18 J-	17	17
Vanadium	182.5			NA	NA	NA	NA
Zinc	10950			NA	NA	NA	NA
Zirconium				NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200			NA	NA	NA	NA
1,1,2-Trichloroethane	5			NA	NA	NA	NA
1,1-Dichloroethane	11.7950			NA	NA	NA	NA
1,1-Dichloroethene	7	0.23	0.23	NA	0.23 J	NA	NA
1,2-Dichloroethane	0.123			NA	NA	NA	NA
1,2-Dichloropropane	5			NA	NA	NA	NA
1,3-Dichlorobenzene	109.091			NA	NA	NA	NA
2-Butanone	21262.1			NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66			NA	NA	NA	NA
Acetone	32613.3			NA	NA	NA	NA
Benzene	5	1	1	NA	1 U	NA	NA
Bromodichloromethane	1.08438			NA	NA	NA	NA
Bromoform	8.51032			NA	NA	NA	NA
Bromomethane	47.7570			NA	NA	NA	NA
Carbon Disulfide	3524.14			NA	NA	NA	NA
Carbon Tetrachloride	5			NA	NA	NA	NA

TABLE 3-18
ANALYTICAL RESULTS FOR WELL M-129
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	NA	NA
Chloroform	1.61648	230	260	NA	**260**	**260**	**230**
Chloromethane	81.1111			NA	NA	NA	NA
cis-1,2-Dichloroethene	70			NA	NA	NA	NA
Dibromochloromethane	0.69718			NA	NA	NA	NA
Ethylbenzene	700			NA	NA	NA	NA
Methylene Chloride	5			NA	NA	NA	NA
Naphthalene	4.29412			NA	NA	NA	NA
Styrene	100			NA	NA	NA	NA
Tetrachloroethene	5	1.1	1.4	NA	1.1	1.2 J	1.4
Toluene	1000	1	1	NA	1 U	NA	NA
Total Trihalomethanes [e]	80	230	260	NA	**260**	**260**	**230**
Trans-1,2-Dichloroethene	100			NA	NA	NA	NA
Trichloroethene	5	1	1	NA	1 U	NA	NA
Trichlorofluoromethane	9890.32			NA	NA	NA	NA
Vinyl Chloride	2			NA	NA	NA	NA
Xylene (Total)	10000			NA	NA	NA	NA

TABLE 3-18
ANALYTICAL RESULTS FOR WELL M-129
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-19
ANALYTICAL RESULTS FOR WELL M-130
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity				NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	1100	1300	NA	**1200**	**1100**	**1300**
Nitrate	10			NA	NA	NA	NA
Perchlorate [g]	0.018	37	40	NA	**37**	**40**	**38**
Sulfate	250			NA	NA	NA	NA
GENERAL							
Fluoride	4			NA	NA	NA	NA
Nitrite	1			NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-19
ANALYTICAL RESULTS FOR WELL M-130
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5600	6000	NA	**5900**	**5600**	**6000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500			NA	NA	NA	NA
Antimony	6			NA	NA	NA	NA
Arsenic	10			NA	NA	NA	NA
Barium	2000			NA	NA	NA	NA
Beryllium	4			NA	NA	NA	NA
Cadmium	5			NA	NA	NA	NA
Calcium				NA	NA	NA	NA
Chromium	100			NA	NA	NA	NA
Chromium VI	100	740	820	NA	**820**	**740 J-**	**770 J-**
Cobalt	10.95			NA	NA	NA	NA
Copper	1300			NA	NA	NA	NA
Iron	25550			NA	NA	NA	NA
Lead	15			NA	NA	NA	NA
Lithium	73			NA	NA	NA	NA
Magnesium	206955			NA	NA	NA	NA
Manganese	5110			NA	NA	NA	NA
Mercury	2			NA	NA	NA	NA
Molybdenum	182.5			NA	NA	NA	NA
Nickel	730			NA	NA	NA	NA
Phosphorus	0.73			NA	NA	NA	NA

TABLE 3-19
ANALYTICAL RESULTS FOR WELL M-130
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium				NA	NA	NA	NA
Selenium	50			NA	NA	NA	NA
Silicon				NA	NA	NA	NA
Silver	182.5			NA	NA	NA	NA
Sodium				NA	NA	NA	NA
Thallium	2			NA	NA	NA	NA
Tin	21900			NA	NA	NA	NA
Titanium	146000			NA	NA	NA	NA
Uranium	30	16	17	NA	17 J-	16	16
Vanadium	182.5			NA	NA	NA	NA
Zinc	10950			NA	NA	NA	NA
Zirconium				NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200			NA	NA	NA	NA
1,1,2-Trichloroethane	5			NA	NA	NA	NA
1,1-Dichloroethane	11.7950			NA	NA	NA	NA
1,1-Dichloroethene	7	1	1	NA	1 U	NA	NA
1,2-Dichloroethane	0.123			NA	NA	NA	NA
1,2-Dichloropropane	5			NA	NA	NA	NA
1,3-Dichlorobenzene	109.091			NA	NA	NA	NA
2-Butanone	21262.1			NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66			NA	NA	NA	NA
Acetone	32613.3			NA	NA	NA	NA
Benzene	5	1	1	NA	1 U	NA	NA
Bromodichloromethane	1.08438			NA	NA	NA	NA
Bromoform	8.51032			NA	NA	NA	NA
Bromomethane	47.7570			NA	NA	NA	NA
Carbon Disulfide	3524.14			NA	NA	NA	NA
Carbon Tetrachloride	5			NA	NA	NA	NA

TABLE 3-19
ANALYTICAL RESULTS FOR WELL M-130
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	NA	NA
Chloroform	1.61648	230	280	NA	**280**	**230**	**230**
Chloromethane	81.1111			NA	NA	NA	NA
cis-1,2-Dichloroethene	70			NA	NA	NA	NA
Dibromochloromethane	0.69718			NA	NA	NA	NA
Ethylbenzene	700			NA	NA	NA	NA
Methylene Chloride	5			NA	NA	NA	NA
Naphthalene	4.29412			NA	NA	NA	NA
Styrene	100			NA	NA	NA	NA
Tetrachloroethene	5	0.6	2.4	NA	0.6 J	0.71 J	2.4
Toluene	1000	1	1	NA	1 U	NA	NA
Total Trihalomethanes [e]	80	230	280	NA	**280**	**230**	**230**
Trans-1,2-Dichloroethene	100			NA	NA	NA	NA
Trichloroethene	5	1	1	NA	1 U	NA	NA
Trichlorofluoromethane	9890.32			NA	NA	NA	NA
Vinyl Chloride	2			NA	NA	NA	NA
Xylene (Total)	10000			NA	NA	NA	NA

TABLE 3-19
ANALYTICAL RESULTS FOR WELL M-130
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-20
ANALYTICAL RESULTS FOR WELL CMT-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity				NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	2300	2500	NA	**2500**	**2300**	**2300**
Nitrate	10	11	15	NA	**15**	**12**	**11**
Perchlorate [g]	0.018	1.7	1.9	NA	**1.9**	NA	**1.7**
Sulfate	250			NA	NA	NA	NA
GENERAL							
Fluoride	4			NA	NA	NA	NA
Nitrite	1	1	2	NA	**2 U** [f]	1 U	1 UJ-
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-20
ANALYTICAL RESULTS FOR WELL CMT-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5800	6800	NA	**6800**	**6100**	**5800**
TOTAL METAL (reported in ug/L)							
Aluminum	36500			NA	NA	NA	NA
Antimony	6			NA	NA	NA	NA
Arsenic	10			NA	NA	NA	NA
Barium	2000			NA	NA	NA	NA
Beryllium	4			NA	NA	NA	NA
Cadmium	5			NA	NA	NA	NA
Calcium				NA	NA	NA	NA
Chromium	100	100	120	NA	**120**	100	**110**
Chromium VI	100	120	130	NA	**120**	NA	**130**
Cobalt	10.95			NA	NA	NA	NA
Copper	1300			NA	NA	NA	NA
Iron	25550			NA	NA	NA	NA
Lead	15			NA	NA	NA	NA
Lithium	73			NA	NA	NA	NA
Magnesium	206955			NA	NA	NA	NA
Manganese	5110			NA	NA	NA	NA
Mercury	2			NA	NA	NA	NA
Molybdenum	182.5			NA	NA	NA	NA
Nickel	730			NA	NA	NA	NA
Phosphorus	0.73			NA	NA	NA	NA

TABLE 3-20
ANALYTICAL RESULTS FOR WELL CMT-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium				NA	NA	NA	NA
Selenium	50			NA	NA	NA	NA
Silicon				NA	NA	NA	NA
Silver	182.5			NA	NA	NA	NA
Sodium				NA	NA	NA	NA
Thallium	2			NA	NA	NA	NA
Tin	21900			NA	NA	NA	NA
Titanium	146000			NA	NA	NA	NA
Uranium	30	26	27	NA	27	NA	26
Vanadium	182.5			NA	NA	NA	NA
Zinc	10950			NA	NA	NA	NA
Zirconium				NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200			NA	NA	NA	NA
1,1,2-Trichloroethane	5			NA	NA	NA	NA
1,1-Dichloroethane	11.7950			NA	NA	NA	NA
1,1-Dichloroethene	7	1.3	1.3	NA	1.3	NA	NA
1,2-Dichloroethane	0.123			NA	NA	NA	NA
1,2-Dichloropropane	5			NA	NA	NA	NA
1,3-Dichlorobenzene	109.091			NA	NA	NA	NA
2-Butanone	21262.1			NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66			NA	NA	NA	NA
Acetone	32613.3			NA	NA	NA	NA
Benzene	5	1	1	NA	1 U	NA	NA
Bromodichloromethane	1.08438			NA	NA	NA	NA
Bromoform	8.51032			NA	NA	NA	NA
Bromomethane	47.7570			NA	NA	NA	NA
Carbon Disulfide	3524.14			NA	NA	NA	NA
Carbon Tetrachloride	5			NA	NA	NA	NA

TABLE 3-20
ANALYTICAL RESULTS FOR WELL CMT-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	NA	NA
Chloroform	1.61648	280	430	NA	**430**	**370**	**280**
Chloromethane	81.1111			NA	NA	NA	NA
cis-1,2-Dichloroethene	70			NA	NA	NA	NA
Dibromochloromethane	0.69718			NA	NA	NA	NA
Ethylbenzene	700			NA	NA	NA	NA
Methylene Chloride	5			NA	NA	NA	NA
Naphthalene	4.29412			NA	NA	NA	NA
Styrene	100			NA	NA	NA	NA
Tetrachloroethene	5	1.9	3.6	NA	3.6	3.3	1.9
Toluene	1000	1	1	NA	1 U	NA	NA
Total Trihalomethanes [e]	80	280	430	NA	**430**	**370**	**280**
Trans-1,2-Dichloroethene	100			NA	NA	NA	NA
Trichloroethene	5	0.47	0.47	NA	0.47 J	NA	NA
Trichlorofluoromethane	9890.32			NA	NA	NA	NA
Vinyl Chloride	2			NA	NA	NA	NA
Xylene (Total)	10000			NA	NA	NA	NA

TABLE 3-20
ANALYTICAL RESULTS FOR WELL CMT-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-21
ANALYTICAL RESULTS FOR WELL TMPZ-105
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		160	180	NA	160	NA	160
ANIONS (reported in mg/L)							
Chloride	250	2100	2400	NA	**2300**	**2100**	**2100**
Nitrate	10	26	29	NA	**28**	NA	**26**
Perchlorate [g]	0.018	33	37	NA	**34**	**37 J+**	**36**
Sulfate	250	2000	2200	NA	**2000**	NA	**2200**
GENERAL							
Fluoride	4	1.7	1.8	NA	1.7	NA	1.8
Nitrite	1	1	1	NA	1 U	NA	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		31	45.2	NA	45.2 ± 12.2	NA	31 ± 10.7
Adjusted Gross Alpha (Total) MCL [c]	15	0.42	13.57	NA	-3.4	NA	-13.6
Beta (Total)	50	21.5	33.1	NA	33.1 ± 14	NA	28.2 ± 13.3
Uranium 238		17.8	19.8	NA	19.8 ± 3.55	NA	17.8 ± 3
Uranium 234		25	27.8	NA	27.8 ± 4.93	NA	25.9 ± 4.3
Thorium 230		-0.0412	0.129	NA	-0.0412 ± 0.056 U	NA	-0.0315 ± 0.048 U
Radium 226	5	2.16	2.47	NA	2.47 ± 0.898	NA	2.16 ± 0.846
Radon 222	300	536	1460	NA	**847 ± 103**	NA	**1460 ± 173**
Lead 214		-2.81	56.1	NA	11 ± 9.32 UJ-	NA	-2.81 ± 12.5 UJ-
Bismuth 214		10.1	59.6	NA	14.7 ± 11.5 UJ-	NA	10.1 ± 16.7 UJ-
Lead 210		0.115	0.115	NA	NA	NA	NA
Thorium 232		-0.00748	0.0415	NA	-0.00748 ± 0.0185 U	NA	-0.00559 ± 0.0127 U
Radium 228	5	0.753	0.802	NA	0.753 ± 0.402	NA	0.802 ± 0.381 J
Radium MCL [d]	5	2.24	3.22	NA	3.22	NA	2.96
Actinium-228		-18.9	16.7	NA	13.6 ± 7.65 J+	NA	16.7 ± 10.7 J
Thorium 228		-0.0267	0.0286	NA	-0.0267 ± 0.0639 U	NA	0.0286 ± 0.0547 U
Lead 212		-4.01	1.98	NA	-4.01 ± 9.28 U	NA	-0.209 ± 7.48 U
Bismuth 212		-43.6	49	NA	49 ± 38.7 U	NA	24.2 ± 38.1 U
Thallium 208		-0.53	6.18	NA	-0.53 ± 5.83 U	NA	6.18 ± 2.93 J
Potassium 40		-2.26	42.1	NA	-2.26 ± 83.4 U	NA	42.1 ± 78.4 U

TABLE 3-21
ANALYTICAL RESULTS FOR WELL TMPZ-105
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.874	1.04	NA	1.04 ± 0.324	NA	0.874 ± 0.244
Polonium-210		0.101	0.101	NA	NA	NA	NA
Protactinium-234		81.4	552	NA	552 ± 554 U	NA	81.4 ± 425 U
Radium-224		-4.01	1.98	NA	-4.01 ± 9.28 U	NA	-0.209 ± 7.48 U
Thorium-227		-2.6	3.99	NA	2.91 ± 18.6 U	NA	-2.6 ± 18.4 U
Thorium-234		4.23	27.5	NA	27.5 ± 80 U	NA	4.23 ± 80.8 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	6900	7900	NA	**7800**	**6900**	**7400**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	100	620	NA	620 U	NA	500 U
Antimony	6	20	200	NA	**200 U [f]**	NA	**100 U [f]**
Arsenic	10	250	300	NA	**260**	NA	**250**
Barium	2000	15	22	NA	15 J-	NA	15 J
Beryllium	4	0.22	10	NA	**7.5 U [f]**	NA	**10 U [f]**
Cadmium	5	5	50	NA	**50 U [f]**	NA	**25 U [f]**
Calcium		290000	330000	NA	330000	NA	290000
Chromium	100	790	840	NA	**790**	NA	**840**
Chromium VI	100	890	1000	NA	**910**	**890**	**1000 J-**
Cobalt	10.95	10	100	NA	**100 U [f]**	NA	**50 U [f]**
Copper	1300	3	100	NA	100 U	NA	50 U
Iron	25550	53	1000	NA	1000 U	NA	500 U
Lead	15	2.9	30	NA	**30 U [f]**	NA	15 U
Lithium	73	420	530	NA	**420 J+**	NA	**420**
Magnesium	206955	150000	170000	NA	170000	NA	150000
Manganese	5110	33	38	NA	33 J-	NA	34 J
Mercury	2	0.012	0.2	NA	0.02 J	NA	0.2 U
Molybdenum	182.5	130	170	NA	170	NA	130
Nickel	730	6.6	200	NA	200 U	NA	100 U
Phosphorus	0.73	0.086	2000	NA	0.086	NA	0.11

TABLE 3-21
ANALYTICAL RESULTS FOR WELL TMPZ-105
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		31000	44000	NA	31000 J+	NA	32000
Selenium	50	5.9	50	NA	50 U	NA	25 U
Silicon		42000	49000	NA	42000	NA	49000
Silver	182.5	10	100	NA	100 U	NA	50 U
Sodium		1700000	1700000	NA	1700000	NA	1700000
Thallium	2	0.07	0.1	NA	0.09 U	NA	0.07 U
Tin	21900	8.2	500	NA	500 U	NA	250 U
Titanium	146000	1	200	NA	200 U	NA	100 U
Uranium	30	47	61	NA	**56**	**50**	**47**
Vanadium	182.5	110	120	NA	110	NA	120
Zinc	10950	100	200	NA	200 U	NA	100 U
Zirconium		20	200	NA	200 U	NA	100 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	NA	1 U	NA	1 U
1,1,2-Trichloroethane	5	1	5	NA	1 U	NA	1 U
1,1-Dichloroethane	11.7950	0.17	5	NA	0.27 J	NA	0.17 J
1,1-Dichloroethene	7	0.49	5	NA	0.58 J	NA	0.49 J
1,2-Dichloroethane	0.123	0.17	5	NA	**0.17 J**	NA	**1 U** [f]
1,2-Dichloropropane	5	1	5	NA	1 U	NA	1 U
1,3-Dichlorobenzene	109.091	1.2	10	NA	1.5	NA	1.2
2-Butanone	21262.1	10	50	NA	10 U	NA	10 U
4-Methyl-2-Pentanone	2900.66	10	50	NA	10 U	NA	10 U
Acetone	32613.3	10	10	NA	10 U	NA	10 U
Benzene	5	1	5	NA	1 U	NA	1 U
Bromodichloromethane	1.08438	0.64	1.1	NA	0.94 J	NA	0.64 J
Bromoform	8.51032	0.4	5	NA	0.4 J	NA	1 U
Bromomethane	47.7570	1	5	NA	1 U	NA	1 U
Carbon Disulfide	3524.14	1	5	NA	1 U	NA	1 U
Carbon Tetrachloride	5	4.8	8.1	NA	**8.1**	NA	**5.7**

TABLE 3-21
ANALYTICAL RESULTS FOR WELL TMPZ-105
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	NA	1 U	NA	1 U
Chloroform	1.61648	460	660	NA	**660**	**460**	**540**
Chloromethane	81.1111	1	5	NA	1 U	NA	1 U
cis-1,2-Dichloroethene	70	1	5	NA	1 U	NA	1 U
Dibromochloromethane	0.69718	0.26	5	NA	0.34 J	NA	0.26 J
Ethylbenzene	700	1	5	NA	1 U	NA	1 U
Methylene Chloride	5	1	1.2	NA	1 U	NA	1 U
Naphthalene	4.29412	0.21	10	NA	1 U	NA	1 U
Styrene	100	1	50	NA	50 U	NA	1 U
Tetrachloroethene	5	5.4	50	NA	**50 U [f]**	**11**	**5.9**
Toluene	1000	1	50	NA	50 U	NA	1 U
Total Trihalomethanes [e]	80	0.9	660	NA	**661.68**	**460**	**540.9**
Trans-1,2-Dichloroethene	100	1	50	NA	50 U	NA	1 U
Trichloroethene	5	0.23	50	NA	**50 U [f]**	NA	0.23 J
Trichlorofluoromethane	9890.32	1	50	NA	50 U	NA	1 U
Vinyl Chloride	2	1	50	NA	**50 U [f]**	NA	1 U
Xylene (Total)	10000	2	100	NA	100 U	NA	2 U

TABLE 3-21
ANALYTICAL RESULTS FOR WELL TMPZ-105
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-22
ANALYTICAL RESULTS FOR WELL TMPZ-106
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		190	190	NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	2400	3800	NA	**3700**	**3300**	**2400**
Nitrate	10	32	32	NA	NA	NA	NA
Perchlorate [g]	0.018	2.3	3.3	NA	**2.9**	**2.8 J+**	**2.3**
Sulfate	250	1400	1400	NA	NA	NA	NA
GENERAL							
Fluoride	4	2.3	2.3	NA	NA	NA	NA
Nitrite	1	1	1	NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		21.9	21.9	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0.05	0.05	NA	NA	NA	NA
Beta (Total)	50	18.4	18.4	NA	NA	NA	NA
Uranium 238		9.28	9.28	NA	NA	NA	NA
Uranium 234		12.2	12.2	NA	NA	NA	NA
Thorium 230		-0.00369	-0.00369	NA	NA	NA	NA
Radium 226	5	0.66	0.66	NA	NA	NA	NA
Radon 222	300	1150	1150	NA	NA	NA	NA
Lead 214		37	37	NA	NA	NA	NA
Bismuth 214		44.1	44.1	NA	NA	NA	NA
Lead 210		0.439	0.439	NA	NA	NA	NA
Thorium 232		0.00413	0.00413	NA	NA	NA	NA
Radium 228	5	0.398	0.398	NA	NA	NA	NA
Radium MCL [d]	5	0.66	0.66	NA	NA	NA	NA
Actinium-228		17.7	17.7	NA	NA	NA	NA
Thorium 228		0.0669	0.0669	NA	NA	NA	NA
Lead 212		4.62	4.62	NA	NA	NA	NA
Bismuth 212		54	54	NA	NA	NA	NA
Thallium 208		1.6	1.6	NA	NA	NA	NA
Potassium 40		1.1	1.1	NA	NA	NA	NA

TABLE 3-22
ANALYTICAL RESULTS FOR WELL TMPZ-106
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.468	0.468	NA	NA	NA	NA
Polonium-210		0.0062	0.0062	NA	NA	NA	NA
Protactinium-234		-208	-208	NA	NA	NA	NA
Radium-224		4.62	4.62	NA	NA	NA	NA
Thorium-227		-7.31	-7.31	NA	NA	NA	NA
Thorium-234		-58.1	-58.1	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	6300	9100	NA	**9000**	**7600**	**6300**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	41	41	NA	NA	NA	NA
Antimony	6	20	20	NA	NA	NA	NA
Arsenic	10	200	200	NA	NA	NA	NA
Barium	2000	31	31	NA	NA	NA	NA
Beryllium	4	0.18	0.18	NA	NA	NA	NA
Cadmium	5	5	5	NA	NA	NA	NA
Calcium		290000	290000	NA	NA	NA	NA
Chromium	100	370	370	NA	NA	NA	NA
Chromium VI	100	330	460	NA	**460**	**370**	**330**
Cobalt	10.95	4.5	4.5	NA	NA	NA	NA
Copper	1300	10	10	NA	NA	NA	NA
Iron	25550	11	11	NA	NA	NA	NA
Lead	15	3	3	NA	NA	NA	NA
Lithium	73	480	480	NA	NA	NA	NA
Magnesium	206955	160000	160000	NA	NA	NA	NA
Manganese	5110	41	41	NA	NA	NA	NA
Mercury	2	0.015	0.015	NA	NA	NA	NA
Molybdenum	182.5	170	170	NA	NA	NA	NA
Nickel	730	6.4	6.4	NA	NA	NA	NA
Phosphorus	0.73	200	200	NA	NA	NA	NA

TABLE 3-22
ANALYTICAL RESULTS FOR WELL TMPZ-106
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		24000	24000	NA	NA	NA	NA
Selenium	50	6.8	6.8	NA	NA	NA	NA
Silicon		43000	43000	NA	NA	NA	NA
Silver	182.5	10	10	NA	NA	NA	NA
Sodium		2100000	2100000	NA	NA	NA	NA
Thallium	2	0.12	0.12	NA	NA	NA	NA
Tin	21900	3.6	3.6	NA	NA	NA	NA
Titanium	146000	20	20	NA	NA	NA	NA
Uranium	30	25	34	NA	**34**	27	25
Vanadium	182.5	140	140	NA	NA	NA	NA
Zinc	10950	21	21	NA	NA	NA	NA
Zirconium		20	20	NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	5	5	NA	NA	NA	NA
1,1,2-Trichloroethane	5	5	5	NA	NA	NA	NA
1,1-Dichloroethane	11.7950	5	5	NA	NA	NA	NA
1,1-Dichloroethene	7	1	5	NA	1 U	NA	NA
1,2-Dichloroethane	0.123	5	5	NA	NA	NA	NA
1,2-Dichloropropane	5	5	5	NA	NA	NA	NA
1,3-Dichlorobenzene	109.091	5	5	NA	NA	NA	NA
2-Butanone	21262.1	50	50	NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66	50	50	NA	NA	NA	NA
Acetone	32613.3			NA	NA	NA	NA
Benzene	5	1	5	NA	1 U	NA	NA
Bromodichloromethane	1.08438	2.3	2.3	NA	NA	NA	NA
Bromoform	8.51032	5	5	NA	NA	NA	NA
Bromomethane	47.7570	5	5	NA	NA	NA	NA
Carbon Disulfide	3524.14	5	5	NA	NA	NA	NA
Carbon Tetrachloride	5	12	12	NA	NA	NA	NA

TABLE 3-22
ANALYTICAL RESULTS FOR WELL TMPZ-106
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	NA	1 U	NA	NA
Chloroform	1.61648	520	890	NA	**710**	**600**	**520**
Chloromethane	81.1111	5	5	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	5	5	NA	NA	NA	NA
Dibromochloromethane	0.69718	5	5	NA	NA	NA	NA
Ethylbenzene	700	5	5	NA	NA	NA	NA
Methylene Chloride	5	1.3	1.3	NA	NA	NA	NA
Naphthalene	4.29412	5	5	NA	NA	NA	NA
Styrene	100	5	5	NA	NA	NA	NA
Tetrachloroethene	5	1.9	7.1	NA	1.9	2.2	2
Toluene	1000	1	5	NA	1 U	NA	NA
Total Trihalomethanes [e]	80	2.3	890	NA	**710**	**600**	**520**
Trans-1,2-Dichloroethene	100	5	5	NA	NA	NA	NA
Trichloroethene	5	0.17	5	NA	0.17 J	NA	NA
Trichlorofluoromethane	9890.32	5	5	NA	NA	NA	NA
Vinyl Chloride	2	5	5	NA	NA	NA	NA
Xylene (Total)	10000	10	10	NA	NA	NA	NA

TABLE 3-22
ANALYTICAL RESULTS FOR WELL TMPZ-106
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-23
ANALYTICAL RESULTS FOR WELL TMPZ-107
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		200	210	NA	200	NA	210
ANIONS (reported in mg/L)							
Chloride	250	6800	8400	NA	**7100 J**	**6800**	**7000 J**
Nitrate	10	74	83	NA	**80 J**	NA	**74 J**
Perchlorate [g]	0.018	2.6	3.6	NA	**2.9 J**	**2.8**	**2.6 J**
Sulfate	250	2300	2500	NA	**2500 J**	NA	**2300 J**
GENERAL							
Fluoride	4	2	2.1	NA	2.1 J	NA	2 U
Nitrite	1	2	2	NA	**2 U [f]**	NA	**2 U [f]**
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		45.7	78	NA	45.7 ± 18.5	NA	58.4 ± 20.6
Adjusted Gross Alpha (Total) MCL [c]	15	4.29	27.81	NA	-27.8	NA	-4.3
Beta (Total)	50	22.2	48.1	NA	32.2 ± 24.7 U	NA	22.2 ± 25.1 U
Uranium 238		25.8	42.2	NA	29.2 ± 6.24	NA	25.8 ± 4.21
Uranium 234		35.4	57.7	NA	41.8 ± 8.4	NA	35.4 ± 5.74
Thorium 230		-0.0431	0.103	NA	-0.0431 ± 0.061 U	NA	0.0219 ± 0.0529 U
Radium 226	5	1.94	2.06	NA	1.94 ± 0.689	NA	2.06 ± 0.81
Radon 222	300	2670	3390	NA	**2890 ± 334**	NA	**3390 ± 391**
Lead 214		4.44	97.2	NA	51.2 ± 10.7 J-	NA	4.44 ± 10 UJ-
Bismuth 214		6.51	93.2	NA	60.7 ± 18.2 J-	NA	6.51 ± 13 UJ-
Lead 210		0.978	0.978	NA	NA	NA	NA
Thorium 232		0.0032	0.0421	NA	0.00917 ± 0.0219 U	NA	0.0032 ± 0.0141 U
Radium 228	5	0.617	0.954	NA	0.949 ± 0.438	NA	0.954 ± 0.439 J
Radium MCL [d]	5	2	3.01	NA	2.89	NA	3.01
Actinium-228		3.47	19	NA	19 ± 9.6 U	NA	3.47 ± 21.2 U
Thorium 228		0	0.0532	NA	0.0532 ± 0.0776 U	NA	0.0457 ± 0.0379 U
Lead 212		-0.827	5.22	NA	5.22 ± 6.88 U	NA	-0.659 ± 7.04 U
Bismuth 212		3.69	45.6	NA	45.6 ± 43.7 U	NA	21.8 ± 32.4 U
Thallium 208		-0.836	4.74	NA	3.83 ± 3.1 U	NA	-0.836 ± 5.55 U
Potassium 40		-6.81	52.1	NA	21.3 ± 78.6 U	NA	-6.81 ± 66.3 U

TABLE 3-23
ANALYTICAL RESULTS FOR WELL TMPZ-107
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		1.49	2.51	NA	2.51 ± 1.31	NA	1.49 ± 0.332
Polonium-210		-0.0684	-0.0684	NA	NA	NA	NA
Protactinium-234		185	553	NA	472 ± 554 U	NA	185 ± 392 U
Radium-224		-0.827	5.22	NA	5.22 ± 6.88 U	NA	-0.659 ± 7.04 U
Thorium-227		-9.26	7.93	NA	-1.22 ± 12.6 U	NA	7.93 ± 16.3 U
Thorium-234		-40.4	45.1	NA	45.1 ± 37.3 U	NA	14 ± 83.2 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	15000	19000	NA	**15000**	**15000**	**16000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	71	500	NA	250 U	NA	500 U
Antimony	6	20	100	NA	**100 U [f]**	NA	**100 U [f]**
Arsenic	10	160	180	NA	**180**	NA	**160**
Barium	2000	24	32	NA	27 J-	NA	24 J
Beryllium	4	0.57	10	NA	**10 U [f]**	NA	**10 U [f]**
Cadmium	5	5	25	NA	**25 U [f]**	NA	**25 U [f]**
Calcium		790000	1000000	NA	810000 J	NA	790000 J
Chromium	100	270	300	NA	**270**	NA	**280**
Chromium VI	100	320	400	NA	**330**	**320**	**330**
Cobalt	10.95	2.1	50	NA	**50 U [f]**	NA	**50 U [f]**
Copper	1300	1.8	50	NA	50 U	NA	50 U
Iron	25550	30	500	NA	120 U	NA	500 U
Lead	15	3	15	NA	15 U	NA	15 U
Lithium	73	520	790	NA	**590 J+**	NA	**520**
Magnesium	206955	590000	740000	NA	**590000 J**	NA	**590000 J**
Manganese	5110	160	180	NA	160	NA	170
Mercury	2	0.01	0.2	NA	0.01 J	NA	0.2 U
Molybdenum	182.5	290	320	NA	**320**	NA	**320**
Nickel	730	2.2	100	NA	100 U	NA	100 U
Phosphorus	0.73	0.05	1000	NA	0.05 U	NA	0.089

TABLE 3-23
ANALYTICAL RESULTS FOR WELL TMPZ-107
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		32000	58000	NA	38000 J+	NA	32000 J
Selenium	50	5.5	25	NA	25 U	NA	25 U
Silicon		40000	46000	NA	41000 J	NA	46000
Silver	182.5	2.8	50	NA	50 U	NA	50 U
Sodium		3000000	3600000	NA	3000000 J-	NA	3100000 J
Thallium	2	0.12	0.16	NA	0.12 U	NA	0.13 U
Tin	21900	5.1	250	NA	250 U	NA	250 U
Titanium	146000	20	100	NA	100 U	NA	100 U
Uranium	30	75	150	NA	**79 J-**	**75**	**78**
Vanadium	182.5	56	67	NA	67	NA	66
Zinc	10950	16	100	NA	100 U	NA	100 U
Zirconium		4.7	20	NA	4.7 J-	NA	5.8 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	50	NA	1 U	NA	1 U
1,1,2-Trichloroethane	5	1	50	NA	1 U	NA	1 U
1,1-Dichloroethane	11.7950	0.26	50	NA	0.29 J	NA	0.26 J
1,1-Dichloroethene	7	0.56	50	NA	0.72 J	NA	0.56 J
1,2-Dichloroethane	0.123	0.2	50	NA	**0.24 J**	NA	**0.2 J**
1,2-Dichloropropane	5	0.18	50	NA	1 U	NA	0.18 J
1,3-Dichlorobenzene	109.091	1	50	NA	1 U	NA	1 U
2-Butanone	21262.1	10	500	NA	10 U	NA	10 U
4-Methyl-2-Pentanone	2900.66	10	500	NA	10 U	NA	10 U
Acetone	32613.3	10	10	NA	10 U	NA	10 U
Benzene	5	1	50	NA	1 U	NA	1 U
Bromodichloromethane	1.08438	0.83	50	NA	**1.1**	NA	0.83 J
Bromoform	8.51032	1	50	NA	1 U	NA	1 U
Bromomethane	47.7570	1	50	NA	1 U	NA	1 U
Carbon Disulfide	3524.14	1	50	NA	1 U	NA	1 U
Carbon Tetrachloride	5	8.4	50	NA	**9.6**	NA	**8.4**

TABLE 3-23
ANALYTICAL RESULTS FOR WELL TMPZ-107
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	50	NA	1 U	NA	1 U
Chloroform	1.61648	1200	1600	NA	**1300**	**1200**	**1200**
Chloromethane	81.1111	1	50	NA	1 U	NA	1 U
cis-1,2-Dichloroethene	70	1	50	NA	1 U	NA	1 U
Dibromochloromethane	0.69718	0.2	50	NA	0.2 J	NA	**1 U** [f]
Ethylbenzene	700	1	50	NA	1 U	NA	1 U
Methylene Chloride	5	0.24	53	NA	1 U	NA	0.24 U
Naphthalene	4.29412	0.087	50	NA	1 U	NA	1 U
Styrene	100	1	50	NA	1 U	NA	1 U
Tetrachloroethene	5	3	50	NA	3.1	3	3.9
Toluene	1000	1	50	NA	1 U	NA	1 U
Total Trihalomethanes [e]	80	0.83	1600	NA	**1301.3**	**1200**	**1200.83**
Trans-1,2-Dichloroethene	100	1	50	NA	1 U	NA	1 U
Trichloroethene	5	0.3	50	NA	0.36 J	NA	0.3 J
Trichlorofluoromethane	9890.32	1	50	NA	1 U	NA	1 U
Vinyl Chloride	2	1	50	NA	1 U	NA	1 U
Xylene (Total)	10000	2	100	NA	2 U	NA	2 U

TABLE 3-23
ANALYTICAL RESULTS FOR WELL TMPZ-107
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-24
ANALYTICAL RESULTS FOR WELL TMPZ-108
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		150	150	NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	5200	7400	NA	**6400**	**5900**	**5200**
Nitrate	10	32	32	NA	NA	NA	NA
Perchlorate [g]	0.018	2.6	3.2	NA	**2.8**	**2.9**	**2.6**
Sulfate	250	3600	3600	NA	NA	NA	NA
GENERAL							
Fluoride	4	2	2	NA	NA	NA	NA
Nitrite	1	2	2	NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		90.6	90.6	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	49.1	49.1	NA	NA	NA	NA
Beta (Total)	50	41.2	41.2	NA	NA	NA	NA
Uranium 238		60.2	60.2	NA	NA	NA	NA
Uranium 234		76.9	76.9	NA	NA	NA	NA
Thorium 230		-0.0646	-0.0646	NA	NA	NA	NA
Radium 226	5	0.926	0.926	NA	NA	NA	NA
Radon 222	300	2290	2290	NA	NA	NA	NA
Lead 214		553	553	NA	NA	NA	NA
Bismuth 214		535	535	NA	NA	NA	NA
Lead 210		0.753	0.753	NA	NA	NA	NA
Thorium 232		0.0478	0.0478	NA	NA	NA	NA
Radium 228	5	0.99	0.99	NA	NA	NA	NA
Radium MCL [d]	5	1.92	1.92	NA	NA	NA	NA
Actinium-228		25.2	25.2	NA	NA	NA	NA
Thorium 228		0.0145	0.0145	NA	NA	NA	NA
Lead 212		2.17	2.17	NA	NA	NA	NA
Bismuth 212		-18.1	-18.1	NA	NA	NA	NA
Thallium 208		2.59	2.59	NA	NA	NA	NA
Potassium 40		-16.5	-16.5	NA	NA	NA	NA

TABLE 3-24
ANALYTICAL RESULTS FOR WELL TMPZ-108
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		2.6	2.6	NA	NA	NA	NA
Polonium-210		-0.00216	-0.00216	NA	NA	NA	NA
Protactinium-234		227	227	NA	NA	NA	NA
Radium-224		2.17	2.17	NA	NA	NA	NA
Thorium-227		-5.2	-5.2	NA	NA	NA	NA
Thorium-234		25.6	25.6	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	16000	18000	NA	**17000**	**16000**	**16000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	560	560	NA	NA	NA	NA
Antimony	6	20	20	NA	NA	NA	NA
Arsenic	10	190	190	NA	NA	NA	NA
Barium	2000	16	16	NA	NA	NA	NA
Beryllium	4	0.55	0.55	NA	NA	NA	NA
Cadmium	5	5	5	NA	NA	NA	NA
Calcium		1000000	1000000	NA	NA	NA	NA
Chromium	100	370	370	NA	NA	NA	NA
Chromium VI	100	380	520	NA	**420 J-**	**390**	**380 J-**
Cobalt	10.95	10	10	NA	NA	NA	NA
Copper	1300	2.2	2.2	NA	NA	NA	NA
Iron	25550	360	360	NA	NA	NA	NA
Lead	15	3	3	NA	NA	NA	NA
Lithium	73	960	960	NA	NA	NA	NA
Magnesium	206955	440000	440000	NA	NA	NA	NA
Manganese	5110	12	12	NA	NA	NA	NA
Mercury	2	0.029	0.029	NA	NA	NA	NA
Molybdenum	182.5	260	260	NA	NA	NA	NA
Nickel	730	2.3	2.3	NA	NA	NA	NA
Phosphorus	0.73	40	40	NA	NA	NA	NA

TABLE 3-24
ANALYTICAL RESULTS FOR WELL TMPZ-108
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		62000	62000	NA	NA	NA	NA
Selenium	50	7.4	7.4	NA	NA	NA	NA
Silicon		36000	36000	NA	NA	NA	NA
Silver	182.5	4.1	4.1	NA	NA	NA	NA
Sodium		3900000	3900000	NA	NA	NA	NA
Thallium	2	0.059	0.059	NA	NA	NA	NA
Tin	21900	8.3	8.3	NA	NA	NA	NA
Titanium	146000	19	19	NA	NA	NA	NA
Uranium	30	130	200	NA	**140 J-**	**140**	**130**
Vanadium	182.5	52	52	NA	NA	NA	NA
Zinc	10950	47	47	NA	NA	NA	NA
Zirconium		20	20	NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	20	20	NA	NA	NA	NA
1,1,2-Trichloroethane	5	20	20	NA	NA	NA	NA
1,1-Dichloroethane	11.7950	20	20	NA	NA	NA	NA
1,1-Dichloroethene	7	3.5	20	NA	3.5	NA	NA
1,2-Dichloroethane	0.123	20	20	NA	NA	NA	NA
1,2-Dichloropropane	5	20	20	NA	NA	NA	NA
1,3-Dichlorobenzene	109.091	20	20	NA	NA	NA	NA
2-Butanone	21262.1	200	200	NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66	200	200	NA	NA	NA	NA
Acetone	32613.3			NA	NA	NA	NA
Benzene	5	1	20	NA	1 U	NA	NA
Bromodichloromethane	1.08438	20	20	NA	NA	NA	NA
Bromoform	8.51032	20	20	NA	NA	NA	NA
Bromomethane	47.7570	20	20	NA	NA	NA	NA
Carbon Disulfide	3524.14	20	20	NA	NA	NA	NA
Carbon Tetrachloride	5	20	20	NA	NA	NA	NA

TABLE 3-24
ANALYTICAL RESULTS FOR WELL TMPZ-108
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	20	NA	1 U	NA	NA
Chloroform	1.61648	610	700	NA	**700**	**630**	**640**
Chloromethane	81.1111	20	20	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	20	20	NA	NA	NA	NA
Dibromochloromethane	0.69718	20	20	NA	NA	NA	NA
Ethylbenzene	700	20	20	NA	NA	NA	NA
Methylene Chloride	5	20	20	NA	NA	NA	NA
Naphthalene	4.29412	20	20	NA	NA	NA	NA
Styrene	100	20	20	NA	NA	NA	NA
Tetrachloroethene	5	57	70	NA	**57**	**70**	**61**
Toluene	1000	1	20	NA	1 U	NA	NA
Total Trihalomethanes [e]	80	610	700	NA	**700**	**630**	**640**
Trans-1,2-Dichloroethene	100	20	20	NA	NA	NA	NA
Trichloroethene	5	3.8	4.9	NA	3.8	NA	NA
Trichlorofluoromethane	9890.32	20	20	NA	NA	NA	NA
Vinyl Chloride	2	20	20	NA	NA	NA	NA
Xylene (Total)	10000	40	40	NA	NA	NA	NA

TABLE 3-24
ANALYTICAL RESULTS FOR WELL TMPZ-108
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-25
ANALYTICAL RESULTS FOR WELL TMPZ-109
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		92	92	NA	NA	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	1500	2100	NA	**1500**	**1600**	**1600**
Nitrate	10	44	44	NA	NA	NA	NA
Perchlorate [g]	0.018	0.69	1	NA	**0.78**	**0.8**	**0.69**
Sulfate	250	1900	1900	NA	NA	NA	NA
GENERAL							
Fluoride	4	1.3	1.3	NA	NA	NA	NA
Nitrite	1	1	1	NA	NA	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		31	31	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	7.21	7.21	NA	NA	NA	NA
Beta (Total)	50	24.9	24.9	NA	NA	NA	NA
Uranium 238		15.4	15.4	NA	NA	NA	NA
Uranium 234		21.9	21.9	NA	NA	NA	NA
Thorium 230		0.0512	0.0512	NA	NA	NA	NA
Radium 226	5	1.5	1.5	NA	NA	NA	NA
Radon 222	300	1960	1960	NA	NA	NA	NA
Lead 214		488	488	NA	NA	NA	NA
Bismuth 214		441	441	NA	NA	NA	NA
Lead 210		0.897	0.897	NA	NA	NA	NA
Thorium 232		0.0384	0.0384	NA	NA	NA	NA
Radium 228	5	0.926	0.926	NA	NA	NA	NA
Radium MCL [d]	5	2.43	2.43	NA	NA	NA	NA
Actinium-228		19.3	19.3	NA	NA	NA	NA
Thorium 228		0.0918	0.0918	NA	NA	NA	NA
Lead 212		6.78	6.78	NA	NA	NA	NA
Bismuth 212		10.1	10.1	NA	NA	NA	NA
Thallium 208		6.72	6.72	NA	NA	NA	NA
Potassium 40		0.688	0.688	NA	NA	NA	NA

TABLE 3-25
ANALYTICAL RESULTS FOR WELL TMPZ-109
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.906	0.906	NA	NA	NA	NA
Polonium-210		0.0299	0.0299	NA	NA	NA	NA
Protactinium-234		208	208	NA	NA	NA	NA
Radium-224		6.78	6.78	NA	NA	NA	NA
Thorium-227		9.35	9.35	NA	NA	NA	NA
Thorium-234		24	24	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5400	6200	NA	**5400**	**5600**	**5400**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	280	280	NA	NA	NA	NA
Antimony	6	20	20	NA	NA	NA	NA
Arsenic	10	98	98	NA	NA	NA	NA
Barium	2000	29	29	NA	NA	NA	NA
Beryllium	4	0.7	0.7	NA	NA	NA	NA
Cadmium	5	5	5	NA	NA	NA	NA
Calcium		800000	800000	NA	NA	NA	NA
Chromium	100	37	37	NA	NA	NA	NA
Chromium VI	100	43	47	NA	43	47	45 J-
Cobalt	10.95	4.9	4.9	NA	NA	NA	NA
Copper	1300	10	10	NA	NA	NA	NA
Iron	25550	170	170	NA	NA	NA	NA
Lead	15	3	3	NA	NA	NA	NA
Lithium	73	450	450	NA	NA	NA	NA
Magnesium	206955	370000	370000	NA	NA	NA	NA
Manganese	5110	3.9	3.9	NA	NA	NA	NA
Mercury	2	0.023	0.023	NA	NA	NA	NA
Molybdenum	182.5	31	31	NA	NA	NA	NA
Nickel	730	1.8	1.8	NA	NA	NA	NA
Phosphorus	0.73	200	200	NA	NA	NA	NA

TABLE 3-25
ANALYTICAL RESULTS FOR WELL TMPZ-109
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		23000	23000	NA	NA	NA	NA
Selenium	50	7.7	7.7	NA	NA	NA	NA
Silicon		40000	40000	NA	NA	NA	NA
Silver	182.5	0.83	0.83	NA	NA	NA	NA
Sodium		720000	720000	NA	NA	NA	NA
Thallium	2	0.026	0.026	NA	NA	NA	NA
Tin	21900	50	50	NA	NA	NA	NA
Titanium	146000	6.1	6.1	NA	NA	NA	NA
Uranium	30	45	52	NA	**45**	**48**	**45**
Vanadium	182.5	46	46	NA	NA	NA	NA
Zinc	10950	17	17	NA	NA	NA	NA
Zirconium		20	20	NA	NA	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	2	2	NA	NA	NA	NA
1,1,2-Trichloroethane	5	2	2	NA	NA	NA	NA
1,1-Dichloroethane	11.7950	2	2	NA	NA	NA	NA
1,1-Dichloroethene	7	0.52	0.74	NA	0.52 J	NA	NA
1,2-Dichloroethane	0.123	2	2	NA	NA	NA	NA
1,2-Dichloropropane	5	2	2	NA	NA	NA	NA
1,3-Dichlorobenzene	109.091	2	9.4	NA	NA	NA	NA
2-Butanone	21262.1	20	20	NA	NA	NA	NA
4-Methyl-2-Pentanone	2900.66	20	20	NA	NA	NA	NA
Acetone	32613.3			NA	NA	NA	NA
Benzene	5	1	2	NA	1 U	NA	NA
Bromodichloromethane	1.08438	2	2	NA	NA	NA	NA
Bromoform	8.51032	2	2	NA	NA	NA	NA
Bromomethane	47.7570	2	2	NA	NA	NA	NA
Carbon Disulfide	3524.14	2	2	NA	NA	NA	NA
Carbon Tetrachloride	5	1.9	1.9	NA	NA	NA	NA

TABLE 3-25
ANALYTICAL RESULTS FOR WELL TMPZ-109
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	2	NA	1 U	NA	NA
Chloroform	1.61648	55	63	NA	**61**	**63**	**55**
Chloromethane	81.1111	2	2	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	2	2	NA	NA	NA	NA
Dibromochloromethane	0.69718	2	2	NA	NA	NA	NA
Ethylbenzene	700	2	2	NA	NA	NA	NA
Methylene Chloride	5	2	2	NA	NA	NA	NA
Naphthalene	4.29412	0.056	9.4	NA	NA	NA	NA
Styrene	100	2	2	NA	NA	NA	NA
Tetrachloroethene	5	34	44	NA	**43**	**39**	**44**
Toluene	1000	0.53	1	NA	1 U	NA	NA
Total Trihalomethanes [e]	80	55	63	NA	61	63	55
Trans-1,2-Dichloroethene	100	2	2	NA	NA	NA	NA
Trichloroethene	5	8.2	9	NA	**9**	NA	NA
Trichlorofluoromethane	9890.32	2	2	NA	NA	NA	NA
Vinyl Chloride	2	2	2	NA	NA	NA	NA
Xylene (Total)	10000	4	4	NA	NA	NA	NA

TABLE 3-25
ANALYTICAL RESULTS FOR WELL TMPZ-109
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-26
ANALYTICAL RESULTS FOR WELL TMPZ-110
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		130	170	NA	130	NA	130
ANIONS (reported in mg/L)							
Chloride	250	930	1200	NA	**1000**	**930**	**1100**
Nitrate	10	9	9.5	NA	9.4	NA	9.5
Perchlorate [g]	0.018	1.8	3.3	NA	**2.2**	**1.8**	**2**
Sulfate	250	2200	2300	NA	**2300**	NA	**2200**
GENERAL							
Fluoride	4	1.3	1.3	NA	1.3	NA	1.3
Nitrite	1	0.5	0.5	NA	0.5 U	NA	0.5 UJ-
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		28.5	105	NA	36.6 ± 9.52	NA	28.5 ± 10.1
Adjusted Gross Alpha (Total) MCL [c]	15	28.2	68.1	NA	-28.2	NA	-54.6
Beta (Total)	50	13.9	39.5	NA	13.9 ± 9.13 U	NA	22.7 ± 13.4
Uranium 238		27.2	73.3	NA	27.2 ± 4.72	NA	34.8 ± 6.01
Uranium 234		36.4	96.4	NA	36.4 ± 6.26	NA	46.9 ± 8.04
Thorium 230		-0.08	0.037	NA	-0.08 ± 0.064 U	NA	0.037 ± 0.0663 U
Radium 226	5	0.541	1.1	NA	1.1 ± 0.586	NA	0.541 ± 0.396 J
Radon 222	300	200	1380	NA	**1380 ± 163**	NA	**896 ± 109**
Lead 214		1.38	12.6	NA	1.38 ± 10.3 UJ-	NA	12.6 ± 10.2 UJ-
Bismuth 214		8.76	18.2	NA	8.76 ± 14.4 UJ-	NA	18.2 ± 13.1 UJ-
Lead 210		0.276	0.276	NA	NA	NA	NA
Thorium 232		-0.0105	0.0429	NA	-0.0105 ± 0.0315 U	NA	0.00361 ± 0.0235 U
Radium 228	5	0.238	0.703	NA	0.275 ± 0.33 U	NA	0.703 ± 0.374 J+
Radium MCL [d]	5	0.61	1.24	NA	1.1	NA	1.24
Actinium-228		11.6	13.6	NA	12.2 ± 10.2 U	NA	11.6 ± 10.9 U
Thorium 228		-0.0158	0.0797	NA	0.0797 ± 0.101 U	NA	0.0345 ± 0.0607 U
Lead 212		-0.36	3.39	NA	-0.36 ± 7.49 U	NA	0.188 ± 6.95 U
Bismuth 212		19.5	38	NA	38 ± 38 U	NA	19.5 ± 31.5 U
Thallium 208		2.08	4.86	NA	4.86 ± 2.71 J+	NA	3.73 ± 2.59 U
Potassium 40		1.82	55.5	NA	2.16 ± 71.8 U	NA	1.82 ± 65.8 U

TABLE 3-26
ANALYTICAL RESULTS FOR WELL TMPZ-110
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		1.2	3.4	NA	1.2 ± 0.344	NA	1.45 ± 0.397
Polonium-210		0.0965	0.0965	NA	NA	NA	NA
Protactinium-234		134	377	NA	377 ± 469 U	NA	196 ± 405 U
Radium-224		-0.36	3.39	NA	-0.36 ± 7.49 U	NA	0.188 ± 6.95 U
Thorium-227		-10.4	1.2	NA	-10.4 ± 18.7 U	NA	-7.45 ± 11.2 U
Thorium-234		-20.1	17.4	NA	-20.1 ± 89.2 U	NA	14.9 ± 77.3 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	4900	5700	NA	**5000**	**4900**	**5500**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	140	390	NA	220 U	NA	140 U
Antimony	6	20	100	NA	**100 U [f]**	NA	**100 U [f]**
Arsenic	10	51	58	NA	**51**	NA	**58**
Barium	2000	13	24	NA	14 J-	NA	13 J
Beryllium	4	0.55	10	NA	**10 U [f]**	NA	1.4 U
Cadmium	5	5	25	NA	**25 U [f]**	NA	**25 U [f]**
Calcium		630000	650000	NA	630000	NA	650000
Chromium	100	12	14	NA	13 U	NA	12 J
Chromium VI	100	12	31	NA	12	31	15 J-
Cobalt	10.95	10	50	NA	**50 U [f]**	NA	**50 U [f]**
Copper	1300	1.4	50	NA	50 U	NA	50 U
Iron	25550	270	500	NA	500 U	NA	500 U
Lead	15	1.6	15	NA	15 U	NA	15 U
Lithium	73	310	470	NA	**330**	NA	**310 J**
Magnesium	206955	280000	310000	NA	**290000**	NA	**280000**
Manganese	5110	0.75	17	NA	0.75 J-	NA	1.2 J
Mercury	2	0.014	0.2	NA	0.014 J	NA	0.2 U
Molybdenum	182.5	15	25	NA	25 J-	NA	17 J
Nickel	730	3.2	100	NA	100 U	NA	100 U
Phosphorus	0.73	0.05	1000	NA	0.05 U	NA	0.05 U

TABLE 3-26
ANALYTICAL RESULTS FOR WELL TMPZ-110
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		8000	14000	NA	8000	NA	8600
Selenium	50	14	25	NA	25 U	NA	25 U
Silicon		39000	44000	NA	41000	NA	44000
Silver	182.5	10	50	NA	50 U	NA	50 U
Sodium		460000	560000	NA	510000	NA	560000
Thallium	2	0.035	0.2	NA	0.2 U	NA	0.06 U
Tin	21900	4.4	250	NA	250 U	NA	250 U
Titanium	146000	9.6	100	NA	100 U	NA	100 U
Uranium	30	63	250	NA	**69**	**63**	**97**
Vanadium	182.5	43	44	NA	44 J-	NA	44 J
Zinc	10950	18	140	NA	100 U	NA	18 J
Zirconium		2.9	20	NA	2.9 J-	NA	4.6 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	1 U	NA	1 U
1,1,2-Trichloroethane	5	1	1	NA	1 U	NA	1 U
1,1-Dichloroethane	11.7950	0.18	0.32	NA	0.32 J	NA	0.22 J
1,1-Dichloroethene	7	1.1	2.9	NA	2.9	NA	1.9
1,2-Dichloroethane	0.123	1	1	NA	**1 U** [f]	NA	**1 U** [f]
1,2-Dichloropropane	5	1	1	NA	1 U	NA	1 U
1,3-Dichlorobenzene	109.091	1	10	NA	1 U	NA	1 U
2-Butanone	21262.1	10	10	NA	10 U	NA	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	10 U	NA	10 U
Acetone	32613.3	10	10	NA	10 U	NA	10 U
Benzene	5	1	1	NA	1 U	NA	1 U
Bromodichloromethane	1.08438	1	1	NA	1 U	NA	1 U
Bromoform	8.51032	1	1	NA	1 U	NA	1 U
Bromomethane	47.7570	1	1	NA	1 U	NA	1 U
Carbon Disulfide	3524.14	1	1	NA	1 U	NA	1 U
Carbon Tetrachloride	5	0.18	1	NA	0.18 J	NA	1 U

TABLE 3-26
ANALYTICAL RESULTS FOR WELL TMPZ-110
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	NA	1 U
Chloroform	1.61648	11	16	NA	**13**	**16 J+**	**11**
Chloromethane	81.1111	1	1	NA	1 U	NA	1 U
cis-1,2-Dichloroethene	70	1	1	NA	1 U	NA	1 U
Dibromochloromethane	0.69718	1	1	NA	**1 U [f]**	NA	**1 U [f]**
Ethylbenzene	700	1	1	NA	1 U	NA	1 U
Methylene Chloride	5	1	1	NA	1 U	NA	1 U
Naphthalene	4.29412	0.13	10	NA	1 U	NA	1 U
Styrene	100	1	1	NA	1 U	NA	1 U
Tetrachloroethene	5	12	26	NA	**26**	**26 J+**	**20**
Toluene	1000	0.67	1	NA	1 U	NA	1 U
Total Trihalomethanes [e]	80	11	16	NA	13	16	11
Trans-1,2-Dichloroethene	100	1	1	NA	1 U	NA	1 U
Trichloroethene	5	0.24	0.47	NA	0.47 J	NA	0.34 J
Trichlorofluoromethane	9890.32	1	1	NA	1 U	NA	1 U
Vinyl Chloride	2	1	1	NA	1 U	NA	1 U
Xylene (Total)	10000	2	2	NA	2 U	NA	2 U

TABLE 3-26
ANALYTICAL RESULTS FOR WELL TMPZ-110
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-27
ANALYTICAL RESULTS FOR WELL TMMW-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		110	130	130	120	NA	110
ANIONS (reported in mg/L)							
Chloride	250	110	160	110	110	NA	160
Nitrate	10	0.4	7.4	0.4 U	0.57	NA	7.4
Perchlorate [g]	0.018	0.0068	0.13	0.0068	0.011	NA	**0.13**
Sulfate	250	820	1300	**850**	**820**	NA	**1300**
GENERAL							
Fluoride	4	0.78	1.6	0.78	0.94	NA	1.6
Nitrite	1	0.2	0.5	0.2 U	0.2 U	NA	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		4.39	13.7	4.39 ± 1.97	12.2 ± 2.92	NA	10.5 ± 3.32
Adjusted Gross Alpha (Total) MCL [c]	15	-2.25	11.34	-11.3	0	NA	-0.6
Beta (Total)	50	-4.06	16.3	-4.06 ± 3.25 U	11.3 ± 3.18	NA	10 ± 5.15
Uranium 238		3.63	5.95	5.95 ± 1.13	4.31 ± 0.833	NA	3.63 ± 0.729
Uranium 234		7.32	9.43	9.43 ± 1.71	7.6 ± 1.38	NA	7.33 ± 1.34
Thorium 230		0.0196	0.159	0.119 ± 0.0667 J+	0.0675 ± 0.0777 U	NA	0.0211 ± 0.0659 U
Radium 226	5	-0.303	0.902	-0.303 ± 0.306 U	0.189 ± 0.185 U	NA	0.0358 ± 0.176 U
Radon 222	300	274	1040	**1040 ± 128**	**583 ± 77.1**	NA	**613 ± 78.3**
Lead 214		-3.27	31.1	4.99 ± 10.4 UJ-	-1.54 ± 6.22 UJ-	NA	-3.27 ± 6.89 UJ-
Bismuth 214		-1.08	32.4	6.43 ± 13.8 UJ-	1.11 ± 7.19 UJ-	NA	-1.08 ± 7.21 UJ-
Lead 210		0.86	2.33	NA	NA	NA	NA
Thorium 232		0.00879	0.0463	0.00879 ± 0.0156 U	0.0099 ± 0.0307 U	NA	0.0143 ± 0.0224 U
Radium 228	5	0.148	12.2	0.333 ± 0.434 U	0.329 ± 0.322 U	NA	0.181 ± 0.311 U
Radium MCL [d]	5	0.9	0.9	NA	NA	NA	NA
Actinium-228		-4.14	12.4	12.4 ± 20.8 U	-3.19 ± 11.4 U	NA	-4.14 ± 10 U
Thorium 228		-0.0161	0.0795	0.0329 ± 0.0367 U	-0.0108 ± 0.0632 U	NA	-0.0161 ± 0.0502 U
Lead 212		-1.48	4.12	2.61 ± 7.41 U	1.07 ± 6.27 U	NA	1.39 ± 4.95 U
Bismuth 212		-3.58	54.5	54.5 ± 40.4 U	31.1 ± 26.6 U	NA	-3.58 ± 45.8 U
Thallium 208		-0.666	5.17	4.78 ± 2.81 J+	-0.666 ± 3.11 U	NA	-0.243 ± 2.75 U
Potassium 40		-67.4	91.1	21.3 ± 79.1 U	-67.4 ± 48.1 U	NA	-13.2 ± 45.1 U

WELL ID: TMMW-101

TABLE 3-27
ANALYTICAL RESULTS FOR WELL TMMW-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.17	14.3	0.353 ± 0.156	0.243 ± 0.12	NA	0.182 ± 0.105
Polonium-210		0.241	0.241	NA	NA	NA	NA
Protactinium-234		-198	345	345 ± 491 U	-198 ± 586 U	NA	287 ± 271 U
Radium-224		-1.48	4.12	2.61 ± 7.41 U	1.07 ± 6.27 U	NA	1.39 ± 4.95 U
Thorium-227		-21.8	6.78	-2.34 ± 20.5 U	3.31 ± 20.1 U	NA	-21.8 ± 13 U
Thorium-234		-21.4	9.51	3.47 ± 75.8 U	-8.46 ± 55.7 U	NA	9.51 ± 54.1 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	1400	2300	1500	1500	NA	**2300**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	100	2000	470	150	NA	100 U
Antimony	6	20	20	**20 U [f]**	**20 U [f]**	NA	**20 U [f]**
Arsenic	10	17	37	**32**	**35**	NA	**17**
Barium	2000	13	33	16 J-	14 U	NA	13 J
Beryllium	4	0.16	2	2 U	2 U	NA	2 U
Cadmium	5	5	5	5 U	5 U	NA	5 U
Calcium		140000	230000	140000	140000	NA	230000
Chromium	100	2.7	10	2.7 J	2.9 U	NA	10 U
Chromium VI	100	10	10	10 U	10 UJ-	NA	10 U
Cobalt	10.95	10	10	10 U	10 U	NA	10 U
Copper	1300	1.9	10	10 U	10 U	NA	10 U
Iron	25550	100	1700	400	120	NA	100 U
Lead	15	2.2	3	3 U	2.2 U	NA	3 U
Lithium	73	130	160	**130**	**130**	NA	**130 J+**
Magnesium	206955	82000	110000	83000	84000	NA	110000
Manganese	5110	4.6	38	8.9 J-	4.6 U	NA	10 U
Mercury	2	0.033	0.2	0.2 U	0.2 U	NA	0.033 U
Molybdenum	182.5	11	43	31	32	NA	11
Nickel	730	2.2	20	20 U	2.4 U	NA	20 U
Phosphorus	0.73	0.05	200	**13 U [f]**	0.05 U	NA	0.05 U

TABLE 3-27
ANALYTICAL RESULTS FOR WELL TMMW-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		10000	13000	11000 J+	11000 J+	NA	13000 J+
Selenium	50	5	5	5 U	5 U	NA	5 U
Silicon		13000	27000	24000	24000	NA	13000
Silver	182.5	10	10	10 U	10 U	NA	10 U
Sodium		150000	280000	150000	150000 J+	NA	280000 J+
Thallium	2	0.02	0.088	0.026 U	0.02 U	NA	0.02 U
Tin	21900	50	50	50 U	50 U	NA	50 U
Titanium	146000	4.7	81	19 J-	4.7 J-	NA	20 U
Uranium	30	12	17	15	14	NA	12
Vanadium	182.5	10	20	16	16	NA	10
Zinc	10950	1.1	430	3.5 U	430	NA	1.1 U
Zirconium		1.1	20	20 U	20 U	NA	1.1 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	1 U	1 U	NA	1 U
1,1,2-Trichloroethane	5	1	1	1 U	1 U	NA	1 U
1,1-Dichloroethane	11.7950	1	1	1 U	1 U	NA	1 U
1,1-Dichloroethene	7	1	1	1 U	1 U	NA	1 U
1,2-Dichloroethane	0.123	1	1	**1 U [f]**	**1 U [f]**	NA	**1 U [f]**
1,2-Dichloropropane	5	1	1	1 U	1 U	NA	1 U
1,3-Dichlorobenzene	109.091	1	1	1 U	1 U	NA	1 U
2-Butanone	21262.1	10	10	10 U	10 U	NA	10 U
4-Methyl-2-Pentanone	2900.66	10	10	10 U	10 U	NA	10 U
Acetone	32613.3	10	10	10 U	10 U	NA	10 U
Benzene	5	1	1	1 U	1 U	NA	1 U
Bromodichloromethane	1.08438	0.3	1	0.3 J	1 U	NA	1 U
Bromoform	8.51032	1	1	1 U	1 U	NA	1 U
Bromomethane	47.7570	1	1	1 U	1 U	NA	1 U
Carbon Disulfide	3524.14	0.5	1	0.5 J	1 U	NA	1 U
Carbon Tetrachloride	5	1	1	1 U	1 U	NA	1 U

TABLE 3-27
ANALYTICAL RESULTS FOR WELL TMMW-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	1 U	1 U	NA	1 U
Chloroform	1.61648	4.1	11	**4.5**	**5.5**	NA	**11**
Chloromethane	81.1111	1	1	1 U	1 U	NA	1 U
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	NA	1 U
Dibromochloromethane	0.69718	1	1	**1 U [f]**	**1 U [f]**	NA	**1 U [f]**
Ethylbenzene	700	1	1	1 U	1 U	NA	1 U
Methylene Chloride	5	0.17	1	1 U	1 U	NA	0.17 U
Naphthalene	4.29412	1	1	1 U	1 U	NA	1 U
Styrene	100	1	1	1 U	1 U	NA	1 U
Tetrachloroethene	5	1	1	1 U	1 U	NA	1 U
Toluene	1000	1	1	1 U	1 U	NA	1 U
Total Trihalomethanes [e]	80	4.45	11	4.8	5.5	NA	11
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	NA	1 U
Trichloroethene	5	1	1	1 U	1 U	NA	1 U
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	NA	1 U
Vinyl Chloride	2	1	1	1 U	1 U	NA	1 U
Xylene (Total)	10000	2	2	2 U	2 U	NA	2 U

TABLE 3-27
ANALYTICAL RESULTS FOR WELL TMMW-101
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-28
ANALYTICAL RESULTS FOR WELL TMMW-102
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		100	150	130	120	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	130	720	220	220	NA	NA
Nitrate	10	0.47	12	1.5	1.6	NA	NA
Perchlorate [g]	0.018	0.025	1.6	**0.19**	**0.15**	NA	NA
Sulfate	250	340	1400	**390**	**450**	NA	NA
GENERAL							
Fluoride	4	0.85	0.93	0.9	0.85	NA	NA
Nitrite	1	0.1	0.5	0.2 U	0.2 U	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		4.7	10.1	10.1 ± 2.49	7.33 ± 2.14	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0.64	8.21	-0.6	-3.3	NA	NA
Beta (Total)	50	5.3	10.1	6.74 ± 2.4	10.1 ± 2.76	NA	NA
Uranium 238		3.07	4.35	3.72 ± 0.739	3.31 ± 0.68	NA	NA
Uranium 234		5.14	7.74	6.91 ± 1.27	7.01 ± 1.3	NA	NA
Thorium 230		-0.00413	0.147	0.0693 ± 0.065 U	0.00321 ± 0.0636 U	NA	NA
Radium 226	5	-0.213	0.217	-0.213 ± 0.27 U	-0.0481 ± 0.236 U	NA	NA
Radon 222	300	161	557	**312 ± 45.5**	**389 ± 55.9**	NA	NA
Lead 214		-2.48	29	0.156 ± 10.8 UJ-	11.1 ± 5.46 J	NA	NA
Bismuth 214		1.38	25.1	2.16 ± 14 UJ-	3.86 ± 11.5 UJ-	NA	NA
Lead 210		0.697	1.36	NA	NA	NA	NA
Thorium 232		0.0033	0.0194	0.0033 ± 0.0167 U	0.0136 ± 0.0282 U	NA	NA
Radium 228	5	-0.213	2.59	-0.213 ± 0.353 U	0.217 ± 0.303 U	NA	NA
Radium MCL [d]	5	0.85	0.85	NA	NA	NA	NA
Actinium-228		2.16	12.8	2.16 ± 22.2 U	12.8 ± 8.02 U	NA	NA
Thorium 228		-0.0173	0.0884	0.0217 ± 0.065 U	-0.000731 ± 0.0659 U	NA	NA
Lead 212		-0.551	3	0.939 ± 8.94 U	3 ± 7.17 U	NA	NA
Bismuth 212		-18.1	44.3	27.6 ± 40.4 U	15.2 ± 37.2 U	NA	NA
Thallium 208		-0.746	5.08	0.25 ± 6.69 U	5.08 ± 2.74 J+	NA	NA
Potassium 40		-98.1	74.3	-18.1 ± 83 U	-98.1 ± 81.1 U	NA	NA

TABLE 3-28
ANALYTICAL RESULTS FOR WELL TMMW-102
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-35.3	0.266	0.113 ± 0.0835	0.266 ± 0.13	NA	NA
Polonium-210		0.104	0.104	NA	NA	NA	NA
Protactinium-234		-76.8	464	287 ± 524 U	464 ± 456 U	NA	NA
Radium-224		-0.551	3	0.939 ± 8.94 U	3 ± 7.17 U	NA	NA
Thorium-227		-9.48	6.19	-1.55 ± 12.9 U	-1.65 ± 19.3 U	NA	NA
Thorium-234		-65.1	-0.333	-0.333 ± 75.8 U	-65.1 ± 83.5 U	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	870	3000	1100	1200	NA	NA
TOTAL METAL (reported in ug/L)							
Aluminum	36500	68	260	68 U	110	NA	NA
Antimony	6	20	20	**20 U [f]**	**20 U [f]**	NA	NA
Arsenic	10	19	25	**19**	**19**	NA	NA
Barium	2000	10	24	12 J-	13 U	NA	NA
Beryllium	4	2	2	2 U	2 U	NA	NA
Cadmium	5	5	5	5 U	5 U	NA	NA
Calcium		80000	280000	100000	120000	NA	NA
Chromium	100	3.4	9.9	3.4 J	6.4 U	NA	NA
Chromium VI	100	10	10	10 U	10 U	NA	NA
Cobalt	10.95	10	10	10 U	10 U	NA	NA
Copper	1300	1.1	10	10 U	10 U	NA	NA
Iron	25550	30	160	30 J-	110	NA	NA
Lead	15	3	3	3 U	3 U	NA	NA
Lithium	73	94	210	**110**	**120**	NA	NA
Magnesium	206955	52000	150000	65000	77000	NA	NA
Manganese	5110	2	4.5	2 J-	3.8 U	NA	NA
Mercury	2	0.0097	0.2	0.2 U	0.012 J	NA	NA
Molybdenum	182.5	24	40	32	30	NA	NA
Nickel	730	0.88	20	20 U	1.9 U	NA	NA
Phosphorus	0.73	0.05	200	**17 U [f]**	0.05 U	NA	NA

TABLE 3-28
ANALYTICAL RESULTS FOR WELL TMMW-102
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		7100	20000	7600 J+	8800 J+	NA	NA
Selenium	50	3.4	5	5 U	3.4 U	NA	NA
Silicon		16000	18000	17000	18000	NA	NA
Silver	182.5	10	10	10 U	10 U	NA	NA
Sodium		95000	370000	110000	110000 J+	NA	NA
Thallium	2	0.04	0.2	0.066 U	0.04 U	NA	NA
Tin	21900	50	50	50 U	50 U	NA	NA
Titanium	146000	1.9	20	20 U	1.9 J-	NA	NA
Uranium	30	8	13	12	10	NA	NA
Vanadium	182.5	12	18	14	13	NA	NA
Zinc	10950	3.8	2200	5.8 U	2200	NA	NA
Zirconium		20	20	20 U	20 U	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	1 U	1 U	NA	NA
1,1,2-Trichloroethane	5	1	1	1 U	1 U	NA	NA
1,1-Dichloroethane	11.7950	1	1	1 U	1 U	NA	NA
1,1-Dichloroethene	7	1	1	1 U	1 U	NA	NA
1,2-Dichloroethane	0.123	1	1	**1 U** [f]	**1 U** [f]	NA	NA
1,2-Dichloropropane	5	1	1	1 U	1 U	NA	NA
1,3-Dichlorobenzene	109.091	1	1	1 U	1 U	NA	NA
2-Butanone	21262.1	10	10	10 U	10 U	NA	NA
4-Methyl-2-Pentanone	2900.66	10	10	10 U	10 U	NA	NA
Acetone	32613.3	10	10	10 U	10 U	NA	NA
Benzene	5	1	1	1 U	1 U	NA	NA
Bromodichloromethane	1.08438	0.26	1	1 U	1 U	NA	NA
Bromoform	8.51032	1	1	1 U	1 U	NA	NA
Bromomethane	47.7570	1	1	1 U	1 U	NA	NA
Carbon Disulfide	3524.14	1	1	1 U	1 U	NA	NA
Carbon Tetrachloride	5	1	1	1 U	1 U	NA	NA

TABLE 3-28
ANALYTICAL RESULTS FOR WELL TMMW-102
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	1 U	1 U	NA	NA
Chloroform	1.61648	0.79	1.7	0.92 J	0.79 J	NA	NA
Chloromethane	81.1111	1	1	1 U	1 U	NA	NA
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	NA	NA
Dibromochloromethane	0.69718	1	1	**1 U [f]**	**1 U [f]**	NA	NA
Ethylbenzene	700	1	1	1 U	1 U	NA	NA
Methylene Chloride	5	1	1	1 U	1 U	NA	NA
Naphthalene	4.29412	1	1	1 U	1 U	NA	NA
Styrene	100	1	1	1 U	1 U	NA	NA
Tetrachloroethene	5	1	1	1 U	1 U	NA	NA
Toluene	1000	1	1	1 U	1 U	NA	NA
Total Trihalomethanes [e]	80	0.79	1.96	0.92	0.79	NA	NA
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	NA	NA
Trichloroethene	5	1	1	1 U	1 U	NA	NA
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	NA	NA
Vinyl Chloride	2	1	1	1 U	1 U	NA	NA
Xylene (Total)	10000	2	2	2 U	2 U	NA	NA

TABLE 3-28
ANALYTICAL RESULTS FOR WELL TMMW-102
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-29
ANALYTICAL RESULTS FOR WELL TMMW-103
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		93	140	100 J	110	NA	NA
ANIONS (reported in mg/L)							
Chloride	250	170	630	**510 J**	250 J	NA	NA
Nitrate	10	0.7	12	**11 J**	7.4 J	NA	NA
Perchlorate [g]	0.018	0.11	1.8	**1.2 J**	**0.69 J**	NA	NA
Sulfate	250	350	1300	**1300 J**	**1100 J**	NA	NA
GENERAL							
Fluoride	4	0.87	1.9	0.89 J	0.95 J	NA	NA
Nitrite	1	0.2	0.5	0.5 U	0.2 U	NA	NA
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		5.67	13.6	5.67 ± 3.39	5.79 ± 2.72	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	-5.62	2.21	-2.2	-1.7	NA	NA
Beta (Total)	50	6.29	26.1	13.1 ± 5.29	11.8 ± 3.94	NA	NA
Uranium 238		2.48	3.47	2.51 ± 0.546	2.48 ± 0.549	NA	NA
Uranium 234		4.71	7.31	5.23 ± 1.01	4.9 ± 0.964	NA	NA
Thorium 230		-0.00658	0.104	0.104 ± 0.0716 U	0.0322 ± 0.0703 U	NA	NA
Radium 226	5	-0.18	0.259	0.0264 ± 0.191 U	0.253 ± 0.247 U	NA	NA
Radon 222	300	194	771	**619 ± 76.8**	**771 ± 97**	NA	NA
Lead 214		-3.59	57.8	22.6 ± 9.81 J-	57.8 ± 9.82 J-	NA	NA
Bismuth 214		4.84	61.8	31.3 ± 10.1 J-	55.8 ± 12.7 J-	NA	NA
Lead 210		0.921	0.953	NA	NA	NA	NA
Thorium 232		-0.0037	0.0234	0.022 ± 0.024 U	-0.0037 ± 0.0204 U	NA	NA
Radium 228	5	-0.0935	0.835	-0.0935 ± 0.409 U	0.19 ± 0.295 U	NA	NA
Radium MCL [d]	5	0.84	0.84	NA	NA	NA	NA
Actinium-228		-4.73	21.4	21.4 ± 11.8 J+	19.5 ± 11.5 J+	NA	NA
Thorium 228		-0.0219	0.0301	0.0204 ± 0.04 U	0.00692 ± 0.0594 U	NA	NA
Lead 212		-1.7	4.76	4.15 ± 7.7 U	4.76 ± 8.65 U	NA	NA
Bismuth 212		17.5	69.4	18.4 ± 40 U	21.2 ± 43.1 U	NA	NA
Thallium 208		0.546	7.04	0.546 ± 5.91 U	3.95 ± 5.09 U	NA	NA
Potassium 40		-3.51	80.4	80.4 ± 74.3 U	51.4 ± 96.4 U	NA	NA

TABLE 3-29
ANALYTICAL RESULTS FOR WELL TMMW-103
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.0871	10.1	0.141 ± 0.095	0.0871 ± 0.0768	NA	NA
Polonium-210		0.8	0.8	NA	NA	NA	NA
Protactinium-234		-324	769	-116 ± 494 U	-38.7 ± 533 U	NA	NA
Radium-224		-1.7	4.76	4.15 ± 7.7 U	4.76 ± 8.65 U	NA	NA
Thorium-227		-7.99	4.38	-5.86 ± 20.5 U	-5.81 ± 19.9 U	NA	NA
Thorium-234		-1.93	48.6	16.8 ± 78.4 U	48.6 ± 49.2 U	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	920	2900	**2800**	**2100**	NA	NA
TOTAL METAL (reported in ug/L)							
Aluminum	36500	56	360	56 U	140 U	NA	NA
Antimony	6	20	20	**20 U [f]**	**20 U [f]**	NA	NA
Arsenic	10	20	27	**20**	**27**	NA	NA
Barium	2000	13	28	20 J-	17 J-	NA	NA
Beryllium	4	0.19	2	2 U	2 U	NA	NA
Cadmium	5	5	5	5 U	5 U	NA	NA
Calcium		84000	250000	220000 J	160000 J	NA	NA
Chromium	100	2.7	12	10	11	NA	NA
Chromium VI	100	10	10	10 U	10 J-	NA	NA
Cobalt	10.95	10	10	10 U	10 U	NA	NA
Copper	1300	10	10	10 U	10 U	NA	NA
Iron	25550	6.2	260	6.2 J-	130	NA	NA
Lead	15	2.3	3	3 U	3 U	NA	NA
Lithium	73	97	210	**190**	**160**	NA	NA
Magnesium	206955	55000	150000	120000 J	89000 J	NA	NA
Manganese	5110	1.3	7.8	1.3 J-	4 J-	NA	NA
Mercury	2	0.025	0.2	0.2 U	0.2 U	NA	NA
Molybdenum	182.5	24	37	26	24	NA	NA
Nickel	730	1.6	20	20 U	20 U	NA	NA
Phosphorus	0.73	0.05	200	**200 U [f]**	0.05 U	NA	NA

TABLE 3-29
ANALYTICAL RESULTS FOR WELL TMMW-103
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		7300	19000	19000 J+	14000 J	NA	NA
Selenium	50	5	5.4	5 J-	5 U	NA	NA
Silicon		16000	18000	16000	17000	NA	NA
Silver	182.5	10	10	10 U	10 U	NA	NA
Sodium		100000	410000	330000 J	310000 J	NA	NA
Thallium	2	0.025	0.2	0.025 U	0.2 U	NA	NA
Tin	21900	50	50	50 U	50 U	NA	NA
Titanium	146000	3.6	20	20 U	3.6 J-	NA	NA
Uranium	30	7.9	11	7.9	8.1	NA	NA
Vanadium	182.5	13	15	13	14	NA	NA
Zinc	10950	2	20	4.5 U	2 U	NA	NA
Zirconium		20	20	20 U	20 U	NA	NA
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	1 U	1 U	NA	NA
1,1,2-Trichloroethane	5	1	1	1 U	1 U	NA	NA
1,1-Dichloroethane	11.7950	1	1	1 U	1 U	NA	NA
1,1-Dichloroethene	7	1	1	1 U	1 U	NA	NA
1,2-Dichloroethane	0.123	1	1	**1 U** [f]	**1 U** [f]	NA	NA
1,2-Dichloropropane	5	1	1	1 U	1 U	NA	NA
1,3-Dichlorobenzene	109.091	1	1	1 U	1 U	NA	NA
2-Butanone	21262.1	10	10	10 U	10 U	NA	NA
4-Methyl-2-Pentanone	2900.66	10	10	10 U	10 U	NA	NA
Acetone	32613.3	10	10	10 U	10 U	NA	NA
Benzene	5	1	1	1 U	1 U	NA	NA
Bromodichloromethane	1.08438	0.28	1	0.28 J	0.33 J	NA	NA
Bromoform	8.51032	1	1	1 U	1 U	NA	NA
Bromomethane	47.7570	1	1	1 U	1 U	NA	NA
Carbon Disulfide	3524.14	0.17	1	0.17 J	1 U	NA	NA
Carbon Tetrachloride	5	1	1	1 U	1 U	NA	NA

TABLE 3-29
ANALYTICAL RESULTS FOR WELL TMMW-103
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	1 U	1 U	NA	NA
Chloroform	1.61648	0.88	3.1	**2.2**	**2.2**	NA	NA
Chloromethane	81.1111	1	1	1 U	1 U	NA	NA
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	NA	NA
Dibromochloromethane	0.69718	1	1	**1 U [f]**	**1 U [f]**	NA	NA
Ethylbenzene	700	1	1	1 U	1 U	NA	NA
Methylene Chloride	5	1	1	1 U	1 U	NA	NA
Naphthalene	4.29412	1	1	1 U	1 U	NA	NA
Styrene	100	1	1	1 U	1 U	NA	NA
Tetrachloroethene	5	1	1	1 U	1 U	NA	NA
Toluene	1000	1	1	1 U	1 U	NA	NA
Total Trihalomethanes [e]	80	0.88	3.46	2.48	2.53	NA	NA
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	NA	NA
Trichloroethene	5	1	1	1 U	1 U	NA	NA
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	NA	NA
Vinyl Chloride	2	1	1	1 U	1 U	NA	NA
Xylene (Total)	10000	2	2	2 U	2 U	NA	NA

TABLE 3-29
ANALYTICAL RESULTS FOR WELL TMMW-103
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-30
ANALYTICAL RESULTS FOR WELL TMMW-104
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		94	120	110	100	NA	120
ANIONS (reported in mg/L)							
Chloride	250	140	230	170	150	NA	220 J
Nitrate	10	1	4.7	2.5	2.1	NA	4.7 J
Perchlorate [g]	0.018	0.039	0.45	**0.041**	**0.039**	NA	**0.45 J**
Sulfate	250	840	1700	**1100**	**1300**	NA	**840 J**
GENERAL							
Fluoride	4	0.88	2.3	1.9	1.4	NA	0.88 J
Nitrite	1	0.2	0.5	0.2 U	0.2 U	NA	0.2 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		1.83	11.8	7.4 ± 3.51	1.83 ± 2.87 U	NA	10.2 ± 2.76
Adjusted Gross Alpha (Total) MCL [c]	15	-3.83	9.88	-0.5	NA	NA	-1.1
Beta (Total)	50	7.63	18.2	9.98 ± 5.03	7.63 ± 4.59	NA	7.75 ± 3.74
Uranium 238		2.07	4.02	2.36 ± 0.518	3.23 ± 0.664	NA	4.02 ± 0.782
Uranium 234		4.07	7.02	5.35 ± 1.02	6.42 ± 1.2	NA	7.02 ± 1.28
Thorium 230		-0.00719	0.129	0.129 ± 0.0724 J+	0.00468 ± 0.0662 U	NA	-0.00719 ± 0.0632 U
Radium 226	5	-0.472	0.308	0.308 ± 0.286 U	0.0735 ± 0.312 U	NA	0.143 ± 0.305 U
Radon 222	300	329	872	**821 ± 100**	**590 ± 75.2**	NA	**648 ± 82.5**
Lead 214		-4.31	23.5	23.5 ± 8.82 J-	21.5 ± 9.17 J	NA	-4.31 ± 6.28 UJ-
Bismuth 214		-5.86	26.4	26.4 ± 9.44 J-	19.8 ± 10.7 J-	NA	-5.86 ± 6.76 UJ-
Lead 210		0.328	3.77	NA	NA	NA	NA
Thorium 232		-0.00148	0.0616	0.00833 ± 0.0157 U	-0.00148 ± 0.0214 U	NA	0.00382 ± 0.0194 U
Radium 228	5	0.149	15.2	0.36 ± 0.45 U	0.149 ± 0.386 U	NA	0.171 ± 0.326 U
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228		-1.06	21.6	21.6 ± 9.31 J+	8.75 ± 20.1 U	NA	-1.06 ± 9.81 U
Thorium 228		-0.00843	0.0945	0.0333 ± 0.04 U	0.0339 ± 0.0605 U	NA	-0.00843 ± 0.0614 U
Lead 212		-3.77	9.18	5.63 ± 7.2 U	0.0894 ± 7.14 U	NA	-0.524 ± 4.7 U
Bismuth 212		-2.58	38.4	-2.58 ± 35.3 U	6.06 ± 37.7 U	NA	16.8 ± 45.3 U
Thallium 208		-0.217	4.21	0.979 ± 4.84 U	3.95 ± 2.8 U	NA	-0.217 ± 2.78 U
Potassium 40		-73.7	200	52.8 ± 67.5 U	-73.7 ± 81.3 U	NA	-2.22 ± 44.2 U

WELL ID: TMMW-104

TABLE 3-30
ANALYTICAL RESULTS FOR WELL TMMW-104
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		-2.32	0.237	0.142 ± 0.0928	0.231 ± 0.121	NA	0.237 ± 0.118
Polonium-210		0.118	0.118	NA	NA	NA	NA
Protactinium-234		-148	420	144 ± 414 U	420 ± 474 U	NA	269 ± 255 U
Radium-224		-3.77	9.18	5.63 ± 7.2 U	0.0894 ± 7.14 U	NA	-0.524 ± 4.7 U
Thorium-227		-44.8	4.19	-7.29 ± 19.5 U	-6.78 ± 19.9 U	NA	-12.5 ± 12 U
Thorium-234		-28.3	144	-9.83 ± 48.1 U	-28.3 ± 88.8 U	NA	0.72 ± 53.3 U
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	1700	2600	**2000**	**2200**	NA	1700
TOTAL METAL (reported in ug/L)							
Aluminum	36500	27	270	27 U	100 U	NA	100 U
Antimony	6	20	20	**20 U [f]**	**20 U [f]**	NA	**20 U [f]**
Arsenic	10	18	37	**18**	**18**	NA	**37**
Barium	2000	13	18	13 J-	14 U	NA	14 J
Beryllium	4	2	2	2 U	2 U	NA	2 U
Cadmium	5	5	5	5 U	5 U	NA	5 U
Calcium		120000	270000	180000	220000	NA	150000 J
Chromium	100	1.6	12	3.2 J	1.6 U	NA	12
Chromium VI	100	10	12	10 U	10 U	NA	12
Cobalt	10.95	10	10	10 U	10 U	NA	10 U
Copper	1300	0.56	10	10 U	1.1 J-	NA	10 U
Iron	25550	8.3	270	30 J-	100 U	NA	16 U
Lead	15	1.2	3	3 U	1.6 U	NA	3 U
Lithium	73	110	150	**110**	**120**	NA	**150 J+**
Magnesium	206955	57000	120000	84000	100000	NA	88000 J
Manganese	5110	0.34	16	10 U	0.34 U	NA	10 U
Mercury	2	0.014	0.2	0.2 U	0.2 U	NA	0.014 U
Molybdenum	182.5	15	38	19	15	NA	38
Nickel	730	1.5	20	20 U	2.2 U	NA	1.6 J
Phosphorus	0.73	0.05	200	**200 U [f]**	0.05 U	NA	0.05 U

TABLE 3-30
ANALYTICAL RESULTS FOR WELL TMMW-104
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		12000	14000	13000 J+	13000 J+	NA	12000 J+
Selenium	50	5	5.2	5 U	5 U	NA	5 U
Silicon		11000	23000	12000	12000	NA	23000
Silver	182.5	10	10	10 U	10 U	NA	10 U
Sodium		200000	280000	240000	250000 J+	NA	200000 J+
Thallium	2	0.03	0.2	0.067 U	0.03 U	NA	0.03 U
Tin	21900	50	50	50 U	50 U	NA	50 U
Titanium	146000	7.1	20	20 U	20 U	NA	20 U
Uranium	30	7	13	8.1	9.7	NA	13
Vanadium	182.5	11	15	11	11	NA	15
Zinc	10950	2	20	3.5 U	20 U	NA	5 U
Zirconium		1.1	20	20 U	1.1 U	NA	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	1 U	1 U	NA	1 U
1,1,2-Trichloroethane	5	1	1	1 U	1 U	NA	1 U
1,1-Dichloroethane	11.7950	1	1	1 U	1 U	NA	1 U
1,1-Dichloroethene	7	1	1	1 U	1 U	NA	1 U
1,2-Dichloroethane	0.123	1	1	**1 U** [f]	**1 U** [f]	NA	**1 U** [f]
1,2-Dichloropropane	5	1	1	1 U	1 U	NA	1 U
1,3-Dichlorobenzene	109.091	1	1	1 U	1 U	NA	1 U
2-Butanone	21262.1	10	10	10 U	10 U	NA	10 U
4-Methyl-2-Pentanone	2900.66	10	10	10 U	10 U	NA	10 U
Acetone	32613.3	10	10	10 U	10 U	NA	10 U
Benzene	5	1	1	1 U	1 U	NA	1 U
Bromodichloromethane	1.08438	0.19	1.3	0.19 J	**1.3**	NA	1 U
Bromoform	8.51032	1	1	1 U	1 U	NA	1 U
Bromomethane	47.7570	1	1	1 U	1 U	NA	1 U
Carbon Disulfide	3524.14	1	1	1 U	1 U	NA	1 U
Carbon Tetrachloride	5	1	1	1 U	1 U	NA	1 U

TABLE 3-30
ANALYTICAL RESULTS FOR WELL TMMW-104
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	1 U	1 U	NA	1 U
Chloroform	1.61648	0.34	9	0.52 J	**9**	NA	**5.9**
Chloromethane	81.1111	1	1	1 U	1 U	NA	1 U
cis-1,2-Dichloroethene	70	1	1	1 U	1 U	NA	1 U
Dibromochloromethane	0.69718	0.25	1	**1 U [f]**	0.25 J	NA	**1 U [f]**
Ethylbenzene	700	1	1	1 U	1 U	NA	1 U
Methylene Chloride	5	1	1	1 U	1 U	NA	1 U
Naphthalene	4.29412	1	1	1 U	1 U	NA	1 U
Styrene	100	1	1	1 U	1 U	NA	1 U
Tetrachloroethene	5	1	1	1 U	1 U	NA	1 U
Toluene	1000	1	1	1 U	1 U	NA	1 U
Total Trihalomethanes [e]	80	0.34	10.55	0.71	10.55	NA	5.9
Trans-1,2-Dichloroethene	100	1	1	1 U	1 U	NA	1 U
Trichloroethene	5	1	1	1 U	1 U	NA	1 U
Trichlorofluoromethane	9890.32	1	1	1 U	1 U	NA	1 U
Vinyl Chloride	2	1	1	1 U	1 U	NA	1 U
Xylene (Total)	10000	2	2	2 U	2 U	NA	2 U

TABLE 3-30
ANALYTICAL RESULTS FOR WELL TMMW-104
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-31
ANALYTICAL RESULTS FOR WELL AA-01
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		93	110	NA	99	99	93
ANIONS (reported in mg/L)							
Chloride	250	700	840	NA	**750**	**840**	**700**
Nitrate	10	9.1	11	NA	9.2	**11**	10
Perchlorate [g]	0.018	2	19	NA	**2.1**	**2.4**	**2**
Sulfate	250	1400	1700	NA	**1600**	**1700**	**1400**
GENERAL							
Fluoride	4	1.1	1.3	NA	1.3	1.3	1.1
Nitrite	1	0.5	0.5	NA	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		30.2	30.2	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	24.31	24.31	NA	NA	NA	NA
Beta (Total)	50	17.5	17.5	NA	NA	NA	NA
Uranium 238		22.9	22.9	NA	NA	NA	NA
Uranium 234		30.4	30.4	NA	NA	NA	NA
Thorium 230		0.0544	0.0544	NA	NA	NA	NA
Radium 226	5	0.137	0.137	NA	NA	NA	NA
Radon 222	300	710	710	NA	NA	NA	NA
Lead 214		16.6	16.6	NA	NA	NA	NA
Bismuth 214		15.4	15.4	NA	NA	NA	NA
Lead 210		0.207	0.207	NA	NA	NA	NA
Thorium 232		0.0009	0.0009	NA	NA	NA	NA
Radium 228	5	0.568	0.568	NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228		0.821	0.821	NA	NA	NA	NA
Thorium 228		0.0701	0.0701	NA	NA	NA	NA
Lead 212		2.21	2.21	NA	NA	NA	NA
Bismuth 212		26.2	26.2	NA	NA	NA	NA
Thallium 208		5.94	5.94	NA	NA	NA	NA
Potassium 40		-1.35	-1.35	NA	NA	NA	NA

TABLE 3-31
ANALYTICAL RESULTS FOR WELL AA-01
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		1.21	1.21	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		777	777	NA	NA	NA	NA
Radium-224		2.21	2.21	NA	NA	NA	NA
Thorium-227		-5.23	-5.23	NA	NA	NA	NA
Thorium-234		33.4	33.4	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	3700	4200	NA	**3900**	**4200**	**3800**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	100	500	NA	100 U	500 U	100 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**20 U [f]**
Arsenic	10	58	92	NA	**90**	**88**	**92**
Barium	2000	12	20	NA	17 U	12 J-	15 J
Beryllium	4	0.22	10	NA	2 U	**10 U [f]**	2 U
Cadmium	5	0.48	25	NA	5 U	**25 U [f]**	0.48 J-
Calcium		510000	550000	NA	520000	550000 J-	510000
Chromium	100	5.7	50	NA	9.5 U	50 U	8.7 J-
Chromium VI	100	10	10	NA	10 U	10 U	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	10 U
Copper	1300	1.1	50	NA	10 U	50 U	10 U
Iron	25550	76	500	NA	100 U	500 U	100 U
Lead	15	1.8	15	NA	2 U	15 U	1.8 J
Lithium	73	210	270	NA	**260**	**210 J+**	**250 J+**
Magnesium	206955	120000	180000	NA	160000	180000 J-	170000
Manganese	5110	1.5	50	NA	1.5 U	50 U	10 U
Mercury	2	0.016	0.2	NA	0.016 J	0.017 J-	0.033 U
Molybdenum	182.5	12	50	NA	14	50 U	12
Nickel	730	1.9	100	NA	4 U	100 U	1.9 J
Phosphorus	0.73	0.05	1000	NA	0.05 U	0.05 U	0.05 U

TABLE 3-31
ANALYTICAL RESULTS FOR WELL AA-01
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		9000	12000	NA	12000 J+	9000	11000 J+
Selenium	50	3.7	25	NA	3.7 U	25 U	4.3 U
Silicon		38000	40000	NA	40000	39000 J-	38000
Silver	182.5	10	50	NA	10 U	50 U	10 U
Sodium		320000	360000	NA	320000 J+	360000 J-	350000 J+
Thallium	2	0.02	0.2	NA	0.02 U	0.2 U	0.04 U
Tin	21900	3.6	250	NA	3.6 U	250 U	50 U
Titanium	146000	2.1	100	NA	20 U	100 U	20 U
Uranium	30	36	68	NA	**43**	**45**	**36**
Vanadium	182.5	27	34	NA	34	34 U	34
Zinc	10950	1.5	130	NA	130	100 U	20 U
Zirconium		20	100	NA	20 U	100 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	2	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	2	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	1	2	NA	1 U	2 U	1 U
1,1-Dichloroethene	7	2.9	4	NA	2.9	3.8	4
1,2-Dichloroethane	0.123	1	2	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	2	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	2	NA	1 U	2 U	1 U
2-Butanone	21262.1	10	20	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 U	10 U
Benzene	5	1	2	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	2	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	2	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	2	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	2	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	1	2	NA	1 U	2 U	1 U

TABLE 3-31
ANALYTICAL RESULTS FOR WELL AA-01
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	2	NA	1 U	2 U	1 U
Chloroform	1.61648	5.6	7	NA	**5.6**	**6.6**	**7**
Chloromethane	81.1111	1	2	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	2	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	2	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	2	NA	1 U	2 U	1 U
Methylene Chloride	5	1	2	NA	1 U	2 U	1 U
Naphthalene	4.29412	1	2	NA	1 U	2 U	1 U
Styrene	100	1	2	NA	1 U	2 U	1 U
Tetrachloroethene	5	69	93	NA	**71**	**80**	**69**
Toluene	1000	1	2	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	5.6	7	NA	5.6	6.6	7
Trans-1,2-Dichloroethene	100	1	2	NA	1 U	2 U	1 U
Trichloroethene	5	0.34	0.56	NA	0.34 J	0.42 J	0.45 J
Trichlorofluoromethane	9890.32	1	2	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	2	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-31
ANALYTICAL RESULTS FOR WELL AA-01
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-32
ANALYTICAL RESULTS FOR WELL AA-09
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		63	69	NA	68	63	64
ANIONS (reported in mg/L)							
Chloride	250	940	1500	NA	**940**	**970**	**1100**
Nitrate	10	11	21	NA	**11**	**12**	**12**
Perchlorate [g]	0.018	5.5	8.4	NA	**5.5**	**8.4**	**7.8**
Sulfate	250	2600	2800	NA	**2800**	**2800**	**2600**
GENERAL							
Fluoride	4	0.65	1	NA	0.65	0.78	1 U
Nitrite	1	0.5	1	NA	0.5 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		12.8	12.8	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	15.11	15.11	NA	NA	NA	NA
Beta (Total)	50	34.4	34.4	NA	NA	NA	NA
Uranium 238		6.25	6.25	NA	NA	NA	NA
Uranium 234		8.49	8.49	NA	NA	NA	NA
Thorium 230		0.111	0.111	NA	NA	NA	NA
Radium 226	5	-0.195	-0.195	NA	NA	NA	NA
Radon 222	300	853	853	NA	NA	NA	NA
Lead 214		-2.04	-2.04	NA	NA	NA	NA
Bismuth 214		-3.57	-3.57	NA	NA	NA	NA
Lead 210		0.899	0.899	NA	NA	NA	NA
Thorium 232		0.0573	0.0573	NA	NA	NA	NA
Radium 228	5	0.654	0.654	NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228		14.9	14.9	NA	NA	NA	NA
Thorium 228		0.0465	0.0465	NA	NA	NA	NA
Lead 212		1.18	1.18	NA	NA	NA	NA
Bismuth 212		39.3	39.3	NA	NA	NA	NA
Thallium 208		0.394	0.394	NA	NA	NA	NA
Potassium 40		36	36	NA	NA	NA	NA

TABLE 3-32
ANALYTICAL RESULTS FOR WELL AA-09
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.368	0.368	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		-281	-281	NA	NA	NA	NA
Radium-224		1.18	1.18	NA	NA	NA	NA
Thorium-227		-1.22	-1.22	NA	NA	NA	NA
Thorium-234		-23.7	-23.7	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5200	7500	NA	**5700**	**5200**	**5700**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	37	1200	NA	37 J-	500 U	500 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	82	100	NA	**100**	**82**	**97**
Barium	2000	5.8	27	NA	11 U	5.8 J-	7.8 J
Beryllium	4	0.39	10	NA	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.4	25	NA	0.4 U	**25 U [f]**	**25 U [f]**
Calcium		500000	580000	NA	500000	570000	540000
Chromium	100	60	98	NA	60	98	82
Chromium VI	100	76	120	NA	76	**120**	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	0.68	50	NA	10 U	50 U	50 U
Iron	25550	23	890	NA	23 U	500 U	500 U
Lead	15	3	15	NA	3 U	15 U	15 U
Lithium	73	180	300	NA	**250**	**180 J+**	**210**
Magnesium	206955	250000	340000	NA	**250000**	**260000**	**270000**
Manganese	5110	0.9	50	NA	0.9 U	50 U	50 U
Mercury	2	0.012	0.2	NA	0.012 J	0.2 U	0.2 U
Molybdenum	182.5	50	57	NA	57	51	50
Nickel	730	2.1	100	NA	2.7 U	100 U	100 U
Phosphorus	0.73	0.05	1000	NA	0.05 U	0.05 U	0.05 U

TABLE 3-32
ANALYTICAL RESULTS FOR WELL AA-09
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		28000	56000	NA	51000 J+	28000	36000
Selenium	50	27	76	NA	**76**	27	**53**
Silicon		31000	37000	NA	34000	31000	37000
Silver	182.5	10	50	NA	10 U	50 U	50 U
Sodium		690000	950000	NA	790000 J+	690000	720000
Thallium	2	0.07	0.21	NA	0.13 U	0.07 U	0.09 U
Tin	21900	50	250	NA	50 U	250 U	250 U
Titanium	146000	20	100	NA	20 U	100 U	100 U
Uranium	30	14	21	NA	14	19	15
Vanadium	182.5	30	37	NA	37	30 J-	37 J
Zinc	10950	20	100	NA	20 U	100 U	100 U
Zirconium		2.6	20	NA	20 U	2.6 J-	8.3 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	4	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	4	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	1	4	NA	1 U	2 U	1 U
1,1-Dichloroethene	7	0.38	4	NA	0.38 J	0.93 J	0.64 J
1,2-Dichloroethane	0.123	1	4	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	4	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	4	NA	1 U	2 U	1 U
2-Butanone	21262.1	10	40	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	40	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 U	10 U
Benzene	5	1	4	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	4	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	4	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	4	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	4	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	0.6	1.3	NA	0.6 J	0.88 J	0.61 J

TABLE 3-32
ANALYTICAL RESULTS FOR WELL AA-09
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	4	NA	1 U	2 U	1 U
Chloroform	1.61648	50	94	NA	**50**	**83**	**56**
Chloromethane	81.1111	1	4	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	4	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	4	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	4	NA	1 U	2 U	1 U
Methylene Chloride	5	1	4	NA	1 U	2 U	1 U
Naphthalene	4.29412	1	4	NA	1 U	2 U	1 U
Styrene	100	1	4	NA	1 U	2 U	1 U
Tetrachloroethene	5	4.2	14	NA	4.6	**14**	**9.8**
Toluene	1000	1	4	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	50	94	NA	50	**83**	56
Trans-1,2-Dichloroethene	100	1	4	NA	1 U	2 U	1 U
Trichloroethene	5	0.38	4	NA	0.38 J	0.67 J	0.48 J
Trichlorofluoromethane	9890.32	1	4	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	4	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-32
ANALYTICAL RESULTS FOR WELL AA-09
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-33
ANALYTICAL RESULTS FOR WELL AA-11
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		84	85	NA	85	85	84
ANIONS (reported in mg/L)							
Chloride	250	820	970	NA	**820**	**920**	**970**
Nitrate	10	7.8	9.1	NA	7.8	8.6	9.1
Perchlorate [g]	0.018	3.5	3.6	NA	**3.5**	**3.6**	**3.5**
Sulfate	250	2000	2100	NA	**2100**	**2100**	**2000**
GENERAL							
Fluoride	4	0.98	1.1	NA	1.1	0.98	1 U
Nitrite	1	0.5	1	NA	0.5 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-33
ANALYTICAL RESULTS FOR WELL AA-11
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	4300	5000	NA	**4300**	**4500**	**5000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	100	500	NA	100 U	500 U	350 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	54	65	NA	**54**	**62**	**65**
Barium	2000	8.1	9.7	NA	9.7 J-	8.1 J-	9.1 J-
Beryllium	4	2	10	NA	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	5	25	NA	5 U	**25 U [f]**	**25 U [f]**
Calcium		580000	620000	NA	590000	580000	620000
Chromium	100	18	26	NA	18	18 U	26 J-
Chromium VI	100	19	23	NA	19	23	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	10	50	NA	10 U	50 U	50 U
Iron	25550	94	500	NA	94 U	500 U	280 J-
Lead	15	3	15	NA	3 U	15 U	15 U
Lithium	73	290	350	NA	**350**	**290 J+**	**320 J+**
Magnesium	206955	190000	210000	NA	190000	190000	**210000**
Manganese	5110	0.67	31	NA	31	0.67 U	22 J-
Mercury	2	0.2	0.2	NA	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	32	38	NA	38	32 J-	32 J-
Nickel	730	24	100	NA	24	100 U	100 U
Phosphorus	0.73	0.05	1000	NA	0.068	0.05 U	0.16

TABLE 3-33
ANALYTICAL RESULTS FOR WELL AA-11
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		15000	20000	NA	20000	15000	15000 J+
Selenium	50	4.9	25	NA	4.9 J-	25 U	25 U
Silicon		40000	46000	NA	40000	40000	46000
Silver	182.5	10	50	NA	10 U	50 U	50 U
Sodium		460000	530000	NA	460000	490000	530000
Thallium	2	0.1	0.2	NA	0.2 U	0.1 U	0.11 U
Tin	21900	50	250	NA	50 U	250 U	250 U
Titanium	146000	20	100	NA	20 U	100 U	100 U
Uranium	30	30	33	NA	30	**32**	**33**
Vanadium	182.5	23	31	NA	23	26 J-	31 J
Zinc	10950	16	100	NA	16 U	100 U	58 U
Zirconium		2.7	20	NA	20 U	2.7 J-	5.8 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	0.19	0.26	NA	0.19 J	0.26 J	0.21 J
1,1-Dichloroethene	7	0.28	0.65	NA	0.28 J	0.65 J	0.53 J
1,2-Dichloroethane	0.123	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	1	NA	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	1	NA	1 U	1 U	1 U
2-Butanone	21262.1	10	10	NA	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	10 U	10 U	10 U
Acetone	32613.3	10	10	NA	10 U	10 U	10 U
Benzene	5	1	1	NA	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	1	NA	1 U	1 U	1 U
Bromoform	8.51032	1	1	NA	1 U	1 U	1 U
Bromomethane	47.7570	1	1	NA	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	1	NA	1 U	1 U	1 U
Carbon Tetrachloride	5	1	1	NA	1 U	1 U	1 U

TABLE 3-33
ANALYTICAL RESULTS FOR WELL AA-11
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	1 U	1 U
Chloroform	1.61648	14	19	NA	**14**	**18**	**19**
Chloromethane	81.1111	1	1	NA	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	NA	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	NA	1 U	1 U	1 U
Methylene Chloride	5	1	1	NA	1 U	1 U	1 U
Naphthalene	4.29412	1	1	NA	1 U	1 U	1 U
Styrene	100	1	1	NA	1 U	1 U	1 U
Tetrachloroethene	5	4.1	6.4	NA	4.1	**6.4**	4.7
Toluene	1000	1	1	NA	1 U	1 U	1 U
Total Trihalomethanes [e]	80	14	19	NA	14	18	19
Trans-1,2-Dichloroethene	100	1	1	NA	1 U	1 U	1 U
Trichloroethene	5	1.1	1.4	NA	1.1	1.4	1.3
Trichlorofluoromethane	9890.32	1	1	NA	1 U	1 U	1 U
Vinyl Chloride	2	1	1	NA	1 U	1 U	1 U
Xylene (Total)	10000	2	2	NA	2 U	2 U	2 U

TABLE 3-33
ANALYTICAL RESULTS FOR WELL AA-11
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-34
ANALYTICAL RESULTS FOR WELL AA-20
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		77	87	NA	87	85	86
ANIONS (reported in mg/L)							
Chloride	250	1100	1100	NA	**1100**	**1100**	**1100**
Nitrate	10	11	19	NA	**12**	**12**	**11**
Perchlorate [g]	0.018	4.7	6.6	NA	**5.6**	**5.2**	**4.7**
Sulfate	250	2300	2700	NA	**2600**	**2700**	**2700**
GENERAL							
Fluoride	4	0.57	1	NA	0.61	0.57	1 U
Nitrite	1	0.5	1	NA	0.5 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		1.65	1.65	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	13.33	13.33	NA	NA	NA	NA
Beta (Total)	50	34	34	NA	NA	NA	NA
Uranium 238		5.94	5.94	NA	NA	NA	NA
Uranium 234		7.11	7.11	NA	NA	NA	NA
Thorium 230		-0.044	-0.044	NA	NA	NA	NA
Radium 226	5	0.425	0.425	NA	NA	NA	NA
Radon 222	300	2730	2730	NA	NA	NA	NA
Lead 214		10.6	10.6	NA	NA	NA	NA
Bismuth 214		4.35	4.35	NA	NA	NA	NA
Lead 210		0.802	0.802	NA	NA	NA	NA
Thorium 232		-0.00435	-0.00435	NA	NA	NA	NA
Radium 228	5	0.842	0.842	NA	NA	NA	NA
Radium MCL [d]	5	1.27	1.27	NA	NA	NA	NA
Actinium-228		9.44	9.44	NA	NA	NA	NA
Thorium 228		0.0205	0.0205	NA	NA	NA	NA
Lead 212		-0.103	-0.103	NA	NA	NA	NA
Bismuth 212		6.63	6.63	NA	NA	NA	NA
Thallium 208		-0.434	-0.434	NA	NA	NA	NA
Potassium 40		8.95	8.95	NA	NA	NA	NA

TABLE 3-34
ANALYTICAL RESULTS FOR WELL AA-20
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.28	0.28	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		-212	-212	NA	NA	NA	NA
Radium-224		-0.103	-0.103	NA	NA	NA	NA
Thorium-227		-3.52	-3.52	NA	NA	NA	NA
Thorium-234		-1.44	-1.44	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5500	6300	NA	**5600**	**5500**	**6000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	22	500	NA	22 J-	500 U	500 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	95	110	NA	**99**	**110**	**110**
Barium	2000	4.6	9.2	NA	9.2 U	4.6 J-	5.9 J-
Beryllium	4	0.33	10	NA	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	0.37	25	NA	0.37 U	**25 U [f]**	**25 U [f]**
Calcium		600000	630000	NA	600000	610000	630000
Chromium	100	52	73	NA	61	52	56
Chromium VI	100	70	95	NA	80	70	NA
Cobalt	10.95	0.53	50	NA	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	10	50	NA	10 U	50 U	50 U
Iron	25550	17	500	NA	20 U	500 U	500 U
Lead	15	2.5	15	NA	2.5 U	15 U	15 U
Lithium	73	290	350	NA	**340**	**290 J+**	**320 J+**
Magnesium	206955	230000	260000	NA	**230000**	**240000**	**260000**
Manganese	5110	0.56	50	NA	1 U	50 U	50 U
Mercury	2	0.2	0.2	NA	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	210	390	NA	**210**	**300**	**390**
Nickel	730	2.7	100	NA	3.3 U	100 U	100 U
Phosphorus	0.73	0.05	1000	NA	0.05 U	0.05 U	0.05 U

TABLE 3-34
ANALYTICAL RESULTS FOR WELL AA-20
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		47000	60000	NA	59000 J+	47000	47000 J+
Selenium	50	29	92	NA	**73**	**75**	**92**
Silicon		34000	39000	NA	35000	34000	39000
Silver	182.5	0.83	50	NA	10 U	50 U	50 U
Sodium		690000	740000	NA	690000 J+	740000	710000
Thallium	2	0.23	0.34	NA	0.28	0.26	0.23
Tin	21900	4.2	250	NA	4.2 U	250 U	250 U
Titanium	146000	20	100	NA	20 U	100 U	100 U
Uranium	30	19	21	NA	20	20	21
Vanadium	182.5	33	41	NA	35	33 J-	41 J
Zinc	10950	20	240	NA	240	100 U	100 U
Zirconium		5.8	20	NA	20 U	12 J-	5.8 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	4	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	4	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.17	4	NA	1 U	2 U	0.17 J
1,1-Dichloroethene	7	0.2	4	NA	1 U	2 U	0.2 J
1,2-Dichloroethane	0.123	1	4	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	4	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	4	NA	1 U	2 U	1 U
2-Butanone	21262.1	10	40	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	40	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 U	10 U
Benzene	5	1	4	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	4	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	4	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	4	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	4	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	0.87	1.4	NA	0.87 J	1.4 J	0.95 J

TABLE 3-34
ANALYTICAL RESULTS FOR WELL AA-20
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	4	NA	1 U	2 U	1 U
Chloroform	1.61648	78	110	NA	**78**	**86**	**85**
Chloromethane	81.1111	1	4	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	4	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	4	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	4	NA	1 U	2 U	1 U
Methylene Chloride	5	1	3.3	NA	1 U	2 U	1 U
Naphthalene	4.29412	1	4	NA	1 U	2 U	1 U
Styrene	100	1	4	NA	1 U	2 U	1 U
Tetrachloroethene	5	6.3	9.3	NA	**6.3**	**9.3**	**6.4**
Toluene	1000	1	4	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	78	110	NA	78	**86**	**85**
Trans-1,2-Dichloroethene	100	1	4	NA	1 U	2 U	1 U
Trichloroethene	5	0.31	4	NA	0.31 J	0.56 J	1
Trichlorofluoromethane	9890.32	1	4	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	4	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-34
ANALYTICAL RESULTS FOR WELL AA-20
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-35
ANALYTICAL RESULTS FOR WELL AA-27
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		130	130	NA	130	130	130
ANIONS (reported in mg/L)							
Chloride	250	420	450	NA	**420**	**430**	**450**
Nitrate	10	12	13	NA	**12**	**13**	**12**
Perchlorate [g]	0.018	0.26	0.27	NA	**0.27**	**0.26**	**0.26**
Sulfate	250	2300	2400	NA	**2300**	**2400**	**2300**
GENERAL							
Fluoride	4	1.9	2.1	NA	2	1.9	2.1
Nitrite	1	0.5	0.5	NA	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-35
ANALYTICAL RESULTS FOR WELL AA-27
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	4000	4300	NA	**4100**	**4300**	**4000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	26	180	NA	180	97 U	26 J-
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**20 U [f]**
Arsenic	10	41	42	NA	**41**	**41**	**42**
Barium	2000	8.3	13	NA	13 U	8.3 J-	11 J
Beryllium	4	2	10	NA	2 U	**10 U [f]**	2 U
Cadmium	5	5	25	NA	5 U	**25 U [f]**	5 U
Calcium		550000	560000	NA	550000	560000 J-	550000
Chromium	100	16	23	NA	23	16 J-	23
Chromium VI	100	29	34	NA	29 J-	34	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	10 U
Copper	1300	10	50	NA	10 U	50 U	10 U
Iron	25550	42	140	NA	140	49 U	42 U
Lead	15	1.9	15	NA	2.1 U	15 U	1.9 J
Lithium	73	220	270	NA	**270**	**220 J+**	**270 J+**
Magnesium	206955	170000	180000	NA	180000	180000 J-	170000
Manganese	5110	1	4.5	NA	4.5 U	1.2 J-	1 J-
Mercury	2	0.016	0.2	NA	0.019 J	0.2 U	0.016 U
Molybdenum	182.5	25	31	NA	30	25 J-	31
Nickel	730	2.1	100	NA	3.3 U	100 U	2.1 J
Phosphorus	0.73	0.05	1000	NA	0.05 U	0.05 U	0.05 U

TABLE 3-35
ANALYTICAL RESULTS FOR WELL AA-27
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		10000	14000	NA	14000 J+	10000	12000 J+
Selenium	50	6.8	25	NA	8.6	25 U	6.8
Silicon		37000	38000	NA	38000	38000 J-	37000
Silver	182.5	10	50	NA	10 U	50 U	10 U
Sodium		390000	430000	NA	390000 J+	420000 J-	430000 J+
Thallium	2	0.03	0.2	NA	0.03 U	0.2 U	0.06 U
Tin	21900	50	250	NA	50 U	250 U	50 U
Titanium	146000	3.7	100	NA	3.7 J-	100 U	20 U
Uranium	30	63	69	NA	**66**	**69**	**63**
Vanadium	182.5	14	15	NA	14	15 U	14
Zinc	10950	0.84	100	NA	8.4 U	100 U	0.84 U
Zirconium		5.4	20	NA	20 U	5.4 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethene	7	1	1	NA	1 U	1 U	1 U
1,2-Dichloroethane	0.123	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	1	NA	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	1	NA	1 U	1 U	1 U
2-Butanone	21262.1	10	10	NA	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	10 U	10 U	10 U
Acetone	32613.3	10	10	NA	10 U	10 U	10 U
Benzene	5	1	1	NA	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	1	NA	1 U	1 U	1 U
Bromoform	8.51032	1	1	NA	1 U	1 U	1 U
Bromomethane	47.7570	1	1	NA	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	1	NA	1 U	1 U	1 U
Carbon Tetrachloride	5	1	1	NA	1 U	1 U	1 U

TABLE 3-35
ANALYTICAL RESULTS FOR WELL AA-27
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	1 U	1 U
Chloroform	1.61648	1.3	1.8	NA	1.3	1.5	**1.8**
Chloromethane	81.1111	1	1	NA	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	NA	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	NA	1 U	1 U	1 U
Methylene Chloride	5	1	1	NA	1 U	1 U	1 U
Naphthalene	4.29412	1	1	NA	1 U	1 U	1 U
Styrene	100	1	1	NA	1 U	1 U	1 U
Tetrachloroethene	5	1	1	NA	1 U	1 U	1 U
Toluene	1000	1	1	NA	1 U	1 U	1 U
Total Trihalomethanes [e]	80	1.3	1.8	NA	1.3	1.5	1.8
Trans-1,2-Dichloroethene	100	1	1	NA	1 U	1 U	1 U
Trichloroethene	5	1	1	NA	1 U	1 U	1 U
Trichlorofluoromethane	9890.32	1	1	NA	1 U	1 U	1 U
Vinyl Chloride	2	1	1	NA	1 U	1 U	1 U
Xylene (Total)	10000	2	2	NA	2 U	2 U	2 U

TABLE 3-35
ANALYTICAL RESULTS FOR WELL AA-27
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-36
ANALYTICAL RESULTS FOR WELL AA-UW1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		40	86	NA	86	40	85
ANIONS (reported in mg/L)							
Chloride	250	400	440	NA	**400 J**	**440**	**410**
Nitrate	10	4	5.4	NA	4.7 J	5.4	4
Perchlorate [g]	0.018	0.68	0.81	NA	**0.81 J**	**0.68**	**0.78**
Sulfate	250	2200	2300	NA	**2200 J**	**2300**	**2300**
GENERAL							
Fluoride	4	0.9	1.4	NA	1.3 J	1.4	0.9
Nitrite	1	0.5	0.5	NA	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-36
ANALYTICAL RESULTS FOR WELL AA-UW1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	3900	4000	NA	**3900**	**3900**	**4000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	40	500	NA	40 J-	500 U	450
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**20 U [f]**
Arsenic	10	61	100	NA	**81**	**61**	**100**
Barium	2000	7.8	23	NA	16 U	7.8 J-	23 J
Beryllium	4	2	10	NA	2 U	**10 U [f]**	2 U
Cadmium	5	0.34	25	NA	5 U	**25 U [f]**	0.34 J-
Calcium		450000	590000	NA	500000 J	590000 J-	450000
Chromium	100	12	50	NA	12	50 U	21
Chromium VI	100	10	12	NA	12	10 U	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	10 U
Copper	1300	10	50	NA	10 U	50 U	10 U
Iron	25550	52	450	NA	52 U	75 U	450
Lead	15	1.6	15	NA	1.6 U	15 U	3 U
Lithium	73	170	200	NA	**200**	**170 J+**	**190 J+**
Magnesium	206955	200000	210000	NA	200000 J	200000 J-	**210000**
Manganese	5110	30	36	NA	30	36 J-	31
Mercury	2	0.029	0.2	NA	0.2 U	0.042 J-	0.029 U
Molybdenum	182.5	22	40	NA	35	22 J-	40
Nickel	730	2.9	100	NA	3.1 U	100 U	2.9 J
Phosphorus	0.73	0.05	1000	NA	0.082	0.05 U	0.061

TABLE 3-36
ANALYTICAL RESULTS FOR WELL AA-UW1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		7800	13000	NA	12000 J+	7800	13000 J+
Selenium	50	5	25	NA	8.3	25 U	5 U
Silicon		39000	41000	NA	39000	39000 J-	41000
Silver	182.5	10	50	NA	10 U	50 U	10 U
Sodium		260000	360000	NA	270000 J+	260000 J-	360000 J+
Thallium	2	0.04	0.2	NA	0.2 U	0.04 U	0.07 U
Tin	21900	50	250	NA	50 U	250 U	50 U
Titanium	146000	14	100	NA	20 U	100 U	14 J-
Uranium	30	31	52	NA	**42**	**52**	**31**
Vanadium	182.5	36	39	NA	36	39 U	36
Zinc	10950	1.8	100	NA	1.8 U	100 U	14 U
Zirconium		20	100	NA	20 U	100 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	2	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	2	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.86	1.1	NA	0.93 J	0.86 J	1.1
1,1-Dichloroethene	7	5.9	7.5	NA	6.1	5.9	**7.5**
1,2-Dichloroethane	0.123	1	2	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	2	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	2	NA	1 U	2 U	1 U
2-Butanone	21262.1	10	20	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 U	10 U
Benzene	5	1	2	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	2	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	2	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	2	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	2	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	1	2	NA	1 U	2 U	1 U

TABLE 3-36
ANALYTICAL RESULTS FOR WELL AA-UW1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	2	NA	1 U	2 U	1 U
Chloroform	1.61648	0.95	1.3	NA	0.96 J	0.95 J	1.3
Chloromethane	81.1111	1	2	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	2	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	2	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	2	NA	1 U	2 U	1 U
Methylene Chloride	5	1	2	NA	1 U	2 U	1 U
Naphthalene	4.29412	1	2	NA	1 U	2 U	1 U
Styrene	100	1	2	NA	1 U	2 U	1 U
Tetrachloroethene	5	27	61	NA	**56**	**61**	**27**
Toluene	1000	1	2	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	0.95	1.3	NA	0.96	0.95	1.3
Trans-1,2-Dichloroethene	100	1	2	NA	1 U	2 U	1 U
Trichloroethene	5	0.39	0.51	NA	0.42 J	0.39 J	0.51 J
Trichlorofluoromethane	9890.32	1	2	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	2	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-36
ANALYTICAL RESULTS FOR WELL AA-UW1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-37
ANALYTICAL RESULTS FOR WELL DBMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		68	69	NA	69	69	68
ANIONS (reported in mg/L)							
Chloride	250	950	1100	NA	**950**	**1100 J**	**1000**
Nitrate	10	8.7	9.5	NA	8.7	9.5 J	9.2
Perchlorate [g]	0.018	7.6	8.6	NA	**7.8**	**8.6 J**	**7.6**
Sulfate	250	2600	2800	NA	**2600**	**2800 J**	**2700**
GENERAL							
Fluoride	4	0.71	1	NA	1 U	0.71 J	1 U
Nitrite	1	0.5	1	NA	1 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-37
ANALYTICAL RESULTS FOR WELL DBMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5500	5800	NA	**5500**	**5800**	**5700**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	68	500	NA	68 U	86 U	500 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	98	100	NA	**100**	**98**	**98**
Barium	2000	5.1	12	NA	11 J-	5.1 J-	12 J-
Beryllium	4	2	10	NA	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	5	25	NA	5 U	**25 U [f]**	**25 U [f]**
Calcium		630000	680000	NA	680000	630000 J-	630000
Chromium	100	40	47	NA	45	40 J-	47 J-
Chromium VI	100	55	64	NA	55	64	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	10	50	NA	10 U	50 U	50 U
Iron	25550	52	500	NA	52 U	500 U	500 U
Lead	15	3	15	NA	3 U	15 U	15 U
Lithium	73	390	470	NA	**470**	**390 J+**	**410 J+**
Magnesium	206955	270000	270000	NA	**270000**	**270000 J-**	**270000**
Manganese	5110	1.7	50	NA	1.7 J-	50 U	50 U
Mercury	2	0.2	0.2	NA	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	740	800	NA	**740**	**790**	**800**
Nickel	730	1.5	100	NA	1.5 J-	100 U	100 U
Phosphorus	0.73	0.05	1000	NA	0.064	0.062	0.05 U

TABLE 3-37
ANALYTICAL RESULTS FOR WELL DBMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		62000	74000	NA	74000	63000 J	62000 J+
Selenium	50	94	100	NA	**96**	**94**	**100**
Silicon		32000	36000	NA	32000	33000 J-	36000
Silver	182.5	10	50	NA	10 U	50 U	50 U
Sodium		630000	650000	NA	640000	630000 J-	650000
Thallium	2	0.07	0.2	NA	0.2 U	0.07 U	0.13 U
Tin	21900	50	250	NA	50 U	250 U	250 U
Titanium	146000	20	100	NA	20 U	100 U	100 U
Uranium	30	9.1	9.5	NA	9.2	9.1	9.5
Vanadium	182.5	30	34	NA	30	32 U	34 J
Zinc	10950	8	250	NA	250	100 U	8 U
Zirconium		12	100	NA	20 U	100 U	12 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	5	NA	1 U	5 U	1 U
1,1,2-Trichloroethane	5	1	5	NA	1 U	5 U	1 U
1,1-Dichloroethane	11.7950	1	5	NA	1 U	5 U	1 U
1,1-Dichloroethene	7	1	5	NA	1 U	5 U	1 U
1,2-Dichloroethane	0.123	1	5	NA	**1 U [f]**	**5 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	5	NA	1 U	5 U	1 U
1,3-Dichlorobenzene	109.091	1	5	NA	1 U	5 U	1 U
2-Butanone	21262.1	10	50	NA	10 U	50 U	10 U
4-Methyl-2-Pentanone	2900.66	10	50	NA	10 U	50 U	10 U
Acetone	32613.3	10	50	NA	10 U	50 U	10 U
Benzene	5	1	5	NA	1 U	5 U	1 U
Bromodichloromethane	1.08438	1	5	NA	1 U	**5 U [f]**	1 U
Bromoform	8.51032	1	5	NA	1 U	5 U	1 U
Bromomethane	47.7570	1	5	NA	1 U	5 U	1 U
Carbon Disulfide	3524.14	1	5	NA	1 U	5 U	1 U
Carbon Tetrachloride	5	1	5	NA	1 U	5 U	1 U

TABLE 3-37
ANALYTICAL RESULTS FOR WELL DBMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	5	NA	1 U	5 U	1 U
Chloroform	1.61648	51	64	NA	**51**	**63**	**64**
Chloromethane	81.1111	1	5	NA	1 U	5 U	1 U
cis-1,2-Dichloroethene	70	1	5	NA	1 U	5 U	1 U
Dibromochloromethane	0.69718	1	5	NA	**1 U [f]**	**5 U [f]**	**1 U [f]**
Ethylbenzene	700	1	5	NA	1 U	5 U	1 U
Methylene Chloride	5	1	5	NA	1 U	5 U	1 U
Naphthalene	4.29412	1	5	NA	1 U	**5 U [f]**	1 U
Styrene	100	1	5	NA	1 U	5 U	1 U
Tetrachloroethene	5	1	5	NA	1 U	5 U	1 U
Toluene	1000	1	5	NA	1 U	5 U	1 U
Total Trihalomethanes [e]	80	51	64	NA	51	63	64
Trans-1,2-Dichloroethene	100	1	5	NA	1 U	5 U	1 U
Trichloroethene	5	1	5	NA	1 U	5 U	1 U
Trichlorofluoromethane	9890.32	1	5	NA	1 U	5 U	1 U
Vinyl Chloride	2	1	5	NA	1 U	**5 U [f]**	1 U
Xylene (Total)	10000	2	10	NA	2 U	10 U	2 U

TABLE 3-37
ANALYTICAL RESULTS FOR WELL DBMW-1
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-38
ANALYTICAL RESULTS FOR WELL DBMW-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		60	67	NA	60	67	66
ANIONS (reported in mg/L)							
Chloride	250	1500	1900	NA	**1500**	**1900 J**	**1900 J**
Nitrate	10	14	15	NA	**14**	**15 J**	**14 J**
Perchlorate [g]	0.018	8.1	10	NA	**8.1**	**10 J**	**9.2 J**
Sulfate	250	3200	3800	NA	**3200**	**3800 J**	**3500 J**
GENERAL							
Fluoride	4	0.52	1	NA	1 U	0.52 J	1 UJ
Nitrite	1	0.5	1	NA	1 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-38
ANALYTICAL RESULTS FOR WELL DBMW-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	7500	8300	NA	**7500**	**8300**	**8200**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	210	2200	NA	2200	210 U	500 U
Antimony	6	6.7	100	NA	**6.7 J**	**100 U [f]**	**100 U [f]**
Arsenic	10	94	100	NA	**100**	**98**	**94**
Barium	2000	5.2	32	NA	32 J-	5.2 J-	5.7 J-
Beryllium	4	2	10	NA	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	5	25	NA	5 U	**25 U [f]**	**25 U [f]**
Calcium		550000	650000	NA	650000	570000 J-	550000 J
Chromium	100	53	60	NA	57	53	60
Chromium VI	100	68	69	NA	68	69	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	1.6	50	NA	1.6 J-	50 U	50 U
Iron	25550	200	2700	NA	2700	200 U	500 U
Lead	15	3	15	NA	3 U	15 U	15 U
Lithium	73	540	550	NA	**540**	**550 J+**	**540 J+**
Magnesium	206955	390000	450000	NA	**390000**	**450000 J-**	**450000 J**
Manganese	5110	2.3	50	NA	39	2.3 J-	50 U
Mercury	2	0.2	0.2	NA	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	1200	2100	NA	**1200**	**2100**	**2000**
Nickel	730	3.5	100	NA	3.5 J-	100 U	100 U
Phosphorus	0.73	0.058	1000	NA	0.19	0.21	0.058

TABLE 3-38
ANALYTICAL RESULTS FOR WELL DBMW-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		140000	160000	NA	140000	160000 J	160000 J+
Selenium	50	110	180	NA	**110**	**180**	**180**
Silicon		25000	31000	NA	25000	30000 J-	31000
Silver	182.5	10	50	NA	10 U	50 U	50 U
Sodium		960000	1200000	NA	960000	1200000 J-	1100000
Thallium	2	0.25	0.36	NA	0.36	0.25	0.3
Tin	21900	50	250	NA	50 U	250 U	250 U
Titanium	146000	78	100	NA	78	100 U	100 U
Uranium	30	7.4	7.5	NA	7.4	7.5	7.4
Vanadium	182.5	34	42	NA	42	35 U	34 J
Zinc	10950	26	140	NA	140	100 U	26 U
Zirconium		1.7	12	NA	1.7 J-	7.3 U	12 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethene	7	1	1	NA	1 U	1 U	1 U
1,2-Dichloroethane	0.123	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	1	NA	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	1	NA	1 U	1 U	1 U
2-Butanone	21262.1	10	10	NA	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	10 U	10 U	10 U
Acetone	32613.3	10	10	NA	10 U	10 U	10 U
Benzene	5	1	1	NA	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	1	NA	1 U	1 U	1 U
Bromoform	8.51032	1	1	NA	1 U	1 U	1 U
Bromomethane	47.7570	1	1	NA	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	1	NA	1 U	1 U	1 U
Carbon Tetrachloride	5	0.22	1	NA	0.22 J	1 U	1 U

TABLE 3-38
ANALYTICAL RESULTS FOR WELL DBMW-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	1 U	1 U
Chloroform	1.61648	57	59	NA	**58**	**57**	**59**
Chloromethane	81.1111	1	1	NA	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	1	1	NA	1 U	1 U	1 U
Dibromochloromethane	0.69718	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	NA	1 U	1 U	1 U
Methylene Chloride	5	1	1	NA	1 U	1 U	1 U
Naphthalene	4.29412	1	1	NA	1 U	1 U	1 U
Styrene	100	1	1	NA	1 U	1 U	1 U
Tetrachloroethene	5	1	1	NA	1 U	1 U	1 U
Toluene	1000	1	1	NA	1 U	1 U	1 U
Total Trihalomethanes [e]	80	57	59	NA	58	57	59
Trans-1,2-Dichloroethene	100	1	1	NA	1 U	1 U	1 U
Trichloroethene	5	1	1	NA	1 U	1 U	1 U
Trichlorofluoromethane	9890.32	1	1	NA	1 U	1 U	1 U
Vinyl Chloride	2	1	1	NA	1 U	1 U	1 U
Xylene (Total)	10000	2	2	NA	2 U	2 U	2 U

TABLE 3-38
ANALYTICAL RESULTS FOR WELL DBMW-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-39
ANALYTICAL RESULTS FOR WELL DBMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		90	100	NA	100	90	91
ANIONS (reported in mg/L)							
Chloride	250	890	990	NA	**890**	**980**	**990**
Nitrate	10	24	25	NA	**25**	**25**	**24**
Perchlorate [g]	0.018	4.3	4.5	NA	**4.3**	**4.4**	**4.5**
Sulfate	250	2500	2600	NA	**2500**	**2600**	**2600**
GENERAL							
Fluoride	4	0.57	1	NA	0.76	0.57	1 U
Nitrite	1	0.5	1	NA	0.5 U	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-39
ANALYTICAL RESULTS FOR WELL DBMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5100	5600	NA	**5100**	**5600**	**5400**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	200	500	NA	200	500 U	500 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	75	100	NA	**75**	**99**	**100**
Barium	2000	5.5	18	NA	18 J-	12 J-	5.5 J-
Beryllium	4	2	10	NA	2 U	**10 U [f]**	**10 U [f]**
Cadmium	5	5	25	NA	5 U	**25 U [f]**	**25 U [f]**
Calcium		600000	630000	NA	630000	600000	630000
Chromium	100	55	65	NA	55	60	65
Chromium VI	100	70	81	NA	70	81	NA
Cobalt	10.95	10	50	NA	10 U	**50 U [f]**	**50 U [f]**
Copper	1300	10	50	NA	10 U	50 U	50 U
Iron	25550	190	500	NA	280	190 U	500 U
Lead	15	3	15	NA	3 U	15 U	15 U
Lithium	73	320	410	NA	**410**	**320 J+**	**350 J+**
Magnesium	206955	240000	250000	NA	**250000**	**240000**	**250000**
Manganese	5110	1.1	11	NA	5.1 J-	11 U	1.1 J-
Mercury	2	0.2	0.2	NA	0.2 U	0.2 U	0.2 U
Molybdenum	182.5	66	77	NA	77	66	68
Nickel	730	3.5	100	NA	3.5 J-	100 U	100 U
Phosphorus	0.73	0.05	1000	NA	0.1	0.069	0.05 U

TABLE 3-39
ANALYTICAL RESULTS FOR WELL DBMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		91000	98000	NA	96000	91000	98000 J+
Selenium	50	18	25	NA	18	25 U	19 J
Silicon		32000	36000	NA	34000	32000	36000
Silver	182.5	10	50	NA	10 U	50 U	50 U
Sodium		590000	630000	NA	600000	590000	630000
Thallium	2	0.2	0.57	NA	0.2 U	0.44	0.57
Tin	21900	50	250	NA	50 U	250 U	250 U
Titanium	146000	9.7	100	NA	9.7 J-	100 U	100 U
Uranium	30	24	28	NA	28	24	25
Vanadium	182.5	27	48	NA	27	43 J-	48 J
Zinc	10950	9.1	100	NA	9.1 U	100 U	28 U
Zirconium		8.1	100	NA	20 U	100 U	8.1 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	2	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	2	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	1	2	NA	1 U	2 U	1 U
1,1-Dichloroethene	7	1	2	NA	1 U	2 U	1 U
1,2-Dichloroethane	0.123	1	2	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	2	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	2	NA	1 U	2 U	1 U
2-Butanone	21262.1	10	20	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 U	10 U
Benzene	5	1	2	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	2	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	2	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	2	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	2	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	1.4	1.5	NA	1.5	1.4 J	1.5

TABLE 3-39
ANALYTICAL RESULTS FOR WELL DBMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	2	NA	1 U	2 U	1 U
Chloroform	1.61648	66	76	NA	**66**	**76**	NA
Chloromethane	81.1111	1	2	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	2	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	2	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	2	NA	1 U	2 U	1 U
Methylene Chloride	5	1	2	NA	1 U	2 U	1 U
Naphthalene	4.29412	1	2	NA	1 U	2 U	1 U
Styrene	100	1	2	NA	1 U	2 U	1 U
Tetrachloroethene	5	3.2	3.9	NA	3.2	3.8	3.9
Toluene	1000	1	2	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	66	76	NA	66	76	NA
Trans-1,2-Dichloroethene	100	1	2	NA	1 U	2 U	1 U
Trichloroethene	5	1	2	NA	1 U	2 U	1 U
Trichlorofluoromethane	9890.32	1	2	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	2	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	10	NA	2 U	4 U	2 U

TABLE 3-39
ANALYTICAL RESULTS FOR WELL DBMW-4
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-40
ANALYTICAL RESULTS FOR WELL DBMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		79	80	NA	NA	80	79
ANIONS (reported in mg/L)							
Chloride	250	1100	1100	NA	NA	**1100 J**	**1100**
Nitrate	10	25	27	NA	NA	**27 J**	**25**
Perchlorate [g]	0.018	4	4.4	NA	NA	**4 J**	**4.4**
Sulfate	250	2200	2300	NA	NA	**2300 J**	**2200**
GENERAL							
Fluoride	4	0.51	1	NA	NA	0.51 J	1 U
Nitrite	1	0.5	1	NA	NA	0.5 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-40
ANALYTICAL RESULTS FOR WELL DBMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5100	5200	NA	NA	**5200**	**5100**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	170	380	NA	NA	380 J-	170 U
Antimony	6	100	100	NA	NA	**100 U [f]**	**100 U [f]**
Arsenic	10	120	120	NA	NA	**120**	**120**
Barium	2000	7.4	8.8	NA	NA	7.4 J-	8.8 J-
Beryllium	4	10	10	NA	NA	**10 U [f]**	**10 U [f]**
Cadmium	5	25	25	NA	NA	**25 U [f]**	**25 U [f]**
Calcium		660000	700000	NA	NA	660000 J	700000
Chromium	100	63	70	NA	NA	63	70
Chromium VI	100	85	85	NA	NA	85	NA
Cobalt	10.95	50	50	NA	NA	**50 U [f]**	**50 U [f]**
Copper	1300	50	50	NA	NA	50 U	50 U
Iron	25550	180	600	NA	NA	600	180 J-
Lead	15	15	15	NA	NA	15 U	15 U
Lithium	73	340	350	NA	NA	**340 J+**	**350 J+**
Magnesium	206955	230000	240000	NA	NA	**230000 J**	**240000**
Manganese	5110	7.1	50	NA	NA	7.1 U	50 U
Mercury	2	0.2	0.2	NA	NA	0.2 U	0.2 U
Molybdenum	182.5	36	38	NA	NA	36 J-	38 J-
Nickel	730	100	100	NA	NA	100 U	100 U
Phosphorus	0.73	0.05	1000	NA	NA	0.097	0.05 U

TABLE 3-40
ANALYTICAL RESULTS FOR WELL DBMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		77000	81000	NA	NA	77000 J	81000 J+
Selenium	50	20	26	NA	NA	20 J	26
Silicon		30000	32000	NA	NA	30000	32000
Silver	182.5	50	50	NA	NA	50 U	50 U
Sodium		460000	500000	NA	NA	460000 J	500000
Thallium	2	0.28	0.32	NA	NA	0.28	0.32
Tin	21900	250	250	NA	NA	250 U	250 U
Titanium	146000	2.1	100	NA	NA	2.1 J-	100 U
Uranium	30	24	25	NA	NA	25	24
Vanadium	182.5	16	17	NA	NA	16 J-	17 J
Zinc	10950	33	100	NA	NA	100 U	33 U
Zirconium		9.1	100	NA	NA	100 U	9.1 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	2	NA	NA	2 U	1 U
1,1,2-Trichloroethane	5	1	2	NA	NA	2 U	1 U
1,1-Dichloroethane	11.7950	1	2	NA	NA	2 U	1 U
1,1-Dichloroethene	7	1	2	NA	NA	2 U	1 U
1,2-Dichloroethane	0.123	1	2	NA	NA	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	2	NA	NA	2 U	1 U
1,3-Dichlorobenzene	109.091	1	2	NA	NA	2 U	1 U
2-Butanone	21262.1	10	20	NA	NA	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	20	NA	NA	20 U	10 U
Acetone	32613.3	10	20	NA	NA	20 U	10 U
Benzene	5	1	2	NA	NA	2 U	1 U
Bromodichloromethane	1.08438	1	2	NA	NA	**2 U [f]**	1 U
Bromoform	8.51032	1	2	NA	NA	2 U	1 U
Bromomethane	47.7570	1	2	NA	NA	2 U	1 U
Carbon Disulfide	3524.14	1	2	NA	NA	2 U	1 U
Carbon Tetrachloride	5	1.1	1.1	NA	NA	1.1 J	1.1

TABLE 3-40
ANALYTICAL RESULTS FOR WELL DBMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	2	NA	NA	2 U	1 U
Chloroform	1.61648	60	60	NA	NA	**60**	NA
Chloromethane	81.1111	1	2	NA	NA	2 U	1 U
cis-1,2-Dichloroethene	70	1	2	NA	NA	2 U	1 U
Dibromochloromethane	0.69718	1	2	NA	NA	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	2	NA	NA	2 U	1 U
Methylene Chloride	5	1	2	NA	NA	2 U	1 U
Naphthalene	4.29412	1	2	NA	NA	2 U	1 U
Styrene	100	1	2	NA	NA	2 U	1 U
Tetrachloroethene	5	1.7	1.8	NA	NA	1.8 J	1.7
Toluene	1000	1	2	NA	NA	2 U	1 U
Total Trihalomethanes [e]	80	60	60	NA	NA	60	NA
Trans-1,2-Dichloroethene	100	1	2	NA	NA	2 U	1 U
Trichloroethene	5	1	2	NA	NA	2 U	1 U
Trichlorofluoromethane	9890.32	1	2	NA	NA	2 U	1 U
Vinyl Chloride	2	1	2	NA	NA	2 U	1 U
Xylene (Total)	10000	2	10	NA	NA	4 U	2 U

TABLE 3-40
ANALYTICAL RESULTS FOR WELL DBMW-5
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-41
ANALYTICAL RESULTS FOR WELL PC-024
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		74	100	NA	85	87	100
ANIONS (reported in mg/L)							
Chloride	250	2700	4800	NA	**3700**	**4000**	**2700 J**
Nitrate	10	26	47	NA	**38**	**42**	**26 J**
Perchlorate [g]	0.018	15	24	NA	**19**	**24**	**17 J**
Sulfate	250	1900	3300	NA	**1900**	**2200**	**2000 J**
GENERAL							
Fluoride	4	1	1.3	NA	1 U	1 U	1.3 J
Nitrite	1	1	1	NA	1 UJ-	1 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		16.1	16.1	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	28.39	28.39	NA	NA	NA	NA
Beta (Total)	50	38.5	38.5	NA	NA	NA	NA
Uranium 238		11.5	11.5	NA	NA	NA	NA
Uranium 234		16.3	16.3	NA	NA	NA	NA
Thorium 230		0.0104	0.0104	NA	NA	NA	NA
Radium 226	5	0.19	0.19	NA	NA	NA	NA
Radon 222	300	729	729	NA	NA	NA	NA
Lead 214		4.93	4.93	NA	NA	NA	NA
Bismuth 214		15.5	15.5	NA	NA	NA	NA
Lead 210		0.258	0.258	NA	NA	NA	NA
Thorium 232		0.0384	0.0384	NA	NA	NA	NA
Radium 228	5	0.356	0.356	NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228		-16	-16	NA	NA	NA	NA
Thorium 228		0.0311	0.0311	NA	NA	NA	NA
Lead 212		5.3	5.3	NA	NA	NA	NA
Bismuth 212		3.75	3.75	NA	NA	NA	NA
Thallium 208		3.29	3.29	NA	NA	NA	NA
Potassium 40		18.1	18.1	NA	NA	NA	NA

TABLE 3-41
ANALYTICAL RESULTS FOR WELL PC-024
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.589	0.589	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		500	500	NA	NA	NA	NA
Radium-224		5.3	5.3	NA	NA	NA	NA
Thorium-227		-15.4	-15.4	NA	NA	NA	NA
Thorium-234		5	5	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	7400	12000	NA	**10000**	**9800**	**7400**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	110	530	NA	530	110 U	240
Antimony	6	20	100	NA	**100 U [f]**	**100 U [f]**	**20 U [f]**
Arsenic	10	72	85	NA	**85**	**80**	**72**
Barium	2000	7.2	25	NA	19 J-	7.2 J-	15 J
Beryllium	4	0.43	10	NA	**10 U [f]**	**10 U [f]**	2 U
Cadmium	5	5	25	NA	**25 U [f]**	**25 U [f]**	5 U
Calcium		710000	1200000	NA	1100000	1000000 J-	710000 J
Chromium	100	82	150	NA	**130**	**150**	97
Chromium VI	100	120	210	NA	**160**	**210**	NA
Cobalt	10.95	1	50	NA	**50 U [f]**	**50 U [f]**	10 U
Copper	1300	0.52	50	NA	50 U	50 U	1.6 J-
Iron	25550	54	400	NA	250 U	54 U	200
Lead	15	3	15	NA	15 U	15 U	3 U
Lithium	73	450	700	NA	**530**	**540 J+**	**450 J+**
Magnesium	206955	260000	470000	NA	**410000**	**410000 J-**	**260000 J**
Manganese	5110	1.9	9	NA	4.4 J-	1.9 J-	6.2 J-
Mercury	2	0.011	0.2	NA	0.019 J	0.2 U	0.036 U
Molybdenum	182.5	85	93	NA	93	90	85
Nickel	730	2.4	100	NA	100 U	100 U	3.8 J
Phosphorus	0.73	0.053	1000	NA	0.072	0.068	0.053

TABLE 3-41
ANALYTICAL RESULTS FOR WELL PC-024
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		31000	50000	NA	31000	36000	32000 J+
Selenium	50	3.5	25	NA	25 U	25 U	3.5 U
Silicon		33000	35000	NA	33000	35000 J-	35000
Silver	182.5	10	50	NA	50 U	50 U	10 U
Sodium		1200000	1900000	NA	1400000	1500000 J-	1200000 J+
Thallium	2	0.04	0.2	NA	0.2 U	0.04 U	0.06 U
Tin	21900	50	250	NA	250 U	250 U	50 U
Titanium	146000	5.6	100	NA	5.6 J-	100 U	6.8 J-
Uranium	30	35	47	NA	**43**	**41**	**47**
Vanadium	182.5	23	28	NA	28 J-	25 U	23
Zinc	10950	3.6	100	NA	3.6 U	100 U	6.3 U
Zirconium		4.7	20	NA	6.9 J-	4.7 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	20	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	20	NA	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	0.24	20	NA	0.28 J	0.37 J	0.24 J
1,1-Dichloroethene	7	2.2	20	NA	2.6	3.2	2.2
1,2-Dichloroethane	0.123	1	20	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	20	NA	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	20	NA	1 U	1 U	1 U
2-Butanone	21262.1	10	200	NA	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	200	NA	10 U	10 U	10 U
Acetone	32613.3	10	10	NA	10 U	10 U	10 U
Benzene	5	1	20	NA	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	20	NA	1 U	1 U	1 U
Bromoform	8.51032	1	20	NA	1 U	1 U	1 U
Bromomethane	47.7570	1	20	NA	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	20	NA	1 U	1 U	1 U
Carbon Tetrachloride	5	4.4	20	NA	5	**5.6**	4.4

TABLE 3-41
ANALYTICAL RESULTS FOR WELL PC-024
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	20	NA	1 U	1 U	1 U
Chloroform	1.61648	400	730	NA	**570**	**730**	**400**
Chloromethane	81.1111	1	20	NA	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	0.17	20	NA	1 U	0.17 J	1 U
Dibromochloromethane	0.69718	1	20	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	20	NA	1 U	1 U	1 U
Methylene Chloride	5	1	20	NA	1 U	1 U	1 U
Naphthalene	4.29412	1	20	NA	1 U	1 U	1 U
Styrene	100	1	20	NA	1 U	1 U	1 U
Tetrachloroethene	5	1.9	20	NA	1.9	2.9	2.2
Toluene	1000	1	20	NA	1 U	1 U	1 U
Total Trihalomethanes [e]	80	400	730	NA	**570**	**730**	**400**
Trans-1,2-Dichloroethene	100	1	20	NA	1 U	1 U	1 U
Trichloroethene	5	0.71	20	NA	0.74 J	0.97 J	0.71 J
Trichlorofluoromethane	9890.32	1	20	NA	1 U	1 U	1 U
Vinyl Chloride	2	1	20	NA	1 U	1 U	1 U
Xylene (Total)	10000	2	2	NA	2 U	2 U	2 U

TABLE 3-41
ANALYTICAL RESULTS FOR WELL PC-024
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-42
ANALYTICAL RESULTS FOR WELL PC-028
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		86	100	NA	98	98	100
ANIONS (reported in mg/L)							
Chloride	250	900	1200	NA	**1100 J**	**1000**	**900 J**
Nitrate	10	30	37	NA	**36 J**	**37**	**33 J**
Perchlorate [g]	0.018	44	520	NA	**44 J**	**450**	**410 J**
Sulfate	250	2100	2300	NA	**2200 J**	**2300**	**2100 J**
GENERAL							
Fluoride	4	1	1.2	NA	1 UJ	1.2	1 UJ
Nitrite	1	1	1	NA	1 U	1 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		42.5	42.5	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	28.44	28.44	NA	NA	NA	NA
Beta (Total)	50	31.7	31.7	NA	NA	NA	NA
Uranium 238		29.2	29.2	NA	NA	NA	NA
Uranium 234		40.1	40.1	NA	NA	NA	NA
Thorium 230		0.287	0.287	NA	NA	NA	NA
Radium 226	5	1.26	1.26	NA	NA	NA	NA
Radon 222	300	534	534	NA	NA	NA	NA
Lead 214		4.38	4.38	NA	NA	NA	NA
Bismuth 214		14.1	14.1	NA	NA	NA	NA
Lead 210		0.496	0.496	NA	NA	NA	NA
Thorium 232		0.126	0.126	NA	NA	NA	NA
Radium 228	5	0.77	0.77	NA	NA	NA	NA
Radium MCL [d]	5	1.26	1.26	NA	NA	NA	NA
Actinium-228		14.2	14.2	NA	NA	NA	NA
Thorium 228		0.189	0.189	NA	NA	NA	NA
Lead 212		2.26	2.26	NA	NA	NA	NA
Bismuth 212		27.7	27.7	NA	NA	NA	NA
Thallium 208		1.52	1.52	NA	NA	NA	NA
Potassium 40		-7.13	-7.13	NA	NA	NA	NA

TABLE 3-42
ANALYTICAL RESULTS FOR WELL PC-028
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		1.64	1.64	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		394	394	NA	NA	NA	NA
Radium-224		2.26	2.26	NA	NA	NA	NA
Thorium-227		11.6	11.6	NA	NA	NA	NA
Thorium-234		17	17	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	6800	7500	NA	**6800 J**	**6900**	**7000 J**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	230	3000	NA	230 U	410 R	500 U
Antimony	6	20	100	NA	**100 U [f]**	**100 R**	**100 U [f]**
Arsenic	10	170	240	NA	**230**	**170 R**	**240**
Barium	2000	10	53	NA	10 J-	27 R	10 J
Beryllium	4	0.44	10	NA	**10 U [f]**	**10 R**	**10 U [f]**
Cadmium	5	5	25	NA	**25 U [f]**	**25 R**	**25 U [f]**
Calcium		640000	680000	NA	660000 J	680000 R	640000 J
Chromium	100	770	1300	NA	**1300**	**800 R**	**1200**
Chromium VI	100	1000	1500	NA	**1500**	**1400**	NA
Cobalt	10.95	0.78	50	NA	**50 U [f]**	**50 R**	**50 U [f]**
Copper	1300	3.5	50	NA	50 U	50 R	50 U
Iron	25550	39	2400	NA	50 U	260 R	39 J
Lead	15	3	15	NA	15 U	15 R	15 U
Lithium	73	440	580	NA	**440**	**580 R**	**450**
Magnesium	206955	220000	310000	NA	**220000 J**	**310000 R**	**220000 J**
Manganese	5110	5.2	50	NA	50 U	29 R	5.2 J
Mercury	2	0.0095	0.2	NA	0.014 J	0.016 R	0.2 U
Molybdenum	182.5	35	200	NA	38 J-	**200 R**	35 J
Nickel	730	5.4	100	NA	100 U	100 R	100 U
Phosphorus	0.73	0.073	1000	NA	0.073	0.11	0.16

TABLE 3-42
ANALYTICAL RESULTS FOR WELL PC-028
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		9000	35000	NA	9000 J	35000 R	10000 J
Selenium	50	4.7	25	NA	25 U	25 R	25 U
Silicon		36000	42000	NA	36000	40000 R	42000
Silver	182.5	10	50	NA	50 U	50 R	50 U
Sodium		880000	2400000	NA	890000 J	2400000 R	880000 J
Thallium	2	0.02	0.2	NA	0.2 U	0.05 R	0.02 U
Tin	21900	50	250	NA	250 U	250 R	250 U
Titanium	146000	3.9	130	NA	100 U	3.9 R	100 U
Uranium	30	90	150	NA	**120**	**150 R**	**120**
Vanadium	182.5	46	130	NA	120	46 R	130
Zinc	10950	2.9	120	NA	120	100 R	100 U
Zirconium		6.1	100	NA	100 U	100 R	6.1 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	10	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	10	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	1	10	NA	1 U	2 U	1 U
1,1-Dichloroethene	7	1	10	NA	1 U	2 U	1 U
1,2-Dichloroethane	0.123	1	10	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	10	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	10	NA	1 U	2 U	1 U
2-Butanone	21262.1	10	100	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	100	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 R	10 U
Benzene	5	1	10	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	10	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	10	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	10	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	10	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	3.5	7.1	NA	4.6	**5.6**	3.5

TABLE 3-42
ANALYTICAL RESULTS FOR WELL PC-028
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	10	NA	1 U	2 U	1 U
Chloroform	1.61648	76	310	NA	**110**	**150 J**	**76**
Chloromethane	81.1111	1	10	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	10	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	10	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	10	NA	1 U	2 U	1 U
Methylene Chloride	5	1	10	NA	1 U	2 U	1 U
Naphthalene	4.29412	1	10	NA	1 U	2 U	1 U
Styrene	100	1	10	NA	1 U	2 U	1 U
Tetrachloroethene	5	0.6	10	NA	0.6 J	1.1 J	1.1
Toluene	1000	1	10	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	76	310	NA	**110**	**150**	76
Trans-1,2-Dichloroethene	100	1	10	NA	1 U	2 U	1 U
Trichloroethene	5	0.49	10	NA	0.49 J	0.83 J	0.56 J
Trichlorofluoromethane	9890.32	1	10	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	10	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-42
ANALYTICAL RESULTS FOR WELL PC-028
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-43
ANALYTICAL RESULTS FOR WELL PC-054
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		110	120	NA	110	110	110
ANIONS (reported in mg/L)							
Chloride	250	560	730	NA	**560**	**580**	**560**
Nitrate	10	26	34	NA	**31**	**33**	**34**
Perchlorate [g]	0.018	230	270	NA	**230**	**230**	**230**
Sulfate	250	2300	2600	NA	**2300**	**2500**	**2400**
GENERAL							
Fluoride	4	1.2	1.3	NA	1.2	1.3	1.3
Nitrite	1	0.5	1	NA	0.5 U	0.5 U	0.5 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		61.1	61.1	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	48	48	NA	NA	NA	NA
Beta (Total)	50	49.4	49.4	NA	NA	NA	NA
Uranium 238		45.7	45.7	NA	NA	NA	NA
Uranium 234		60.9	60.9	NA	NA	NA	NA
Thorium 230		0.149	0.149	NA	NA	NA	NA
Radium 226	5	2.49	2.49	NA	NA	NA	NA
Radon 222	300	2530	2530	NA	NA	NA	NA
Lead 214		5.13	5.13	NA	NA	NA	NA
Bismuth 214		8.12	8.12	NA	NA	NA	NA
Lead 210		1.32	1.32	NA	NA	NA	NA
Thorium 232		0.0225	0.0225	NA	NA	NA	NA
Radium 228	5	0.905	0.905	NA	NA	NA	NA
Radium MCL [d]	5	3.4	3.4	NA	NA	NA	NA
Actinium-228		-0.109	-0.109	NA	NA	NA	NA
Thorium 228		0.0398	0.0398	NA	NA	NA	NA
Lead 212		-2.66	-2.66	NA	NA	NA	NA
Bismuth 212		-6.28	-6.28	NA	NA	NA	NA
Thallium 208		0.369	0.369	NA	NA	NA	NA
Potassium 40		2.22	2.22	NA	NA	NA	NA

TABLE 3-43
ANALYTICAL RESULTS FOR WELL PC-054
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		2.5	2.5	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		91.8	91.8	NA	NA	NA	NA
Radium-224		-2.66	-2.66	NA	NA	NA	NA
Thorium-227		1.35	1.35	NA	NA	NA	NA
Thorium-234		45.5	45.5	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	5400	7100	NA	**5500**	**5900**	**5400**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	150	3300	NA	200	220 U	150 U
Antimony	6	20	100	NA	**20 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	160	180	NA	**170**	**170**	**180**
Barium	2000	7.7	34	NA	14 J-	7.7 J-	9.7 J
Beryllium	4	0.44	10	NA	2 U	**10 U [f]**	1.2 J
Cadmium	5	5	25	NA	5 U	**25 U [f]**	**25 U [f]**
Calcium		540000	570000	NA	550000	540000 J-	550000
Chromium	100	1400	1900	NA	**1400**	**1500**	**1500**
Chromium VI	100	1800	2500	NA	**1800**	**1800**	NA
Cobalt	10.95	1.1	50	NA	10 U	2.7 U	**50 U [f]**
Copper	1300	3.5	50	NA	10 U	50 U	50 U
Iron	25550	72	2300	NA	200	72 U	500 U
Lead	15	3	15	NA	3 U	15 U	15
Lithium	73	480	760	NA	**570**	**480 J+**	**490 J**
Magnesium	206955	200000	230000	NA	**210000**	200000 J-	**210000**
Manganese	5110	53	120	NA	53	57	53
Mercury	2	0.0098	0.2	NA	0.014 J	0.036 J-	0.2 U
Molybdenum	182.5	24	35	NA	35	24 J-	32 J
Nickel	730	4.2	100	NA	4.2 J-	100 U	100 U
Phosphorus	0.73	0.059	1000	NA	0.089	0.2	0.059

TABLE 3-43
ANALYTICAL RESULTS FOR WELL PC-054
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		17000	25000	NA	24000	17000	17000
Selenium	50	3	25	NA	3 J-	25 U	25 U
Silicon		39000	45000	NA	39000	41000 J-	45000
Silver	182.5	0.74	50	NA	10 U	6.6 J	50 U
Sodium		670000	880000	NA	670000	730000 J-	700000
Thallium	2	0.04	0.2	NA	0.2 U	0.04 U	0.05 U
Tin	21900	50	250	NA	50 U	250 U	250 U
Titanium	146000	9.1	120	NA	9.1 J-	100 U	100 U
Uranium	30	100	160	NA	**110**	**100**	**110**
Vanadium	182.5	83	99	NA	83	88	99
Zinc	10950	4.7	200	NA	200	100 U	100 U
Zirconium		3.1	20	NA	20 U	3.1 U	8.8 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	10	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	10	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	1	10	NA	1 U	2 U	1 U
1,1-Dichloroethene	7	1	10	NA	1 U	2 U	1 U
1,2-Dichloroethane	0.123	1	10	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	10	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	2.2	3.7	NA	2.3	2.2	2.3
2-Butanone	21262.1	10	100	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	100	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 U	10 U
Benzene	5	1	10	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	10	NA	1 U	**2 U [f]**	1 U
Bromoform	8.51032	1	10	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	10	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	10	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	0.24	10	NA	0.64 J	2 U	0.24 J

TABLE 3-43
ANALYTICAL RESULTS FOR WELL PC-054
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	10	NA	1 U	2 U	1 U
Chloroform	1.61648	49	320	NA	**72**	**71**	**49**
Chloromethane	81.1111	1	10	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	10	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	1	10	NA	**1 U [f]**	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	10	NA	1 U	2 U	1 U
Methylene Chloride	5	0.29	10	NA	0.29 U	2 U	0.37 U
Naphthalene	4.29412	1	10	NA	1 U	2 U	1 U
Styrene	100	1	10	NA	1 U	2 U	1 U
Tetrachloroethene	5	1.4	3.1	NA	1.4	1.6 J	1.4
Toluene	1000	1	10	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	49	320	NA	72	71	49
Trans-1,2-Dichloroethene	100	1	10	NA	1 U	2 U	1 U
Trichloroethene	5	0.19	10	NA	0.19 J	2 U	1 U
Trichlorofluoromethane	9890.32	1	10	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	10	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-43
ANALYTICAL RESULTS FOR WELL PC-054
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-44
ANALYTICAL RESULTS FOR WELL PC-067
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		120	140	NA	140	130	140
ANIONS (reported in mg/L)							
Chloride	250	3700	4700	NA	**4700 J**	**4000**	**3700 J**
Nitrate	10	41	47	NA	**47**	**45**	**41 J**
Perchlorate [g]	0.018	61	90	NA	**61**	**90**	**73 J**
Sulfate	250	2700	3000	NA	**3000 J**	**2900**	**2900 J**
GENERAL							
Fluoride	4	1.6	2	NA	2 UJ	1.6	2 UJ
Nitrite	1	1	2	NA	**2 U [f]**	1 U	**2 U [f]**
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		69	69	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	55.44	55.44	NA	NA	NA	NA
Beta (Total)	50	113	113	NA	NA	NA	NA
Uranium 238		50.6	50.6	NA	NA	NA	NA
Uranium 234		71.6	71.6	NA	NA	NA	NA
Thorium 230		0.0609	0.0609	NA	NA	NA	NA
Radium 226	5	1.79	1.79	NA	NA	NA	NA
Radon 222	300	1170	1170	NA	NA	NA	NA
Lead 214		56.6	56.6	NA	NA	NA	NA
Bismuth 214		52.6	52.6	NA	NA	NA	NA
Lead 210		0.288	0.288	NA	NA	NA	NA
Thorium 232		0.0342	0.0342	NA	NA	NA	NA
Radium 228	5	0.287	0.287	NA	NA	NA	NA
Radium MCL [d]	5	1.79	1.79	NA	NA	NA	NA
Actinium-228		14.8	14.8	NA	NA	NA	NA
Thorium 228		-0.0169	-0.0169	NA	NA	NA	NA
Lead 212		3.57	3.57	NA	NA	NA	NA
Bismuth 212		36.8	36.8	NA	NA	NA	NA
Thallium 208		4.25	4.25	NA	NA	NA	NA
Potassium 40		41.1	41.1	NA	NA	NA	NA

TABLE 3-44
ANALYTICAL RESULTS FOR WELL PC-067
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		2.24	2.24	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		-44.4	-44.4	NA	NA	NA	NA
Radium-224		3.57	3.57	NA	NA	NA	NA
Thorium-227		-1.52	-1.52	NA	NA	NA	NA
Thorium-234		5.32	5.32	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	11000	12000	NA	**12000**	**11000**	**11000**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	130	590	NA	590	130 R	500 U
Antimony	6	20	100	NA	**100 U [f]**	**100 R**	**100 U [f]**
Arsenic	10	130	230	NA	**170**	**230 R**	**170**
Barium	2000	12	36	NA	31 J-	12 R	26 J
Beryllium	4	0.25	10	NA	**10 U [f]**	**10 R**	**10 U [f]**
Cadmium	5	5	25	NA	**25 U [f]**	**25 R**	**25 U [f]**
Calcium		640000	730000	NA	730000 J	640000 R	650000 J
Chromium	100	540	1200	NA	**690**	**1200 R**	**800**
Chromium VI	100	680	980	NA	**820 J-**	**980**	NA
Cobalt	10.95	1	50	NA	**50 U [f]**	**50 R**	**50 U [f]**
Copper	1300	0.69	50	NA	50 U	50 R	50 U
Iron	25550	110	500	NA	410 U	110 R	500 U
Lead	15	3	15	NA	15 U	15 R	15 U
Lithium	73	440	640	NA	**580**	**440 R**	**540**
Magnesium	206955	210000	340000	NA	**330000**	**210000 R**	**300000 J**
Manganese	5110	2.4	29	NA	29 J-	2.4 R	7.5 J
Mercury	2	0.012	0.2	NA	0.025 J	0.2 R	0.2 U
Molybdenum	182.5	31	220	NA	**220**	31 R	**200**
Nickel	730	5.9	100	NA	100 U	100 R	100 U
Phosphorus	0.73	0.079	1000	NA	0.092	0.1	0.079

TABLE 3-44
ANALYTICAL RESULTS FOR WELL PC-067
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		12000	47000	NA	34000	12000 R	32000 J
Selenium	50	5	25	NA	25 U	25 R	25 U
Silicon		36000	42000	NA	36000	39000 R	42000
Silver	182.5	0.84	50	NA	50 U	50 R	50 U
Sodium		960000	2400000	NA	2300000 J	960000 R	2200000
Thallium	2	0.05	0.2	NA	0.2 U	0.05 R	0.06 U
Tin	21900	50	250	NA	250 U	250 R	250 U
Titanium	146000	11	100	NA	11 J-	100 R	100 U
Uranium	30	110	170	NA	**150**	**110 R**	**140**
Vanadium	182.5	40	120	NA	48 J-	120 R	49 J
Zinc	10950	20	280	NA	280	100 R	100 U
Zirconium		9.3	100	NA	9.3 J-	100 R	14 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	50	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	50	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.27	50	NA	0.3 J	0.48 J	0.27 J
1,1-Dichloroethene	7	1.1	50	NA	1.5	2.2	1.1
1,2-Dichloroethane	0.123	0.2	50	NA	**0.2 J**	**2 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	50	NA	1 U	2 U	1 U
1,3-Dichlorobenzene	109.091	1	50	NA	1 J	2.3	1.2
2-Butanone	21262.1	10	500	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	10	500	NA	10 U	20 U	10 U
Acetone	32613.3	10	20	NA	10 U	20 R	10 U
Benzene	5	1	50	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	0.68	50	NA	0.68 J	0.99 J	0.7 J
Bromoform	8.51032	1	50	NA	1 U	2 U	1 U
Bromomethane	47.7570	1	50	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	50	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	8.4	17	NA	**9.9**	**17**	**8.4**

TABLE 3-44
ANALYTICAL RESULTS FOR WELL PC-067
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	50	NA	1 U	2 U	1 U
Chloroform	1.61648	710	990	NA	**890**	**830**	**710**
Chloromethane	81.1111	1	50	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	1	50	NA	1 U	2 U	1 U
Dibromochloromethane	0.69718	0.17	50	NA	0.17 J	**2 U [f]**	**1 U [f]**
Ethylbenzene	700	1	50	NA	1 U	2 U	1 U
Methylene Chloride	5	0.22	50	NA	1 U	2 U	0.22 U
Naphthalene	4.29412	1	50	NA	1 U	2 U	1 U
Styrene	100	1	50	NA	1 U	2 U	1 U
Tetrachloroethene	5	17	43	NA	**17**	**43**	**19**
Toluene	1000	1	50	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	0.7	990	NA	**890.85**	**830.99**	**710.7**
Trans-1,2-Dichloroethene	100	1	50	NA	1 U	2 U	1 U
Trichloroethene	5	0.45	50	NA	0.54 J	1.1 J	0.45 J
Trichlorofluoromethane	9890.32	1	50	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	50	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	4	NA	2 U	4 U	2 U

TABLE 3-44
ANALYTICAL RESULTS FOR WELL PC-067
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-45
ANALYTICAL RESULTS FOR WELL PC-124
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		79	81	NA	80	79	81
ANIONS (reported in mg/L)							
Chloride	250	2400	2700	NA	**2400**	**2700**	**2700 J**
Nitrate	10	21	24	NA	**21**	**24**	**24 J**
Perchlorate [g]	0.018	5.4	6.5	NA	**5.4**	**6.5**	**6.5 J**
Sulfate	250	1900	2200	NA	**1900**	**2200**	**2100 J**
GENERAL							
Fluoride	4	1	1.1	NA	1 U	1.1	1 UJ
Nitrite	1	1	1	NA	1 UJ-	1 U	1 U
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)				NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	0	0	NA	NA	NA	NA
Beta (Total)	50			NA	NA	NA	NA
Uranium 238				NA	NA	NA	NA
Uranium 234				NA	NA	NA	NA
Thorium 230				NA	NA	NA	NA
Radium 226	5			NA	NA	NA	NA
Radon 222	300			NA	NA	NA	NA
Lead 214				NA	NA	NA	NA
Bismuth 214				NA	NA	NA	NA
Lead 210				NA	NA	NA	NA
Thorium 232				NA	NA	NA	NA
Radium 228	5			NA	NA	NA	NA
Radium MCL [d]	5	0	0	NA	NA	NA	NA
Actinium-228				NA	NA	NA	NA
Thorium 228				NA	NA	NA	NA
Lead 212				NA	NA	NA	NA
Bismuth 212				NA	NA	NA	NA
Thallium 208				NA	NA	NA	NA
Potassium 40				NA	NA	NA	NA

TABLE 3-45
ANALYTICAL RESULTS FOR WELL PC-124
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235				NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234				NA	NA	NA	NA
Radium-224				NA	NA	NA	NA
Thorium-227				NA	NA	NA	NA
Thorium-234				NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	6600	7600	NA	**6600**	**7100**	**7600**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	95	500	NA	500 U	95 U	110
Antimony	6	20	100	NA	**100 U [f]**	**100 U [f]**	**20 U [f]**
Arsenic	10	87	89	NA	**88**	**87**	**89**
Barium	2000	12	19	NA	19 J-	12 J-	17 J
Beryllium	4	2	10	NA	**10 U [f]**	**10 U [f]**	2 U
Cadmium	5	5	25	NA	**25 U [f]**	**25 U [f]**	5 U
Calcium		860000	890000	NA	890000	890000 J-	860000 J
Chromium	100	35	40	NA	40 U	35 J-	40
Chromium VI	100	45	58	NA	45	58	NA
Cobalt	10.95	10	50	NA	**50 U [f]**	**50 U [f]**	10 U
Copper	1300	10	50	NA	50 U	50 U	10 U
Iron	25550	38	210	NA	210 U	38 U	110
Lead	15	3	15	NA	15 U	15 U	3 U
Lithium	73	460	530	NA	**480**	**460 J+**	**530 J+**
Magnesium	206955	330000	350000	NA	**350000**	**350000 J-**	**330000 J**
Manganese	5110	5.6	50	NA	5.8 J-	50 U	5.6 J-
Mercury	2	0.011	0.026	NA	0.013 J	0.011 J-	0.026 U
Molybdenum	182.5	58	63	NA	63	59	58
Nickel	730	6	100	NA	100 U	100 U	6 J
Phosphorus	0.73	0.05	1000	NA	0.061	0.063	0.05 U

TABLE 3-45
ANALYTICAL RESULTS FOR WELL PC-124
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		25000	33000	NA	25000	27000	33000 J+
Selenium	50	4.2	25	NA	25 U	25 U	4.2 U
Silicon		38000	39000	NA	38000	39000 J-	38000
Silver	182.5	10	50	NA	50 U	50 U	10 U
Sodium		860000	930000	NA	860000	920000 J-	930000 J+
Thallium	2	0.04	0.2	NA	0.2 U	0.04 U	0.08 U
Tin	21900	50	250	NA	250 U	250 U	50 U
Titanium	146000	1.5	100	NA	1.5 J-	100 U	20 U
Uranium	30	35	37	NA	**35**	**37**	**36**
Vanadium	182.5	25	32	NA	32 J-	28 U	25
Zinc	10950	31	100	NA	100 U	100 U	31
Zirconium		4.8	20	NA	8 J-	4.8 U	20 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	1	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1	1	NA	1 U	1 U	1 U
1,1-Dichloroethane	11.7950	0.2	0.21	NA	0.2 J	0.21 J	0.21 J
1,1-Dichloroethene	7	1.5	1.9	NA	1.5	1.9	1.9
1,2-Dichloroethane	0.123	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
1,2-Dichloropropane	5	1	1	NA	1 U	1 U	1 U
1,3-Dichlorobenzene	109.091	1	1	NA	1 U	1 U	1 U
2-Butanone	21262.1	10	10	NA	10 U	10 U	10 U
4-Methyl-2-Pentanone	2900.66	10	10	NA	10 U	10 U	10 U
Acetone	32613.3	10	10	NA	10 U	10 U	10 U
Benzene	5	1	1	NA	1 U	1 U	1 U
Bromodichloromethane	1.08438	1	1	NA	1 U	1 U	1 U
Bromoform	8.51032	1	1	NA	1 U	1 U	1 U
Bromomethane	47.7570	1	1	NA	1 U	1 U	1 U
Carbon Disulfide	3524.14	1	1	NA	1 U	1 U	1 U
Carbon Tetrachloride	5	0.59	0.89	NA	0.59 J	0.76 J	0.89 J

TABLE 3-45
ANALYTICAL RESULTS FOR WELL PC-124
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	1	1	NA	1 U	1 U	1 U
Chloroform	1.61648	180	230	NA	**180**	**230**	**220**
Chloromethane	81.1111	1	1	NA	1 U	1 U	1 U
cis-1,2-Dichloroethene	70	0.2	1	NA	1 U	0.2 J	1 U
Dibromochloromethane	0.69718	1	1	NA	**1 U [f]**	**1 U [f]**	**1 U [f]**
Ethylbenzene	700	1	1	NA	1 U	1 U	1 U
Methylene Chloride	5	1	1	NA	1 U	1 U	1 U
Naphthalene	4.29412	1	1	NA	1 U	1 U	1 U
Styrene	100	1	1	NA	1 U	1 U	1 U
Tetrachloroethene	5	0.8	0.99	NA	0.8 J	0.98 J	0.99 J
Toluene	1000	1	1	NA	1 U	1 U	1 U
Total Trihalomethanes [e]	80	180	230	NA	**180**	**230**	**220**
Trans-1,2-Dichloroethene	100	1	1	NA	1 U	1 U	1 U
Trichloroethene	5	0.88	1.1	NA	0.88 J	1.1	1 J
Trichlorofluoromethane	9890.32	1	1	NA	1 U	1 U	1 U
Vinyl Chloride	2	1	1	NA	1 U	1 U	1 U
Xylene (Total)	10000	2	2	NA	2 U	2 U	2 U

TABLE 3-45
ANALYTICAL RESULTS FOR WELL PC-124
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-46
ANALYTICAL RESULTS FOR WELL POU-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
ALKALINITY (reported in mg/L)							
Bicarbonate Alkalinity		68	148	NA	68	100	68
ANIONS (reported in mg/L)							
Chloride	250	64.8	3800	NA	**3600**	**3500 J**	**3800**
Nitrate	10	4	121	NA	**14**	**14 J**	**14**
Perchlorate [g]	0.018	22	41	NA	**38**	**37 J**	**41**
Sulfate	250	1280	2700	NA	**2500**	**2600 J**	**2500**
GENERAL							
Fluoride	4	1	2	NA	1 U	1 UJ	2 U
Nitrite	1	1	2	NA	1 U	1 U	**2 U** [f]
RADIONUCLIDES (reported in pCi/L)							
Alpha (Total)		-20	51	NA	NA	NA	NA
Adjusted Gross Alpha (Total) MCL [c]	15	-41.87	63.94	NA	NA	NA	NA
Beta (Total)	50	-5	33	NA	NA	NA	NA
Uranium 238		2	25.6	NA	NA	NA	NA
Uranium 234		3	36.9	NA	NA	NA	NA
Thorium 230		-0.0422	0.0337	NA	NA	NA	NA
Radium 226	5	-0.04	1	NA	NA	NA	NA
Radon 222	300	122	1270	NA	NA	NA	NA
Lead 214		-5.24	60.8	NA	NA	NA	NA
Bismuth 214		-0.0818	57.7	NA	NA	NA	NA
Lead 210		0.272	0.56	NA	NA	NA	NA
Thorium 232		0.00387	0.0357	NA	NA	NA	NA
Radium 228	5	-0.19	0.77	NA	NA	NA	NA
Radium MCL [d]	5	-0.02	1.12	NA	NA	NA	NA
Actinium-228		-2.18	23.4	NA	NA	NA	NA
Thorium 228		0.0258	0.0422	NA	NA	NA	NA
Lead 212		-1.35	1.3	NA	NA	NA	NA
Bismuth 212		-5.62	41.5	NA	NA	NA	NA
Thallium 208		0.967	6.01	NA	NA	NA	NA
Potassium 40		-40.4	49.8	NA	NA	NA	NA

TABLE 3-46
ANALYTICAL RESULTS FOR WELL POU-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
RADIONUCLIDES (reported in pCi/L)							
Uranium 235		0.033	7.75	NA	NA	NA	NA
Polonium-210				NA	NA	NA	NA
Protactinium-234		24.5	646	NA	NA	NA	NA
Radium-224		1.3	1.3	NA	NA	NA	NA
Thorium-227		-0.152	2.6	NA	NA	NA	NA
Thorium-234		-49.3	222	NA	NA	NA	NA
SOLIDS (reported in mg/L)							
Total Dissolved Solids	1900	3110	9900	NA	**9400**	**9000**	**9900**
TOTAL METAL (reported in ug/L)							
Aluminum	36500	14	460	NA	460 U	180 J-	160 U
Antimony	6	7.6	100	NA	**100 U [f]**	**100 U [f]**	**100 U [f]**
Arsenic	10	12.7	110	NA	**71**	**74**	**70**
Barium	2000	12	27	NA	27 J-	26 J-	25 J
Beryllium	4	0.081	10	NA	**10 U [f]**	**10 U [f]**	1.2 J
Cadmium	5	0.33	25	NA	**25 U [f]**	**25 U [f]**	**25 U [f]**
Calcium		212000	840000	NA	840000	790000 J	840000
Chromium	100	3	530	NA	**510**	**430**	**530**
Chromium VI	100	240	570	NA	**570**	**490**	NA
Cobalt	10.95	0.82	50	NA	**50 U [f]**	**50 U [f]**	**50 U [f]**
Copper	1300	0.82	50	NA	50 U	50 U	50 U
Iron	25550	12	500	NA	190 U	160 U	500 U
Lead	15	1	15	NA	15 U	15 U	15 U
Lithium	73	220	260	NA	**260**	**230 J+**	**250 J**
Magnesium	206955	81100	430000	NA	**430000**	**400000 J**	**430000**
Manganese	5110	2.2	88.7	NA	13 J-	25 U	6.5 J
Mercury	2	0.011	0.2	NA	0.2 U	0.2 U	0.011 U
Molybdenum	182.5	82	87	NA	86	82	87
Nickel	730	1.6	100	NA	100 U	100 U	100 U
Phosphorus	0.73	0.073	1000	NA	0.075	0.15	0.073

TABLE 3-46
ANALYTICAL RESULTS FOR WELL POU-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
TOTAL METAL (reported in ug/L)							
Potassium		13000	53000	NA	52000	49000 J	53000
Selenium	50	1.3	25	NA	25 U	25 U	25 U
Silicon		38000	43000	NA	38000	42000	43000
Silver	182.5	1.5	50	NA	50 U	50 U	50 U
Sodium		525000	1600000	NA	1600000	1500000 J	1600000
Thallium	2	0.02	0.2	NA	0.2 U	0.02 U	0.09 U
Tin	21900	50	250	NA	250 U	250 U	250 U
Titanium	146000	3.4	100	NA	3.4 J-	100 U	100 U
Uranium	30	8.5	45.2	NA	8.9	17	8.5
Vanadium	182.5	11	38.2	NA	11 J-	17 J-	16 J
Zinc	10950	2.2	170	NA	170	100 U	100 U
Zirconium		3.3	11	NA	3.3 J-	5.2 J-	11 U
VOLATILES (reported in ug/L)							
1,1,1-Trichloroethane	200	1	50	NA	1 U	2 U	1 U
1,1,2-Trichloroethane	5	1	50	NA	1 U	2 U	1 U
1,1-Dichloroethane	11.7950	0.26	50	NA	0.94 J	1.3 J	0.87 J
1,1-Dichloroethene	7	1.8	50	NA	2	3	1.8
1,2-Dichloroethane	0.123	0.59	50	NA	**1.6**	**2 J**	**1.3**
1,2-Dichloropropane	5	0.37	50	NA	1.5	1.7 J	1.2
1,3-Dichlorobenzene	109.091	0.4	50	NA	0.41 J	0.92 J	0.4 J
2-Butanone	21262.1	10	500	NA	10 U	20 U	10 U
4-Methyl-2-Pentanone	2900.66	1.3	500	NA	10 U	20 U	10 U
Acetone	32613.3	3	20	NA	10 U	20 U	10 U
Benzene	5	0.21	50	NA	1 U	2 U	1 U
Bromodichloromethane	1.08438	1	33	NA	**25**	**33**	**17**
Bromoform	8.51032	0.89	50	NA	8	**10**	5.7
Bromomethane	47.7570	1	50	NA	1 U	2 U	1 U
Carbon Disulfide	3524.14	1	50	NA	1 U	2 U	1 U
Carbon Tetrachloride	5	1	29	NA	**19**	**29**	**15**

TABLE 3-46
ANALYTICAL RESULTS FOR WELL POU-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011
VOLATILES (reported in ug/L)							
Chlorobenzene	100	0.27	50	NA	0.32 J	0.96 J	0.27 J
Chloroform	1.61648	8.2	1200	NA	**1200**	**1200**	**1100**
Chloromethane	81.1111	0.54	50	NA	1 U	2 U	1 U
cis-1,2-Dichloroethene	70	0.21	50	NA	1	1.3 J	0.97 J
Dibromochloromethane	0.69718	1	15	NA	**11**	**15**	**8.3**
Ethylbenzene	700	1	50	NA	1 U	2 U	1 U
Methylene Chloride	5	0.6	50	NA	1.4 U	**6.3**	1.2 U
Naphthalene	4.29412	1	50	NA	1 U	2 U	1 U
Styrene	100	1	50	NA	1 U	2 U	1 U
Tetrachloroethene	5	8.5	75	NA	**8.5**	**17**	**8.5**
Toluene	1000	0.75	50	NA	1 U	2 U	1 U
Total Trihalomethanes [e]	80	23.2	1200	NA	**1244**	**1258**	**1131**
Trans-1,2-Dichloroethene	100	1	50	NA	1 U	2 U	1 U
Trichloroethene	5	0.47	50	NA	4.2	**5.9**	3.8
Trichlorofluoromethane	9890.32	1	50	NA	1 U	2 U	1 U
Vinyl Chloride	2	1	50	NA	1 U	2 U	1 U
Xylene (Total)	10000	2	10	NA	2 U	4 U	2 U

TABLE 3-46
ANALYTICAL RESULTS FOR WELL POU-3
SEMIANNUAL GROUNDWATER MONITORING REPORT, 2nd SEMESTER 2010

Analyte	NDEP BCL [a,b]	MIN Value (Since 2000)	MAX Value (Since 2000)	2nd SMSTR 2009	1st SMSTR 2010	2nd SMSTR 2010	1st SMSTR 2011

Notes:

a NDEP BCL are reported in the same unit as analytical group. Source of NDEP BCL's are from January 2011 update. MCL applied where no BCL exists.
b Bolded results exceed the associated screening level.
c MCL for Adjusted Gross Alpha (Total) was calculated using the following equation
Adjusted Gross Alpha (Total) MCL = Alpha Total - (Uranium 234 + Uranium 235 + Uranium 238)
d MCL for Radium was calculated using the following equation: Radium MCL = Radium 226 + Radium 228
e Total Trihalomethanes were calculated using the following equation:
Total Trihalomethanes = Bromodichloromethane + Bromoform + Chloroform + Dibromochloromethane
f Reporting limit exceeds the MCL due to analytical limitations or sample dilution.
g Based on the Nevada Standard for perchlorate.

Qualifiers:

J Estimated value
U Analyte not detected; the reporting limit is reported in the table
R Rejected data point

+ Biased high
- Biased low
µg/L Microgram per liter
MCL Maximum contaminant level
MDC Minimum detectable concentration
mg/L Milligram per liter
NA Not anaylzed; or not calculated if components are not detected
pCi/L Picocurie per liter
QTR Quarter
SL Screening level

TABLE 3-47
CATION-ANION BALANCE EVALUATION
GROUNDWATER MONITORING REPORT FIRST SEMESTER 2011
Titanium Metals Corporation, Henderson, Nevada

Well ID	Cation Sum (meq/L) [1]	Anion Sum (meq/L) [2]	Difference (%) [3]	CAB Results	TDS Measured (mg/L)	TDS Calculated (mg/L)	TDS Ratio [4]	TDS Results [5]	TDS Measured (mg/L)	EC Measured (uS/cm)	EC Ratio TDS:EC [6]	EC Results [7]	Qualifier
AA-01	55	52	3.2	Acceptable	3800	3200	1.2	Acceptable	3800	5140	0.74	Acceptable	No qualifier
AA-09	81	87	3.5	Acceptable	5700	5300	1.1	Acceptable	5700	7333	0.78	Acceptable	No qualifier
AA-11	72	71	0.21	Acceptable	5000	4400	1.1	Acceptable	5000	6190	0.81	Acceptable	No qualifier
AA-20	85	90	2.8	Acceptable	6000	5500	1.1	Acceptable	6000	7400	0.81	Acceptable	No qualifier
AA-27	61	64	3.0	Acceptable	4000	3900	1.0	Acceptable	4000	5050	0.79	Acceptable	No qualifier
AA-UW1	56	61	4.9	Acceptable	4000	3700	1.1	Acceptable	4000	4750	0.84	Acceptable	No qualifier
BRW-R1	53	53	0.48	Acceptable	3600	3400	1.1	Acceptable	3600	4400	0.82	Acceptable	No qualifier
CLD1-R	48	52	4.3	Acceptable	3700	3000	1.2	Acceptable	3700	5413	0.68	Acceptable	No qualifier
CLD4-R	82	97	9.1	**Unacceptable**	6200	5600	1.1	Acceptable	6200	10190	0.61	Acceptable	J-CAB
DBMW-1	84	87	1.8	Acceptable	5700	5300	1.1	Acceptable	5700	7230	0.79	Acceptable	No qualifier
DBMW-3	120	130	5.1	**Unacceptable**	8200	7700	1.1	Acceptable	8200	10820	0.76	Acceptable	J-CAB
DBMW-4	82	86	2.2	Acceptable	5400	5200	1.0	Acceptable	5400	6890	0.78	Acceptable	No qualifier
DBMW-5	78	80	1.1	Acceptable	5100	4900	1.1	Acceptable	5100	6700	0.76	Acceptable	No qualifier
J2D1-R2	120	120	1.4	Acceptable	7700	6600	1.2	Acceptable	7700	11060	0.70	Acceptable	No qualifier
J2D2-R2	82	82	0.43	Acceptable	5400	4700	1.1	Acceptable	5400	7060	0.76	Acceptable	No qualifier
J2D3-R	70	71	1.0	Acceptable	4800	4300	1.1	Acceptable	4800	5970	0.80	Acceptable	No qualifier
J2D4	150	150	1.9	Acceptable	10000	8700	1.1	Acceptable	10000	14710	0.68	Acceptable	No qualifier
J2U2	67	72	3.2	Acceptable	4500	4100	1.1	Acceptable	4500	6060	0.74	Acceptable	No qualifier
TIMETMW-3R	29	31	3.1	Acceptable	2000	1800	1.1	Acceptable	2000	2870	0.70	Acceptable	No qualifier
TIMETMW-4	43	45	2.8	Acceptable	3100	2800	1.1	Acceptable	3100	3820	0.81	Acceptable	No qualifier
TIMETMW-5	60	62	2.0	Acceptable	4100	3800	1.1	Acceptable	4100	5450	0.75	Acceptable	No qualifier
TIMETMW-6R	46	49	3.6	Acceptable	3300	2800	1.2	Acceptable	3300	4660	0.71	Acceptable	No qualifier
PC-124	41	120	50	**Unacceptable**	7600	7000	1.1	Acceptable	7600	10550	0.72	Acceptable	J-CAB
PC-24	110	120	5.2	**Unacceptable**	7400	6900	1.1	Acceptable	7400	10760	0.69	Acceptable	J-CAB
PC-28	39	78	34	**Unacceptable**	7000	5200	1.3	**Unacceptable**	7000	8200	0.85	Acceptable	J-CAB/J-TDS
PC-54	76	73	1.9	Acceptable	5400	4700	1.1	Acceptable	5400	6494	0.83	Acceptable	No qualifier
PC-67	150	170	5.4	**Unacceptable**	11000	9900	1.1	Acceptable	11000	15650	0.70	Acceptable	J-CAB
POU-3	150	160	4.4	Acceptable	9900	9300	1.1	Acceptable	9900	14270	0.69	Acceptable	No qualifier
TMMW-101	33	34	2.0	Acceptable	2300	2100	1.1	Acceptable	2300	3010	0.76	Acceptable	No qualifier
TMMW-104	24	26	5.5	**Unacceptable**	1700	1600	1.1	Acceptable	1700	2440	0.70	Acceptable	J-CAB
TMPZ-105	100	110	4.2	Acceptable	7400	6600	1.1	Acceptable	7400	10850	0.68	Acceptable	No qualifier
TMPZ-107	220	250	6.5	**Unacceptable**	16000	14000	1.2	Acceptable	16000	23100	0.69	Acceptable	J-CAB
TMPZ-110	80	80	0.085	Acceptable	5500	4800	1.1	Acceptable	5500	6831	0.81	Acceptable	No qualifier

TABLE 3-47
CATION-ANION BALANCE EVALUATION
GROUNDWATER MONITORING REPORT FIRST SEMESTER 2011
Titanium Metals Corporation, Henderson, Nevada

Notes:

CAB	Cation/anion balance	mg/L	Milligram per liter
EC	Electrical conductivity	TDS	Total dissolved solids
meq/L	Milliequivalent per liter	uS/cm	MicroSiemens per centimeter

1 Cations summed include: Calcium, magnesium, sodium, and potassium.
2 Anions summed include: Bicarbonate, carbonate, chloride, fluoride, nitrate-nitrogen, perchlorate, and sulfate.
3 QC criterion for CAB: absolute percent difference less than or equal to 5 percent; when the anion sum is between 10 and 800 meq/L.
4 Ratio of laboratory measured TDS to calculated TDS.
5 QC criterion for TDS measured versus calculated: ratio of TDS measured to TDS calculated greater than or equal to 1.0 and less than or equal to 1.2.
6 QC limits for TDS versus ED ratio is 0.54 to 0.96
7 J-TDS indicates that TDS value for the given well is estimated; J-CAB indicates that the values for the 11 cation/anions are estimated for a given well. The qualification of results based CAB includes the "J" qualifier with the associated comment code "p" or "q" in the TIMET analytical database

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APPENDIX A

DATA VALIDATION SUMMARY REPORT
GROUNDWATER MONITORING DATA

1st SEMESTER, 2011
DATA VALIDATION SUMMARY REPORT
FOR
SEMIANNUAL REPORTING OF
GROUNDWATER MONITORING DATA

Titanium Metals Corporation
Henderson, Nevada

Submitted to

Nevada Division of Environmental Protection

2030 E. Flamingo Road, Suite 230

Las Vegas, Nevada 89119-0818

September 30, 2011

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ACRONYMS AND ABBREVIATIONS

pCi/L	PicoCurie per liter
ASTM	American Society for Testing and Materials
CAB	Cation/anion balance
CCB	Continuing calibration blank
CFR	Code of federal regulations
COC	Chain of custody
CVAA	Cold vapor atomic absorption
DER	Duplicate error ratio
DQO	Data quality objective
DOE	U.S. Department of Energy
DVSR	Data validation summary report
EDD	Electronic data deliverable
EPA	U.S. Environmental Protection Agency
GC/MS	Gas chromatography/mass spectrometer
HASL	Health and Safety Laboratory
ICB	Initial calibration blank
ICP	Inductively coupled plasma
ICP/MS	Inductively coupled plasma/mass spectrometer
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
LSC	Liquid scintillation counter
MD	Matrix duplicate
MDA	Maximum detectable activity
MDL	Method detection limit
MS	Matrix spike
MSD	Matrix spike duplicate
NDEP	Nevada Division of Environmental Protection
PARAGON	ALS-Paragon Analytics, Inc.
PARCCS	Precision, accuracy, representativeness, completeness, comparability, and sensitivity
PQL	Practical quantitation limit

ACRONYMS AND ABBREVIATIONS (Continued)

QA	Quality assurance
QC	Quality control
RPD	Relative percent difference
SAP	Sampling and analysis plan
SDG	Sample delivery group
SQL	Sample quantitation limit
STL	Severn Trent Laboratories, Inc.
TDS	Total dissolved solid
TIC	Tentatively identified compound
TIMET	Titanium Metals Corporation, Inc.
VOC	Volatile organic compound

1.0 INTRODUCTION

This data validation summary report (DVSR) was prepared to assess the validity (based on data validation) and usability (based on project objectives) of groundwater analytical data collected during the first semester sampling event in 2011 at the Titanium Metals Corporation, Inc. (TIMET) facility in Henderson, Nevada. The routine groundwater monitoring program is established in the current Groundwater Monitoring Program Sampling and Analysis Plan (SAP), dated October 29, 2007 (TIMET 2007a). During this event, the following types of types of data collection events were conducted:

- Routine sampling of six groundwater protection and landfill permit wells (CLD1-R, CMT-101 (replaces CLD3-R), CLD4-R, J2U2, J2D4, and MW-6R).
- Semi-annual sampling of 14 Plant Site wells (BRW-R1, J2U1, J2U2, J2D1-R2, J2D2-R2, J2D3-R, J2D4, CLD1-R, CLD2-R, CLD4-R, MW-3R, MW-4, MW-5, and MW-6R).
- Groundwater collection at up-gradient wells (TMMW-101, TMMW-102, TMMW-103, and TMMW-104).
- Groundwater collection at off-site down-gradient wells and piezometers near the property line to the north (see Table 1 for the remaining well locations sampled).

It should be noted, however, that several wells were not sampled as listed above. Wells J2U1, AA-15, AA-19, and POD2-R did not produce sufficient groundwater volume for sample collection during the semi-annual event; as such, no data were collected for these locations.

Table 1 lists samples collected at the well locations during each of the events in this reporting period. A sample is defined as all fractions of a matrix (groundwater) from a given location (monitor well) during a single event (quarter).

1.1 PURPOSE AND OBJECTIVES

The purpose of this DVSR is to summarize the validation and usability for chemical groundwater data collected during this event. Routine monitoring is conducted according to the current Groundwater Monitoring Program Sampling and Analysis Plan (SAP), dated October 29, 2007 (TIMET 2007a). The purpose of the groundwater investigation is to:

- Characterize the distribution of inorganic, organic, and radiochemical analytes in groundwater.
- Characterize the hydraulic characteristics of the aquifer more completely.

- Evaluate relationships between groundwater chemistry, hydrogeology, and potential sources.

Compliance monitoring requirements for evaporation ponds HP-1 and HP-6 consist of the following:

- Field measurements of groundwater levels and pH at monitoring wells CLD1-R, CMT-101, CLD4-R, J2U2, J2D4, and MW-6R.
- Collection of samples for laboratory analysis of nitrate as nitrogen, total nitrogen, chromium, chloride, and total dissolved solids (TDS) at the same locations as above.

The groundwater monitoring requirements for the J-2 Landfill consist of the following:

- Field measurements of groundwater levels, pH, and specific conductivity at monitoring wells J2U2, J2D1-R2, and J2D2-R2.
- Collection of samples for laboratory analysis of TDS, total chromium, magnesium, chloride, and vanadium at the same locations as above.

The groundwater monitoring program also includes the following activities conducted on a semi-annual basis:

- Measure groundwater levels in all wells in the program.
- Collect groundwater samples for field and chemical analysis.
- Evaluate groundwater hydraulic and water quality data.
- Analyze groundwater data for trends and compare to appropriate screening levels.

All analyses for groundwater samples collected during this reporting period were conducted by ALS-Paragon Analytics, Inc. (Paragon) of Fort Collins, Colorado. All data were delivered as hardcopy data packages and accompanied by electronic data deliverables (EDD). Hardcopy data deliverables included full data packages (including sample results, quality control [QC] summaries, and all associated sample receipt, preparation, and analytical raw data). EDDs received from the laboratory were loaded into a Microsoft Access® database and used for reporting. The laboratories reported the sample results in the EDDs, along with applicable laboratory qualifiers. In addition to sample results, associated field and laboratory QC sample results were reported in the EDDs.

The following types of analyses were conducted on groundwater samples collected during this reporting period and analyzed by Paragon:

- Volatile Organic Compounds (VOC) by gas chromatography/mass spectrometry (GC/MS) by U.S. Environmental Protection Agency (EPA) Method 8260B and revisions (EPA 2007).

- Total metals by inductively coupled plasma (ICP) by EPA Method 6010B, ICP/mass spectrometer (ICP/MS) by EPA Method 6020, and cold vapor atomic absorption (CVAA) for mercury by EPA Methods 7470 (EPA 2007).

- Inorganic analytes including alkalinity by titration (EPA Method 310.1), cations by ICP (included in total metals listed above), anions by ion chromatography (EPA Method 300.0), perchlorate by ion chromatography (EPA Method 314.1), and hexavalent chromium by colorimetry (EPA Method 7196A) (EPA 1983 and 2007).

- Physical parameters including total dissolved solids (TDS) and total suspended solids (TSS) by gravimetric determination (EPA Methods 160.1 and 160.2, respectively) (EPA 1983).

- Radionuclides, including alpha (total) and gross beta (EPA Methods 9310 and 900.0), gamma emitters (EPA Method 901.1), radon-222 (American Society for Testing and Materials [ASTM] D5072-92), isotopic radium (EPA Methods 903.1/904.0), isotopic thorium and uranium (ASTM Method D3972-90), and lead-210 by liquid scintillation counter (LSC) technique according to an in-house standard operating procedure (ASTM 1990, ASTM 1992, EPA 1980, EPA 2007, and Paragon 2004). Paragon also references the U.S. Department of Energy (DOE) Health and Safety Laboratory (HASL) Procedures Manual (HASL-300) (DOE 1997a).

Quantitation limits are critical to the proper evaluation of method sensitivity and non-detect data. Three types of quantitation limits were evaluated for stable chemistries as follows:

- Method detection limit (MDL) – This limit was established by the laboratories according to the requirement in 40 CFR 136, Appendix B, and represents the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. MDLs are established using matrices with little or no interfering species using reagent matrices and are considered the lowest possible reporting limit. Often, the MDL is represented as the instrument detection limit. Because these limits do not reflect sample-specific characteristics and preparation volumes/masses, MDLs were not reported in the hardcopy or EDDs for individual samples. However, MDLs can be indirectly obtained from the limits reported for method blanks, as method blanks were reported to the MDL.

- Sample quantitation limit (SQL) – The SQL is defined as the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes, and takes into account sample characteristics, sample preparation, and analytical adjustments. The SQL represents the sample-specific detection limit and all non-detected results are reported to this level.

- Practical quantitation limit (PQL) – This limit is defined as the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte, and includes the predicted effect of sample matrices with typical interfering species. The PQL is the lowest concentration of an analyte that can be reliably measured within specified limits of precision and accuracy during routine laboratory operating conditions. PQLs are used to estimate or evaluate the minimum concentration at which the laboratory can be expected to reliably measure a specific chemical contaminant during day-to-day analyses of different sample matrices. Detected results greater than the SQL, but less than the PQL

were qualified by the laboratory as estimated. Further qualification based on this scenario is discussed in Section 2.1.8.

Laboratories consistently reported PQLs and SQLs for all stable chemistries in the EDDs, which were subsequently entered into the TIMET database.

For radionuclides, Paragon reported the minimum detectable activity (MDA) (also known as minimum detectable concentration) as the "reporting limit." The MDA for radionuclides is the lowest level of activity in a given sample that is statistically distinguishable from a sample with no activity, at the 2-sigma confidence interval. The MDAs for radionuclide analysis are determined by a mathematical formula that takes into account sample volume, chemical recovery, instrument detection efficiency and background, and sample counting duration. The MDA, therefore, is equivalent to the SQL for radiochemical analytes. For radiochemical analysis, no PQL is established, as all results are reported to the MDA. In addition, the 2-sigma rad error is reported for each analyte in each sample.

QC data were reviewed in conjunction with sample data. Sample results were received in both hardcopy and electronic formats. The TIMET database includes both sampling information and analytical results. Table 1 presents all sample identification numbers and the analytical groups analyzed during this reporting period. Note that the limits reported by TIMET in the database are consistent with the recommendation by Nevada Division of Environmental Protection (NDEP) in the memo dated December 3, 2008 (NDEP 2008).

1.2 VALIDATION PROCESS

Two levels of validations were conducted on the analytical data collected during this investigation as required by the most current NDEP data validation guidance (NDEP 2009a):

- Level 2B – Including verification and validation based on completeness and compliance checks of sample receipt conditions and both sample-related and instrument-related QC results.
- Level 4 - Including verification and validation based on completeness and compliance checks of sample receipt conditions, both sample-related and instrument-related QC results, recalculation checks, and the review of actual instrument outputs.

According to NDEP guidance, at least 10 percent of all samples should undergo Level 4 validation; while the remaining 90 percent may be validated to Level 2B. Table 1 indicates the level of data validation conducted on the results from each sampling location; and shows that at least 10 percent of the samples/analyses were validated to Level 4 criteria. According to the TIMET database (Appendix A), of

the 4,536 validated sample results, 798 were validated at Level 4 exceeding the 10 percent criterion. Table 2 lists the review items associated with each of the two levels of validation. A description of each review item, including instances when results did not meet acceptance criteria, is provided in Section 2.0.

Stable chemistry sample results were validated in accordance with the following EPA guidance documents:

- "U.S. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review" (EPA 2008).
- "U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (EPA 2004).
- "Region 9 Superfund Data Evaluation/Validation Guidance" (EPA 2001).
- NDEP data validation guidance and supplements (NDEP 2009a, 2009b, and 2009c)

EPA has not standardized the validation of radionuclide data, so the reviewer relied on professional judgment and other sources to qualify the data. Radionuclide data validation was conducted using a DOE reference document, "Evaluation of Radiochemical Data Usability" (DOE 1997b) as well as QC requirements and criteria summarized in the applicable method. In addition, validation was conducted in accordance with the most current NDEP data validation guidance and supplements (NDEP 2009a, 2009b, and 2009c).

Based on data validation and review, data qualifiers were placed in the electronic database to signify whether the data were acceptable, acceptable with qualification, or rejected. In addition, for every data validation qualifier, a secondary comment code was entered to indicate the primary reason for qualification. Table 3 provides the definitions for the data validation qualifiers and comment codes used in the database. Validation qualifiers and definitions are based on those used by EPA in the current validation guidelines (EPA 2004 and 2008). These comment codes include an indication as to the reason for qualification of data, as well as the expected bias, if applicable. Note that a new validation comment code has been added to the list for TIMET. The comment code "s" has been added to indicate results that were reported by the laboratory as undetected (U). The addition of the comment code "s" allows the user to understand those results already qualified by the laboratory as undetected. As such, every individual result that has any qualifier (laboratory or validation) has a corresponding code(s) to provide clarity to the usability of the result. The validated results and comments are contained in the TIMET database and provided in electronic format as Appendix A to this document.

The laboratory was also required to submit a detailed case narrative with every data package listing any QC criteria that were not met or any other issue that might affect data quality (for example, initial or continuing calibration problems). In addition to the criteria listed above, each laboratory case narrative was thoroughly reviewed. Results were qualified for any issues that affected data quality listed in the laboratory case narrative.

1.3 REPORT ORGANIZATION

After this introductory section, Section 2.0 summarizes data validation and usability for groundwater data collected during this reporting period. Section 3.0 provides general conclusions about the usability of the data sets. The conclusions regarding data usability will be used to prepare data quality objectives (DQO) for future environmental investigations undertaken at TIMET. The references and tables follow the conclusions and recommendations at the end of this document.

2.0 DATA VALIDATION SUMMARY

This section describes the data validation findings and usability with regard to the project-specific objectives. Section 2.1 summarizes the data validation findings, and Section 2.2 summarizes the evaluation of the following quality indicator parameters: precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS).

2.1 DATA VALIDATION FINDINGS

This section summarizes items of the validation process and discusses how these findings affect data quality.

2.1.1 Sample Receipt and Holding Times

The condition of the samples upon receipt and holding times are evaluated initially by the laboratory, and then assessed by the reviewer. Minor issues related to the chains of custody (COC) involve the omission of trip blank IDs, collection dates, or collection times. These issues were immediately remedied with no affect on sample data quality.

Holding time refers to the period of time between sample collection and the preparation and/or analysis of the sample. Sample results were reviewed for compliance with the holding times set forth in Table 5 of the approved TIMET Site-Wide Generic SAP (TIMET 2007b).

The 24-hour holding time was missed on several hexavalent chromium sample analyses. As such, the results are qualified as estimated and biased low (UJ-/J-) and assigned the comment code "h" in the TIMET analytical database. No results were rejected based on holding time. Table 4 lists the results qualified due to holding time exceedances.

The following sample receipt issues were observed during this reporting period; their resolution and affect on data quality are also discussed below:

- In several SDGs from this event, the pH of samples received for cyanide and sulfide aliquots were lower than the required pH of 12 and 9, respectively. It appears that the groundwater itself has a buffering capacity that limits the ability to chemically preserve the sample to a pH of 9 or higher using the amount of preservative provided in the sample container.

- Almost all trip blanks and some of the groundwater sample VOC vials contained a small bubble upon receipt at the laboratory. It is suspected that changes in air pressure during transportation of shipment cooler to and from the site (via airplane) resulted in vaporization of dissolved gases in the aqueous matrix. Since the bubbles were small (less than pea-size), no qualification of the sample results was necessary.

The results affected by the pH issues described above were qualified as estimated and biased low (UJ-/J-) and assigned the comment code "h" in the TIMET database. Results qualified due to sample receipt conditions are presented in Table 5. No data were rejected on the basis of sample receipt condition alone; however, Table 5 shows that, due to other QC issues with results, some results were ultimately qualified as rejected.

2.1.2 Calibration

Instrument calibration data were included in the laboratory hardcopy data packages, but not the EDDs (typical of the industry). Review included the instrument setup, operating conditions, initial calibration verifications, and continuing calibration verifications.

No metal, radionuclide, or general chemistry data were qualified based on calibration issues. However, for VOC analysis, the initial calibration relative response standards for acetonitrile and ethanol were lower than the required limit. Table 6 lists all sample results qualified based on calibration issues during this reporting period. Nondetect results for acetonitrile and ethanol were qualified as rejected (R) because of the possibility of false negatives and assigned the comment code "c" in the TIMET analytical database. Rejected data points are not usable for meeting project objectives. Rejected data are further discussed in Section 2.1.10.

2.1.3 Blank Samples

Field and laboratory blanks consisting of contaminant-free water were prepared and analyzed as part of standard quality assurance/quality control (QA/QC) procedures to monitor for potential contamination of field equipment, laboratory process reagents, and sample containers. For this program, two groups of blanks were prepared and analyzed: (1) laboratory blanks (calibration blanks and method blanks), and (2) field QC blanks (including trip blanks). Each blank type is discussed in the following sections (Sections 2.1.3.1 and 2.1.3.2). The assignment of validation qualifiers associated with blank contamination is discussed in Section 2.1.3.3.

2.1.3.1 Laboratory Blanks

Two types of laboratory blanks were prepared and analyzed: calibration blanks and method blanks. Both types were prepared in the laboratory using high-grade, contaminant-free water.

Calibration Blanks – Calibration blanks are comprised of acidified high-grade contaminant-free water analyzed at the beginning (initial calibration blank [ICB]), end (continuing calibration blank [CCB]), and every 10 runs during analysis of metals by ICP, ICP/MS, and CVAA. Their primary function is to initially set the calibration curve (along with calibration standards) and continually monitor the background for possible variations in instrument electronic signal or cross-contamination. ICB and CCB data are included in the Paragon hardcopy data packages, but not the EDDs. As such, ICB and CCB data were evaluated based solely on hardcopy data (i.e., these results are not available in the database) for samples that underwent full validation only.

Method Blanks – Method blanks are laboratory QC samples that are prepared and analyzed with each batch of environmental samples. Method blanks are comprised of high-grade contaminant-free water that is carried though all preparation procedures in batches with field samples (including the addition of all reagents and QC monitoring compounds). Method blanks monitor potential contaminants in laboratory processes, reagents, and containers, and were analyzed for each analytical method used on field samples.

The following analytes were detected in one or more calibration or method blanks (note that sample results may or may not have been qualified for all listed analytes based on the comparison of blank concentrations to sample concentrations; qualified data are discussed in Section 2.1.3.3):

- VOCs detected in method blanks – Methylene chloride.

- Metals detected in method blanks – Aluminum, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, phosphorus, potassium, silicon, silver, sodium, strontium, sulfur, thallium, tin, titanium, zinc, and zirconium.

- Radionuclides detected in method blanks – Actinium-228, bismuth-212, lead-214, radium-228, thallium-208, thorium-232, and uranium-238.

2.1.3.2 Field QC Blanks

Trip and rinsate blanks were collected for this event. Trip blanks are field QC blanks collected and analyzed with field samples. Trip blanks were prepared at the laboratory by filling a 40-milliliter vial with high-grade, contaminant-free water and sealing it with a Teflon-lined lid. Trip blanks are shipped to the field sampling location accompanying sample containers in the shipping cooler. When samples for VOCs are collected and shipped back to the laboratory for analysis, a trip blank is transported within the shipping container. Trip blanks monitor for potential contamination of sample containers during shipment to the field, as well as monitor for potential contamination of VOC samples during collection and transportation back to the laboratory. A total of 25 trip blank samples were prepared by the laboratory and shipped to the field in coolers with unused sample containers; these samples were shipped back to the laboratory in coolers along with samples to be analyzed for VOCs. Trip blank data are reported in both the hardcopy and EDD formats (trip blank data can be obtained from the database). The following analytes were detected in one or more trip blanks (note that sample results may or may not have been qualified for listed analytes based on the comparison of blank concentrations to sample concentrations; qualified data are discussed in Section 2.1.3.3):

- Acetone, chloroform, and methylene chloride

2.1.3.3 Qualifications Due to Blank Contamination

The previous subsections describe the types of blanks that were collected and analyzed with field samples and lists analytes detected in the method blanks. This section discusses the procedure for evaluating blank results and applying qualifiers on field data.

Table 7 presents data that were qualified as undetected (U) or estimated and biased low (J-) based on laboratory blank contamination (including both calibration and method blanks). Note that not every compound detected in laboratory blanks resulted in qualification of data. If the criteria listed below were not met for a given result, then no qualification was required.

All stable chemistry results were qualified as follows:

Blank Value	Sample Result	Qualification
Detects	Not detected	No qualification
< PQL	< PQL ≥ PQL	Report found value with U Use professional judgment (typically no qualification)
> PQL	< PQL ≥ PQL but < blank value ≥ PQL and > blank value	Report found value with U Report found value with U Use professional judgment (either J+ or no qualifier)
= PQL	< PQL ≥ PQL	Report found value with U Use professional judgment (either J+ or no qualifier)
Negative value (often seen with metals)	< PQL	Report sample value with J-
Gross contamination	Detects	Qualify as rejected "R"

NDEP has submitted a guidance document on qualification of results based on blank contamination on July 14, 2011 (NDEP 2011), but the validation for samples in this DVSR was already underway. As such, the previous guidance for qualification of results was used.

For radionuclides, the qualification is simpler. Several radionuclides were detected above the MDA in laboratory blanks. However, no data were qualified or rejected due to blank contamination. Either results were significantly greater than the blank value, the results were already non-detect, or results were not reported from the associated analyses.

As listed in Section 2.1.3.2, VOCs were detected in trip blanks associated with the SDGs in this DVSR. Almost all associated sample results were either already non-detect, or already qualified as non-detect for other reasons. Only one result was qualified as non-detect (U) due to field blank contamination. The result is qualified as undetected (U) and assigned the comment code "f" in the TIMET database. Results qualified due to field blank contamination are presented in Table 8.

2.1.4 Spike Samples

Spiked samples are environmental matrices spiked with a subset of target compounds at known concentrations. These QC samples were analyzed with project samples to measure laboratory accuracy and potential interference from the matrix. Two types of spike samples were analyzed with the project samples to monitor for potential interferences during analysis:

- Matrix spike (MS) and matrix spike duplicate (MSD) samples; these samples consist of aliquots of environmental samples spiked with a subset of target compounds. MS/MSD samples monitor potential interference from the site-specific sample matrix and its effect on target compounds.

- Blank spike samples, also known as laboratory control samples (LCS); these samples are an aliquot of reagent soil or water spiked with a subset of target compounds. The LCS monitors laboratory accuracy without the bias of a sample matrix. In some cases, the LCS was analyzed in duplicate (LCSD).

At least one MS/MSD sample and one LCS were prepared and analyzed with each batch of environmental samples except for radionuclide and TDS analyses, which require only LCSs. Note that for some SDGs, the laboratory conducted MS and MSD analyses on samples that were not specific to the TIMET site. In those cases, evaluation of the MS and MSD is not conducted because the reviewer has no way to confirm that the matrix chosen is representative of samples from the TIMET facility.

The reviewer evaluated both the spike and duplicate recoveries of the MS and LCS pairs. Data were qualified only if both the MS and MSD recovery were outside the QC limits (or both the LCS and LCSD recoveries were outside the QC limits). If either recovery in the pair was acceptable, then data were not qualified. Data that were qualified based on MS/MSD and/or LCS/LCSD recoveries that were outside the QC limits are presented in Table 9. Analytical bias was also determined and qualified data were assigned bias codes (- or +) as necessary. Qualified results were also assigned the validation comment code "e" in the TIMET database. Note that in many SDGs the MS/MSD recoveries for cyanide were 0%. As such, cyanide sample results in these SDGs were qualified as rejected (R). Rejected results are discussed further in Section 2.1.10.

2.1.5 Surrogate Spikes and Carrier/Tracer Yields

Surrogate spikes were prepared by adding compounds similar to target compounds of interest to sample aliquots and associated QC samples for organic analyses only. Surrogate spike recoveries monitor the efficiency of contaminant extraction from the sample medium into the instrument measuring system and measure possible interferences from the sample matrix that may affect the data quality of target compound results. Similarly, tracer isotopes are added to radionuclide analyses to monitor the extraction and analysis of radionuclides.

Surrogate spikes were added to each of the samples submitted for organic analysis to monitor potential interferences from the matrix. Surrogates were added to the sample aliquot during preparation of the sample for analysis, and surrogate recoveries were compared with QC acceptance limits. Surrogate

recoveries outside of the acceptable limits indicate interference from the sample matrix for the detection of target compounds. All surrogate recoveries were within acceptable limits. As such, no data were qualified or rejected based on surrogate recoveries.

Both stable carriers and isotopic tracers were used to evaluate the efficiency of the preparation and analytical methods and to quantify the results. Carriers or tracers were added to each of the samples submitted for analysis of uranium, radium, thorium, and lead-210 isotopes. Carriers/tracers were added to the sample aliquot during preparation of the sample for analysis, and recoveries were compared with QC acceptance limits of 80 to 120 percent. Recoveries were within acceptable limits. No data were qualified or rejected based on carrier/tracer yields.

2.1.6 Internal Standards

Internal standards were prepared for certain VOCs and ICP/MS analyses by adding compounds similar to target compounds of interest to sample aliquots. Internal standards are used in the quantitation of target compounds in the sample or sample extract. Internal standard responses and retention times were presented in full data packages received from Paragon. The evaluation of internal standards involved comparing the instrument response and retention time from the target compounds in the sample with the response and retention time of specific internal standards added to the sample extract prior to analysis. All internal standard criteria were met; no data were qualified or rejected based on these criteria.

2.1.7 Duplicate Samples

Duplicate samples involved the preparation and analysis of an additional aliquot of a field sample. Results from duplicate sample analysis measure laboratory precision as well as homogeneity of contaminants in the field matrix. For this investigation, three types of duplicate analyses were conducted: (1) MSDs for organic analyses and total metals, (2) matrix duplicates (MD) for inorganic analyses (anions) and radionuclides, and (3) field duplicates for both types of analyses. MSDs and MDs measure laboratory precision and sample homogeneity, while field duplicates are used to evaluate field sampling technique precision, laboratory precision, and homogeneity of the sample matrix.

At least one duplicate analysis (MSD or MD) was performed with each batch of environmental samples processed in the laboratory. The laboratory calculated the relative percent difference (RPD) between the two detected values for MSD and MD analyses of stable chemistries. RPD values within the acceptable limits indicate both laboratory precision and minimal matrix heterogeneity of compounds detected in the samples. Results associated with elevated RPD values were qualified as estimated to indicate the

variability in detected concentrations or poor laboratory precision. RPDs for duplicate precision were within acceptable limits and therefore, no results were qualified based on duplicate precision.

For radionuclides, the duplicate error ratio (DER) is calculated which takes into account the 2-sigma analytical error assigned to each radionuclide result. The DER equation is as follows:

$$DER = \frac{/S - D/}{2 * \sqrt{\sigma_S^2 + \sigma_D^2}}$$

Where:
S = sample result in activity (pCi/L or pCi/g)
D = duplicate sample results in activity (pCi/L or pCi/g)
σ^2_s = sample 2-sigma error value
σ^2_d = duplicate 2-sigma error value

DERs were reported for all radionuclide duplicate analyses and were compared to the acceptable limit of less than or equal to the laboratory-established QC limit of 2.13. All DERs were acceptable for radionuclides.

Field duplicate pairs were collected from the following locations and events:

- Duplicate-1 paired with J2D2-R2.
- Duplicate-2 paired with J2D1-R2.

The collection frequency of at least one per 20 groundwater samples was met for each required quarter. This meets the collection frequency of 5 percent needed to meet project objectives. According to EPA guidance, there are no specific criteria for evaluating field duplicates (EPA 2004 and 2008). Generally, field duplicate precision was less than 20 percent RPD for water samples for results that exceeded five times the reporting limit. Field duplicate precision was not assessed when results were less than five times the reporting limit. No data were qualified based on field duplicate precision.

2.1.8 Other Qualifications

Each of the paragraphs in this section addresses the following qualification scenarios and comment codes that are not already addressed in the larger review sections:

- Positive results for stable chemistries above the SQL, but less than the PQL (comment code "g") as reported in Table 10.

- Other stable chemistry qualifications including ICP serial dilution issues and tentatively identified compounds (TIC) (included in comment code "j") as reported in Tables 11 and 12, respectively.

- Results replaced by more sensitive analytical method results (comment code "l"); these results are not listed in a table because data qualified as not reportable (X) are not and will not be included in any reporting of groundwater data.

- Results replaced by more sensitive analytical run (comment code "m"); these results are not listed in a table because data qualified as not reportable (X) are not and will not be included in any reporting of groundwater data. In addition, it is impractical to include a lengthy table in this document.

- Results for radiochemistries qualified due to inherent bias in analytical technique (comment code "o") as reported in Table 13.

Quantitation less than the practical quantitation limit for stable chemistries – The laboratory evaluated the SQL and PQL for each sample result. In cases where sample results were greater than the SQL, but less than the PQL, the laboratory qualified the results as estimated. Specifically, results with this scenario were qualified by the laboratory as "B" for metals and "J" for all other stable chemistry tests. During data validation, positive results less than the PQL but greater than or equal to the SQL were qualified as estimated (J). Qualitatively, the results are acceptable; however, these results were considered estimated, because as the value approaches the SQL, the accuracy of the measurement is less certain. In these cases, bias cannot be determined. All results qualified as estimated (J) for this reason are presented in Table 10 and were assigned the validation comment code "g" in the TIMET database.

Other stable chemistries qualifications – This category includes other issues that may affect data quality and for which qualifiers have been assigned. During this reporting period, the percent difference between the original analysis and the required ICP serial dilution exceeded the QC limit for certain total metals by ICP and ICP/MS. As such, the total metals results in affected samples were qualified as estimated (J). A bias was assessed to some results, when the serial dilution clearly indicated that the initial reported result was higher or lower than the result from the dilution. This indicates the possibility that matrix interference (chemical or spectral) may be enhancing or suppressing the signal in the undiluted reported result. The qualified result due to this issue is included in Table 11 and was assigned the validation comment code "j" in the TIMET database. No data were rejected based on serial dilution results.

In addition, a non-target compound was tentatively identified by the library match of the mass spectrum for one compound, hexachlorobutadiene, in one sample. Since the quantitation is tentative (library match and not an actual calibration curve), the result is qualified as estimated (J) and reported in Table 12.

Analytical method sensitivity – This qualification is meant only to select the most appropriate sample result for reporting when one or more values are reported for a given analyte using different analytical techniques. Specifically, radium-228 and uranium-235 results were obtained from both isotopic alpha spectroscopy analysis and gamma spectroscopy. Since the gamma spectroscopy results are less reliable than the isotopic analysis, the gamma spectroscopy results were flagged (X) as not reportable. Flagged results were assigned the comment code "l" in the TIMET database, but were not reported in a table because these results will not be used for reporting.

Analytical run sensitivity – This qualification is meant only to select the most appropriate sample result for reporting when one or more values are reported for a given analyte using identical analytical techniques, but from multiple analytical runs. Specifically, during this report period, chloroform and tetrachloroethene were detected at concentrations above the calibration range in some samples. In these cases, dilutions were required to bring the compounds' responses within the calibration range for accurate quantitation. When this happens, all results are reported in the laboratory EDD (both the diluted and undiluted results for all VOC analytes). It is the responsibility of the reviewer to choose the most accurate result from the most sensitive run for each analyte. The reviewer chose the lowest dilution for all analytes that were not above the calibration range. As such, in the initial undiluted run, the chloroform and/or tetrachloroethene results (over the calibration range) were qualified as unreportable (X), while all other VOC results were reportable. Conversely, in the diluted run, chloroform and/or tetrachloroethene results were reported, while the other VOC results were qualified as unreportable (X). Qualified results were also assigned the comment code "m" in the TIMET database. Because the "X" qualified results are not reported in any investigative report, no summary table was included.

Other qualification for radiochemistries – This category includes other radiochemistry issues that may affect data quality and for which qualifiers have been assigned. Bi-214 and Pb-214 results analyzed by Paragon using gamma spectroscopy may be biased low due to inherent bias in the analytical method. Results qualified for this reason are included in Table 13 and assigned the comment code "o" in the TIMET database.

2.1.9 CAB and TDS Balances

In addition to the data validation and results qualification discussed above, two comparison tests were conducted to verify the correctness of analyses using Standard Method 1030E (American Public Health Association 2005) as required by NDEP (NDEP 2009d). Cation-anion balance (CAB) and the ratio of measured TDS versus calculated TDS were evaluated. Based on the findings, the anion, cation, and/or

TDS results were qualified as estimated when acceptance criteria were not met as follows. If the CAB criterion was not met, then the results for the anions and cations were qualified as estimated (J or UJ) and assigned the comment code "p" in the TIMET analytical database. If the TDS ratio criterion was not met, then the results for TDS were qualified as estimated (J) and also assigned the comment code "p" in the TIMET database. If *both* criteria were not met, then both the anion/cation and TDS results were qualified as estimated (J or UJ) and assigned the comment code "q" in the TIMET database. This allows the data user to quickly identify if both tests were unacceptable. TDS, cation, and anion results were qualified according to the method criteria and presented in Tables 14 and 15 for this reporting period.

2.1.10 Summary of Rejected Groundwater Data

Based on the review summarized above, 76 sample results were rejected. Table 16 lists rejected data with the associated comment codes. Groundwater data collected during this reporting period were rejected due to poor calibration response for acetonitrile and ethanol and no spike recovery for cyanide. All of the VOCs listed are typically "poor performers" that often result in low calibration responses. This scenario is not uncommon and does not indicate a system laboratory issue. The cause of the poor cyanide spike recoveries may be attributed to the buffering capacity of the groundwater matrix in many of the wells at TIMET, as observed by the difficulty in raising the pH to >12. The laboratory has a history of successful cyanide matrix spike samples in similar matrices at other sites, so the low recovery appears to be unique to the condition in the groundwater from this site. All other data were usable to meet project objectives with the qualifications discussed in the sections above.

2.2 EVALUATION OF PARCCS PARAMETERS

Overall data quality was acceptable based on the critical indicator parameters, except for data specifically rejected and qualified as such (R). PARCCS parameters were reviewed for laboratory analytical results obtained during the groundwater monitoring conducted during this reporting period, and the sections below discuss the results of the evaluation for each indicated parameter.

2.2.1 Precision

Precision is the measure of the variability associated with an entire sampling and analysis process. It is the comparison among independent measurements as the result of repeated application of the same process under similar conditions. It is determined by analyzing field duplicate pairs, MSD pairs, and MD pairs. Precision is expressed as the RPD of a pair of values (or results) for stable chemistries and DER for radionuclides.

Field duplicate pairs were collected, analyzed, and evaluated for each analysis performed on every sample matrix. Frequencies of field duplicate pairs submitted to the laboratory for analysis were shown to be at least 1 per 20 as required to meet project objectives. Field duplicate precision for aqueous samples was generally acceptable. No data were qualified based on field duplicate precision.

The frequency criterion for MSD or MD pairs is 5 percent of the samples (per matrix) or one per each analytical batch of 20 or less per matrix. MSD or MD samples were collected, analyzed, and evaluated for each analysis performed on every sample matrix. The frequencies in which MSDs or MDs were prepared and analyzed by the laboratory met the frequency requirement as stated above. No data were qualified or rejected based on laboratory duplicate precision.

2.2.2 Accuracy

Accuracy is the degree to which a measurement agrees with its true value and is expressed as percent recovery. Accuracy is assessed by evaluating instrument calibrations and comparing MS, LCS, surrogate recoveries, and carrier/tracer yields with associated QC limits.

Instrument calibrations were evaluated against acceptable QC limits. During this reporting period results for two VOCs were rejected because the instrument response of the calibration standard was very low; which may cause biased low results or false negatives. Table 6 presents all analytical data qualified due to calibration issues.

The frequency criterion for MS and LCS is 5 percent of the samples per matrix or one per each analytical batch of 20 samples or less per matrix. MS and LCS samples were prepared, analyzed, and evaluated for each analysis performed at the proper frequency. The criteria for MS and LCS accuracy are based on recommended QC limits provided in EPA validation guidelines and on laboratory historical QC limits for those analytes not presented in validation guidelines. Table 9 presents groundwater data that were qualified or rejected during this reporting period based on spiked sample recoveries. Notably, cyanide results for several samples were rejected due to lack of recovery in MS and MSD samples.

Positive or negative signs were assigned to the qualifiers to indicate the expected bias, as indicated by the QC result. In some cases, the MS and MSD had different biases for the same sample; in which case no bias could be assigned.

Surrogate recoveries and carrier/tracer yields were within acceptable limits. As such, no data were qualified based on these QC measures.

In addition, matrix interferences that may result in inaccurate results were identified from serial dilutions conducted during ICP analysis. Table 11 lists results that were qualified based on serial dilution results.

2.2.3 Representativeness

Representativeness is a qualitative parameter and is defined by the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or a process or environmental condition. Sample results were evaluated for representativeness by examining items related to sample collection, including COC documentation, sample labeling, collection dates, and condition of the samples upon receipt at the laboratory. Laboratory procedures also were examined, including anomalies reported by the laboratory, either upon receipt of the samples at the laboratory or during analytical processes, adherence to recommended holding times of samples prior to analysis, calibration of laboratory instruments, adherence to analytical methods, and completeness of data package documentation.

Section 2.1.1 lists a number of issues that were observed during sample receipt at the laboratory. Each one is presented with the applicable resolution and a statement about its affect on data quality. It was determined that no significant affect on data quality was observed. This observation was made based on the trend charts presented in the Semiannual Groundwater Monitoring Report (TIMET 2011).

In addition to the issues discussed above, representativeness is evaluated by reviewing blanks (laboratory method blanks and trip blanks). Laboratory and field QC blanks contained detectable amounts of VOCs, metals, and radionuclides (listed in Section 2.1.3). Generally, concentrations detected in the blanks were considerably less than reported results for the field samples; therefore, these concentrations did not affect overall data quality. Common laboratory contaminants were qualified as estimated in sample results when detected in associated blanks. Sample results qualified based on laboratory and field blanks are presented in Tables 7 and 8, respectively. The affected data were qualified as undetected (U) or estimated and biased high or low (J+/J-).

2.2.4 Completeness

Completeness is defined as the percentage of measurements judged to be valid. The validity of sample results is determined through the data validation process. All rejected sample results are considered to be incomplete. Data that are qualified as undetected (U), undetected at estimated reporting limits (UJ), and estimated (J) are considered to be valid and usable. The number of valid results divided by the number of possible individual analyte results, expressed as a percentage, determines the completeness of the data set.

For groundwater data collected during this reporting period, 76 results were rejected (R). The total number of validated sample result records in the groundwater database for this reporting period is 4,692 (contained in the table "EDD_ Results" in the TIMET analytical database found in Appendix A). Validated sample results do not include any results qualified with an "X" and not reported. If 76 results were rejected from a total of 4,692 reportable validated results, then the number of valid results is 4,616. The percent complete (valid and not rejected) is 96.0 percent. This meets the completeness goal of 90 percent for this event.

2.2.5 Comparability

Comparability of the data is a qualitative parameter that expresses the confidence with which one data set may be compared with another. Comparability of the data is achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions, and using standardized reporting formats and data validation procedures. Historical groundwater data collected prior to the data collected in the first quarter of 2005 were obtained from Severn Trent Laboratories, Inc. (STL) using methods comparable to current analytical methods. However, since 2005, results were obtained from Paragon using analytical techniques that are consistent from quarterly and semiannual events. As such, results from the last 6 years of groundwater monitoring are comparable within the dataset.

2.2.6 Sensitivity

Sensitivity is the measure of the signal from an instrument that represents an actual deflection or response above instrument noise. Analytical sensitivity is measured by the MDL and is reported with the necessary dilution factors, preparation factors, and dry-weight factors of an individual sample as the SQL. The sensitivity requirements were based on the laboratory's ability to detect and report consistent and reliable limits.

It is expected that when a direct comparison to approved applicable screening levels is conducted, some SQLs will exceed the corresponding levels. For the purposes of site characterization and remedy selection, non-detects with reporting limits that exceed screening levels will be compared to screening levels and plotted as "U" qualified data that exceed the screening level (with the notation that the results are non-detected above the screening level). Recommendations to supplement the data or confirm the absence/presence of the analyte with additional data collection will be made for both purposes. Usability for other scenarios will be determined on a case-by-case basis. Procedures for handling non-detects (whether above the screening level or not) will be addressed in future risk assessment work plans.

Scenarios involving dilutions, high moisture content, and matrix interference affect the SQL by raising it according to the dilution factor or percent moisture content. Dilutions were required for numerous metal, anion, and VOC analyses because of high concentrations. Whenever the concentration exceeded the linear range of the instrumentation, dilutions were analyzed. All dilutions were reported.

3.0 CONCLUSIONS AND RECOMMENDATIONS

This section summarizes the conclusions and recommendations regarding usability of the data for the project objectives. Based on the evaluation of each data set, greater than 90 percent of the groundwater data obtained during this reporting period are valid (that is, not rejected) and acceptable for their intended use. Biased data will be used as follows:

- Biased high results, based on spike recoveries, surrogate recoveries, and blank contamination will be used as the upper limit of concentration for the analyte, recognizing that the actual value may be lower.
- Biased low results, based on spike surrogate recoveries and negative blank values, will be used as the lower limit of concentration for the analyte, recognizing that the actual value may be higher.

All validated data points may be considered for use in other purposes that extend beyond the original project objectives, including evaluation against screening levels and risk assessment with the appended qualifiers noted in this document. Limitations on data usability for future purposes may arise, but are not addressed in the scope of this document. These limitations will be identified through subsequent data evaluations and mitigated where possible by collecting additional data in future investigations. The DQO process will be used to design future workplans that will include a comprehensive analytical suite and ensure adequate coverage for assessing potential source areas and risk to receptors.

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TABLE 1
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Date Sampled	Event	SDG	Sample ID	Sample Matrix	Validation Status	GEN [1]	RADIO	TMETAL	TOC	VOC
2Q2011	05-Apr-11	1104040	AA-01	GW	LEVEL 2B	2	--	X	X	X
2Q2011	14-Apr-11	1104176	AA-09	GW	LEVEL 2B	2	--	X	X	X
2Q2011	12-Apr-11	1104130	AA-11	GW	LEVEL 2B	2	--	X	X	X
2Q2011	12-Apr-11	1104130	AA-20	GW	LEVEL 2B	2	--	X	X	X
2Q2011	04-Apr-11	1104025	AA-27	GW	LEVEL 4	2	--	X	X	X
2Q2011	05-Apr-11	1104040	AA-UW1	GW	LEVEL 2B	2	--	X	X	X
2Q2011	07-Apr-11	1104089	BRW-R1	GW	LEVEL 2B	X	X	X	X	X
2Q2011	21-Apr-11	1104291	CLD1-R	GW	LEVEL 2B	X	X	X	X	X
2Q2011	12-Apr-11	1104130	CLD4-R	GW	LEVEL 2B	X	X	X	X	X
2Q2011	27-Apr-11	1104416 1107254	CMT-101	GW	LEVEL 2B	3	--	3	--	3
2Q2011	11-Apr-11	1104121	DBMW-1	GW	LEVEL 2B	2	--	X	X	X
2Q2011	11-Apr-11	1104121	DBMW-3	GW	LEVEL 2B	2	--	X	X	X
2Q2011	07-Apr-11	1104089	DBMW-4	GW	LEVEL 2B	2	--	X	X	X
2Q2011	07-Apr-11	1104089	DBMW-5	GW	LEVEL 2B	2	--	X	X	X
2Q2011	20-Apr-11	1104271	J2D1-R2	GW	LEVEL 2B	X	X	X	X	X
2Q2011	19-Apr-11	1104246	J2D2-R2	GW	LEVEL 2B	X	X	X	X	X
2Q2011	28-Apr-11	1104447	J2D3-R	GW	LEVEL 2B	2	X	X	--	X
2Q2011	21-Apr-11	1104291	J2D4	GW	LEVEL 2B	X	X	X	X	X
2Q2011	25-Apr-11	1104355	J2U2	GW	LEVEL 2B	X	X	X	X	X
2Q2011	19-Apr-11	1104246	M-129	GW	LEVEL 2B	4	--	X	--	X
2Q2011	19-Apr-11	1104246	M-130	GW	LEVEL 2B	4	--	X	--	X
2Q2011	25-Apr-11	1104355	MW-1	GW	LEVEL 2B	--	--	--	--	X
2Q2011	07-Apr-11	1104089	MW-3R	GW	LEVEL 4	X	X	X	X	X
2Q2011	11-Apr-11	1104121	MW-4	GW	LEVEL 2B	X	X	X	X	X
2Q2011	11-Apr-11	1104121	MW-5	GW	LEVEL 2B	X	X	X	X	X
2Q2011	12-Apr-11	1104130	MW-6R	GW	LEVEL 2B	X	X	X	X	X
2Q2011	06-Apr-11	1104060	PC-124	GW	LEVEL 2B	2	--	X	X	X
2Q2011	06-Apr-11	1104060	PC-24	GW	LEVEL 2B	2	--	X	X	X
2Q2011	13-Apr-11	1104152	PC-28	GW	LEVEL 4	2	--	X	X	X
2Q2011	18-Apr-11	1104223	PC-54	GW	LEVEL 2B	2	--	X	X	X
2Q2011	13-Apr-11	1104152	PC-67	GW	LEVEL 4	2	--	X	X	X
2Q2011	18-Apr-11	1104223	POU-3	GW	LEVEL 2B	2	--	X	X	X
2Q2011	06-Apr-11	1104060	TMMW-101	GW	LEVEL 2B	X	X	X	X	X
2Q2011	06-Apr-11	1104060	TMMW-104	GW	LEVEL 2B	X	X	X	X	X
2Q2011	13-Apr-11	1104152	TMPZ-105	GW	LEVEL 4	X	X	X	X	X
2Q2011	14-Apr-11	1104176	TMPZ-106	GW	LEVEL 2B	4	--	X	--	X
2Q2011	13-Apr-11	1104152	TMPZ-107	GW	LEVEL 4	X	X	X	X	X
2Q2011	14-Apr-11	1104176	TMPZ-108	GW	LEVEL 2B	4	--	X	--	X
2Q2011	25-Apr-11	1104355	TMPZ-109	GW	LEVEL 2B	4	--	X	--	X
2Q2011	21-Apr-11	1104291	TMPZ-110	GW	LEVEL 2B	X	X	X	X	X

TABLE 1
SUMMARY OF GROUNDWATER SAMPLE ANALYSIS
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Date Sampled	Event	SDG	Sample ID	Sample Matrix	Validation Status	GEN [1]	RADIO	TMETAL	TOC	VOC

Notes:

--	No analysis conducted	TDS	Total dissolved solids
X	Analysis conducted	TMETAL	Total metals
GEN	General chemistries	TSS	Total suspended solids
GW	Groundwater	TOC	Total organic carbon
RADIO	Radionuclides	VOC	Volatile organic compounds
SDG	Sample deliver group		

1 General Chemistries include: total alkalinity, bicarbonate alkalinity, carbonate alkalinity, ammonia-N, cyanide, perchlorate, phosphorus, sulfide, TDS, TSS, fluoride, chloride, nitrite-N, nitrate-N, bromide, and sulfate; except as noted.
2 All general chemistries except for hexavalent chromium
3 VOCs include only chloroform and tetrachloroethene; metals include total chromium and total uranium only; and general chemistries include ammonia, chloride, nitrate, nitrite, and total dissolved solids.
4 Hexavalent chromium, perchlorate, and TDS only.

TABLE 2
DATA VALIDATION CRITERIA
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Inorganics Validation Criteria	**Level 4**	**Level 2B**
Holding times	X	X
Calibration (initial and continuing)	X	--
Blanks (laboratory and field)	X	X
Inductively coupled plasma (ICP) interference check sample	X	--
Laboratory control sample	X	X
Duplicate sample analysis	X	X
Matrix spike analysis	X	X
ICP serial dilution	X	X
Tracer yield (radionuclide analysis only)	X	X
Sample results verification	X	--
Field duplicate	X	X
Overall assessment of data set	X	X
Organics Validation Criteria		
Holding times	X	X
Gas chromatography/mass spectrometry (GC/MS) instrument performance check	X	--
Calibration (initial and continuing)	X	--
Blanks (laboratory and field)	X	X
Surrogate recovery	X	X
Laboratory control sample	X	X
Duplicate sample analysis	X	X
Matrix spike/matrix spike duplicate analysis	X	X
Field duplicate	X	X
Internal standard performance	X	X
Target compound identification	X	--
Tentatively identified compounds	X	--
System performance	X	--
Overall assessment of data set	X	X

Notes:
-- Criterion not evaluated
X Criterion evaluated

TABLE 3
DATA VALIDATION QUALIFIERS AND COMMENT CODES
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Validation Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
UJ	The analyte was analyzed for, but was not detected. The reported sample quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is an approximate concentration of the analyte in the sample.
R	The sample result is rejected and unusable due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
+	Estimated results are possibly biased high based on associated quality control
–	Estimated results are possibly biased low based on associated quality control
X	Result is not used for reporting because a more accurate and precise result is reported in its place.
Comment Code	**Definition**
a	Surrogate recovery exceeded
b	Laboratory method blank and common blank contamination
c	Calibration criteria exceeded
d	Duplicate precision criteria exceeded
e	Matrix spike or laboratory control sample recovery exceeded
f	Field blank contamination
g	Quantification below practical quantitation limit for stable chemistries
h	Holding time exceeded or other sample receipt issues
i	Internal standard criteria exceeded
j	Other stable chemistry qualification
k	Radiochemistry quantitation issue
l	Duplicate result from a less sensitive analytical method (for example, ICP versus ICP-MS)
m	Duplicate result from a less sensitive analytical run (for example, worse surrogate recoveries or dilution analysis)
n	Radiochemistry tracer yield criteria exceeded
o	Other radiochemistry qualification
p	Qualification of anions or TDS if either the CAB or TDS balance is unacceptable, but not both
q	Qualification of both anions and TDS when *both* the CAB and TDS balance are unacceptable.
r	Qualification of dioxin/furan results when the concentrations are represented by an “estimated maximum possible concentration” (EMPC).
s	Indicates that the analyte was undetected in the sample and was reported by the laboratory as undetected (U); below the SQL

TABLE 3
DATA VALIDATION QUALIFIERS AND COMMENT CODES
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Notes:

CAB	Cation/anion balance
EMPC	Estimated maximum possible concentration
ICP	Inductively coupled plasma
ICP/MS	Inductively coupled plasma/mass spectrometer
SQL	Sample quantitation limit
TDS	Total dissolved solids
TIMET	Titanium Metals Corporation

TABLE 4
QUALIFICATION BASED ON HOLDING TIME EXCEEDANCE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Sample ID	Analyte	Date/Time Sampled	Date/Time Analyzed	Result [1]	Qualifier	Comment	Unit
2Q2011	1104271	J2D1-R2	Hexavalent Chromium	4/20/11 10:08	4/21/11 11:15	67	J-	h	UG/L
2Q2011	1104246	J2D2-R2	Hexavalent Chromium	4/19/11 10:26	4/20/11 14:00	52	J-	h	UG/L
2Q2011	1104291	J2D4	Hexavalent Chromium	4/21/11 10:57	4/22/11 11:30	290	J-	h	UG/L
2Q2011	1104152	TMPZ-105	Hexavalent Chromium	4/13/11 10:30	4/14/11 10:45	1000	J-	h	UG/L
2Q2011	1104176	TMPZ-108	Hexavalent Chromium	4/14/11 10:00	4/15/11 10:30	380	J-	h	UG/L
2Q2011	1104355	TMPZ-109	Hexavalent Chromium	4/25/11 10:25	4/26/11 11:30	45	J-	h	UG/L
2Q2011	1104291	TMPZ-110	Hexavalent Chromium	4/21/11 10:45	4/22/11 11:30	15	J-	h	UG/L
2Q2011	1104246	M-129	Hexavalent Chromium	4/19/11 9:55	4/20/11 14:00	790	J-	h	UG/L
2Q2011	1104246	M-130	Hexavalent Chromium	4/19/11 11:50	4/20/11 14:00	770	J-	h	UG/L

Notes:

+/-	Result may be biased high/low, respectively
UG/L	Microgram per liter
SDG	Sample delivery group
PQL	Practical quantitation limit

Qualifiers/Comments:

h	Comment code for holding time exceedance
J	Estimated Value
UJ	Undetected at estimated quantitation limit

TABLE 5
QUALIFICATION BASED ON SAMPLE RECEIPT CONDITION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Sample ID	Analyte	Sample pH [1]	Results [2]	Qualifier	Comment	Unit
2Q2011	1104040	AA-01	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104176	AA-09	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104130	AA-11	CYANIDE	9	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	AA-20	CYANIDE	9	0.01 U	R	e, h, s	MG/L
2Q2011	1104025	AA-27	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104040	AA-UW1	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104089	BRW-R1	CYANIDE	11.5	0.01 U	UJ-	h, s	MG/L
2Q2011	1104291	CLD1-R	CYANIDE	11.5	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	CLD4-R	CYANIDE	9	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	DBMW-1	CYANIDE	10	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	DBMW-3	CYANIDE	10	0.01 U	R	e, h, s	MG/L
2Q2011	1104089	DBMW-4	CYANIDE	9	0.01 U	UJ-	h, s	MG/L
2Q2011	1104089	DBMW-5	CYANIDE	9	0.01 U	UJ-	h, s	MG/L
2Q2011	1104271	J2D1-R2	CYANIDE	9	0.01 U	R	e, h, s	MG/L
2Q2011	1104271	J2D1-R2	SULFIDE	8	2 U	UJ-	h, s	MG/L
2Q2011	1104246	J2D2-R2	CYANIDE	9	0.01 U	R	e, h, s	MG/L
2Q2011	1104291	J2D4	CYANIDE	10	0.01 U	R	e, h, s	MG/L
2Q2011	1104355	J2U2	CYANIDE	10	0.01 U	R	e, h, s	MG/L
2Q2011	1104089	MW-3R	CYANIDE	11.8	0.01 U	UJ-	h, s	MG/L
2Q2011	1104121	MW-4	CYANIDE	11	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	MW-5	CYANIDE	11	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	MW-6R	CYANIDE	11.5	0.01 U	R	e, h, s	MG/L
2Q2011	1104060	PC-124	CYANIDE	9	0.01 U	UJ-	h, s	MG/L
2Q2011	1104060	PC-24	CYANIDE	9	0.01 U	UJ-	h, s	MG/L
2Q2011	1104152	PC-028	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104223	PC-054	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104152	PC-067	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104223	POU-3	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104060	TMMW-101	CYANIDE	11.5	0.01 U	UJ-	h, s	MG/L
2Q2011	1104060	TMMW-104	CYANIDE	11.8	0.01 U	UJ-	h, s	MG/L
2Q2011	1104152	TMPZ-105	CYANIDE	11.5	0.01 U	UJ-	h, s	MG/L
2Q2011	1104152	TMPZ-107	CYANIDE	10	0.01 U	UJ-	h, s	MG/L
2Q2011	1104291	TMPZ-110	CYANIDE	10	0.01 U	R	e, h, s	MG/L

Notes:

MG/L	Millogram per liter
SDG	Sample delivery group
SQL	Sample quantitation limit

Qualifiers/Comments:

e	Comment code for spike exceedances
h	Comment code for sample receipt condition
s	Comment code for non-detects
R	Rejected
UJ	Undetected at an estimated SQL

1 Sample pH at receipt at laboratory; cyanide and sulfide pH requirements are >12 and >9, respectively
2 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 6
QUALIFICATION BASED ON CALIBRATION CRITERIA
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
ICAL 032411W RRF acetonitrile = 0.013, ethanol = 0.0014 (QC limit ≥0.01 for acetone; ≥0.05 all others)										
2Q2011	1104025	1104025-1	AA-27	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104025	1104025-1	AA-27	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104040	1104040-1	AA-UW1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104040	1104040-1	AA-UW1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104040	1104040-3	AA-01	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104040	1104040-3	AA-01	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-1	TMMW-101	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-1	TMMW-101	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-2	PC-024	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-2	PC-024	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-3	PC-124	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-3	PC-124	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-5	TMMW-104	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-5	TMMW-104	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-1	BRW-R1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-1	BRW-R1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-2	DBMW-5	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-2	DBMW-5	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-3	DBMW-4	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-3	DBMW-4	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-1	DBMW-1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-1	DBMW-1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-3	DBMW-3	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-3	DBMW-3	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104130	1104130-1	CLD4-R	ACETONITRILE	100	19	100 U	R	c, s	UG/L
2Q2011	1104130	1104130-1	CLD4-R	ETHANOL	400	11	400 U	R	c, s	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L

TABLE 6
QUALIFICATION BASED ON CALIBRATION CRITERIA
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104130	1104130-3	TIMETMW-6R	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104130	1104130-4	AA-20	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104130	1104130-4	AA-20	ETHANOL	200	5.5	41 J	J	c, g	UG/L
2Q2011	1104130	1104130-6	AA-11	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104130	1104130-6	AA-11	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-4	PC-067	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-4	PC-067	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-6	PC-028	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-6	PC-028	ETHANOL	200	5.5	39 J	J	c,g	UG/L
2Q2011	1104176	1104176-3	AA-09	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104176	1104176-3	AA-09	ETHANOL	200	5.5	55 J	J	c, s	UG/L
2Q2011	1104223	1104223-1	POU-3	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104223	1104223-1	POU-3	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104223	1104223-3	PC-054	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104223	1104223-3	PC-054	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	ETHANOL	200	5.5	200 U	R	c, s	UG/L
ICAL 04211WM RRF ethanol = 0.0037 (QC limit ≥0.01 for acetone; ≥0.05 all others)										
2Q2011	1104291	1104291-1	TMPZ-110	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104291	1104291-3	J2D4	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104291	1104291-4	CLD1-R	ETHANOL	200	5.5	200 U	R	c, s	UG/L
ICAL 032411W RRF acetonitrile = 0.013, ethanol = 0.0014 (QC limit ≥0.01 for acetone; ≥0.05 all others)										
2Q2011	1104355	1104355-3	TIMETMW-1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104355	1104355-3	TIMETMW-1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104355	1104355-4	J2U2	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104355	1104355-4	J2U2	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104447	1104447-1	J2D3	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104447	1104447-1	J2D3	ETHANOL	200	5.5	200 U	R	c, s	UG/L

TABLE 6
QUALIFICATION BASED ON CALIBRATION CRITERIA
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit

Notes:

UG/L	Microgram per liter
CCAL	Continuing calibration
ICAL	Initial calibration
PQL	Practical quantitation limit
QC	Quality Control
RRF	Relative response factor
SDG	Sample delivery group
SQL	Sample quantitation limit

Qualifiers/Comments:

c	Comment code for calibration qualification
s	Comment code for non-detects
R	Rejected
U	Undetected

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 7
QUALIFICATION BASED ON LABORATORY BLANK CONTAMINATION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

EVENT	Lab ID [1]	Sample ID	Analyte	PQL	SQL	Result [2]	Qualifier	Comment	Blank Type	Blank Value	Unit
2Q2011	1104025-1	AA-27	ALUMINUM	100	15	26 B	J-	b, g	MB	-42 B	UG/L
2Q2011	1104025-1	AA-27	BARIUM	100	0.19	11 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104025-1	AA-27	IRON	100	4.9	42 B	U	b	ICB	11.9 B	UG/L
2Q2011	1104025-1	AA-27	MANGANESE	10	0.11	1 B	J-	b, g	MB	-0.28 B	UG/L
2Q2011	1104025-1	AA-27	MERCURY	0.2	0.0097	0.016 B	U	b	MB	0.02 B	UG/L
2Q2011	1104025-1	AA-27	THALLIUM	0.2	0.016	0.06 B	U	b	ICB	0.007B	UG/L
2Q2011	1104025-1	AA-27	ZINC	20	0.72	0.84 B	U	b	MB	2.3 B	UG/L
2Q2011	1104040-1	AA-UW1	BARIUM	100	0.19	23 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104040-3	AA-01	BARIUM	100	0.19	15 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104040-1	AA-UW1	CADMIUM	5	0.33	0.34 B	J-	b, g	CCB	-0.35 B	UG/L
2Q2011	1104040-3	AA-01	CADMIUM	5	0.33	0.48 B	J-	b, g	CCB	-0.35 B	UG/L
2Q2011	1104040-3	AA-01	CHROMIUM	10	0.51	8.7 B	J-	b, g	MB	-0.58 B	UG/L
2Q2011	1104040-1	AA-UW1	MERCURY	0.2	0.0097	0.029 B	U	b	MB	0.02 B	UG/L
2Q2011	1104040-3	AA-01	MERCURY	0.2	0.0097	0.033 B	U	b	MB	0.02 B	UG/L
2Q2011	1104040-1	AA-UW1	SELENIUM	5	2.7	5 B	U	b	CCB	3.36B	UG/L
2Q2011	1104040-3	AA-01	SELENIUM	5	2.7	4.3 B	U	b	CCB	3.36B	UG/L
2Q2011	1104040-1	AA-UW1	THALLIUM	0.2	0.016	0.07 B	U	b	ICB	0.007B	UG/L
2Q2011	1104040-3	AA-01	THALLIUM	0.2	0.016	0.04 B	U	b	ICB	0.007B	UG/L
2Q2011	1104040-1	AA-UW1	TITANIUM	20	0.27	14 B	J-	b, g	MB	-1.9 B	UG/L
2Q2011	1104040-1	AA-UW1	ZINC	20	0.72	14 B	U	b	MB	2.3 B	UG/L
2Q2011	1104060-1	TMMW-101	BARIUM	100	0.19	13 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104060-2	PC-024	BARIUM	100	0.19	15 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104060-3	PC-124	BARIUM	100	0.19	17 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104060-5	TMMW-104	BARIUM	100	0.19	14 B	J	b, g, j	MB	-0.61 B	UG/L
2Q2011	1104060-2	PC-024	COPPER	10	0.97	1.6 B	J-	b, g	CCB	-1.03 B	UG/L
2Q2011	1104060-5	TMMW-104	IRON	100	4.9	16 B	U	b	ICB	11.9 B	UG/L
2Q2011	1104060-2	PC-024	MANGANESE	10	0.11	6.2 B	J-	b, g	MB	-0.28 B	UG/L
2Q2011	1104060-3	PC-124	MANGANESE	10	0.11	5.6 B	J-	b, g	MB	-0.28 B	UG/L
2Q2011	1104060-1	TMMW-101	MERCURY	0.2	0.0097	0.033 B	U	b	MB	0.02 B	UG/L
2Q2011	1104060-2	PC-024	MERCURY	0.2	0.0097	0.036 B	U	b	MB	0.02 B	UG/L
2Q2011	1104060-3	PC-124	MERCURY	0.2	0.0097	0.026 B	U	b	MB	0.02 B	UG/L
2Q2011	1104060-5	TMMW-104	MERCURY	0.2	0.0097	0.014 B	U	b	MB	0.02 B	UG/L
2Q2011	1104060-1	TMMW-101	METHYLENE CHLORIDE	1	0.17	0.17 BJ	U	b	MB	0.25 J	UG/L
2Q2011	1104060-2	PC-024	SELENIUM	5	2.7	3.5 B	U	b	CCB	3.36B	UG/L

TABLE 7
QUALIFICATION BASED ON LABORATORY BLANK CONTAMINATION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

EVENT	Lab ID [1]	Sample ID	Analyte	PQL	SQL	Result [2]	Qualifier	Comment	Blank Type	Blank Value	Unit
2Q2011	1104060-3	PC-124	SELENIUM	5	2.7	4.2 B	U	b	CCB	3.36B	UG/L
2Q2011	1104060-1	TMMW-101	THALLIUM	0.2	0.016	0.02 B	U	b	ICB	0.007B	UG/L
2Q2011	1104060-2	PC-024	THALLIUM	0.2	0.016	0.06 B	U	b	ICB	0.007B	UG/L
2Q2011	1104060-3	PC-124	THALLIUM	0.2	0.016	0.08 B	U	b	ICB	0.007B	UG/L
2Q2011	1104060-5	TMMW-104	THALLIUM	0.2	0.016	0.03 B	U	b	ICB	0.007B	UG/L
2Q2011	1104060-2	PC-024	TITANIUM	20	0.27	6.8 B	J-	b, g	MB	-1.9 B	UG/L
2Q2011	1104060-1	TMMW-101	ZINC	20	0.72	1.1 B	U	b	MB	2.3 B	UG/L
2Q2011	1104060-2	PC-024	ZINC	20	0.72	6.3 B	U	b	MB	2.3 B	UG/L
2Q2011	1104060-5	TMMW-104	ZINC	20	0.72	5 B	U	b	MB	2.3 B	UG/L
2Q2011	1104060-1	TMMW-101	ZIRCONIUM	20	0.5	1.1 B	U	b	MB	0.67 B	UG/L
2Q2011	1104089-2	DBMW-5	ALUMINUM	500	76	170 B	U	b	ICB	43.9 B	UG/L
2Q2011	1104089-1	BRW-R1	BARIUM	500	0.93	9.9 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104089-2	DBMW-5	BARIUM	500	0.93	8.8 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104089-3	DBMW-4	BARIUM	500	0.93	5.5 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104089-5	TIMETMW-3R	BARIUM	500	0.93	18 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104089-1	BRW-R1	CHROMIUM	50	2.6	43 B	J-	b, g	ICB	-0.84 B	UG/L
2Q2011	1104089-5	TIMETMW-3R	CHROMIUM	50	2.6	28 B	J-	b, g	ICB	-0.84 B	UG/L
2Q2011	1104089-2	DBMW-5	IRON	500	25	180 B	J-	b, g	MB	-7.8 B	UG/L
2Q2011	1104089-3	DBMW-4	MANGANESE	50	0.57	1.1 B	J-	b, g	MB	-0.56 B	UG/L
2Q2011	1104089-2	DBMW-5	MOLYBDENUM	50	5.4	38 B	J-	b, g	MB	-1.5 B	UG/L
2Q2011	1104089-1	BRW-R1	THALLIUM	0.2	0.016	0.12 B	U	b	MB	0.03 B	UG/L
2Q2011	1104089-5	TIMETMW-3R	THALLIUM	0.2	0.016	0.04 B	U	b	MB	0.03 B	UG/L
2Q2011	1104089-2	DBMW-5	ZINC	100	3.6	33 B	U	b	MB	0.92 B	UG/L
2Q2011	1104089-3	DBMW-4	ZINC	100	3.6	28 B	U	b	MB	0.92 B	UG/L
2Q2011	1104089-1	BRW-R1	ZIRCONIUM	100	2.5	14 B	U	b	MB	1.4 B	UG/L
2Q2011	1104089-2	DBMW-5	ZIRCONIUM	100	2.5	9.1 B	U	b	MB	1.4 B	UG/L
2Q2011	1104089-3	DBMW-4	ZIRCONIUM	100	2.5	8.1 B	U	b	MB	1.4 B	UG/L
2Q2011	1104089-5	TIMETMW-3R	ZIRCONIUM	100	2.5	4.4 B	U	b	MB	1.4 B	UG/L
2Q2011	1104121-1	DBMW-1	BARIUM	500	0.93	12 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104121-3	DBMW-3	BARIUM	500	0.93	5.7 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104121-4	TIMETMW-4	BARIUM	500	0.93	6.7 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104121-5	TIMETMW-5	BARIUM	500	0.93	8.7 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104121-1	DBMW-1	CHROMIUM	50	2.6	47 B	J-	b, g	ICB	-0.84 B	UG/L
2Q2011	1104121-4	TIMETMW-4	CHROMIUM	50	2.6	13 B	J-	b, g	ICB	-0.84 B	UG/L

TABLE 7
QUALIFICATION BASED ON LABORATORY BLANK CONTAMINATION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

EVENT	Lab ID [1]	Sample ID	Analyte	PQL	SQL	Result [2]	Qualifier	Comment	Blank Type	Blank Value	Unit
2Q2011	1104121-5	TIMETMW-5	CHROMIUM	50	2.6	22 B	J-	b, g	ICB	-0.84 B	UG/L
2Q2011	1104121-4	TIMETMW-4	MOLYBDENUM	50	5.4	29 B	J-	b, g	MB	-1.5 B	UG/L
2Q2011	1104121-1	DBMW-1	THALLIUM	0.2	0.016	0.13 B	U	b	MB	0.03 B	UG/L
2Q2011	1104121-4	TIMETMW-4	THALLIUM	0.2	0.016	0.05 B	U	b	MB	0.03 B	UG/L
2Q2011	1104121-5	TIMETMW-5	THALLIUM	0.2	0.016	0.04 B	U	b	MB	0.03 B	UG/L
2Q2011	1104121-1	DBMW-1	ZINC	100	3.6	8 B	U	b	MB	0.92 B	UG/L
2Q2011	1104121-3	DBMW-3	ZINC	100	3.6	26 B	U	b	MB	0.92 B	UG/L
2Q2011	1104121-1	DBMW-1	ZIRCONIUM	100	2.5	12 B	U	b	MB	1.4 B	UG/L
2Q2011	1104121-3	DBMW-3	ZIRCONIUM	100	2.5	12 B	U	b	MB	1.4 B	UG/L
2Q2011	1104121-4	TIMETMW-4	ZIRCONIUM	100	2.5	4.5 B	U	b	MB	1.4 B	UG/L
2Q2011	1104130-1	CLD4-R	ALUMINUM	500	76	170 B	U	b	ICB	43.9 B	UG/L
2Q2011	1104130-6	AA-11	ALUMINUM	500	76	350 B	U	b	ICB	43.9 B	UG/L
2Q2011	1104130-1	CLD4-R	BARIUM	500	0.93	5.1 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104130-3	TIMETMW-6R	BARIUM	500	0.93	9.5 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104130-4	AA-20	BARIUM	500	0.93	5.9 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104130-6	AA-11	BARIUM	500	0.93	9.1 B	J-	b, g	MB	-0.78 B	UG/L
2Q2011	1104130-1	CLD4-R	BERYLLIUM	10	0.88	8.5 B	U	b	CCB	0.034 B	UG/L
2Q2011	1104130-6	AA-11	CHROMIUM	50	2.6	26 B	J-	b, g	ICB	-0.84 B	UG/L
2Q2011	1104130-6	AA-11	IRON	500	25	280 B	J-	b, g	MB	-7.8 B	UG/L
2Q2011	1104130-1	CLD4-R	MANGANESE	50	0.57	44 B	J-	b, g	MB	-0.56 B	UG/L
2Q2011	1104130-6	AA-11	MANGANESE	50	0.57	22 B	J-	b, g	MB	-0.56 B	UG/L
2Q2011	1104130-3	TIMETMW-6R	MOLYBDENUM	50	5.4	16 B	J-	b, g	MB	-1.5 B	UG/L
2Q2011	1104130-6	AA-11	MOLYBDENUM	50	5.4	32 B	J-	b, g	MB	-1.5 B	UG/L
2Q2011	1104130-3	TIMETMW-6R	NICKEL	100	4.7	19 B	J-	b, g	ICB	-1.3 B	UG/L
2Q2011	1104130-1	CLD4-R	THALLIUM	0.2	0.016	0.08 B	U	b	MB	0.03 B	UG/L
2Q2011	1104130-3	TIMETMW-6R	THALLIUM	0.2	0.016	0.07 B	U	b	MB	0.03 B	UG/L
2Q2011	1104130-6	AA-11	THALLIUM	0.2	0.016	0.11 B	U	b	MB	0.03 B	UG/L
2Q2011	1104130-6	AA-11	ZINC	100	3.6	58 B	U	b	MB	0.92 B	UG/L
2Q2011	1104130-3	TIMETMW-6R	ZIRCONIUM	100	2.5	3.4 B	U	b	MB	1.4 B	UG/L
2Q2011	1104130-4	AA-20	ZIRCONIUM	100	2.5	5.8 B	U	b	MB	1.4 B	UG/L
2Q2011	1104130-6	AA-11	ZIRCONIUM	100	2.5	5.8 B	U	b	MB	1.4 B	UG/L
2Q2011	1104152-2	TMPZ-107	METHYLENE CHLORIDE	1	0.17	0.24 BJ	U	b	MB	0.24 J	UG/L
2Q2011	1104152-4	PC-067	METHYLENE CHLORIDE	1	0.17	0.22 BJ	U	b	MB	0.24 J	UG/L
2Q2011	1104152-1	TMPZ-105	THALLIUM	0.2	0.016	0.07 B	U	b	ICB	0.003 B	UG/L

TABLE 7
QUALIFICATION BASED ON LABORATORY BLANK CONTAMINATION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

EVENT	Lab ID [1]	Sample ID	Analyte	PQL	SQL	Result [2]	Qualifier	Comment	Blank Type	Blank Value	Unit
2Q2011	1104152-2	TMPZ-107	THALLIUM	0.2	0.016	0.13 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104152-4	PC-067	THALLIUM	0.2	0.016	0.06 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104152-6	PC-028	THALLIUM	0.2	0.016	0.02 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104152-2	TMPZ-107	ZIRCONIUM	100	2.5	5.8 B	U	b	MB	0.74 B	UG/L
2Q2011	1104152-4	PC-067	ZIRCONIUM	100	2.5	14 B	U	b	MB	0.74 B	UG/L
2Q2011	1104152-6	PC-028	ZIRCONIUM	100	2.5	6.1 B	U	b	MB	0.74 B	UG/L
2Q2011	1104176-3	AA-09	THALLIUM	0.2	0.016	0.09 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104176-3	AA-09	ZIRCONIUM	100	2.5	8.3 B	U	b	MB	0.74 B	UG/L
2Q2011	1104223-1	POU-3	ALUMINUM	500	76	160 B	U	b	ICB	55.1 B	UG/L
2Q2011	1104223-3	PC-054	ALUMINUM	500	76	150 B	U	b	ICB	55.1 B	UG/L
2Q2011	1104223-1	POU-3	MERCURY	0.2	0.0097	0.011 B	U	b	MB	-0.012 B	UG/L
2Q2011	1104223-1	POU-3	METHYLENE CHLORIDE	1	0.17	1.2 B	U	b	MB	0.4 J	UG/L
2Q2011	1104223-3	PC-054	METHYLENE CHLORIDE	1	0.17	0.37 BJ	U	b	MB	0.4 J	UG/L
2Q2011	1104223-1	POU-3	THALLIUM	0.2	0.016	0.09 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104223-3	PC-054	THALLIUM	0.2	0.016	0.05 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104223-1	POU-3	ZIRCONIUM	100	2.5	11 B	U	b	MB	4.3 B	UG/L
2Q2011	1104223-3	PC-054	ZIRCONIUM	100	2.5	8.8 B	U	b	MB	4.3 B	UG/L
2Q2011	1104246-1	J2D2-R2	ALUMINUM	500	76	110 B	U	b	ICB	55.1 B	UG/L
2Q2011	1104246-1	J2D2-R2	BERYLLIUM	10	0.88	1.1 B	U	b	CCB	0.34 B	UG/L
2Q2011	1104246-1	J2D2-R2	MERCURY	0.2	0.0097	0.017 B	U	b	MB	-0.012 B	UG/L
2Q2011	1104246-1	J2D2-R2	THALLIUM	0.2	0.016	0.04 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104246-1	J2D2-R2	ZIRCONIUM	100	2.5	6.9 B	U	b	MB	4.3 B	UG/L
2Q2011	1104271-1	J2D1-R2	THALLIUM	0.2	0.016	0.05 B	U	b	ICB	0.003 B	UG/L
2Q2011	1104271-1	J2D1-R2	ZINC	100	3.6	4.6 B	U	b	MB	2.3 B	UG/L
2Q2011	1104271-1	J2D1-R2	ZIRCONIUM	100	2.5	9.9 B	U	b	MB	4.3 B	UG/L
2Q2011	1104291-1	TMPZ-110	ALUMINUM	500	76	140 B	U	b	ICB	18.2 B	UG/L
2Q2011	1104291-3	J2D4	ALUMINUM	500	76	150 B	U	b	ICB	18.2 B	UG/L
2Q2011	1104291-4	CLD1-R	ALUMINUM	500	76	130 B	U	b	ICB	18.2 B	UG/L
2Q2011	1104291-1	TMPZ-110	BERYLLIUM	10	0.88	1.4 B	U	b	CCB	-0.3 B	UG/L
2Q2011	1104291-3	J2D4	BERYLLIUM	10	0.88	1.6 B	U	b	CCB	-0.3 B	UG/L
2Q2011	1104291-1	TMPZ-110	THALLIUM	0.2	0.016	0.06 B	U	b	CCB	0.002 B	UG/L
2Q2011	1104291-3	J2D4	THALLIUM	0.2	0.016	0.04 B	U	b	CCB	0.002 B	UG/L
2Q2011	1104291-4	CLD1-R	THALLIUM	0.2	0.016	0.05 B	U	b	CCB	0.002 B	UG/L
2Q2011	1104291-1	TMPZ-110	ZIRCONIUM	100	2.5	4.6 B	U	b	MB	0.66 B	UG/L

TABLE 7
QUALIFICATION BASED ON LABORATORY BLANK CONTAMINATION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

EVENT	Lab ID [1]	Sample ID	Analyte	PQL	SQL	Result [2]	Qualifier	Comment	Blank Type	Blank Value	Unit
2Q2011	1104291-3	J2D4	ZIRCONIUM	100	2.5	12 B	U	b	MB	0.66 B	UG/L
2Q2011	1104291-4	CLD1-R	ZIRCONIUM	100	2.5	2.8 B	U	b	MB	0.66 B	UG/L
2Q2011	1104355-4	J2U2	THALLIUM	0.2	0.016	0.08 B	U	b	MB	0.02 B	UG/L
2Q2011	1104447-1	J2D3	THALLIUM	0.2	0.016	0.03 B	U	b	MB	0.02 B	UG/L

Notes

+/-	Result may be biased high/low, respectively
UG/L	Microgram per liter
CCB	Continuing calibration blank
ICB	Initial calibration blank
MB	Method/preparation blank
PQL	Practical quantitaion limit
SDG	Sample delivery group

Qualifiers/Comments

b	Comment code for blank contamination
B	Indicates detected result less than PQL
J	Estimated value
U	Undetected

1 Lab sample ID contains the SDG number.
2 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 8
QUALIFICATION BASED ON FIELD BLANK CONTAMINATION
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

EVENT	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Results[1]	Qualifier	Comment	Unit
2Q2011	1104130	1104130-1	CLD4-R	METHYLENE CHLORIDE	2	0.33	0.45 J	U	f	UG/L

Notes

UG/L	Microgram per liter
PQL	Practical quantitaion limit
SDG	Sample delivery group

Qualifiers/Comments

f	Comment code for field blank contamination
J	Estimated value
U	Undetected

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 9
QUALIFICATION BASED ON SPIKE RECOVERY
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
AA-27 MS/MSD Potassium = 130/131 %R (QC Limits 75 - 125 %R)										
2Q2011	1104025	1104025-1	AA-27	POTASSIUM	1000	110	12000	J+	e, j	UG/L
2Q2011	1104040	1104040-1	AA-UW1	POTASSIUM	1000	110	13000	J+	e, j	UG/L
2Q2011	1104040	1104040-3	AA-01	POTASSIUM	1000	110	11000	J+	e, j	UG/L
DBMW-1 MS/MSD Cyanide = 0/0 %R (QC Limits 75 - 125 %R)										
2Q2011	1104121	1104121-1	DBMW-1	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-3	DBMW-3	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-4	MW-4	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-5	MW-5	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-1	CLD4-R	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-3	MW-6R	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-4	AA-20	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-6	AA-11	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104246	1104246-1	J2D2-R2	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
J2D1-R2 MS/MSD Cyanide = 0/0 %R; Potassium = 133/127 %R; TOC = 70/70 %R (QC Limits 75 - 125 %R)										
2Q2011	1104271	1104271-1	J2D1-R2	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104271	1104271-1	J2D1-R2	POTASSIUM	5000	540	32000	J	e,j	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	TOC	1	1	1 U	UJ-	e, s	MG/L
J2D1-R2 MS/MSD Cyanide = 0/0 %R; TMPZ-110 MS/MSD Nitrite = 70/69 %R (QC Limits 75 - 125 %R)										
2Q2011	1104291	1104291-1	TMPZ-110	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104291	1104291-1	TMPZ-110	NITRITE	0.5	0.024	0.5 U	UJ-	e, s	MG/L
2Q2011	1104291	1104291-3	J2D4	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104291	1104291-3	J2D4	NITRITE	1	0.048	1 U	UJ-	e, s	MG/L
2Q2011	1104291	1104291-4	CLD1-R	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104291	1104291-4	CLD1-R	NITRITE	0.5	0.024	0.5 U	UJ-	e, s	MG/L
2Q2011	1104355	1104355-4	J2U2	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104416	1104416-1	CMT-101	NITRITE	1	0.048	1 U	UJ-	e, s	MG/L
J2D2-R2 MS/MSD Phosphorus = 130/132 %R (QC Limits 75 - 125 %R)										
2Q2011	1104355	1104355-4	J2U2	PHOSPHORUS	0.05	0.04	0.2	J+	e	MG/L
LCS Radium-228 = 145 %R (QC Limits 80 - 120 %R)										
2Q2011	1104291	1104291-1	TMPZ-110	RADIUM-228	0.602	0.602	0.703 LT	J+	e,g	PCI/L

TABLE 9
QUALIFICATION BASED ON SPIKE RECOVERY
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit

Notes:

%R	Percent Recovery
UG/L	Microgram per liter
MDA	Minimum detectable activity
MG/L	Milligram per liter
MS	Matrix spike
MSD	Matrix spike duplicate
PCI/L	PicoCurie per liter
PQL	Practical quantitation limit
QC	Quality control
SDG	Sample delivery group
SQL	Sample quantitation limit
TOC	Total organic carbon

Qualifiers/Comments:

+/-	Result may be biased high/low
e	Comment code for spike recovery
g	Comment code for results detected less than PQL
h	Comment code for holding time/sample receipt
j	Comment code for other stable chemistry issues
s	Comment code for non-detects
J	Estimated Value
LT	Result less than requested MDA
R	Rejected value
UJ	Undetected at quantitation limits

1 Result field includes the numerical concentration and the laboratory qualifier or code

TABLE 10
QUALIFICATION WHEN RESULTS ARE BELOW PQL
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104025	1104025-1	AA-27	ALUMINUM	100	15	26 B	J-	b, g	UG/L
2Q2011	1104025	1104025-1	AA-27	BARIUM	100	0.19	11 B	J	b, g, j	UG/L
2Q2011	1104025	1104025-1	AA-27	LEAD	3	1.3	1.9 B	J	g	UG/L
2Q2011	1104025	1104025-1	AA-27	MANGANESE	10	0.11	1 B	J-	b, g	UG/L
2Q2011	1104025	1104025-1	AA-27	NICKEL	20	0.93	2.1 B	J+	e, g	UG/L
2Q2011	1104040	1104040-1	AA-UW1	BARIUM	100	0.19	23 B	J	b, g, j	UG/L
2Q2011	1104040	1104040-1	AA-UW1	CADMIUM	5	0.33	0.34 B	J-	b, g	UG/L
2Q2011	1104040	1104040-1	AA-UW1	NICKEL	20	0.93	2.9 B	J	g	UG/L
2Q2011	1104040	1104040-1	AA-UW1	TITANIUM	20	0.27	14 B	J-	b, g	UG/L
2Q2011	1104040	1104040-1	AA-UW1	TRICHLOROETHENE	1	0.17	0.51 J	J	g	UG/L
2Q2011	1104040	1104040-3	AA-01	BARIUM	100	0.19	15 B	J	b, g, j	UG/L
2Q2011	1104040	1104040-3	AA-01	CADMIUM	5	0.33	0.48 B	J-	b, g	UG/L
2Q2011	1104040	1104040-3	AA-01	CHROMIUM	10	0.51	8.7 B	J-	b, g	UG/L
2Q2011	1104040	1104040-3	AA-01	LEAD	3	1.3	1.8 B	J	g	UG/L
2Q2011	1104040	1104040-3	AA-01	NICKEL	20	0.93	1.9 B	J	g	UG/L
2Q2011	1104040	1104040-3	AA-01	TRICHLOROETHENE	1	0.17	0.45 J	J	g	UG/L
2Q2011	1104060	1104060-1	TMMW-101	BARIUM	100	0.19	13 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-1	TMMW-101	POTASSIUM	1000	110	13000	J+	g, j	UG/L
2Q2011	1104060	1104060-2	PC-024	1,1-DICHLOROETHANE	1	0.16	0.24 J	J	g	UG/L
2Q2011	1104060	1104060-2	PC-024	BARIUM	100	0.19	15 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-2	PC-024	COPPER	10	0.97	1.6 B	J-	b, g	UG/L
2Q2011	1104060	1104060-2	PC-024	MANGANESE	10	0.11	6.2 B	J-	b, g	UG/L
2Q2011	1104060	1104060-2	PC-024	NICKEL	20	0.93	3.8 B	J	g	UG/L
2Q2011	1104060	1104060-2	PC-024	POTASSIUM	1000	110	32000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-2	PC-024	TITANIUM	20	0.27	6.8 B	J-	b, g	UG/L
2Q2011	1104060	1104060-2	PC-024	TRICHLOROETHENE	1	0.17	0.71 J	J	g	UG/L
2Q2011	1104060	1104060-3	PC-124	1,1-DICHLOROETHANE	1	0.16	0.21 J	J	g	UG/L
2Q2011	1104060	1104060-3	PC-124	BARIUM	100	0.19	17 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-3	PC-124	CARBON TETRACHLORIDE	1	0.17	0.89 J	J	g	UG/L
2Q2011	1104060	1104060-3	PC-124	MANGANESE	10	0.11	5.6 B	J-	b, g	UG/L
2Q2011	1104060	1104060-3	PC-124	NICKEL	20	0.93	6 B	J	g	UG/L
2Q2011	1104060	1104060-3	PC-124	POTASSIUM	1000	110	33000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-3	PC-124	TETRACHLOROETHENE	1	0.18	0.99 J	J	g	UG/L
2Q2011	1104060	1104060-3	PC-124	TRICHLOROETHENE	1	0.17	1 J	J	g	UG/L
2Q2011	1104060	1104060-5	TMMW-104	BARIUM	100	0.19	14 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-5	TMMW-104	NICKEL	20	0.93	1.6 B	J	g	UG/L

TABLE 10
QUALIFICATION WHEN RESULTS ARE BELOW PQL
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104060	1104060-5	TMMW-104	POTASSIUM	1000	110	12000	J+	g, j, p	UG/L
2Q2011	1104089	1104089-1	BRW-R1	BARIUM	500	0.93	9.9 B	J-	b, g	UG/L
2Q2011	1104089	1104089-1	BRW-R1	CHROMIUM	50	2.6	43 B	J-	b, g	UG/L
2Q2011	1104089	1104089-1	BRW-R1	VANADIUM	50	2.7	21 B	J	g	UG/L
2Q2011	1104089	1104089-2	DBMW-5	BARIUM	500	0.93	8.8 B	J-	b, g	UG/L
2Q2011	1104089	1104089-2	DBMW-5	IRON	500	25	180 B	J-	b, g	UG/L
2Q2011	1104089	1104089-2	DBMW-5	METHYL-T-BUTYL ETHER	1	0.17	0.23 J	J	g	UG/L
2Q2011	1104089	1104089-2	DBMW-5	METHYL-T-BUTYL ETHER	1	0.17	0.23 J	J	g	UG/L
2Q2011	1104089	1104089-2	DBMW-5	MOLYBDENUM	50	5.4	38 B	J-	b, g	UG/L
2Q2011	1104089	1104089-2	DBMW-5	VANADIUM	50	2.7	17 B	J	g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	BARIUM	500	0.93	5.5 B	J-	b, g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	ETHANOL	200	5.5	27 J	J	c, g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	MANGANESE	50	0.57	1.1 B	J-	b, g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	METHYL-T-BUTYL ETHER	1	0.17	0.4 J	J	g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	METHYL-T-BUTYL ETHER	1	0.17	0.4 J	J	g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	SELENIUM	25	13	19 B	J	g	UG/L
2Q2011	1104089	1104089-3	DBMW-4	VANADIUM	50	2.7	48 B	J	g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	1,2-DICHLOROETHANE	1	0.18	0.48 J	J	g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	1,2-DICHLOROETHANE	1	0.18	0.48 J	J	g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	BARIUM	500	0.93	18 B	J-	b, g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	CHLOROFORM	1	0.18	0.93 J	J	g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	CHLOROFORM	1	0.18	0.93 J	J	g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	CHROMIUM	50	2.6	28 B	J-	b, g	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	VANADIUM	50	2.7	31 B	J	g	UG/L
2Q2011	1104121	1104121-1	DBMW-1	BARIUM	500	0.93	12 B	J-	b, g	UG/L
2Q2011	1104121	1104121-1	DBMW-1	CHROMIUM	50	2.6	47 B	J-	b, g	UG/L
2Q2011	1104121	1104121-1	DBMW-1	VANADIUM	50	2.7	34 B	J	g	UG/L
2Q2011	1104121	1104121-3	DBMW-3	BARIUM	500	0.93	5.7 B	J-	b, g	UG/L
2Q2011	1104121	1104121-3	DBMW-3	VANADIUM	50	2.7	34 B	J	g	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	1,1-DICHLOROETHANE	1	0.16	0.42 J	J	g	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	BARIUM	500	0.93	6.7 B	J-	b, g	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	CHROMIUM	50	2.6	13 B	J-	b, g	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	MOLYBDENUM	50	5.4	29 B	J-	b, g	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	TRICHLOROETHENE	1	0.17	0.33 J	J	g	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	BARIUM	500	0.93	8.7 B	J-	b, g	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	CHROMIUM	50	2.6	22 B	J-	b, g	UG/L

TABLE 10
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Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104130	1104130-1	CLD4-R	1,1-DICHLOROETHENE	2	0.36	0.66 J	J	g	UG/L
2Q2011	1104130	1104130-1	CLD4-R	BARIUM	500	0.93	5.1 B	J-	b, g	UG/L
2Q2011	1104130	1104130-1	CLD4-R	CIS-1,2-DICHLOROETHENE	2	0.34	1.5 J	J	g	UG/L
2Q2011	1104130	1104130-1	CLD4-R	DIBROMOCHLOROMETHANE	2	0.5	0.5 J	J	g	UG/L
2Q2011	1104130	1104130-1	CLD4-R	MANGANESE	50	0.57	44 B	J-	b, g	UG/L
2Q2011	1104130	1104130-1	CLD4-R	TETRACHLOROETHENE	2	0.36	0.52 J	J	g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	1,1-DICHLOROETHENE	1	0.18	0.3 J	J	g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	BARIUM	500	0.93	9.5 B	J-	b, g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	CARBON TETRACHLORIDE	1	0.17	0.24 J	J	g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	MOLYBDENUM	50	5.4	16 B	J-	b, g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	NICKEL	100	4.7	19 B	J-	b, g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	TETRACHLOROETHENE	1	0.18	0.34 J	J	g	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	VANADIUM	50	2.7	39 B	J	g	UG/L
2Q2011	1104130	1104130-4	AA-20	1,1-DICHLOROETHANE	1	0.16	0.17 J	J	g	UG/L
2Q2011	1104130	1104130-4	AA-20	1,1-DICHLOROETHENE	1	0.18	0.2 J	J	g	UG/L
2Q2011	1104130	1104130-4	AA-20	BARIUM	500	0.93	5.9 B	J-	b, g	UG/L
2Q2011	1104130	1104130-4	AA-20	CARBON TETRACHLORIDE	1	0.17	0.95 J	J	g	UG/L
2Q2011	1104130	1104130-4	AA-20	ETHANOL	200	5.5	41 J	J	c, g	UG/L
2Q2011	1104130	1104130-4	AA-20	VANADIUM	50	2.7	41 B	J	g	UG/L
2Q2011	1104130	1104130-6	AA-11	1,1-DICHLOROETHANE	1	0.16	0.21 J	J	g	UG/L
2Q2011	1104130	1104130-6	AA-11	1,1-DICHLOROETHENE	1	0.18	0.53 J	J	g	UG/L
2Q2011	1104130	1104130-6	AA-11	BARIUM	500	0.93	9.1 B	J-	b, g	UG/L
2Q2011	1104130	1104130-6	AA-11	CHROMIUM	50	2.6	26 B	J-	b, g	UG/L
2Q2011	1104130	1104130-6	AA-11	IRON	500	25	280 B	J-	b, g	UG/L
2Q2011	1104130	1104130-6	AA-11	MANGANESE	50	0.57	22 B	J-	b, g	UG/L
2Q2011	1104130	1104130-6	AA-11	MOLYBDENUM	50	5.4	32 B	J-	b, g	UG/L
2Q2011	1104130	1104130-6	AA-11	VANADIUM	50	2.7	31 B	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	1,1-DICHLOROETHANE	1	0.16	0.17 J	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	1,1-DICHLOROETHENE	1	0.18	0.49 J	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	ACTINIUM-228	16.7		16.7 LT	J	g	PCI/L
2Q2011	1104152	1104152-1	TMPZ-105	BARIUM	500	0.93	15 B	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	BROMODICHLOROMETHANE	1	0.22	0.64 J	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	DIBROMOCHLOROMETHANE	1	0.25	0.26 J	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	MANGANESE	50	0.57	34 B	J	g	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	RADIUM-228	0.565		0.802 LT	J	g	PCI/L
2Q2011	1104152	1104152-1	TMPZ-105	THALLIUM-208	4.45		6.18 LT	J	g	PCI/L

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Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104152	1104152-1	TMPZ-105	TRICHLOROETHENE	1	0.17	0.23 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	1,1-DICHLOROETHANE	1	0.16	0.26 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	1,1-DICHLOROETHENE	1	0.18	0.56 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	1,2,4-TRICHLOROBENZENE	1	0.22	0.37 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	1,2-DICHLOROETHANE	1	0.18	0.2 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	1,2-DICHLOROPROPANE	1	0.17	0.18 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	BARIUM	500	0.93	24 B	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	BROMODICHLOROMETHANE	1	0.22	0.83 J	J	g	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	RADIUM-228	0.634		0.954 LT	J	g	PCI/L
2Q2011	1104152	1104152-2	TMPZ-107	TRICHLOROETHENE	1	0.17	0.3 J	J	g	UG/L
2Q2011	1104152	1104152-4	PC-067	1,1-DICHLOROETHANE	1	0.16	0.27 J	J	g	UG/L
2Q2011	1104152	1104152-4	PC-067	BARIUM	500	0.93	26 B	J	g	UG/L
2Q2011	1104152	1104152-4	PC-067	BROMODICHLOROMETHANE	1	0.22	0.7 J	J	g	UG/L
2Q2011	1104152	1104152-4	PC-067	MANGANESE	50	0.57	7.5 B	J	g	UG/L
2Q2011	1104152	1104152-4	PC-067	TRICHLOROETHENE	1	0.17	0.45 J	J	g	UG/L
2Q2011	1104152	1104152-4	PC-067	VANADIUM	50	2.7	49 B	J	g	UG/L
2Q2011	1104152	1104152-6	PC-028	BARIUM	500	0.93	10 B	J	g	UG/L
2Q2011	1104152	1104152-6	PC-028	ETHANOL	200	5.5	39 J	J	c,g	UG/L
2Q2011	1104152	1104152-6	PC-028	IRON	500	25	39 B	J	g	UG/L
2Q2011	1104152	1104152-6	PC-028	MANGANESE	50	0.57	5.2 B	J	g	UG/L
2Q2011	1104152	1104152-6	PC-028	METHYL-T-BUTYL ETHER	1	0.17	0.31 J	J	g	UG/L
2Q2011	1104152	1104152-6	PC-028	MOLYBDENUM	50	5.4	35 B	J	g	UG/L
2Q2011	1104152	1104152-6	PC-028	TRICHLOROETHENE	1	0.17	0.56 J	J	g	UG/L
2Q2011	1104176	1104176-3	AA-09	1,1-DICHLOROETHENE	1	0.18	0.64 J	J	g	UG/L
2Q2011	1104176	1104176-3	AA-09	BARIUM	500	0.93	7.8 B	J	g	UG/L
2Q2011	1104176	1104176-3	AA-09	CARBON TETRACHLORIDE	1	0.17	0.61 J	J	g	UG/L
2Q2011	1104176	1104176-3	AA-09	TRICHLOROETHENE	1	0.17	0.48 J	J	g	UG/L
2Q2011	1104176	1104176-3	AA-09	VANADIUM	50	2.7	37 B	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	1,1-DICHLOROETHANE	1	0.16	0.87 J	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	1,1-DICHLOROPROPENE	5	0.17	0.33 J	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	1,2,3-TRICHLOROPROPANE	5	0.31	1.2 J	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	1,3-DICHLOROBENZENE	1	0.2	0.4 J	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	1,4-DICHLOROBENZENE	1	0.2	0.77 J	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	BARIUM	500	0.93	25 B	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	BERYLLIUM	10	0.88	1.2 B	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	CHLOROBENZENE	1	0.19	0.27 J	J	g	UG/L

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Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104223	1104223-1	POU-3	CIS-1,2-DICHLOROETHENE	1	0.17	0.97 J	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	MANGANESE	50	0.57	6.5 B	J	g	UG/L
2Q2011	1104223	1104223-1	POU-3	VANADIUM	50	2.7	16 B	J	g	UG/L
2Q2011	1104223	1104223-3	PC-054	BARIUM	500	0.93	9.7 B	J	g	UG/L
2Q2011	1104223	1104223-3	PC-054	BERYLLIUM	10	0.88	1.2 B	J	g	UG/L
2Q2011	1104223	1104223-3	PC-054	CARBON TETRACHLORIDE	1	0.17	0.24 J	J	g	UG/L
2Q2011	1104223	1104223-3	PC-054	MOLYBDENUM	50	5.4	32 B	J	g	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	1,1-DICHLOROETHANE	1	0.16	0.33 J	J	g	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	1,1-DICHLOROETHENE	1	0.18	0.58 J	J	g	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	BARIUM	500	0.93	14 B	J	g	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	CHROMIUM	50	2.6	42 B	J	g	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	MOLYBDENUM	50	5.4	21 B	J	g	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	RADIUM-228	0.606		0.821 LT	J	g	PCI/L
2Q2011	1104271	1104271-1	J2D1-R2	1,2-DICHLOROETHANE	1	0.18	0.29 J	J	g	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	BARIUM	500	0.93	36 B	J	g	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	CARBON TETRACHLORIDE	1	0.17	0.65 J	J	g	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	RADIUM-228	0.611		0.926 LT	J	g	PCI/L
2Q2011	1104271	1104271-1	J2D1-R2	TRICHLOROETHENE	1	0.17	0.86 J	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	1,1-DICHLOROETHANE	1	0.16	0.22 J	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	BARIUM	500	0.93	13 B	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	CHROMIUM	50	2.6	12 B	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	MANGANESE	50	0.57	1.2 B	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	MOLYBDENUM	50	5.4	17 B	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	RADIUM-226	0.536		0.541 LT	J	g	PCI/L
2Q2011	1104291	1104291-1	TMPZ-110	RADIUM-228	0.602		0.703 LT	J+	e,g	PCI/L
2Q2011	1104291	1104291-1	TMPZ-110	TRICHLOROETHENE	1	0.17	0.34 J	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	VANADIUM	50	2.7	44 B	J	g	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	ZINC	100	3.6	18 B	J	g	UG/L
2Q2011	1104291	1104291-3	J2D4	1,1-DICHLOROETHENE	1	0.18	0.78 J	J	g	UG/L
2Q2011	1104291	1104291-3	J2D4	1,2-DICHLOROPROPANE	1	0.17	0.18 J	J	g	UG/L
2Q2011	1104291	1104291-3	J2D4	BARIUM	500	0.93	19 B	J	g	UG/L
2Q2011	1104291	1104291-3	J2D4	RADIUM-226	0.323		0.39 LT	J	g	PCI/L
2Q2011	1104291	1104291-3	J2D4	SILVER	50	5.4	7.6 B	J	g	UG/L
2Q2011	1104291	1104291-3	J2D4	THALLIUM-208	4.17		5.24 LT	J	g	PCI/L
2Q2011	1104291	1104291-3	J2D4	TRICHLOROETHENE	1	0.17	0.35 J	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	1,1-DICHLOROETHENE	1	0.18	0.2 J	J	g	UG/L

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Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104291	1104291-4	CLD1-R	1,2,3-TRICHLOROBENZENE	1	0.22	0.38 J	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	1,2,4-TRICHLOROBENZENE	1	0.22	0.43 J	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	1,2-DICHLOROBENZENE	1	0.22	0.22 J	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	1,4-DICHLOROBENZENE	1	0.2	0.29 J	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	BARIUM	500	0.93	8.4 B	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	BROMODICHLOROMETHANE	1	0.22	0.84 J	J	g	UG/L
2Q2011	1104291	1104291-4	CLD1-R	THORIUM-230	0.128		0.13 LT	J	g	PCI/L
2Q2011	1104291	1104291-4	CLD1-R	TRICHLOROETHENE	1	0.17	0.18 J	J	g	UG/L
2Q2011	1104355	1104355-4	J2U2	1,1-DICHLOROETHENE	1	0.18	0.46 J	J	g	UG/L
2Q2011	1104355	1104355-4	J2U2	1,4-DICHLOROBENZENE	1	0.2	0.2 J	J	g	UG/L
2Q2011	1104355	1104355-4	J2U2	BARIUM	100	0.19	19 B	J	g	UG/L
2Q2011	1104355	1104355-4	J2U2	COBALT	10	0.45	2.6 B	J	g	UG/L
2Q2011	1104355	1104355-4	J2U2	NICKEL	20	0.93	2.7 B	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	BARIUM	100	0.19	28 B	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	CARBON TETRACHLORIDE	1	0.17	0.72 J	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	MERCURY	0.2	0.0029	0.02 B	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	NICKEL	20	0.93	3.9 B	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	TITANIUM	20	0.27	16 B	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	TRICHLOROETHENE	1	0.17	0.53 J	J	g	UG/L
2Q2011	1104447	1104447-1	J2D3	ZINC	20	0.72	3 B	J	g	UG/L

Notes:

+/-	Result may be biased high/low, respectively
UG/L	Microgram per liter
MDA	Minimum detectable activity
PCI/L	PicoCurie per liter
PQL	Practical quantitation limit
SDG	Sample delivery group
SQL	Sample quantitation limit

1 Result field includes the numerical concentration and the laboratory qualifier or code.

Qualifiers/Comments:

B	Indicates detected result less than PQL
b	Comment for qualification due to blanks.
c	Comment code for calibration issues
e	Comment code for spike recoveies
g	Comment code for results detected less than PQL
j	Comment code for other stable chemistry issues
J	Estimated value
LT	Results is less than requested MDA

TABLE 11
OTHER STABLE CHEMISTRY QUALIFICATIONS (SERIAL DILUTION)
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
AA-27 SD Barium = 13%D; Lithium = 15%D; Potassium = 29%D; Sodium = 18%D (QC Limit ≤ 10 %D)										
2Q2011	1104025	1104025-1	AA-27	BARIUM	100	0.19	11 B	J	b, g, j	UG/L
2Q2011	1104025	1104025-1	AA-27	POTASSIUM	1000	110	12000	J+	e, j	UG/L
2Q2011	1104025	1104025-1	AA-27	SODIUM	20000	130	430000	J+	j	UG/L
2Q2011	1104025	1104025-1	AA-27	LITHIUM	10	0.25	270	J+	e, j	UG/L
2Q2011	1104040	1104040-1	AA-UW1	BARIUM	100	0.19	23 B	J	b, g, j	UG/L
2Q2011	1104040	1104040-1	AA-UW1	POTASSIUM	1000	110	13000	J+	e, j	UG/L
2Q2011	1104040	1104040-1	AA-UW1	SODIUM	20000	130	360000	J+	j	UG/L
2Q2011	1104040	1104040-1	AA-UW1	LITHIUM	10	0.25	190	J+	j	UG/L
2Q2011	1104040	1104040-3	AA-01	BARIUM	100	0.19	15 B	J	b, g, j	UG/L
2Q2011	1104040	1104040-3	AA-01	POTASSIUM	1000	110	11000	J+	e, j	UG/L
2Q2011	1104040	1104040-3	AA-01	SODIUM	20000	130	350000	J+	j	UG/L
2Q2011	1104040	1104040-3	AA-01	LITHIUM	10	0.25	250	J+	j	UG/L
2Q2011	1104060	1104060-1	TMMW-101	BARIUM	100	0.19	13 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-1	TMMW-101	POTASSIUM	1000	110	13000	J+	g, j	UG/L
2Q2011	1104060	1104060-1	TMMW-101	SODIUM	20000	130	280000	J+	j	UG/L
2Q2011	1104060	1104060-1	TMMW-101	LITHIUM	10	0.25	130	J+	j	UG/L
2Q2011	1104060	1104060-2	PC-024	BARIUM	100	0.19	15 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-2	PC-024	POTASSIUM	1000	110	32000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-2	PC-024	SODIUM	20000	130	1200000	J+	j	UG/L
2Q2011	1104060	1104060-2	PC-024	LITHIUM	10	0.25	450	J+	j	UG/L
2Q2011	1104060	1104060-3	PC-124	BARIUM	100	0.19	17 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-3	PC-124	POTASSIUM	1000	110	33000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-3	PC-124	SODIUM	20000	130	930000	J+	j	UG/L
2Q2011	1104060	1104060-3	PC-124	LITHIUM	10	0.25	530	J+	j	UG/L
2Q2011	1104060	1104060-5	TMMW-104	BARIUM	100	0.19	14 B	J	b, g, j	UG/L
2Q2011	1104060	1104060-5	TMMW-104	POTASSIUM	1000	110	12000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-5	TMMW-104	SODIUM	10000	66	200000	J+	j	UG/L
2Q2011	1104060	1104060-5	TMMW-104	LITHIUM	10	0.25	150	J+	j	UG/L
DBMW-5 SD Lithium = 30%D; Potassium = 23%D (QC Limit ≤ 10 %D)										
2Q2011	1104089	1104089-1	BRW-R1	POTASSIUM	5000	540	12000	J+	j	UG/L
2Q2011	1104089	1104089-1	BRW-R1	LITHIUM	50	1.3	160	J+	j	UG/L
2Q2011	1104089	1104089-2	DBMW-5	POTASSIUM	5000	540	81000	J+	j	UG/L

TABLE 11
OTHER STABLE CHEMISTRY QUALIFICATIONS (SERIAL DILUTION)
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104089	1104089-2	DBMW-5	LITHIUM	50	1.3	350	J+	j	UG/L
2Q2011	1104089	1104089-3	DBMW-4	POTASSIUM	5000	540	98000	J+	j	UG/L
2Q2011	1104089	1104089-3	DBMW-4	LITHIUM	50	1.3	350	J+	j	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	POTASSIUM	5000	540	9300	J+	j	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	LITHIUM	50	1.3	130	J+	j	UG/L
2Q2011	1104121	1104121-1	DBMW-1	POTASSIUM	5000	540	62000	J+	j	UG/L
2Q2011	1104121	1104121-1	DBMW-1	LITHIUM	50	1.3	410	J+	j	UG/L
2Q2011	1104121	1104121-3	DBMW-3	POTASSIUM	5000	540	160000	J+	j, p	UG/L
2Q2011	1104121	1104121-3	DBMW-3	LITHIUM	50	1.3	540	J+	j	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	POTASSIUM	5000	540	8500	J+	j	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	LITHIUM	50	1.3	120	J+	j	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	POTASSIUM	5000	540	11000	J+	j	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	LITHIUM	50	1.3	170	J+	j	UG/L
2Q2011	1104130	1104130-1	CLD4-R	POTASSIUM	5000	540	7800	J+	j, p	UG/L
2Q2011	1104130	1104130-1	CLD4-R	LITHIUM	50	1.3	130	J+	j	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	POTASSIUM	5000	540	15000	J+	j	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	LITHIUM	50	1.3	280	J+	j	UG/L
2Q2011	1104130	1104130-4	AA-20	POTASSIUM	5000	540	47000	J+	j	UG/L
2Q2011	1104130	1104130-4	AA-20	LITHIUM	50	1.3	320	J+	j	UG/L
2Q2011	1104130	1104130-6	AA-11	POTASSIUM	5000	540	15000	J+	j	UG/L
2Q2011	1104130	1104130-6	AA-11	LITHIUM	50	1.3	320	J+	j	UG/L
J2D2-R2 SD Lithium = 27%D (QC Limit ≤ 10 %D)										
2Q2011	1104223	1104223-1	POU-3	LITHIUM	50	1.3	250	J	j	UG/L
2Q2011	1104223	1104223-3	PC-054	LITHIUM	50	1.3	490	J	j	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	LITHIUM	50	1.3	490	J	j	UG/L
J2D1-R2 SD Lithium = 24%D; Potassium = 27%D (QC Limit ≤ 10 %D)										
2Q2011	1104271	1104271-1	J2D1-R2	POTASSIUM	5000	540	32000	J	e,j	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	LITHIUM	50	1.3	480	J	j	UG/L
TMPZ-110 SD Lithium = 38%D (QC Limit ≤ 10 %D)										
2Q2011	1104291	1104291-1	TMPZ-110	LITHIUM	50	1.3	310	J	j	UG/L
2Q2011	1104291	1104291-3	J2D4	LITHIUM	50	1.3	580	J	j	UG/L
2Q2011	1104291	1104291-4	CLD1-R	LITHIUM	50	1.3	290	J	j	UG/L

TABLE 11
OTHER STABLE CHEMISTRY QUALIFICATIONS (SERIAL DILUTION)
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit

Notes:

%D	Percent difference
UG/L	Microgram per liter
PQL	Practical quantitation limit
QC	Quality control
SDG	Sample delivery group
SQL	Sample quantitation limit

Qualifiers/Comments:

+ / -	Result may be biased high/low, respectively
b	Comment code for blank contamination
g	Comment code for results less than PQL
e	Comment code for spike recoveries
p	Comment code for CAB issues
J	Estimated value
j	Comment code for other stable chemistry issues

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 12
OTHER STABLE CHEMISTRY QUALIFICATIONS (TENTATIVELY IDENTIFIED COMPOUNDS)
2011 1ST DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104291	1104291-4	CLD1-R	HEXACHLOROBUTADIENE	1	0.26	1.3 J	J	j	UG/L

Notes:

UG/L	Microgram per liter
PQL	Practical quantitation limit
SDG	Sample delivery group
SQL	Sample quantitation limit

Qualifiers/Comments:

J	Estimated value
j	Commend code for other stable chemistry issues

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 13
OTHER RADIOCHEMISTRY QUALIFICATIONS (ANALYTICAL BIAS)
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Results[1]	Qualifier	Comment	Unit
2Q2011	1104060	1104060-1	TMMW-101	BISMUTH-214	11.9	11.9	-1.08 UJ	UJ-	o	PCI/L
2Q2011	1104060	1104060-1	TMMW-101	LEAD-214	11.4	11.4	-3.27 UJ	UJ-	o	PCI/L
2Q2011	1104060	1104060-5	TMMW-104	BISMUTH-214	11.2	11.2	-5.86 UJ	UJ-	o	PCI/L
2Q2011	1104060	1104060-5	TMMW-104	LEAD-214	10.4	10.4	-4.31 UJ	UJ-	o	PCI/L
2Q2011	1104089	1104089-1	BRW-R1	BISMUTH-214	15.5	15.5	-21 UJ	UJ-	o	PCI/L
2Q2011	1104089	1104089-1	BRW-R1	LEAD-214	12.6	12.6	0.349 UJ	UJ-	o	PCI/L
2Q2011	1104089	1104089-5	TIMETMW-3R	BISMUTH-214	9.42	9.42	11.4 LTJ	J-	o	PCI/L
2Q2011	1104089	1104089-5	TIMETMW-3R	LEAD-214	8.97	8.97	12.7 LTJ	J-	o	PCI/L
2Q2011	1104121	1104121-4	TIMETMW-4	BISMUTH-214	27.1	27.1	8.81 UMJ	UJ-	o	PCI/L
2Q2011	1104121	1104121-4	TIMETMW-4	LEAD-214	18.1	18.1	1.5 UMJ	UJ-	o	PCI/L
2Q2011	1104121	1104121-5	TIMETMW-5	BISMUTH-214	15.6	15.6	-18.7 UJ	UJ-	o	PCI/L
2Q2011	1104121	1104121-5	TIMETMW-5	LEAD-214	12.9	12.9	-1.15 UJ	UJ-	o	PCI/L
2Q2011	1104130	1104130-1	CLD4-R	BISMUTH-214	8.21	8.21	10.1 LTJ	J-	o	PCI/L
2Q2011	1104130	1104130-1	CLD4-R	LEAD-214	16.1	16.1	1.44 UMJ	UJ-	o	PCI/L
2Q2011	1104130	1104130-3	TIMETMW-6R	BISMUTH-214	10.9	10.9	12.8 LTJ	J-	o	PCI/L
2Q2011	1104130	1104130-3	TIMETMW-6R	LEAD-214	11	11	6.98 UJ	UJ-	o	PCI/L
2Q2011	1104152	1104152-1	TMPZ-105	BISMUTH-214	27.5	27.5	10.1 UMJ	UJ-	o	PCI/L
2Q2011	1104152	1104152-1	TMPZ-105	LEAD-214	20.8	20.8	-2.81 UMJ	UJ-	o	PCI/L
2Q2011	1104152	1104152-2	TMPZ-107	BISMUTH-214	21.4	21.4	6.51 UJ	UJ-	o	PCI/L
2Q2011	1104152	1104152-2	TMPZ-107	LEAD-214	16.5	16.5	4.44 UMJ	UJ-	o	PCI/L
2Q2011	1104246	1104246-1	J2D2-R2	BISMUTH-214	23.3	23.3	1.31 UJ	UJ-	o	PCI/L
2Q2011	1104246	1104246-1	J2D2-R2	LEAD-214	9.63	9.63	11.9 LTJ	J-	o	PCI/L
2Q2011	1104271	1104271-1	J2D1-R2	BISMUTH-214	26	26	21.1 UMJ	UJ-	o	PCI/L
2Q2011	1104271	1104271-1	J2D1-R2	LEAD-214	17.7	17.7	16.5 UMJ	UJ-	o	PCI/L
2Q2011	1104291	1104291-1	TMPZ-110	BISMUTH-214	21.1	21.1	18.2 UJ	UJ-	o	PCI/L
2Q2011	1104291	1104291-1	TMPZ-110	LEAD-214	16.6	16.6	12.6 UMJ	UJ-	o	PCI/L
2Q2011	1104291	1104291-3	J2D4	BISMUTH-214	21.1	21.1	12.4 UJ	UJ-	o	PCI/L
2Q2011	1104291	1104291-3	J2D4	LEAD-214	16.5	16.5	7.87 UMJ	UJ-	o	PCI/L
2Q2011	1104291	1104291-4	CLD1-R	BISMUTH-214	17.5	17.5	11.2 UJ	UJ-	o	PCI/L
2Q2011	1104291	1104291-4	CLD1-R	LEAD-214	14.6	14.6	9.83 UJ	UJ-	o	PCI/L
2Q2011	1104355	1104355-4	J2U2	BISMUTH-214	20.1	20.1	2.55 UJ	UJ-	o	PCI/L
2Q2011	1104355	1104355-4	J2U2	LEAD-214	18.3	18.3	1.99 UMJ	UJ-	o	PCI/L

TABLE 13
OTHER RADIOCHEMISTRY QUALIFICATIONS (ANALYTICAL BIAS)
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Results[1]	Qualifier	Comment	Unit

Notes:

+/-	Results my be biased high/low
PCI/L	PicoCurie per liter
MDA	Minimum detectable activity
PQL	Practical quantitation limit
SDG	Sample delivery group
SQL	Sample quantitation limit

Qualifiers/Comments:

b	Comment code for laboratory blank contamination
J	Estimated value
LT	Result less than requested MDA
o	Comment code for other radiochemistry issues
TI	Tentative peak identification
UJ	Undetected at an estimated quantitation limit

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 14
QUALIFICATION BASED ON EITHER UNACCEPTABLE CAB OR TDS BALANCE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Client ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104060	1104060-2	PC-024	BICARBONATE ALKALINITY	10		100	J	p	MG/L
2Q2011	1104060	1104060-2	PC-024	CALCIUM	10000	240	710000	J	p	UG/L
2Q2011	1104060	1104060-2	PC-024	CARBONATE ALKALINITY	10		10 U	UJ	p, s	MG/L
2Q2011	1104060	1104060-2	PC-024	CHLORIDE	40	13	2700	J	p	MG/L
2Q2011	1104060	1104060-2	PC-024	FLUORIDE	1	0.088	1.3	J	p	MG/L
2Q2011	1104060	1104060-2	PC-024	MAGNESIUM	1000	13	260000	J	p	UG/L
2Q2011	1104060	1104060-2	PC-024	NITRATE NITROGEN	2	0.16	26	J	p	MG/L
2Q2011	1104060	1104060-2	PC-024	PERCHLORATE	2		17	J	p	MG/L
2Q2011	1104060	1104060-2	PC-024	POTASSIUM	1000	110	32000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-2	PC-024	SULFATE	200	16	2000	J	p	MG/L
2Q2011	1104060	1104060-3	PC-124	BICARBONATE ALKALINITY	10		81	J	p	MG/L
2Q2011	1104060	1104060-3	PC-124	CALCIUM	10000	240	860000	J	p	UG/L
2Q2011	1104060	1104060-3	PC-124	CARBONATE ALKALINITY	10		10 U	UJ	p, s	MG/L
2Q2011	1104060	1104060-3	PC-124	CHLORIDE	40	13	2700	J	p	MG/L
2Q2011	1104060	1104060-3	PC-124	FLUORIDE	1	0.088	1 U	UJ	p, s	MG/L
2Q2011	1104060	1104060-3	PC-124	MAGNESIUM	1000	13	330000	J	p	UG/L
2Q2011	1104060	1104060-3	PC-124	NITRATE NITROGEN	2	0.16	24	J	p	MG/L
2Q2011	1104060	1104060-3	PC-124	PERCHLORATE	0.4		6.5	J	p	MG/L
2Q2011	1104060	1104060-3	PC-124	POTASSIUM	1000	110	33000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-3	PC-124	SULFATE	200	16	2100	J	p	MG/L
2Q2011	1104060	1104060-5	TMMW-104	BICARBONATE ALKALINITY	10		120	J	p	MG/L
2Q2011	1104060	1104060-5	TMMW-104	CALCIUM	500	12	150000	J	p	UG/L
2Q2011	1104060	1104060-5	TMMW-104	CARBONATE ALKALINITY	10		10 U	UJ	p, s	MG/L
2Q2011	1104060	1104060-5	TMMW-104	CHLORIDE	10	3.2	220	J	p	MG/L
2Q2011	1104060	1104060-5	TMMW-104	FLUORIDE	0.2	0.018	0.88	J	p	MG/L
2Q2011	1104060	1104060-5	TMMW-104	MAGNESIUM	1000	13	88000	J	p	UG/L
2Q2011	1104060	1104060-5	TMMW-104	NITRATE NITROGEN	0.4	0.031	4.7	J	p	MG/L
2Q2011	1104060	1104060-5	TMMW-104	PERCHLORATE	0.04		0.45	J	p	MG/L
2Q2011	1104060	1104060-5	TMMW-104	POTASSIUM	1000	110	12000	J+	g, j, p	UG/L
2Q2011	1104060	1104060-5	TMMW-104	SULFATE	50	3.9	840	J	p	MG/L
2Q2011	1104121	1104121-3	DBMW-3	BICARBONATE ALKALINITY	10		66	J	p	MG/L
2Q2011	1104121	1104121-3	DBMW-3	CALCIUM	2500	60	550000	J	p	UG/L
2Q2011	1104121	1104121-3	DBMW-3	CARBONATE ALKALINITY	10		10 U	UJ	p, s	MG/L
2Q2011	1104121	1104121-3	DBMW-3	CHLORIDE	40	13	1900	J	p	MG/L
2Q2011	1104121	1104121-3	DBMW-3	FLUORIDE	1	0.088	1 U	UJ	p, s	MG/L

TABLE 14
QUALIFICATION BASED ON EITHER UNACCEPTABLE CAB OR TDS BALANCE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Client ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104121	1104121-3	DBMW-3	MAGNESIUM	5000	65	450000	J	p	UG/L
2Q2011	1104121	1104121-3	DBMW-3	NITRATE NITROGEN	2	0.16	14	J	p	MG/L
2Q2011	1104121	1104121-3	DBMW-3	PERCHLORATE	0.8		9.2	J	p	MG/L
2Q2011	1104121	1104121-3	DBMW-3	POTASSIUM	5000	540	160000	J+	j, p	UG/L
2Q2011	1104121	1104121-3	DBMW-3	SULFATE	200	16	3500	J	p	MG/L
2Q2011	1104130	1104130-1	CLD4-R	BICARBONATE ALKALINITY	10		270	J	p	MG/L
2Q2011	1104130	1104130-1	CLD4-R	CALCIUM	2500	60	37000	J	p	UG/L
2Q2011	1104130	1104130-1	CLD4-R	CARBONATE ALKALINITY	10		10 U	UJ	p, s	MG/L
2Q2011	1104130	1104130-1	CLD4-R	CHLORIDE	40	13	1900	J	p	MG/L
2Q2011	1104130	1104130-1	CLD4-R	FLUORIDE	1	0.088	4.7	J	p	MG/L
2Q2011	1104130	1104130-1	CLD4-R	MAGNESIUM	5000	65	10000	J	p	UG/L
2Q2011	1104130	1104130-1	CLD4-R	NITRATE NITROGEN	2	0.16	9.3	J	p	MG/L
2Q2011	1104130	1104130-1	CLD4-R	PERCHLORATE	0.2		2.2	J	p	MG/L
2Q2011	1104130	1104130-1	CLD4-R	POTASSIUM	5000	540	7800	J+	j, p	UG/L
2Q2011	1104130	1104130-1	CLD4-R	SULFATE	200	16	1800	J	p	MG/L
2Q2011	1104152	1104152-2	TMPZ-107	BICARBONATE ALKALINITY	10		210	J	p	MG/L
2Q2011	1104152	1104152-2	TMPZ-107	BICARBONATE ALKALINITY	10		210	J	p	MG/L
2Q2011	1104152	1104152-2	TMPZ-107	CALCIUM	2500	60	790000	J	p	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	CHLORIDE	100	32	7000	J	p	MG/L
2Q2011	1104152	1104152-2	TMPZ-107	MAGNESIUM	5000	65	590000	J	p	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	NITRATE NITROGEN	4	0.31	74	J	p	MG/L
2Q2011	1104152	1104152-2	TMPZ-107	PERCHLORATE	0.2		2.6	J	p	MG/L
2Q2011	1104152	1104152-2	TMPZ-107	POTASSIUM	5000	540	32000	J	p	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	SODIUM	50000	330	3100000	J	p	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	SULFATE	500	39	2300	J	p	MG/L
2Q2011	1104152	1104152-4	PC-067	BICARBONATE ALKALINITY	10		140	J	p	MG/L
2Q2011	1104152	1104152-4	PC-067	CALCIUM	2500	60	650000	J	p	UG/L
2Q2011	1104152	1104152-4	PC-067	CARBONATE ALKALINITY	10		10 U	UJ	p, s	MG/L
2Q2011	1104152	1104152-4	PC-067	CHLORIDE	40	13	3700	J	p	MG/L
2Q2011	1104152	1104152-4	PC-067	FLUORIDE	2	0.18	2 U	UJ	p, s	MG/L
2Q2011	1104152	1104152-4	PC-067	MAGNESIUM	5000	65	300000	J	p	UG/L
2Q2011	1104152	1104152-4	PC-067	NITRATE NITROGEN	4	0.31	41	J	p	MG/L
2Q2011	1104152	1104152-4	PC-067	PERCHLORATE	8		73	J	p	MG/L
2Q2011	1104152	1104152-4	PC-067	POTASSIUM	5000	540	32000	J	p	UG/L
2Q2011	1104152	1104152-4	PC-067	SULFATE	200	16	2900	J	p	MG/L

TABLE 14
QUALIFICATION BASED ON EITHER UNACCEPTABLE CAB OR TDS BALANCE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Client ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit

Notes:

+/-	Result may be biased high/low, respectively
UG/L	Microgram per liter
CAB	Cation-anion balance
MG/L	Milligram per liter
PQL	Practical quantitation limit
SDG	Sample delivery group
TDS	Total dissolved solids

Qualifiers/Comments

g	Comment code for results less than PQL
j	Comment code for other stable chemistry issues
J	Estimated value
p	Comment code for either TDS or CAB unacceptable
s	Comment code for non-detects
U	Undetected
UJ	Undetected at an estimated quantitation limit

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 15
QUALIFICATION BASED ON BOTH UNACCEPTABLE CAB AND TDS BALANCE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Client ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104152	1104152-6	PC-28	CALCIUM	2500	60	640000	J	q	UG/L
2Q2011	1104152	1104152-6	PC-28	MAGNESIUM	5000	65	220000	J	q	UG/L
2Q2011	1104152	1104152-6	PC-28	POTASSIUM	5000	540	10000	J	q	UG/L
2Q2011	1104152	1104152-6	PC-28	SODIUM	50000	330	880000	J	q	UG/L
2Q2011	1104152	1104152-6	PC-28	NITRATE NITROGEN	2	0.16	33	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	SULFATE	100	7.8	2100	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	TOTAL DISSOLVED SOLIDS	200	200	7000	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	BICARBONATE ALKALINITY	10	10	100	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	BICARBONATE ALKALINITY	10	10	100	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	CARBONATE ALKALINITY	10	10	10 U	UJ	q, s	MG/L
2Q2011	1104152	1104152-6	PC-28	PERCHLORATE	40	40	410	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	CHLORIDE	20	6.5	900	J	q	MG/L
2Q2011	1104152	1104152-6	PC-28	FLUORIDE	1	0.088	1 U	UJ	q, s	MG/L

Notes:

UG/L	Microgram per liter
CAB	Cation-anion balance
MG/L	Milligram per liter
PQL	Practical quantitation limit
SDG	Sample delivery group
TDS	Total dissolved solids

Qualifiers/Comments

+/-	Result may be biased high/low, respectively
J	Estimated value
q	Comment code for either TDS and CAB unacceptable
s	Comment code for non-detects
U	Undetected
UJ	Undetected at an estimated quantitation limit

1 Result field includes the numerical concentration and the laboratory qualifier or code.

TABLE 16
REJECTED DATA POINTS IN GROUNDWATER DATABASE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104025	1104025-1	AA-27	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104025	1104025-1	AA-27	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104040	1104040-1	AA-UW1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104040	1104040-1	AA-UW1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104040	1104040-3	AA-01	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104040	1104040-3	AA-01	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-1	TMMW-101	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-1	TMMW-101	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-2	PC-024	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-2	PC-024	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-3	PC-124	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-3	PC-124	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104060	1104060-5	TMMW-104	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104060	1104060-5	TMMW-104	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-1	BRW-R1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-1	BRW-R1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-2	DBMW-5	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-2	DBMW-5	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-3	DBMW-4	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-3	DBMW-4	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104089	1104089-5	TIMETMW-3R	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-1	DBMW-1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-1	DBMW-1	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-1	DBMW-1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-3	DBMW-3	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-3	DBMW-3	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-3	DBMW-3	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-4	TIMETMW-4	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-4	TIMETMW-4	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104121	1104121-5	TIMETMW-5	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104121	1104121-5	TIMETMW-5	ETHANOL	200	5.5	200 U	R	c, s	UG/L

TABLE 16
REJECTED DATA POINTS IN GROUNDWATER DATABASE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104130	1104130-1	CLD4-R	ACETONITRILE	100	19	100 U	R	c, s	UG/L
2Q2011	1104130	1104130-1	CLD4-R	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-1	CLD4-R	ETHANOL	400	11	400 U	R	c, s	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-3	TIMETMW-6R	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104130	1104130-4	AA-20	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104130	1104130-4	AA-20	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-6	AA-11	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104130	1104130-6	AA-11	CYANIDE	0.01	0.0017	0.01 U	R	e, h, s	MG/L
2Q2011	1104130	1104130-6	AA-11	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-1	TMPZ-105	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-2	TMPZ-107	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-4	PC-067	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104152	1104152-4	PC-067	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104152	1104152-6	PC-028	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104176	1104176-3	AA-09	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104223	1104223-1	POU-3	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104223	1104223-1	POU-3	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104223	1104223-3	PC-054	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104223	1104223-3	PC-054	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104246	1104246-1	J2D2-R2	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104246	1104246-1	J2D2-R2	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104271	1104271-1	J2D1-R2	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104271	1104271-1	J2D1-R2	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104291	1104291-1	TMPZ-110	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104291	1104291-1	TMPZ-110	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104291	1104291-3	J2D4	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104291	1104291-3	J2D4	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104291	1104291-4	CLD1-R	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L

TABLE 16
REJECTED DATA POINTS IN GROUNDWATER DATABASE
2011 1ST SEMESTER DATA VALIDATION SUMMARY REPORT
Titanium Metals Corporation, Henderson, Nevada

Event	SDG	Lab ID	Sample ID	Analyte	PQL	SQL	Result [1]	Qualifier	Comment	Unit
2Q2011	1104291	1104291-4	CLD1-R	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104355	1104355-3	TIMETMW-1	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104355	1104355-3	TIMETMW-1	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104355	1104355-4	J2U2	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104355	1104355-4	J2U2	CYANIDE	0.01	0.0017	0.01 U	R	e, s	MG/L
2Q2011	1104355	1104355-4	J2U2	ETHANOL	200	5.5	200 U	R	c, s	UG/L
2Q2011	1104447	1104447-1	J2D3	ACETONITRILE	50	9.6	50 U	R	c, s	UG/L
2Q2011	1104447	1104447-1	J2D3	ETHANOL	200	5.5	200 U	R	c, s	UG/L

Notes:

UG/L	Microgram per liter
MG/L	Milligram per liter
PQL	Practical quantitation limit
SDG	Sample delivery group
SQL	Sample quantitation limit

Qualifiers/Comments:

c	Comment code for calibration qualification
e	Comment code for spike recovery
h	Comment code for holding time/sample receipt condition
j	Comment code for other stable chemistry issues
R	Rejected
s	Comment code for non-detects
U	Undetected

1 Result field includes the numerical concentration and the laboratory qualifier or code.

APPENDIX B

WELL HYDROGRAPHS

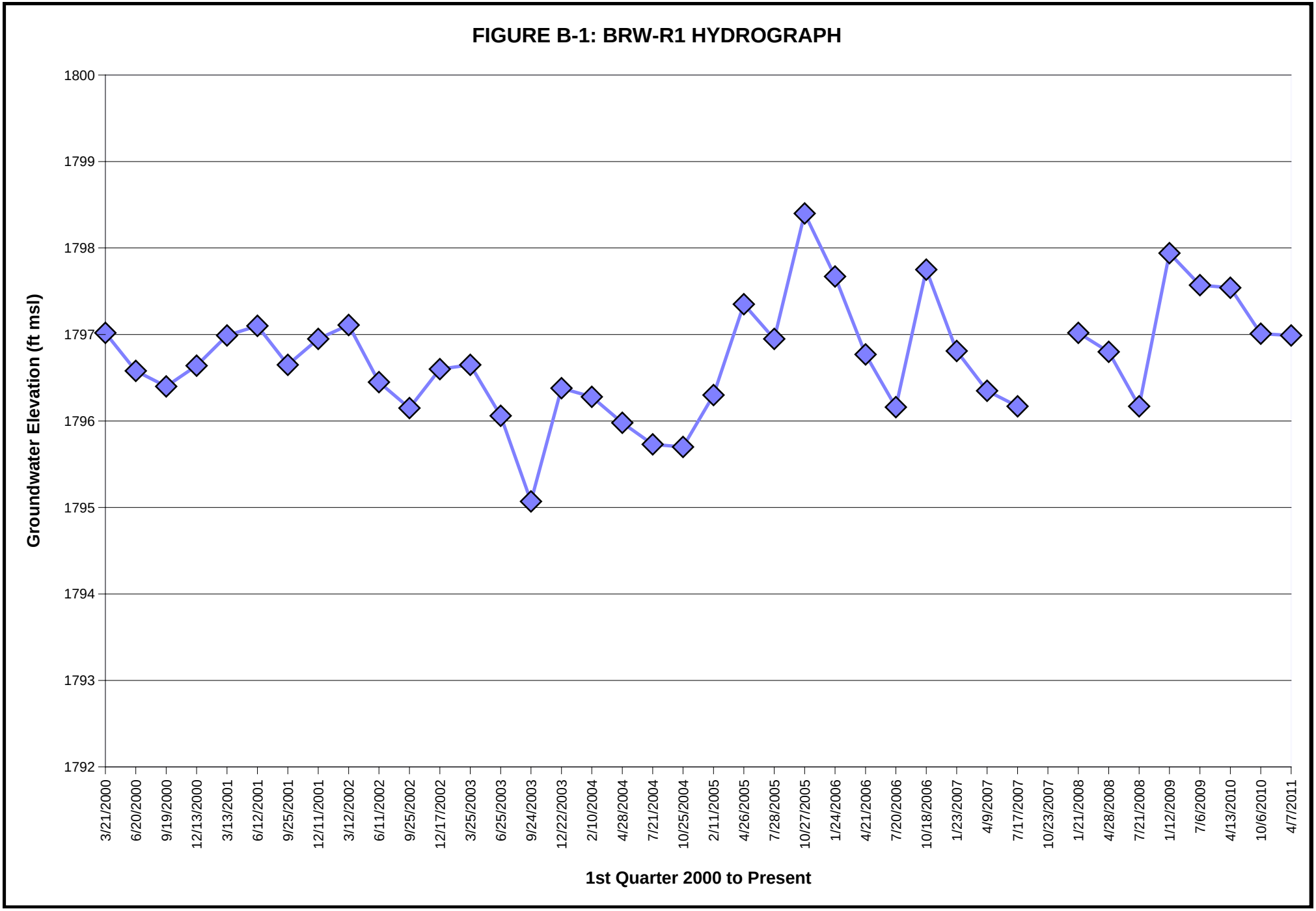


FIGURE B-1: BRW-R1 HYDROGRAPH
Groundwater Elevation (ft msl)
1800
1799
1798
1797
1796
1795
1794
1793
1792
3/21/2000
6/20/2000
9/19/2000
12/13/2000
3/13/2001
6/12/2001
9/25/2001
12/11/2001
3/12/2002
6/11/2002
9/25/2002
12/17/2002
3/25/2003
6/25/2003
9/24/2003
12/22/2003
2/10/2004
4/28/2004
7/21/2004
10/25/2004
2/11/2005
4/26/2005
7/28/2005
10/27/2005
1/24/2006
4/21/2006
7/20/2006
10/18/2006
1/23/2007
4/9/2007
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/13/2010
10/6/2010
4/7/2011
1st Quarter 2000 to Present

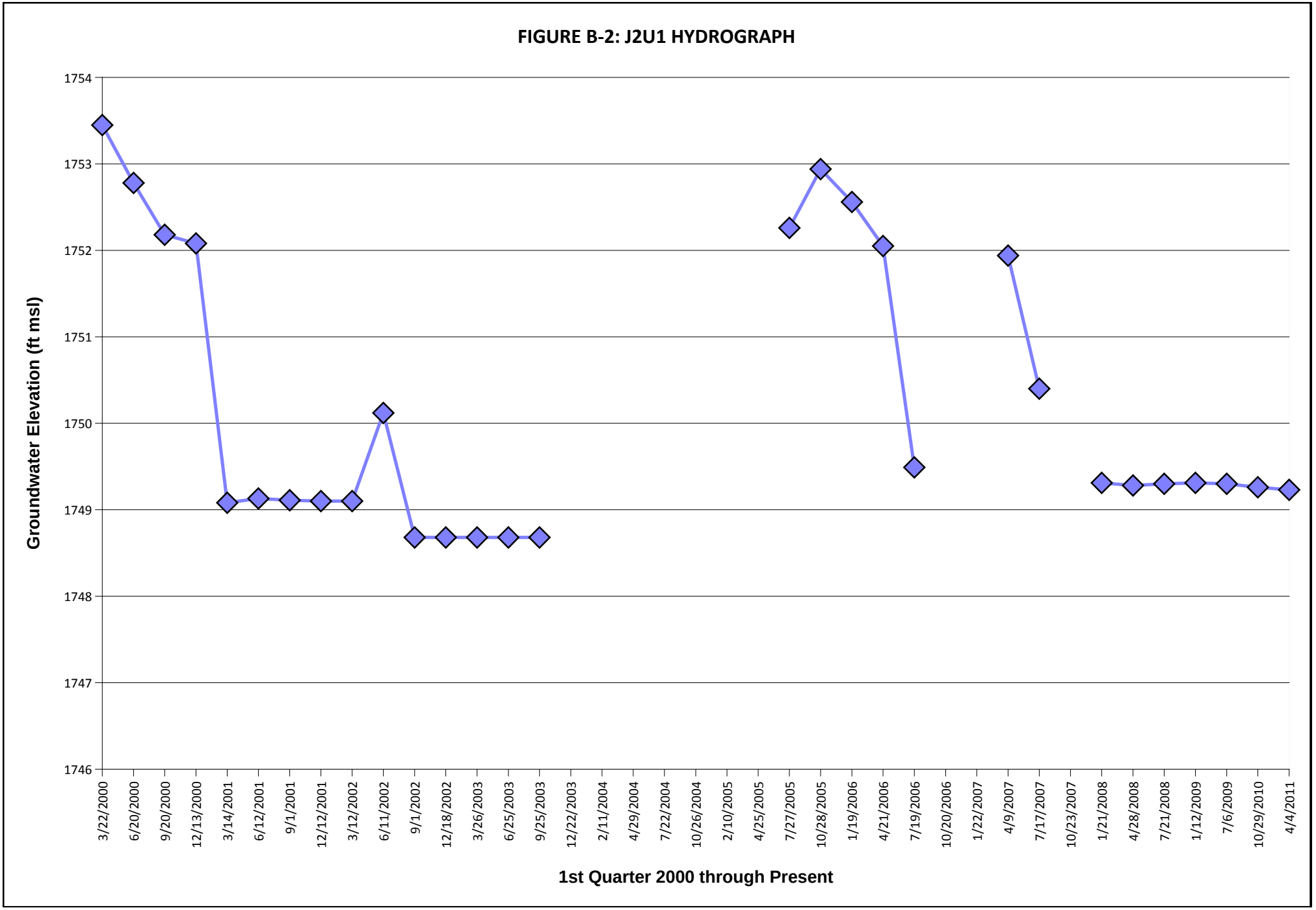
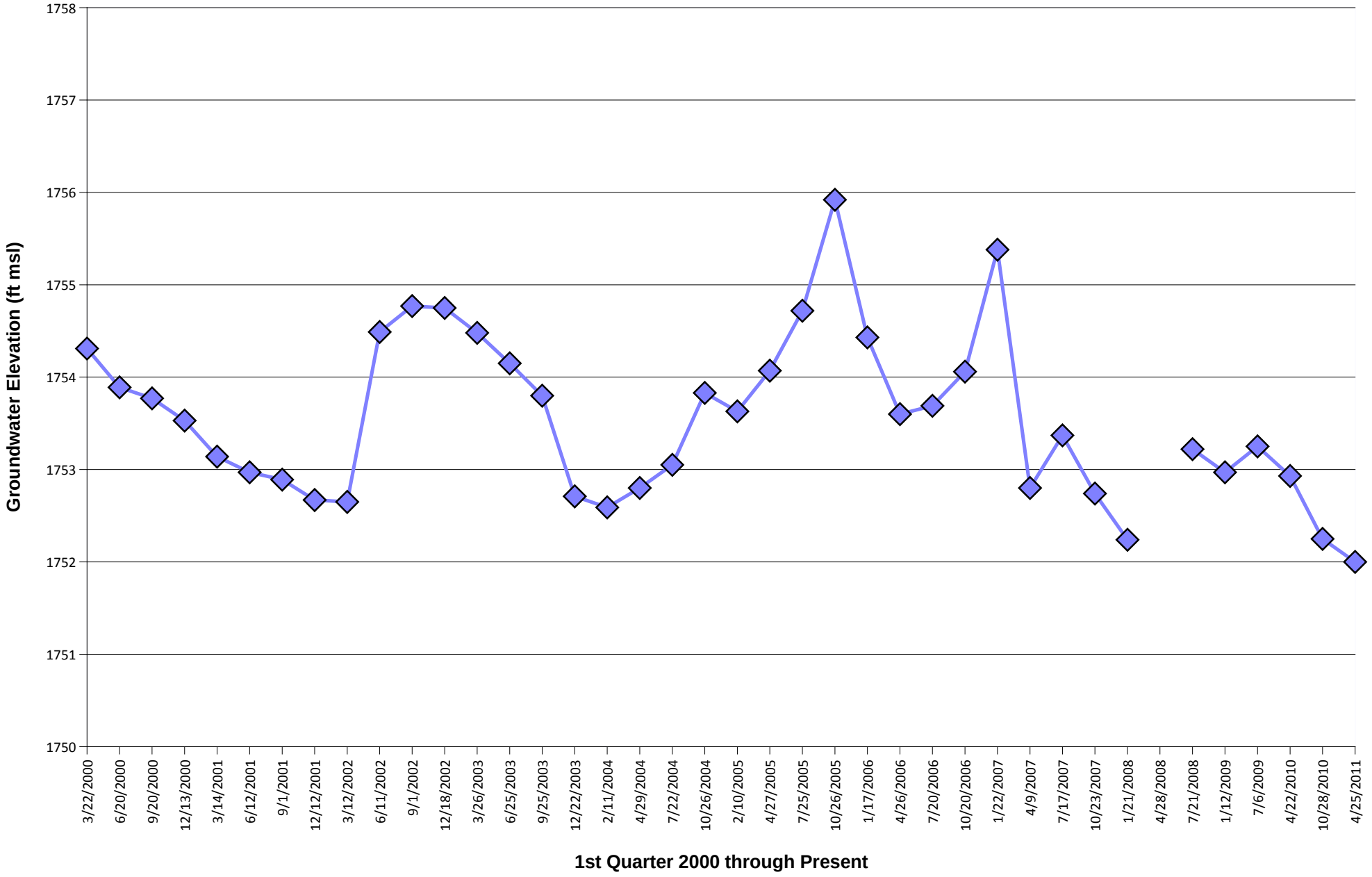


FIGURE B-2: J2U1 HYDROGRAPH
Groundwater Elevation (ft msl)
1754
1753
1752
1751
1750
1749
1748
1747
1746
3/22/2000
6/20/2000
9/20/2000
12/13/2000
3/14/2001
6/12/2001
9/1/2001
12/12/2001
3/12/2002
6/11/2002
9/1/2002
12/18/2002
3/26/2003
6/25/2003
9/25/2003
12/22/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/10/2005
4/25/2005
7/27/2005
10/28/2005
1/19/2006
4/21/2006
7/19/2006
10/20/2006
1/22/2007
4/9/2007
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
10/29/2010
4/4/2011
1st Quarter 2000 through Present

FIGURE B-3: J2U2 HYDROGRAPH



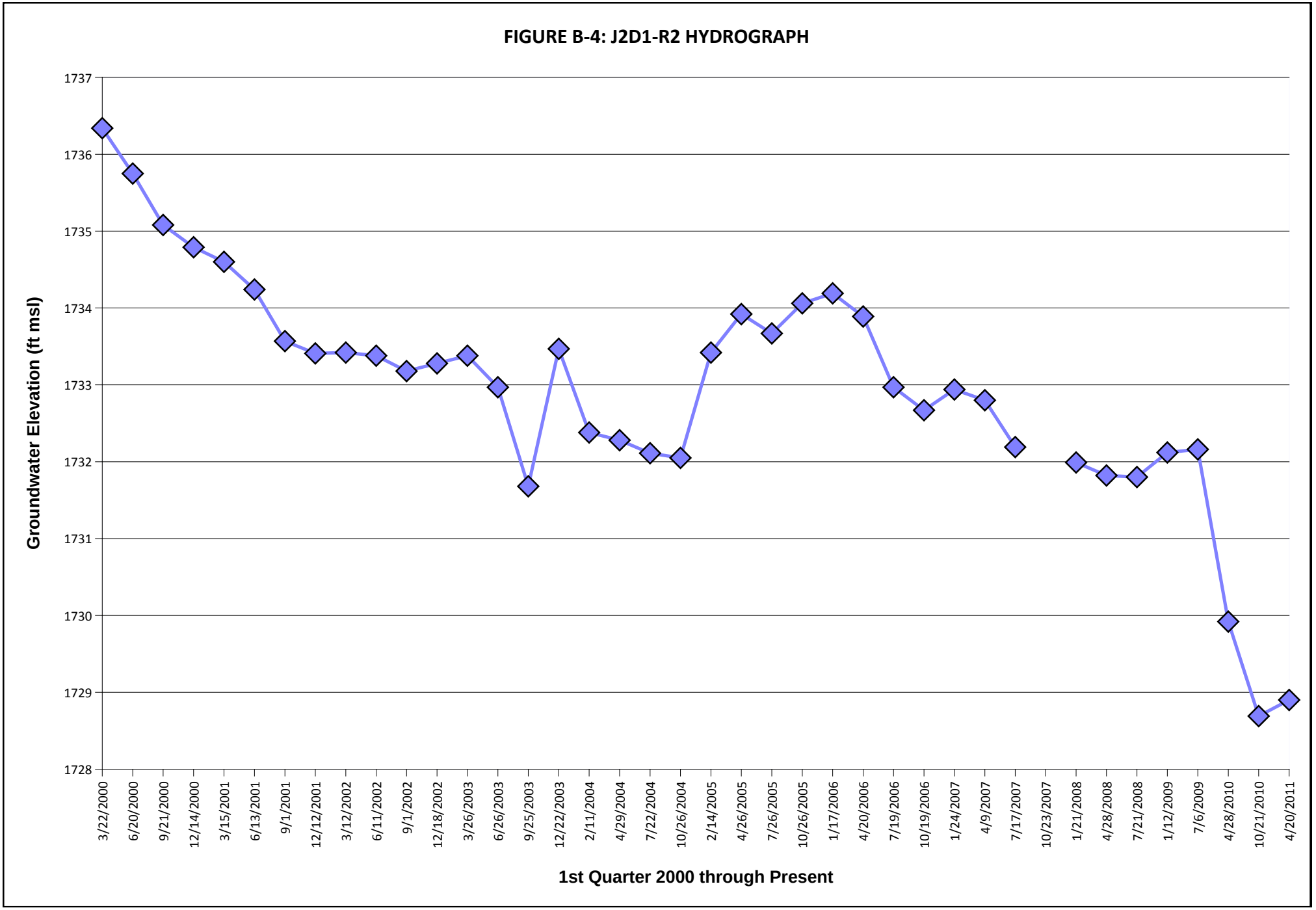


FIGURE B-4: J2D1-R2 HYDROGRAPH
Groundwater Elevation (ft msl)
1737
1736
1735
1734
1733
1732
1731
1730
1729
1728
3/22/2000
6/20/2000
9/21/2000
12/14/2000
3/15/2001
6/13/2001
9/1/2001
12/12/2001
3/12/2002
6/11/2002
9/1/2002
12/18/2002
3/26/2003
6/26/2003
9/25/2003
12/22/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/14/2005
4/26/2005
7/26/2005
10/26/2005
1/17/2006
4/20/2006
7/19/2006
10/19/2006
1/24/2007
4/9/2007
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/28/2010
10/21/2010
4/20/2011
1st Quarter 2000 through Present

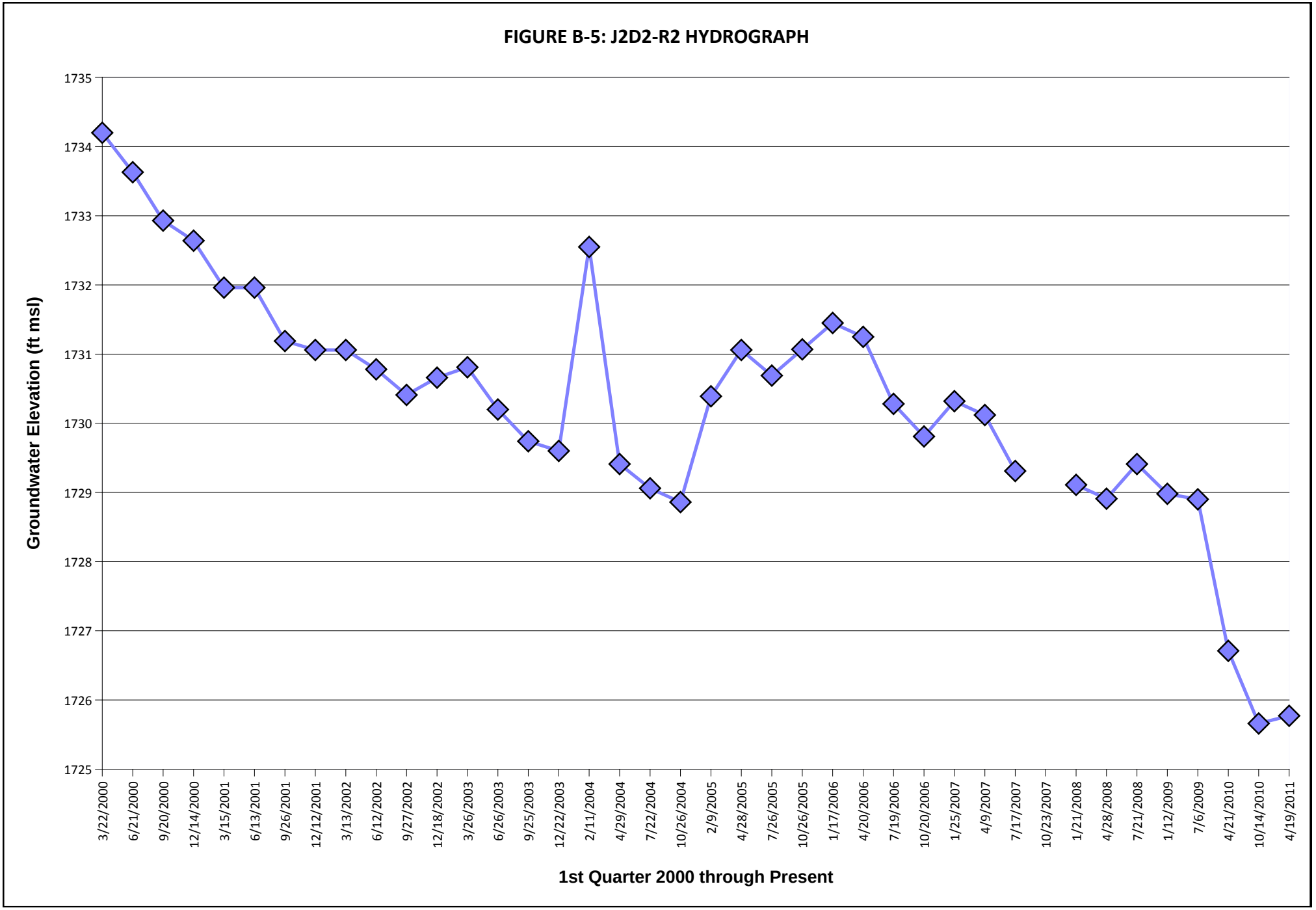


FIGURE B-5: J2D2-R2 HYDROGRAPH
Groundwater Elevation (ft msl)
1735
1734
1733
1732
1731
1730
1729
1728
1727
1726
1725
3/22/2000
6/21/2000
9/20/2000
12/14/2000
3/15/2001
6/13/2001
9/26/2001
12/12/2001
3/13/2002
6/12/2002
9/27/2002
12/18/2002
3/26/2003
6/26/2003
9/25/2003
12/22/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/9/2005
4/28/2005
7/26/2005
10/26/2005
1/17/2006
4/20/2006
7/19/2006
10/20/2006
1/25/2007
4/9/2007
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/21/2010
10/14/2010
4/19/2011
1st Quarter 2000 through Present

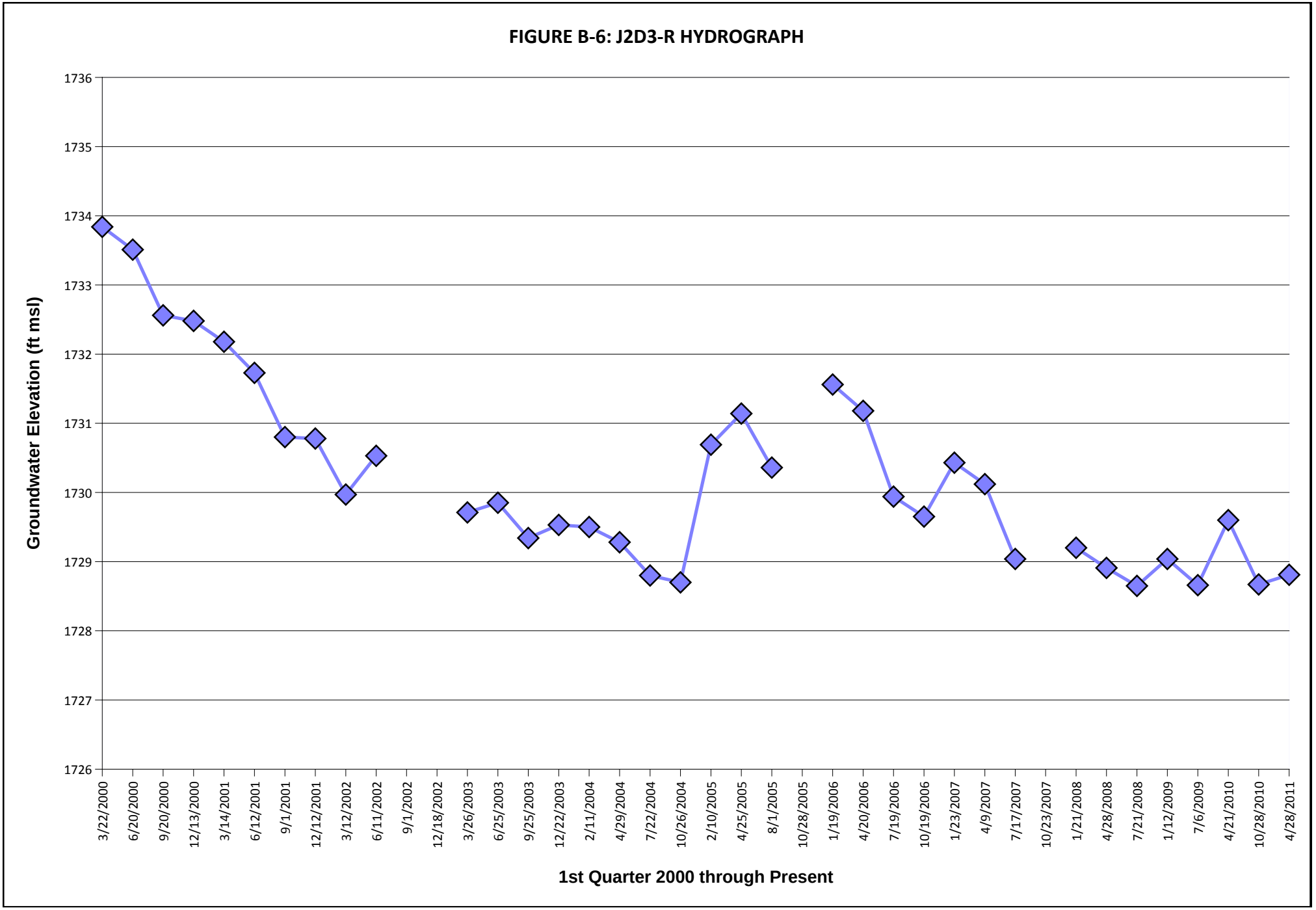


FIGURE B-6: J2D3-R HYDROGRAPH
Groundwater Elevation (ft msl)
1736
1735
1734
1733
1732
1731
1730
1729
1728
1727
1726
3/22/2000
6/20/2000
9/20/2000
12/13/2000
3/14/2001
6/12/2001
9/1/2001
12/12/2001
3/12/2002
6/11/2002
9/1/2002
12/18/2002
3/26/2003
6/25/2003
9/25/2003
12/22/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/10/2005
4/25/2005
8/1/2005
10/28/2005
1/19/2006
4/20/2006
7/19/2006
10/19/2006
1/23/2007
4/9/2007
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/21/2010
10/28/2010
4/28/2011
1st Quarter 2000 through Present

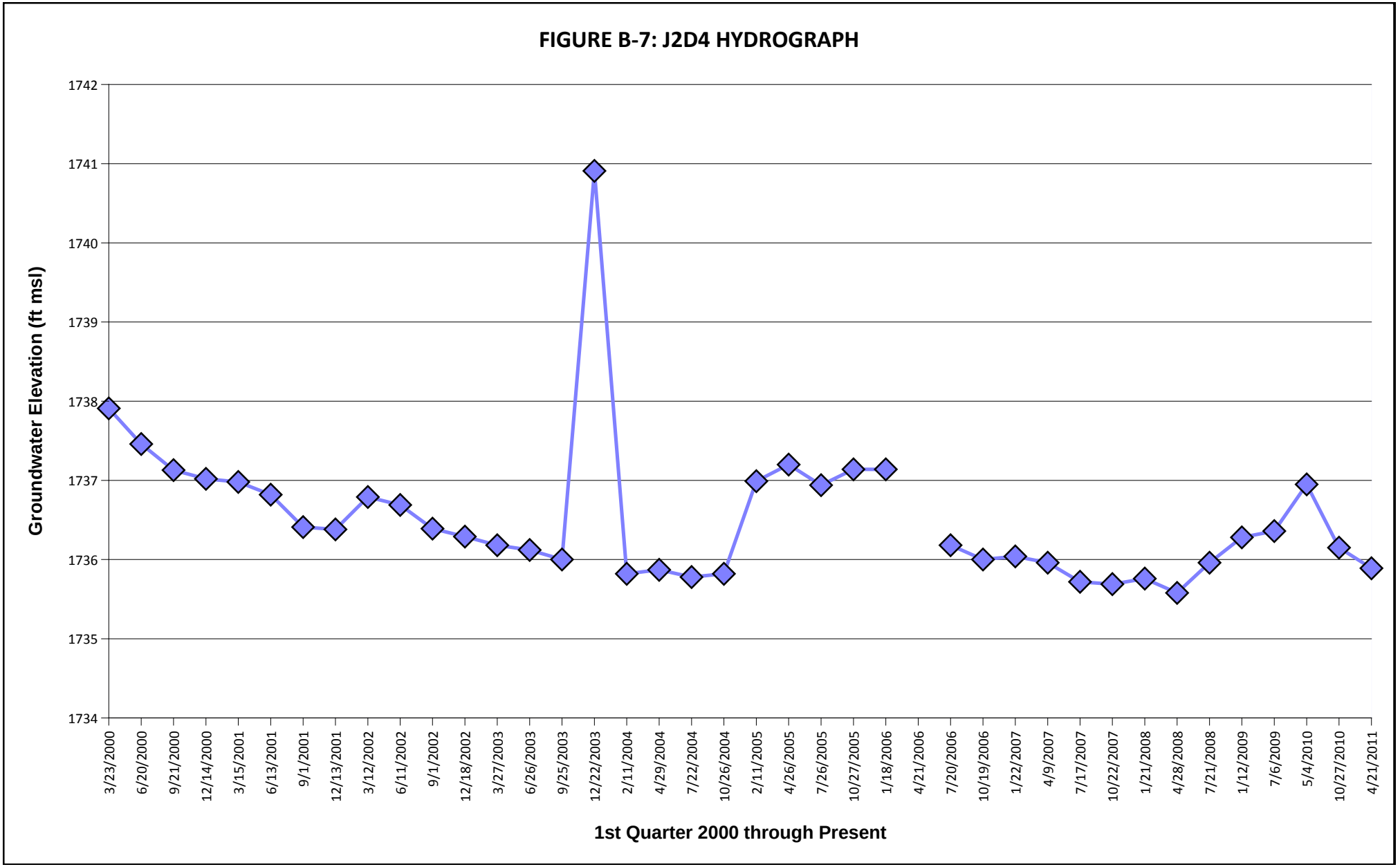


FIGURE B-7: J2D4 HYDROGRAPH
Groundwater Elevation (ft msl)
1742
1741
1740
1739
1738
1737
1736
1735
1734
3/23/2000
6/20/2000
9/21/2000
12/14/2000
3/15/2001
6/13/2001
9/1/2001
12/13/2001
3/12/2002
6/11/2002
9/1/2002
12/18/2002
3/27/2003
6/26/2003
9/25/2003
12/22/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/11/2005
4/26/2005
7/26/2005
10/27/2005
1/18/2006
4/21/2006
7/20/2006
10/19/2006
1/22/2007
4/9/2007
7/17/2007
10/22/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/4/2010
10/27/2010
4/21/2011
1st Quarter 2000 through Present

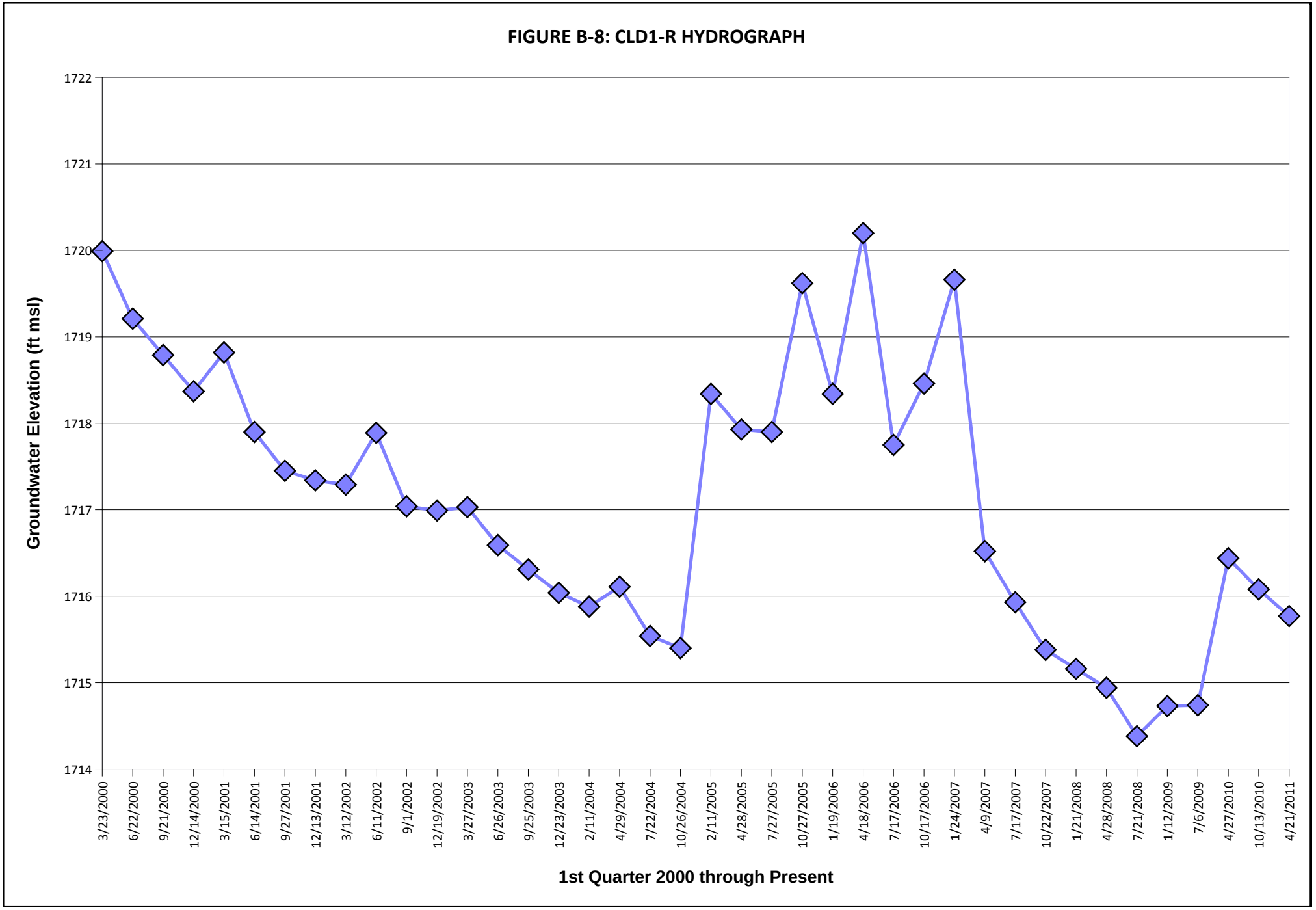


FIGURE B-8: CLD1-R HYDROGRAPH
Groundwater Elevation (ft msl)
1722
1721
1720
1719
1718
1717
1716
1715
1714
3/23/2000
6/22/2000
9/21/2000
12/14/2000
3/15/2001
6/14/2001
9/27/2001
12/13/2001
3/12/2002
6/11/2002
9/1/2002
12/19/2002
3/27/2003
6/26/2003
9/25/2003
12/23/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/11/2005
4/28/2005
7/27/2005
10/27/2005
1/19/2006
4/18/2006
7/17/2006
10/17/2006
1/24/2007
4/9/2007
7/17/2007
10/22/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/27/2010
10/13/2010
4/21/2011
1st Quarter 2000 through Present

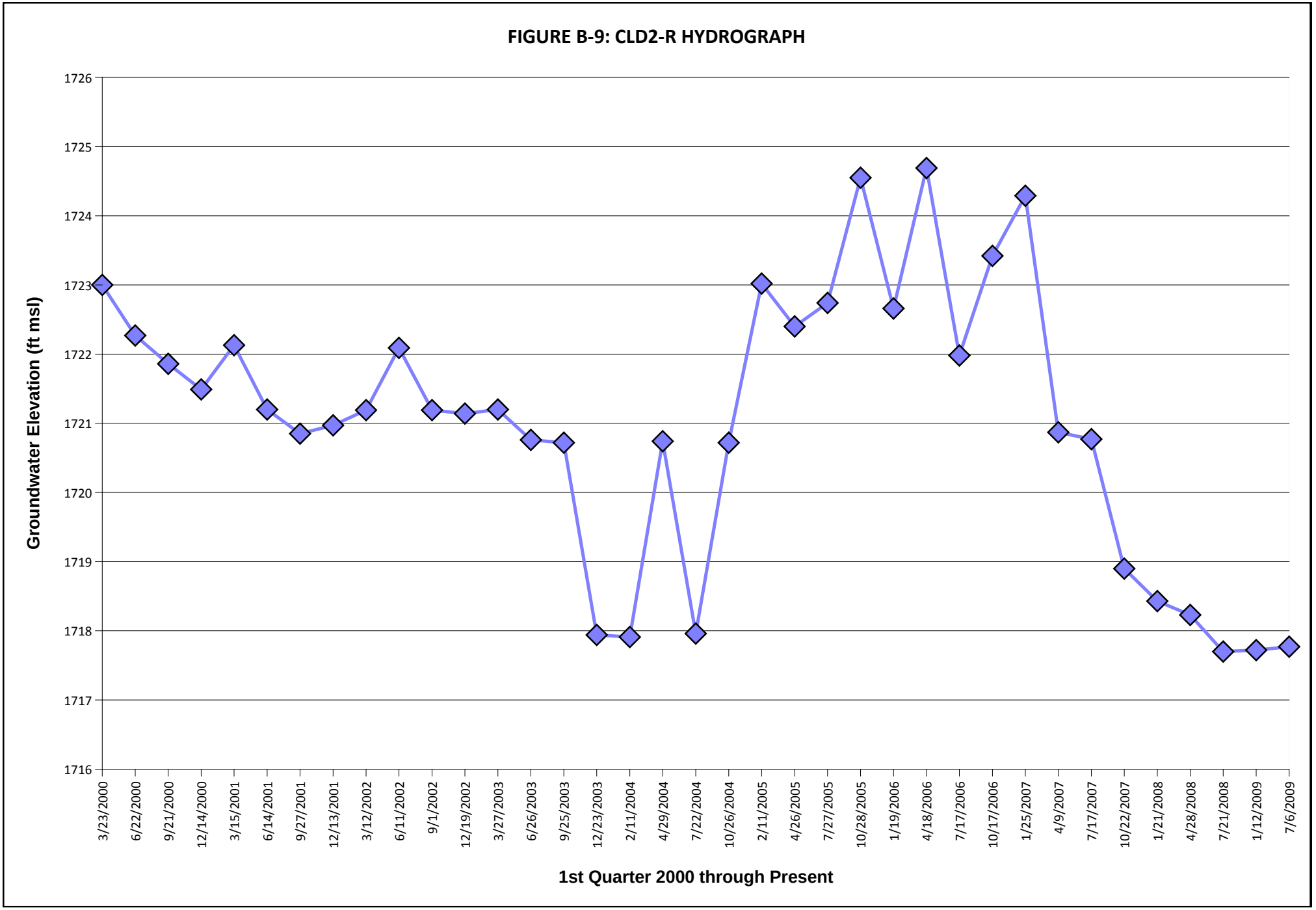


FIGURE B-9: CLD2-R HYDROGRAPH
Groundwater Elevation (ft msl)
1726
1725
1724
1723
1722
1721
1720
1719
1718
1717
1716
3/23/2000
6/22/2000
9/21/2000
12/14/2000
3/15/2001
6/14/2001
9/27/2001
12/13/2001
3/12/2002
6/11/2002
9/1/2002
12/19/2002
3/27/2003
6/26/2003
9/25/2003
12/23/2003
2/11/2004
4/29/2004
7/22/2004
10/26/2004
2/11/2005
4/26/2005
7/27/2005
10/28/2005
1/19/2006
4/18/2006
7/17/2006
10/17/2006
1/25/2007
4/9/2007
7/17/2007
10/22/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
1st Quarter 2000 through Present

FIGURE B-10: CLD3-R HYDROGRAPH

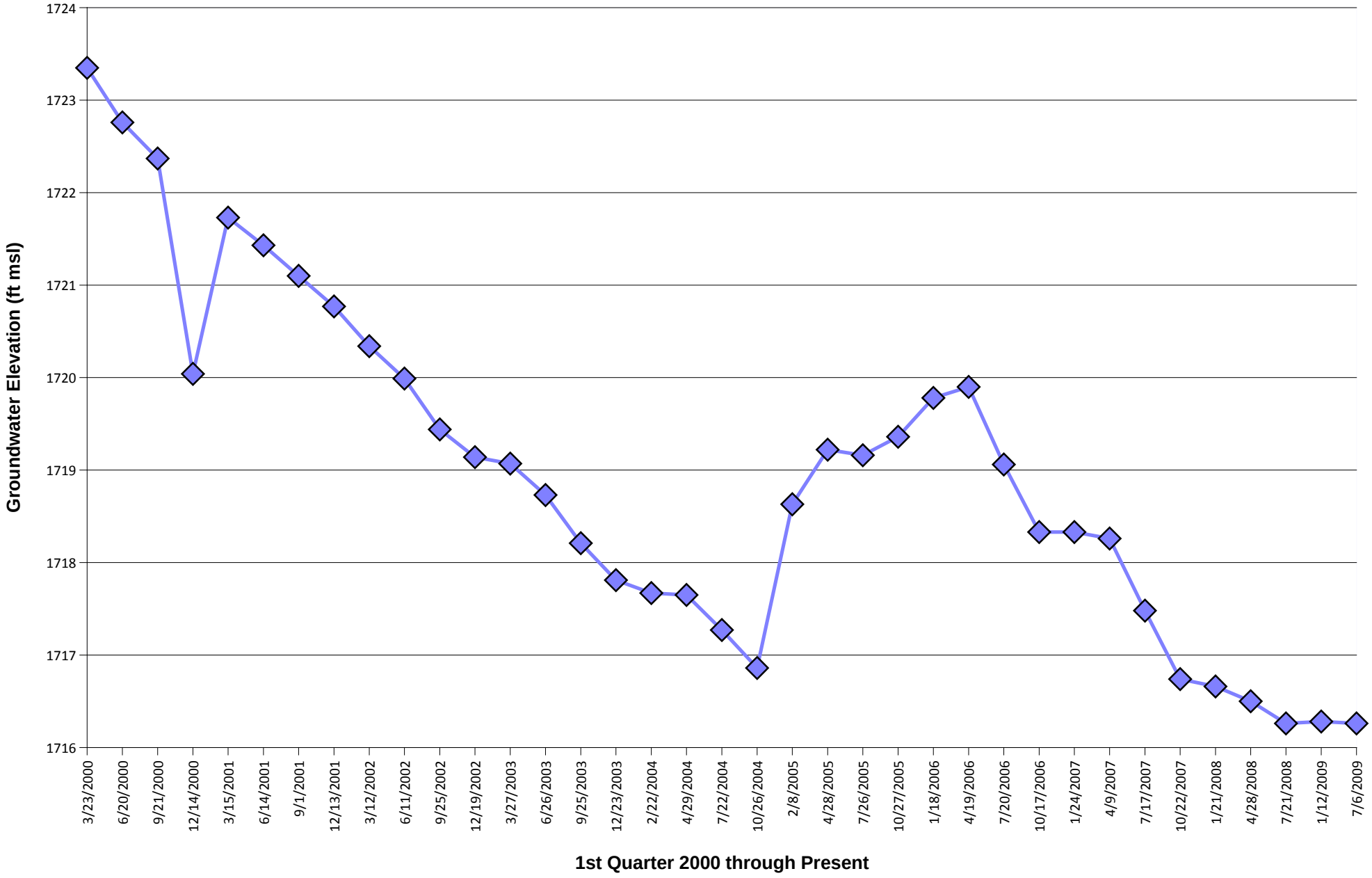


FIGURE B-11: CLD4-R HYDROGRAPH

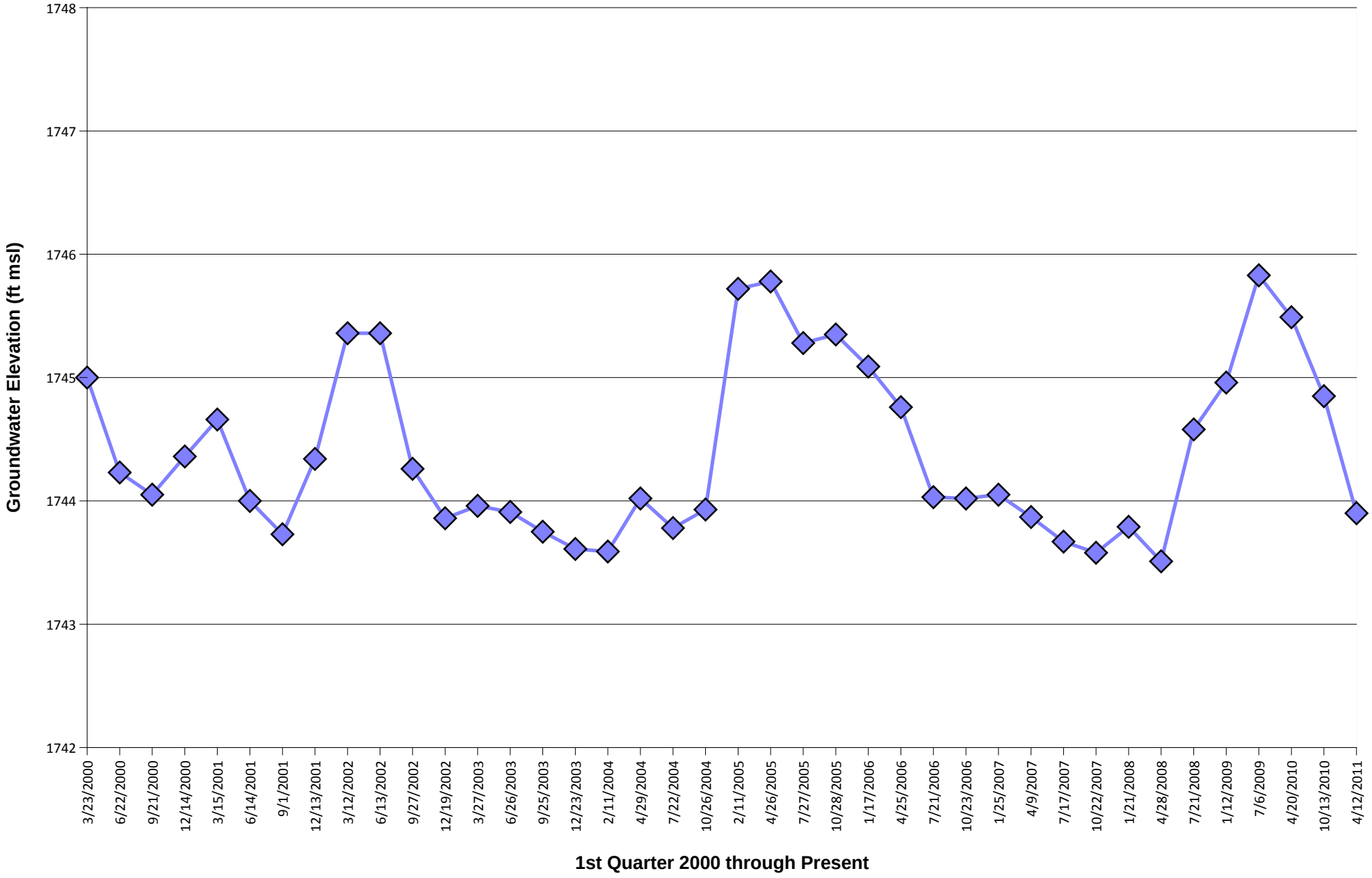


FIGURE B-12: TIMETMW-3R HYDROGRAPH

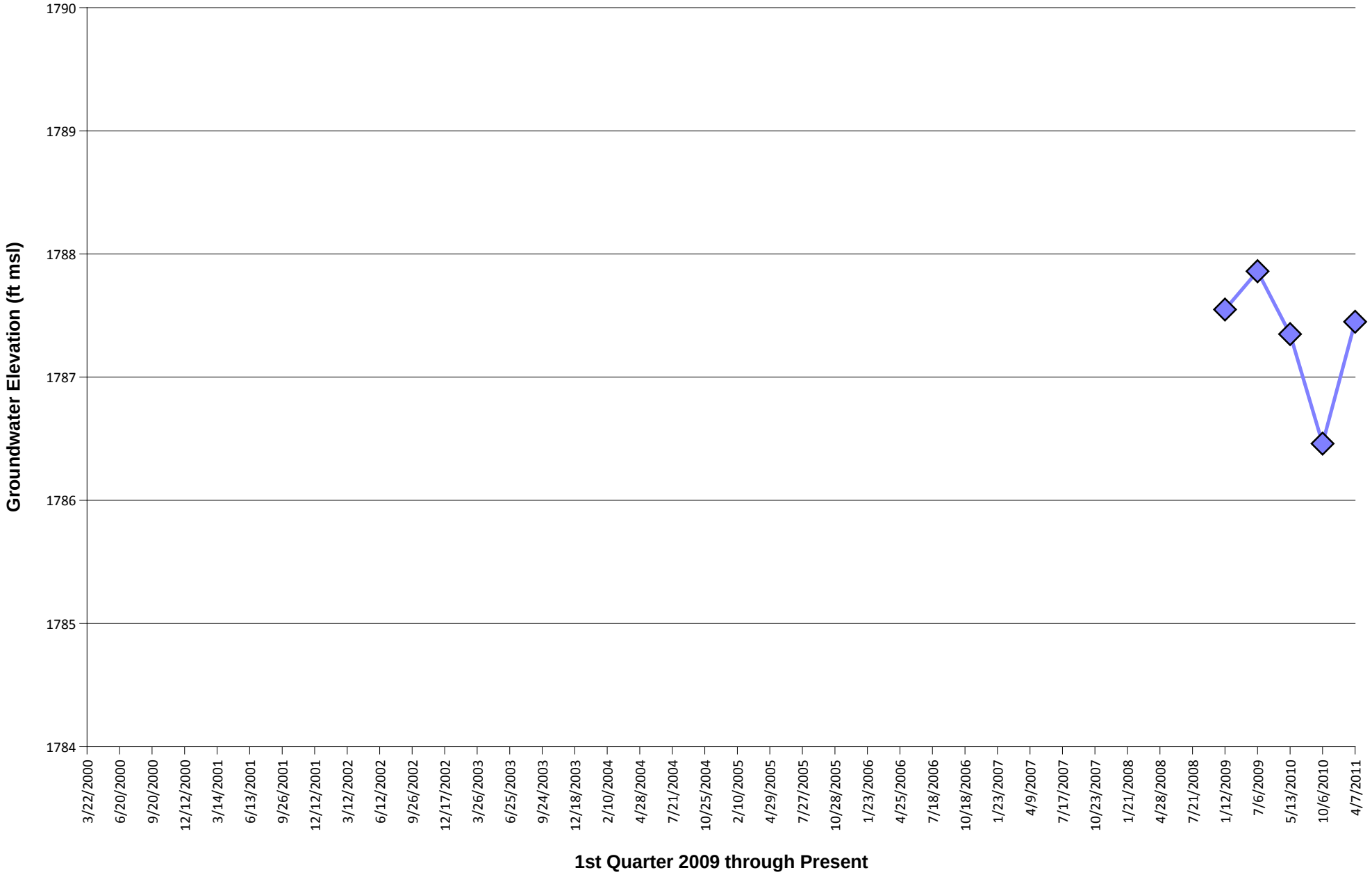
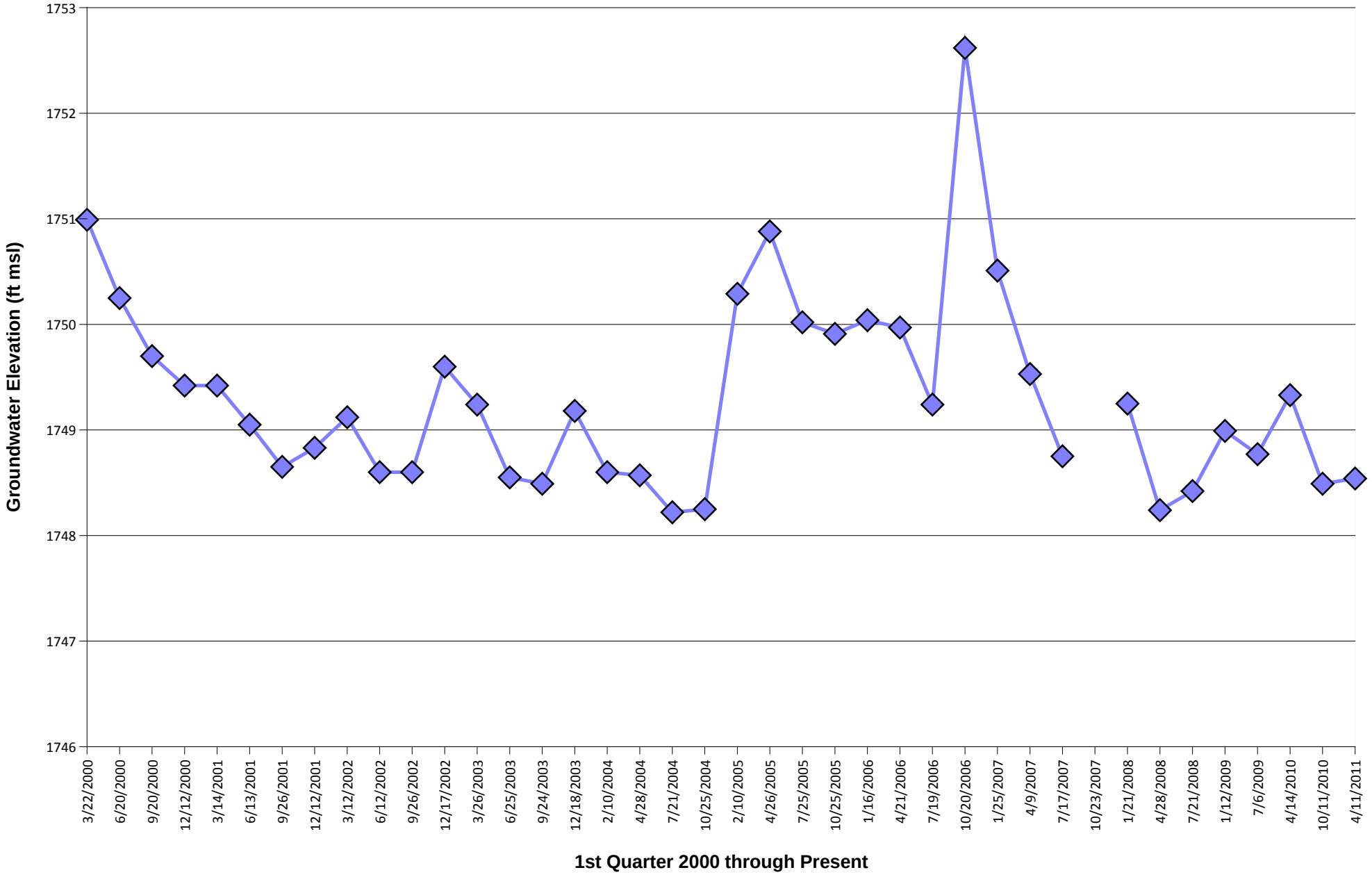


FIGURE B-13: TIMETMW-4 HYDROGRAPH



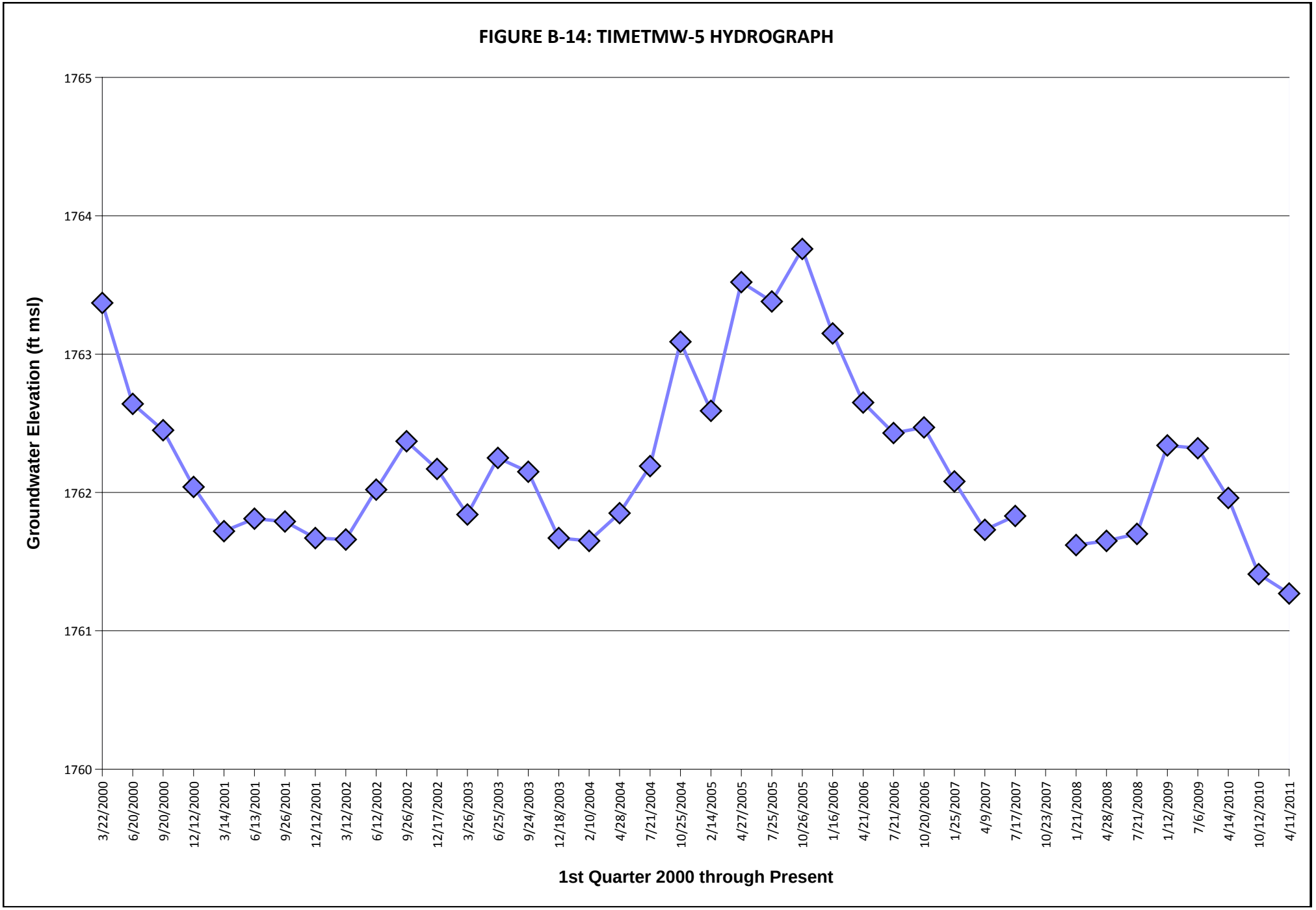


FIGURE B-14: TIMETMW-5 HYDROGRAPH
Groundwater Elevation (ft msl)
1765
1764
1763
1762
1761
1760
3/22/2000
6/20/2000
9/20/2000
12/12/2000
3/14/2001
6/13/2001
9/26/2001
12/12/2001
3/12/2002
6/12/2002
9/26/2002
12/17/2002
3/26/2003
6/25/2003
9/24/2003
12/18/2003
2/10/2004
4/28/2004
7/21/2004
10/25/2004
2/14/2005
4/27/2005
7/25/2005
10/26/2005
1/16/2006
4/21/2006
7/21/2006
10/20/2006
1/25/2007
4/9/2007
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/14/2010
10/12/2010
4/11/2011
1st Quarter 2000 through Present

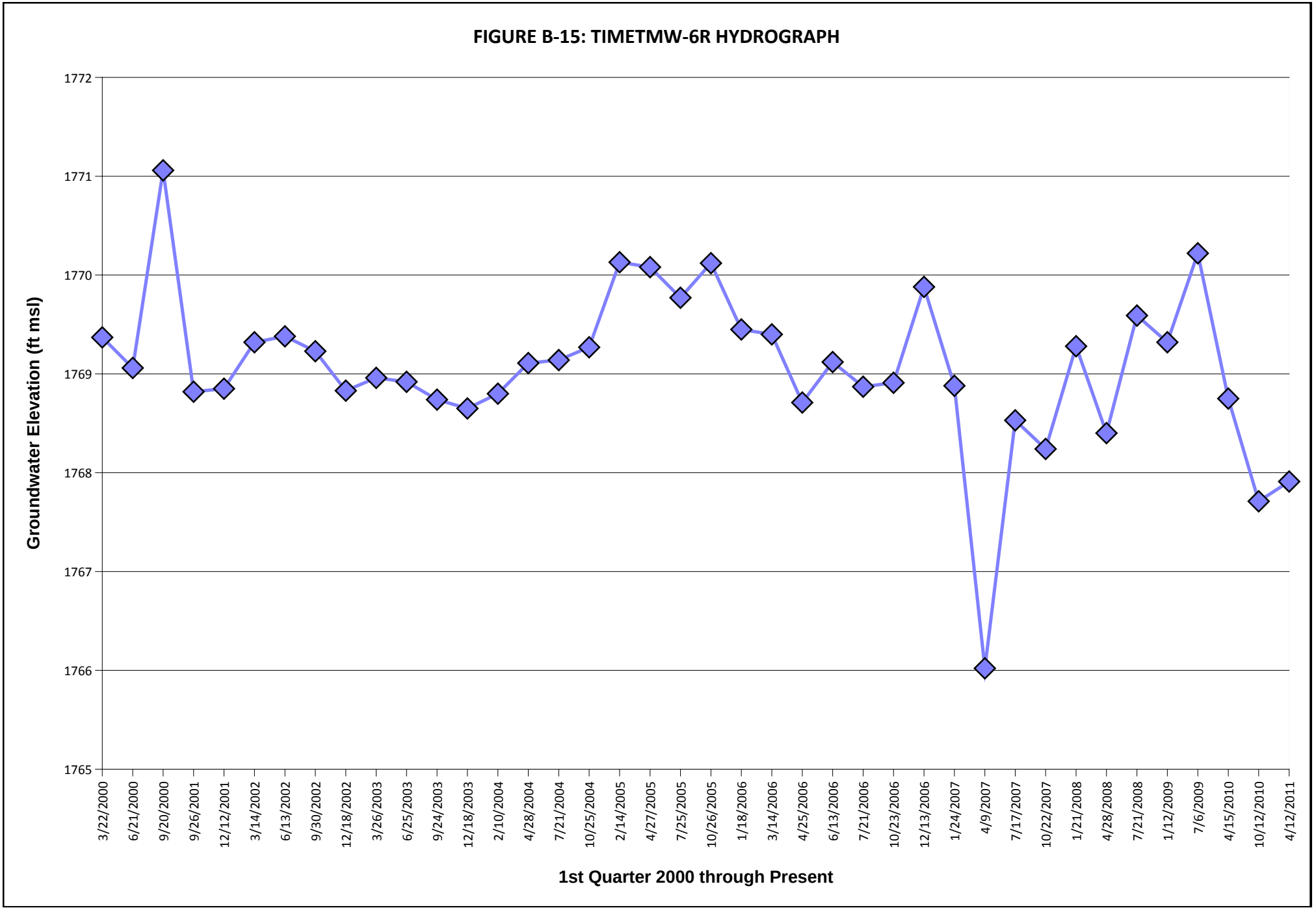


FIGURE B-15: TIMETMW-6R HYDROGRAPH
Groundwater Elevation (ft msl)
1772
1771
1770
1769
1768
1767
1766
1765
3/22/2000
6/21/2000
9/20/2000
9/26/2001
12/12/2001
3/14/2002
6/13/2002
9/30/2002
12/18/2002
3/26/2003
6/25/2003
9/24/2003
12/18/2003
2/10/2004
4/28/2004
7/21/2004
10/25/2004
2/14/2005
4/27/2005
7/25/2005
10/26/2005
1/18/2006
3/14/2006
4/25/2006
6/13/2006
7/21/2006
10/23/2006
12/13/2006
1/24/2007
4/9/2007
7/17/2007
10/22/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/15/2010
10/12/2010
4/12/2011
1st Quarter 2000 through Present

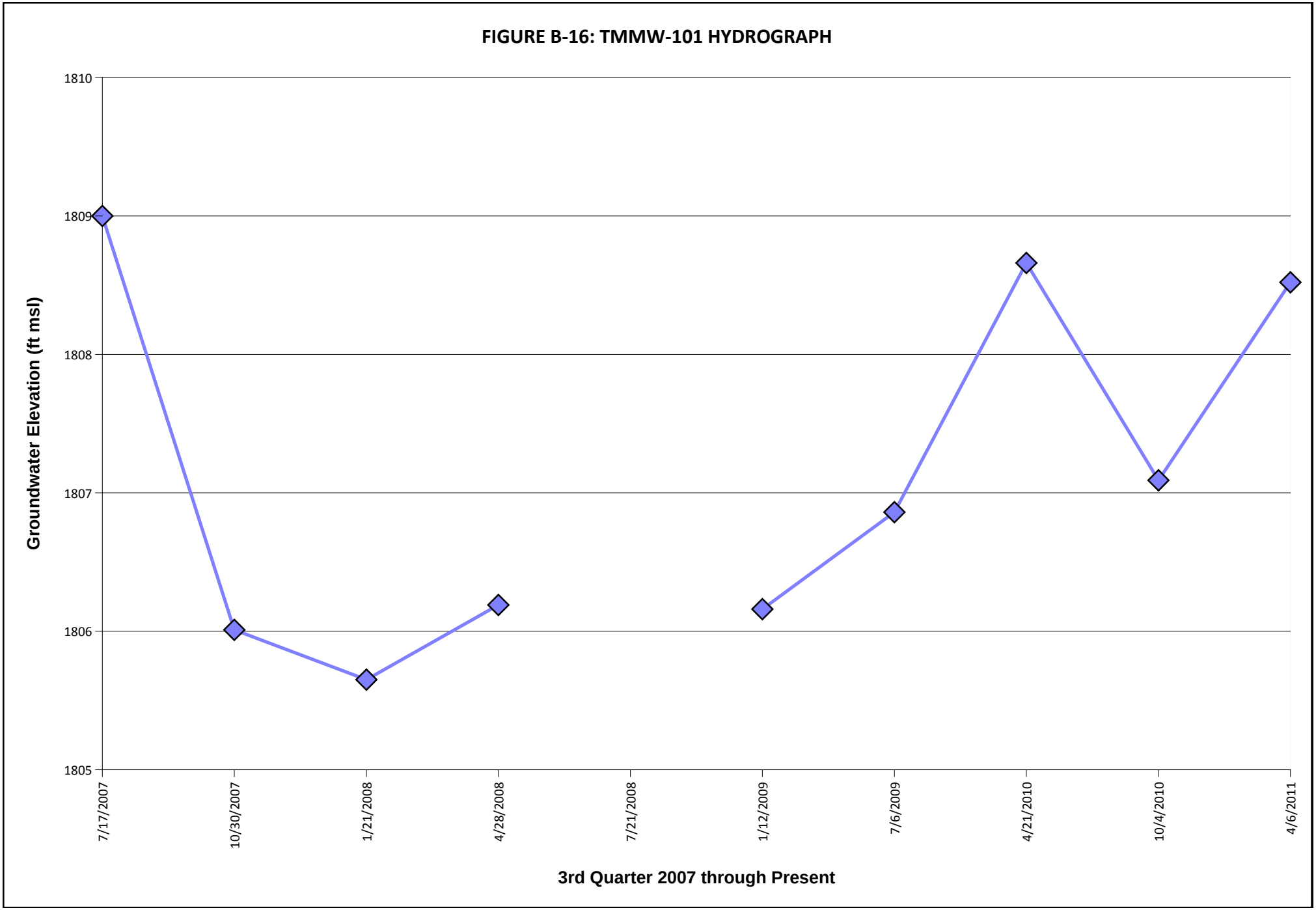


FIGURE B-16: TMMW-101 HYDROGRAPH
Groundwater Elevation (ft msl)
1810
1809
1808
1807
1806
1805
7/17/2007
10/30/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/21/2010
10/4/2010
4/6/2011
3rd Quarter 2007 through Present

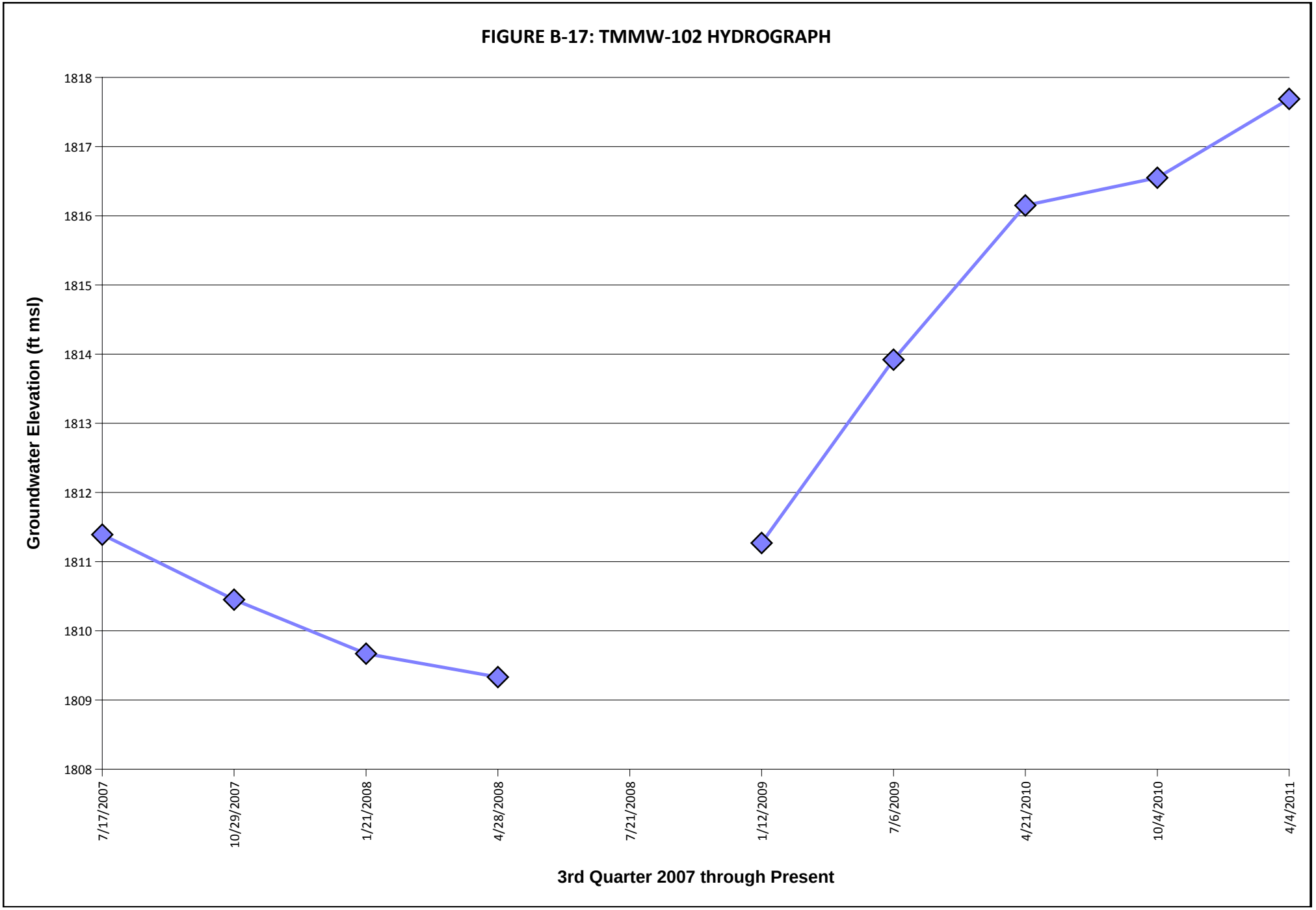


FIGURE B-17: TMMW-102 HYDROGRAPH
Groundwater Elevation (ft msl)
1818
1817
1816
1815
1814
1813
1812
1811
1810
1809
1808
7/17/2007
10/29/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/21/2010
10/4/2010
4/4/2011
3rd Quarter 2007 through Present

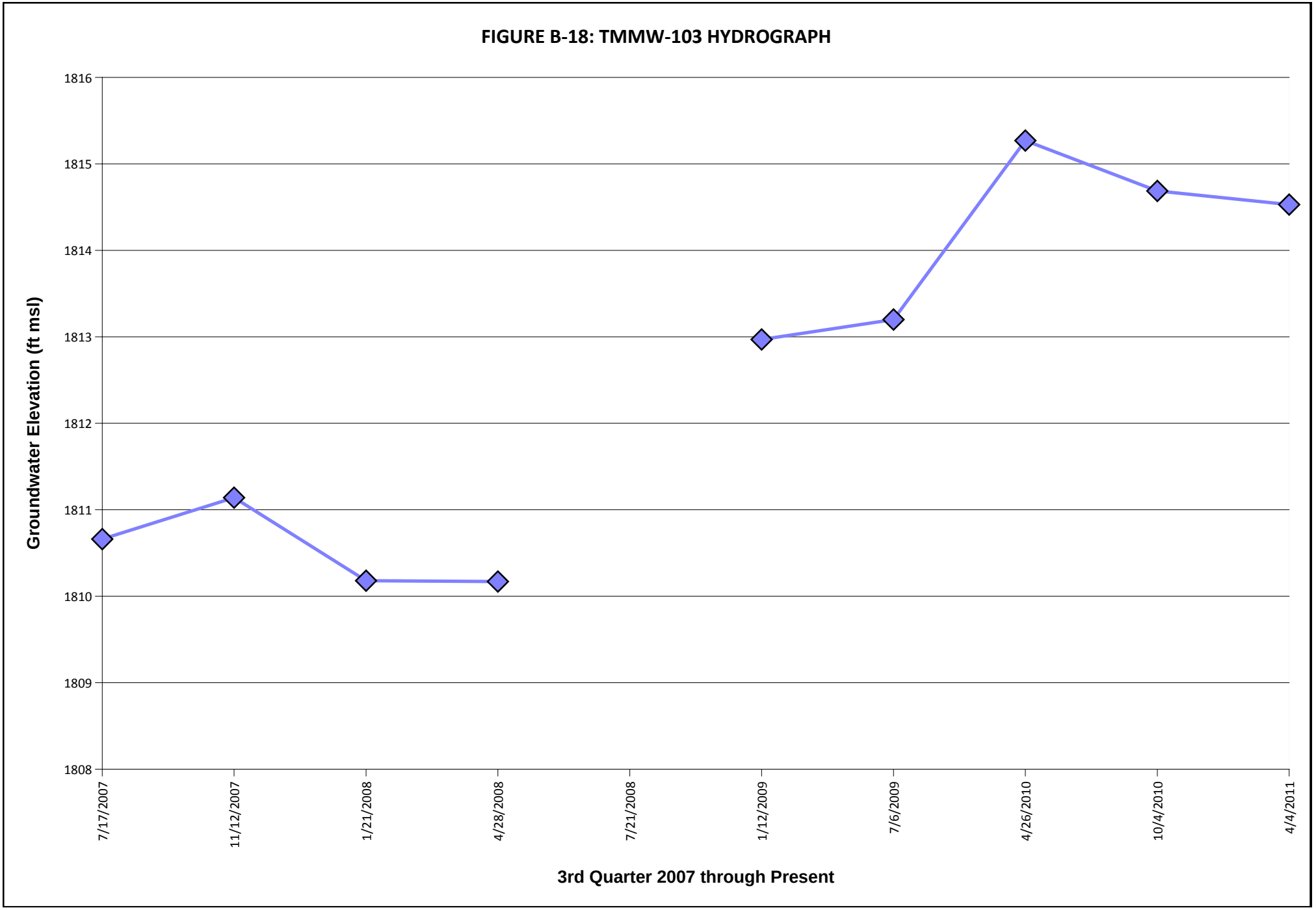


FIGURE B-18: TMMW-103 HYDROGRAPH
Groundwater Elevation (ft msl)
1816
1815
1814
1813
1812
1811
1810
1809
1808
7/17/2007
11/12/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/26/2010
10/4/2010
4/4/2011
3rd Quarter 2007 through Present

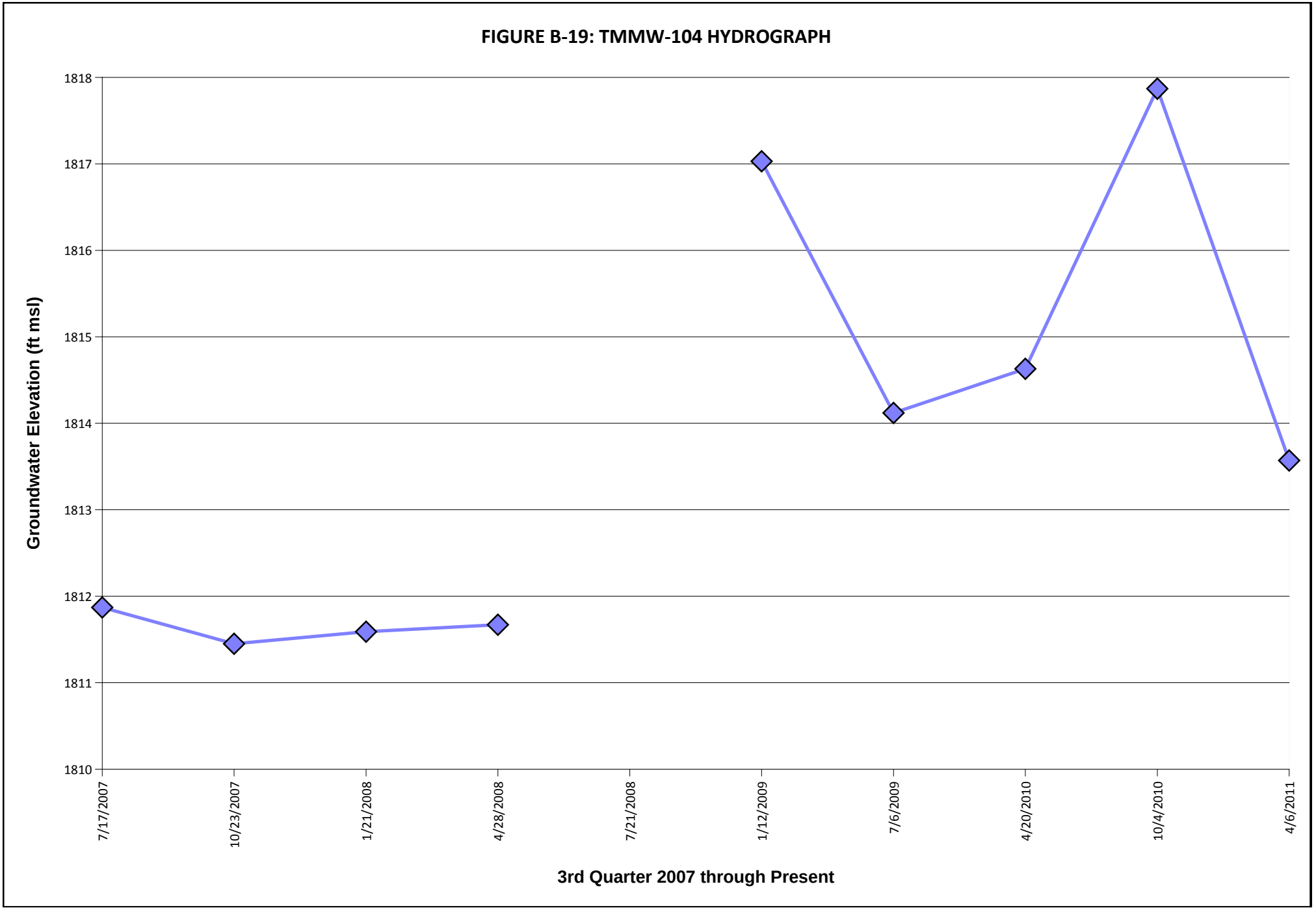


FIGURE B-19: TMMW-104 HYDROGRAPH
Groundwater Elevation (ft msl)
1818
1817
1816
1815
1814
1813
1812
1811
1810
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/20/2010
10/4/2010
4/6/2011
3rd Quarter 2007 through Present

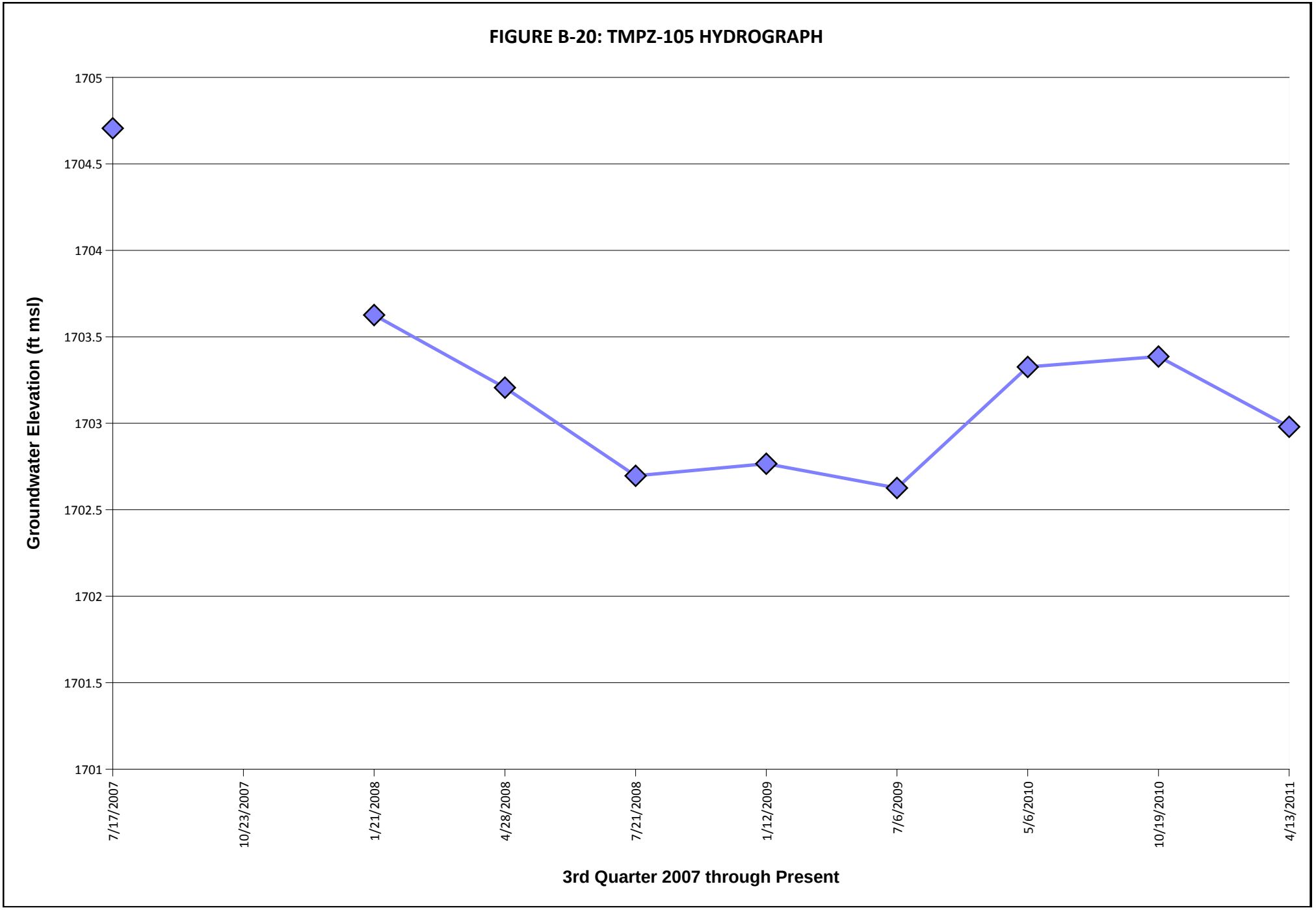


FIGURE B-20: TMPZ-105 HYDROGRAPH
Groundwater Elevation (ft msl)
1705
1704.5
1704
1703.5
1703
1702.5
1702
1701.5
1701
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/6/2010
10/19/2010
4/13/2011
3rd Quarter 2007 through Present

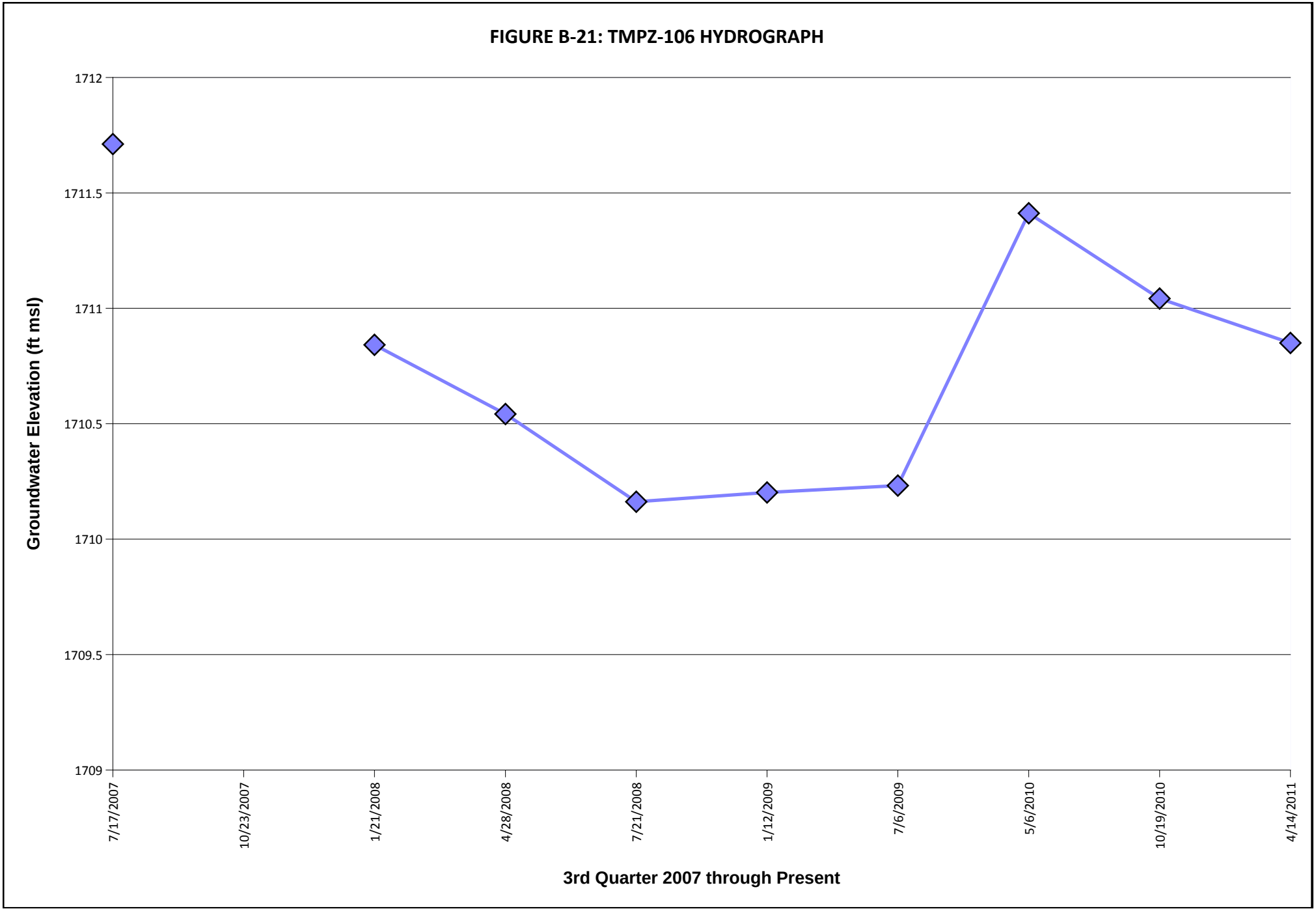


FIGURE B-21: TMPZ-106 HYDROGRAPH
Groundwater Elevation (ft msl)
1712
1711.5
1711
1710.5
1710
1709.5
1709
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/6/2010
10/19/2010
4/14/2011
3rd Quarter 2007 through Present

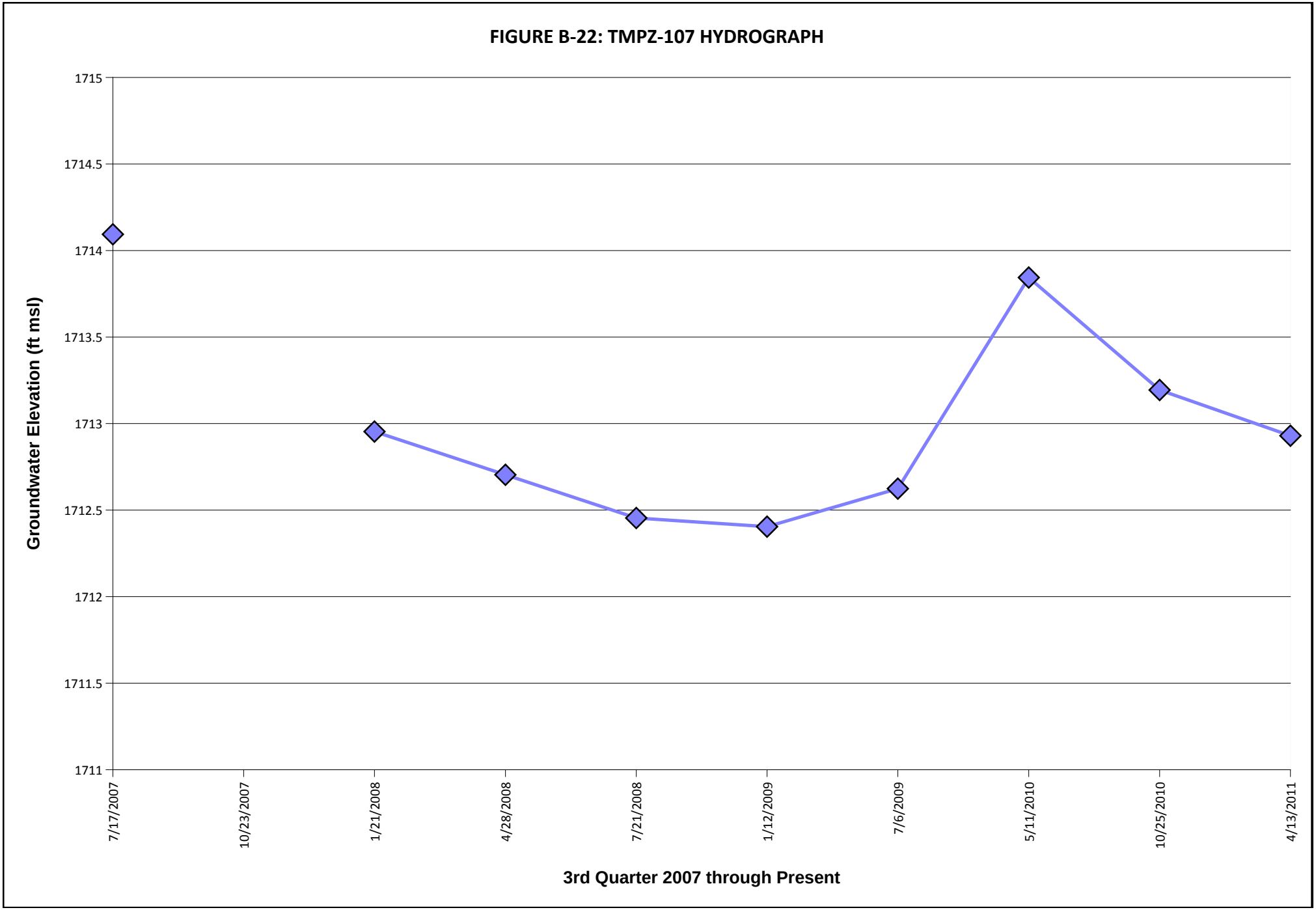


FIGURE B-22: TMPZ-107 HYDROGRAPH
Groundwater Elevation (ft msl)
1715
1714.5
1714
1713.5
1713
1712.5
1712
1711.5
1711
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/11/2010
10/25/2010
4/13/2011
3rd Quarter 2007 through Present

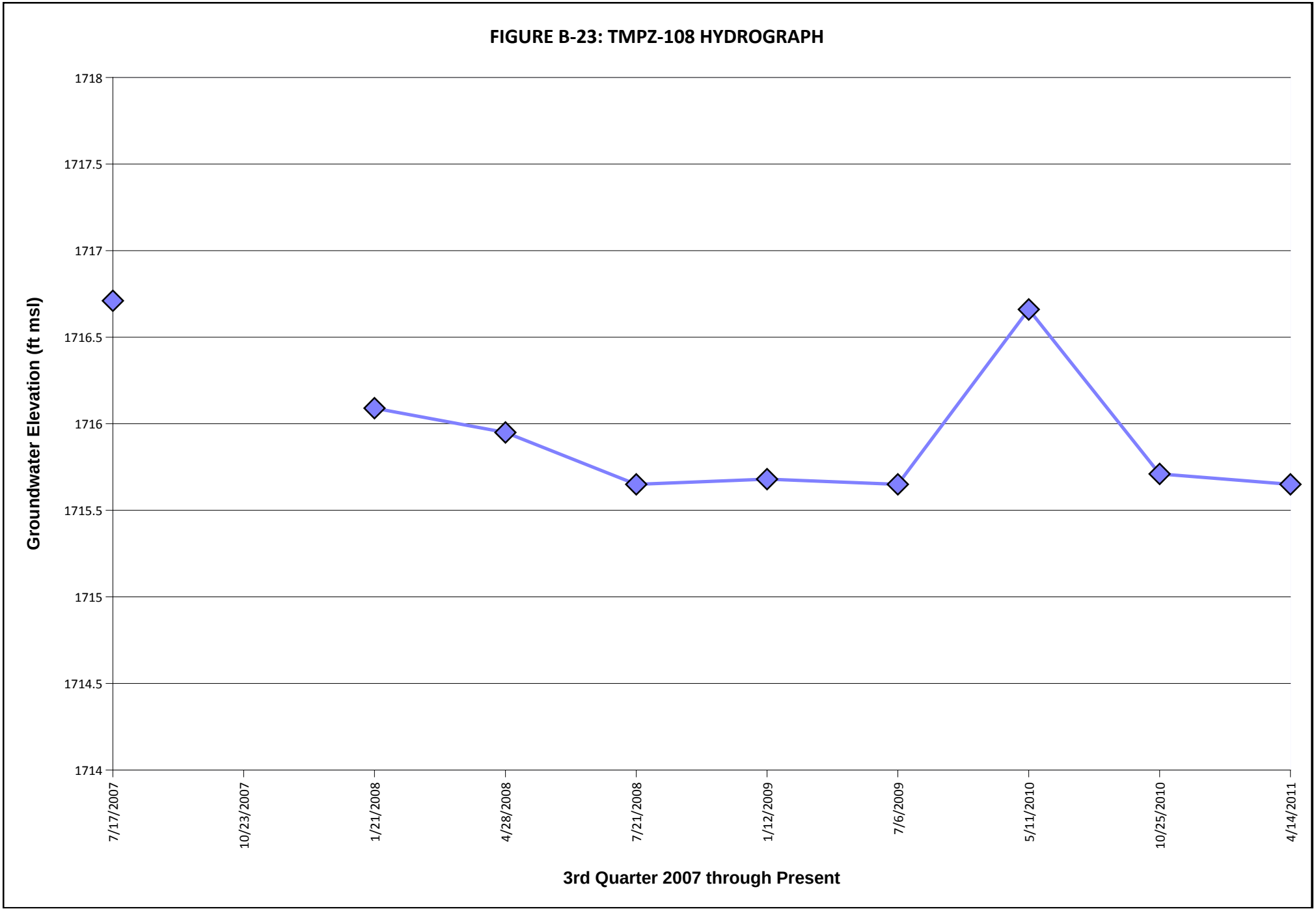


FIGURE B-23: TMPZ-108 HYDROGRAPH
Groundwater Elevation (ft msl)
1718
1717.5
1717
1716.5
1716
1715.5
1715
1714.5
1714
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/11/2010
10/25/2010
4/14/2011
3rd Quarter 2007 through Present

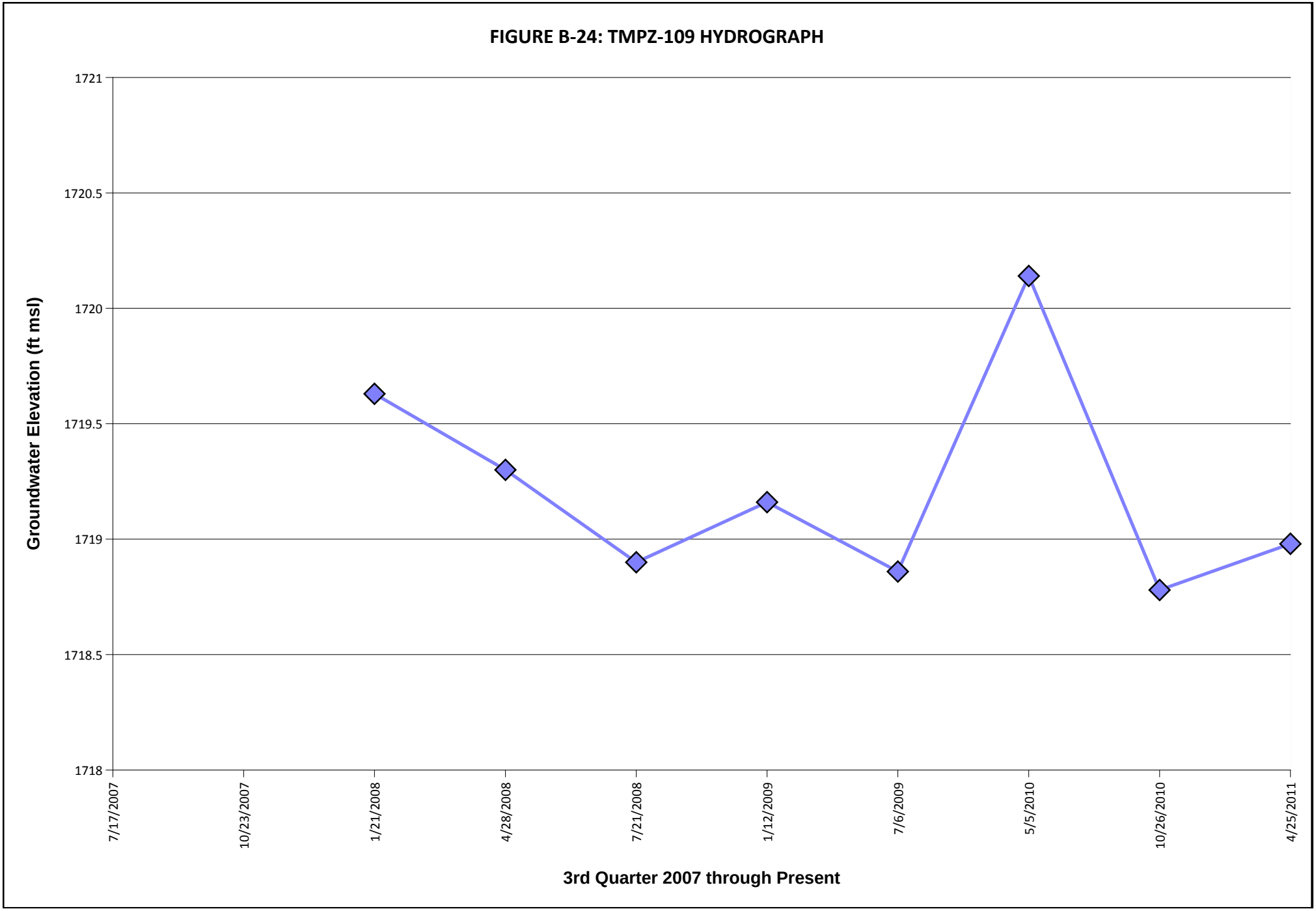


FIGURE B-24: TMPZ-109 HYDROGRAPH
Groundwater Elevation (ft msl)
1721
1720.5
1720
1719.5
1719
1718.5
1718
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/5/2010
10/26/2010
4/25/2011
3rd Quarter 2007 through Present

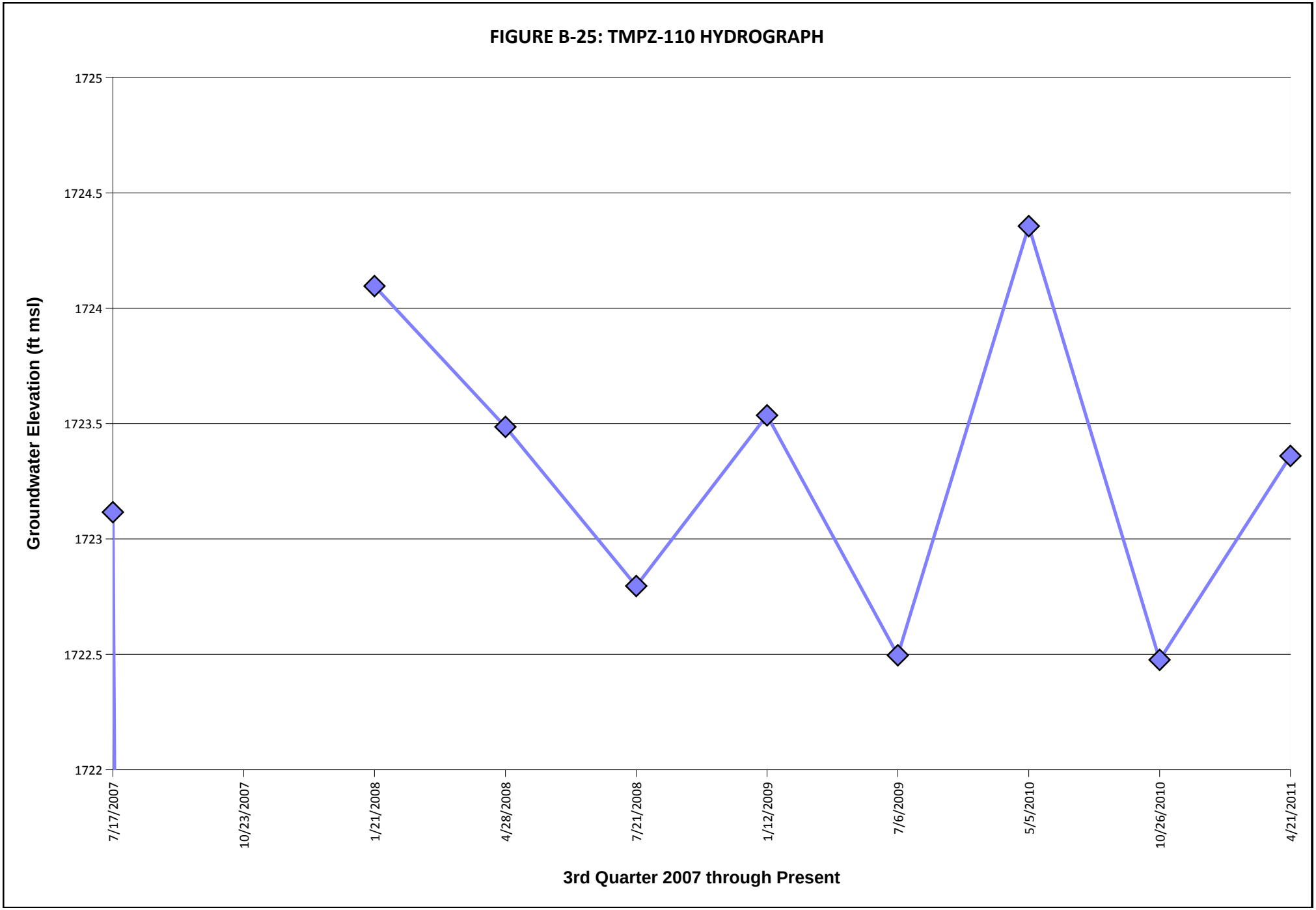


FIGURE B-25: TMPZ-110 HYDROGRAPH
Groundwater Elevation (ft msl)
1725
1724.5
1724
1723.5
1723
1722.5
1722
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
5/5/2010
10/26/2010
4/21/2011
3rd Quarter 2007 through Present

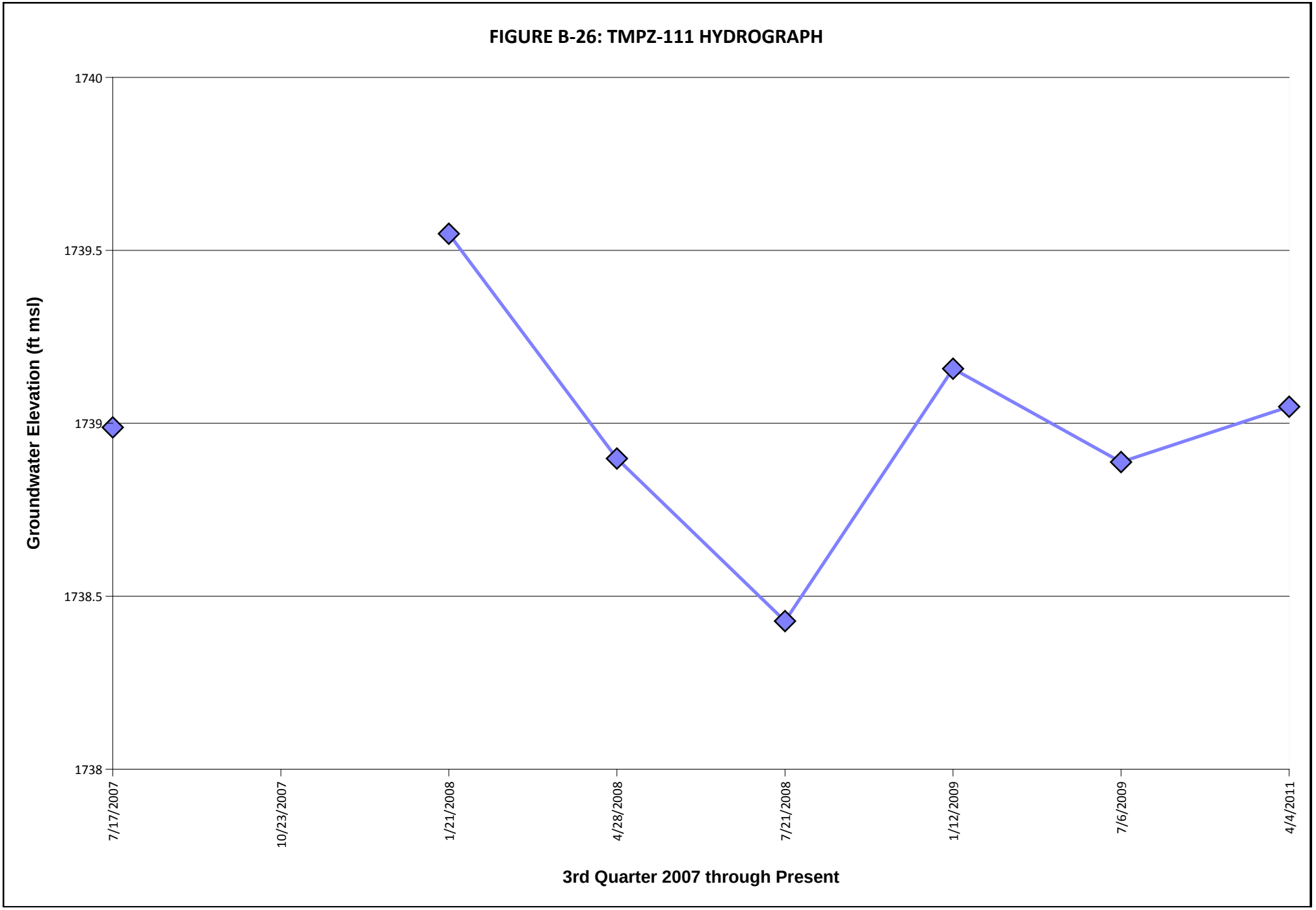


FIGURE B-26: TMPZ-111 HYDROGRAPH
Groundwater Elevation (ft msl)
1740
1739.5
1739
1738.5
1738
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/4/2011
3rd Quarter 2007 through Present

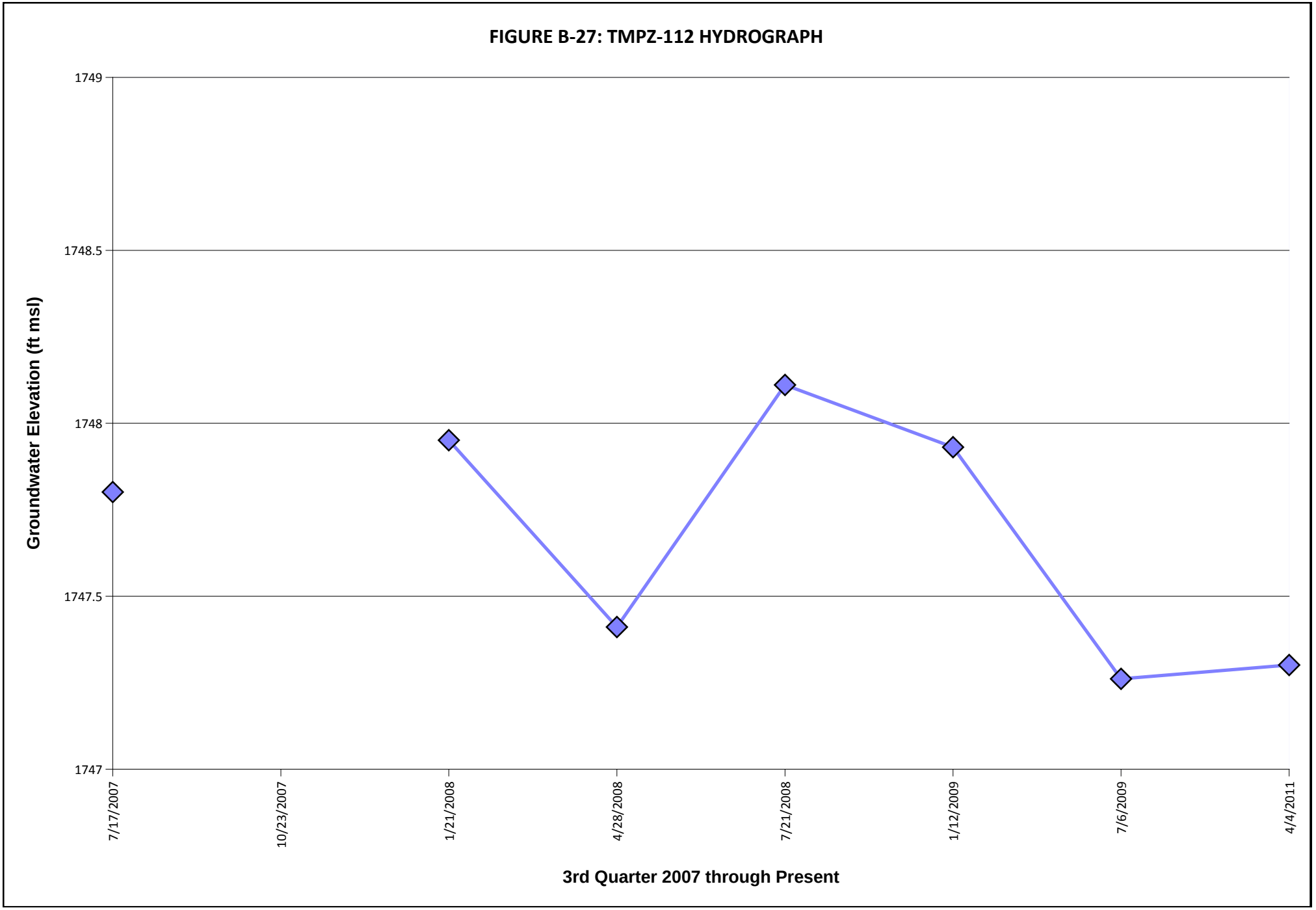


FIGURE B-27: TMPZ-112 HYDROGRAPH
Groundwater Elevation (ft msl)
1749
1748.5
1748
1747.5
1747
7/17/2007
10/23/2007
1/21/2008
4/28/2008
7/21/2008
1/12/2009
7/6/2009
4/4/2011
3rd Quarter 2007 through Present

FIGURE B-28: AA-01 HYDROGRAPH
Groundwater Elevation (ft msl)
1710
1709.5
1709
1708.5
1708
1707.5
1707
1706.5
1706
1705.5
1705
4/20/2010
10/6/2010
4/5/2011
2nd Quarter 2010 through Present

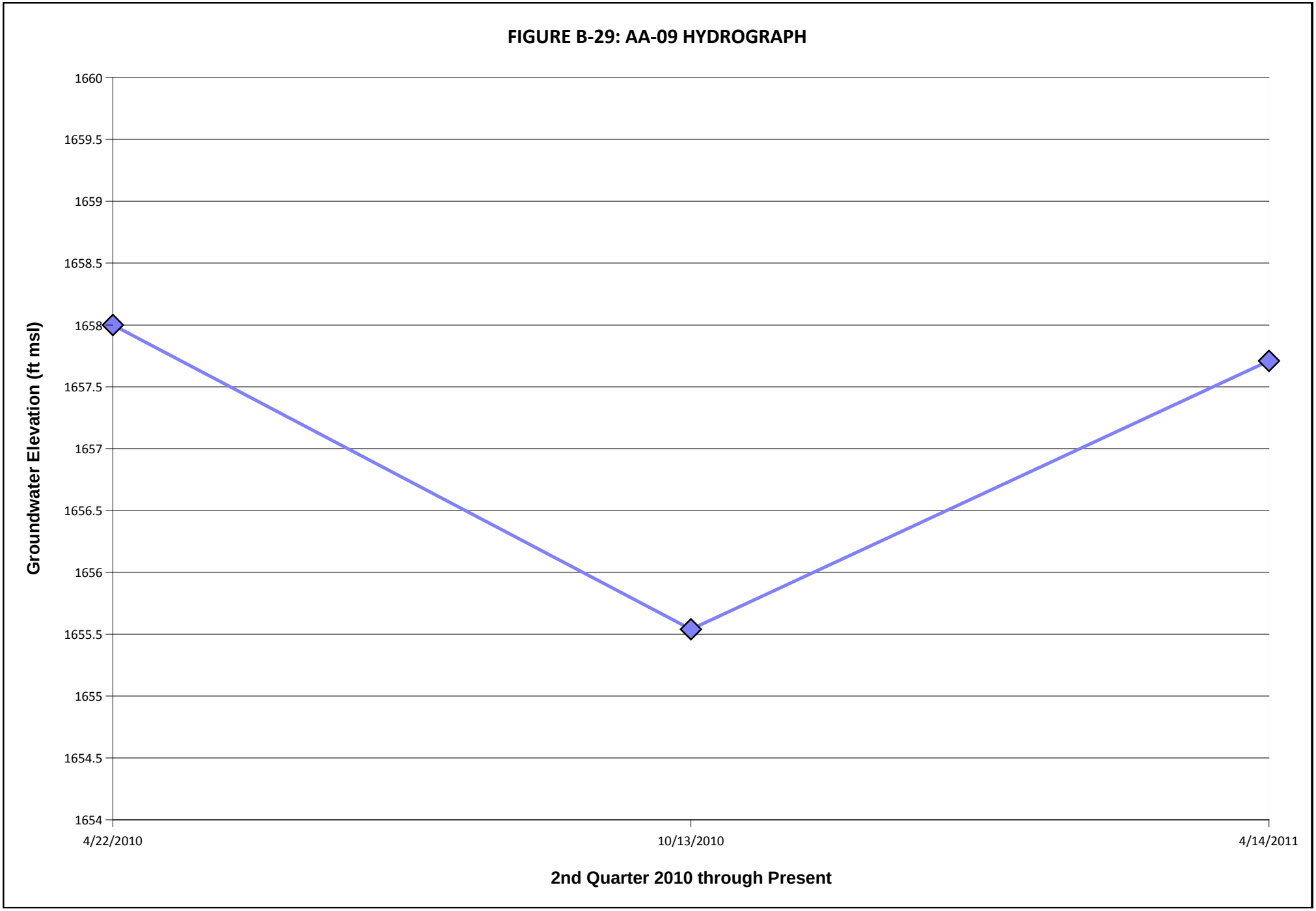


FIGURE B-29: AA-09 HYDROGRAPH
Groundwater Elevation (ft msl)
1660
1659.5
1659
1658.5
1658
1657.5
1657
1656.5
1656
1655.5
1655
1654.5
1654
4/22/2010
10/13/2010
4/14/2011
2nd Quarter 2010 through Present

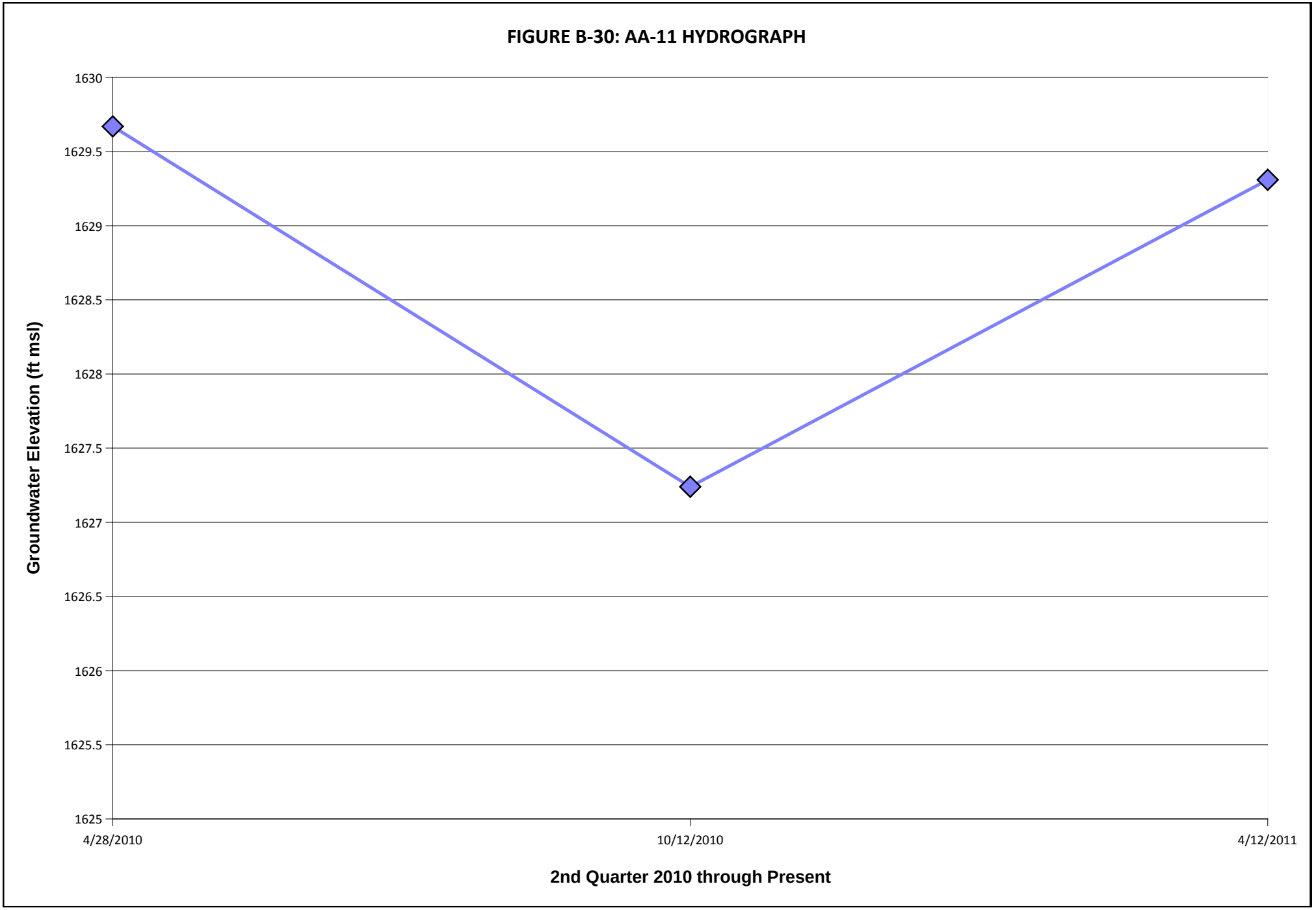


FIGURE B-30: AA-11 HYDROGRAPH
Groundwater Elevation (ft msl)
1630
1629.5
1629
1628.5
1628
1627.5
1627
1626.5
1626
1625.5
1625
4/28/2010
10/12/2010
4/12/2011
2nd Quarter 2010 through Present

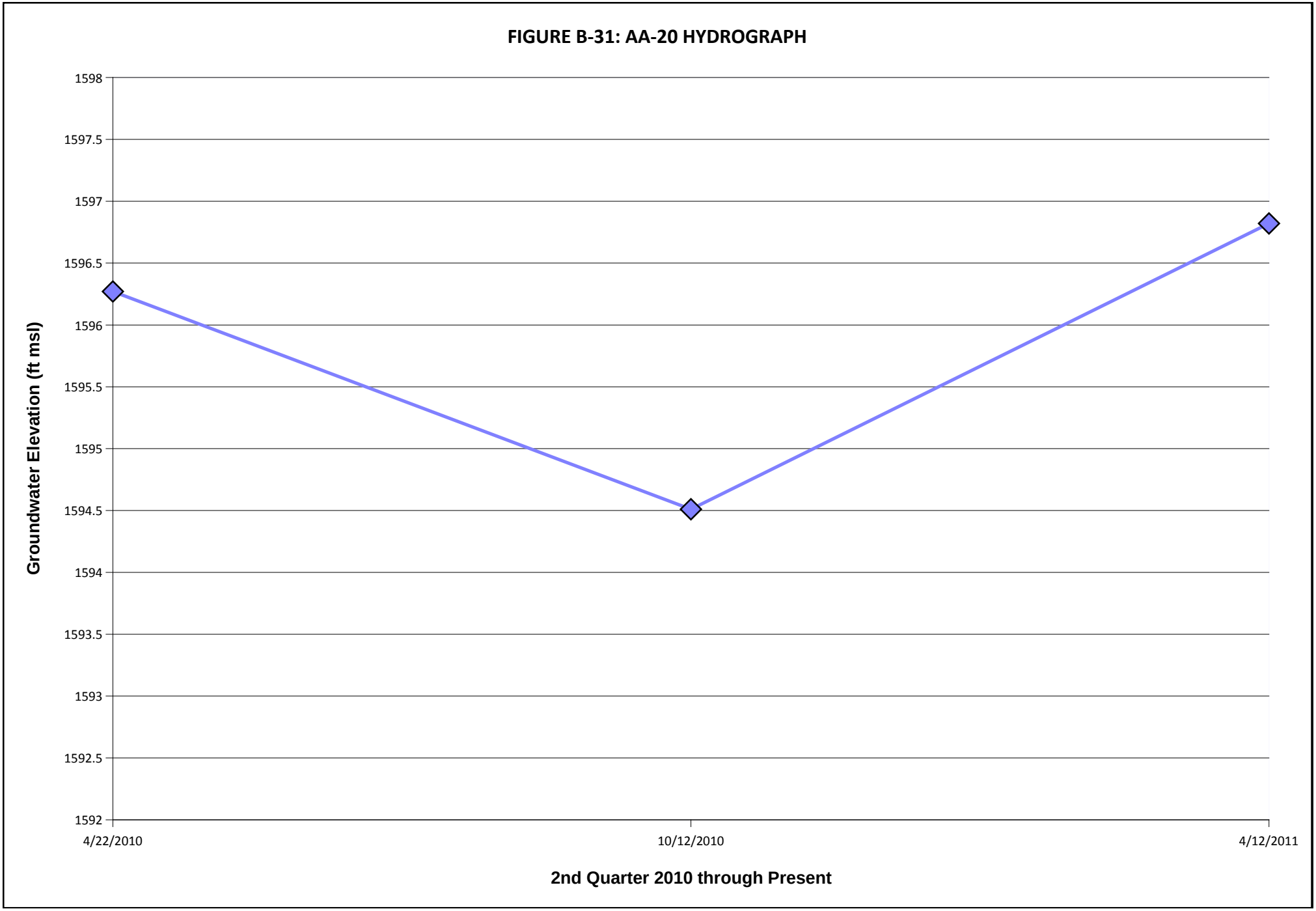


FIGURE B-31: AA-20 HYDROGRAPH
Groundwater Elevation (ft msl)
1598
1597.5
1597
1596.5
1596
1595.5
1595
1594.5
1594
1593.5
1593
1592.5
1592
4/22/2010
10/12/2010
4/12/2011
2nd Quarter 2010 through Present

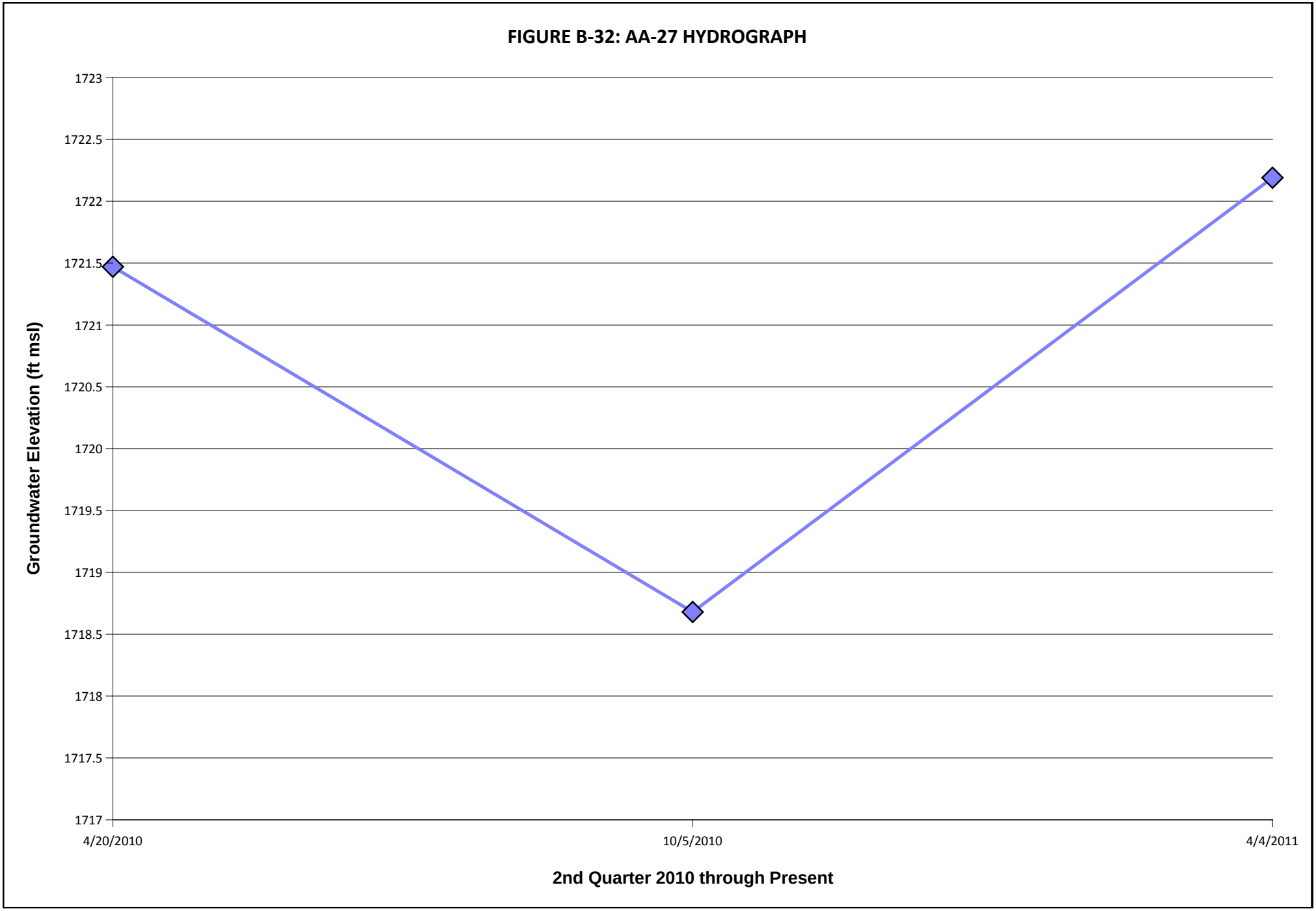


FIGURE B-32: AA-27 HYDROGRAPH
Groundwater Elevation (ft msl)
1723
1722.5
1722
1721.5
1721
1720.5
1720
1719.5
1719
1718.5
1718
1717.5
1717
4/20/2010
10/5/2010
4/4/2011
2nd Quarter 2010 through Present

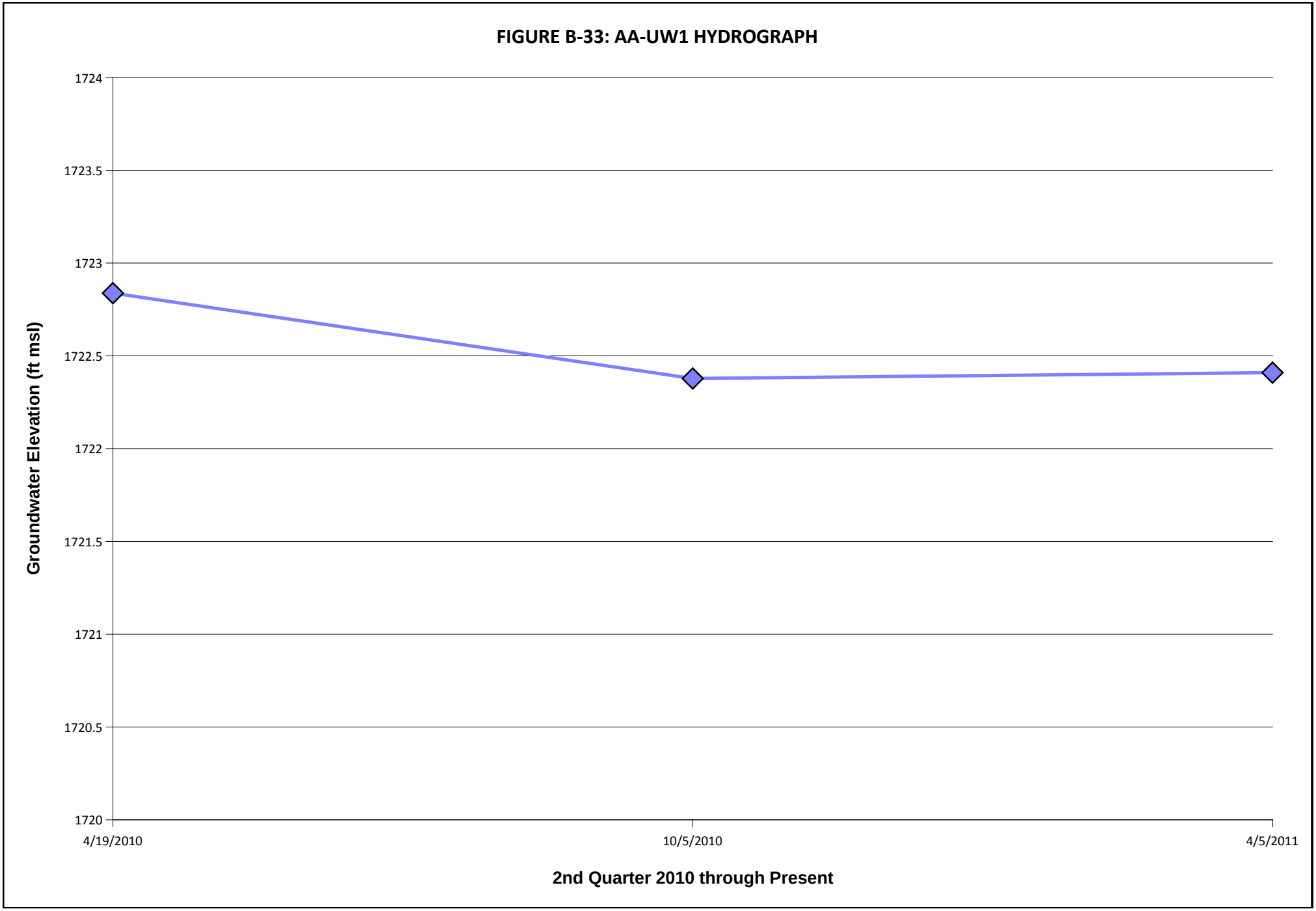


FIGURE B-33: AA-UW1 HYDROGRAPH
Groundwater Elevation (ft msl)
1724
1723.5
1723
1722.5
1722
1721.5
1721
1720.5
1720
4/19/2010
10/5/2010
4/5/2011
2nd Quarter 2010 through Present

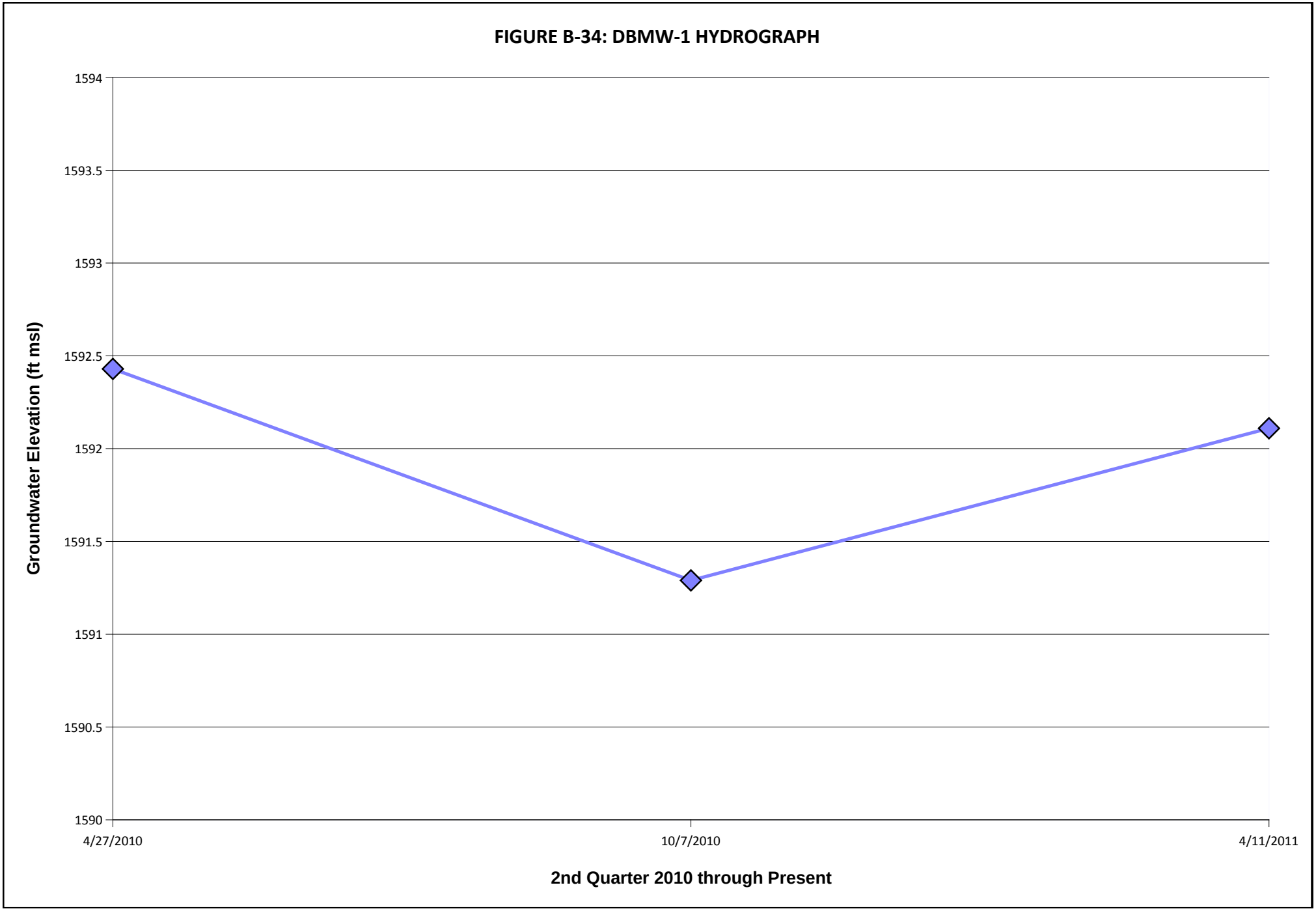


FIGURE B-34: DBMW-1 HYDROGRAPH
Groundwater Elevation (ft msl)
1594
1593.5
1593
1592.5
1592
1591.5
1591
1590.5
1590
4/27/2010
10/7/2010
4/11/2011
2nd Quarter 2010 through Present

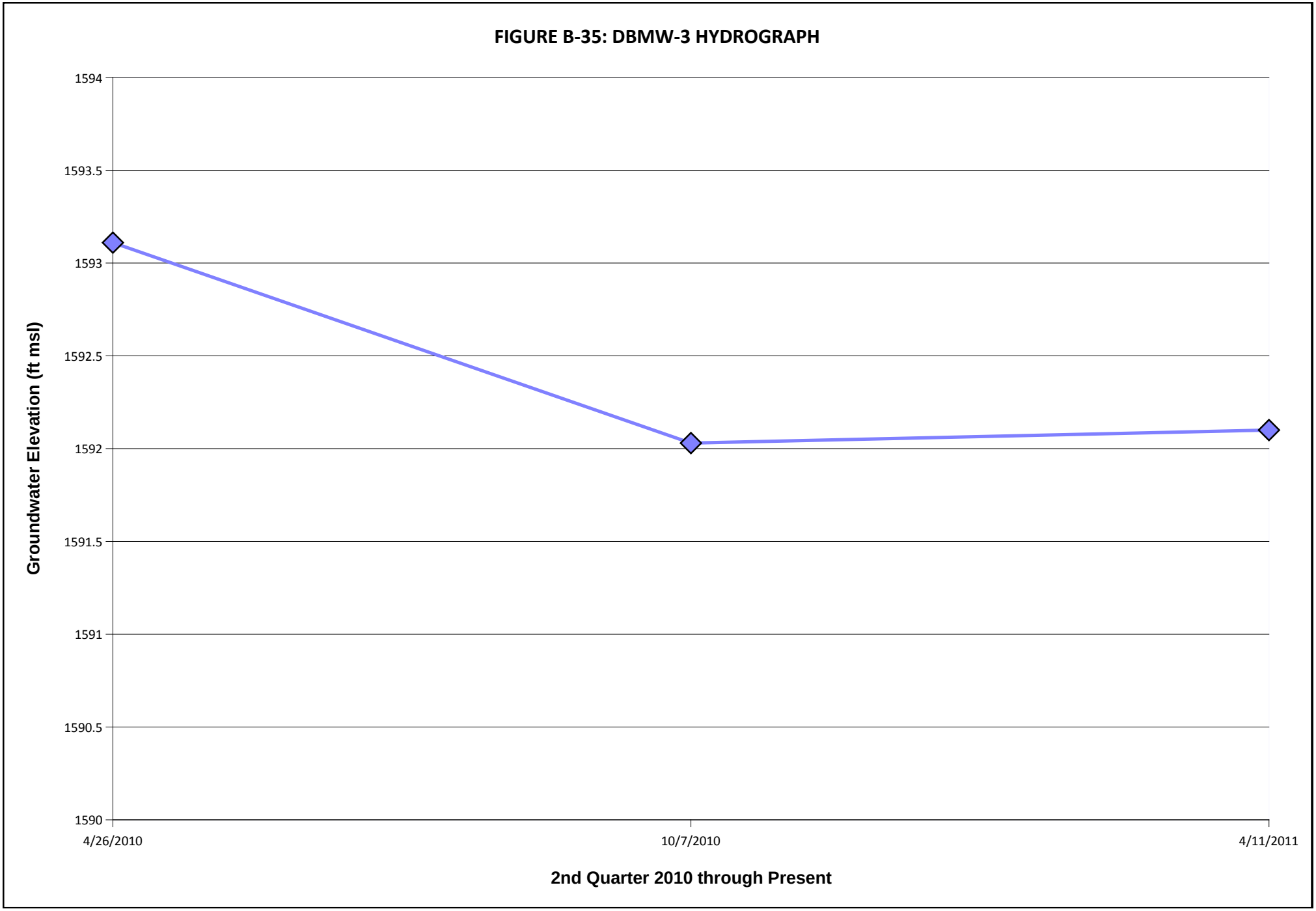


FIGURE B-35: DBMW-3 HYDROGRAPH
Groundwater Elevation (ft msl)
1594
1593.5
1593
1592.5
1592
1591.5
1591
1590.5
1590
4/26/2010
10/7/2010
4/11/2011
2nd Quarter 2010 through Present

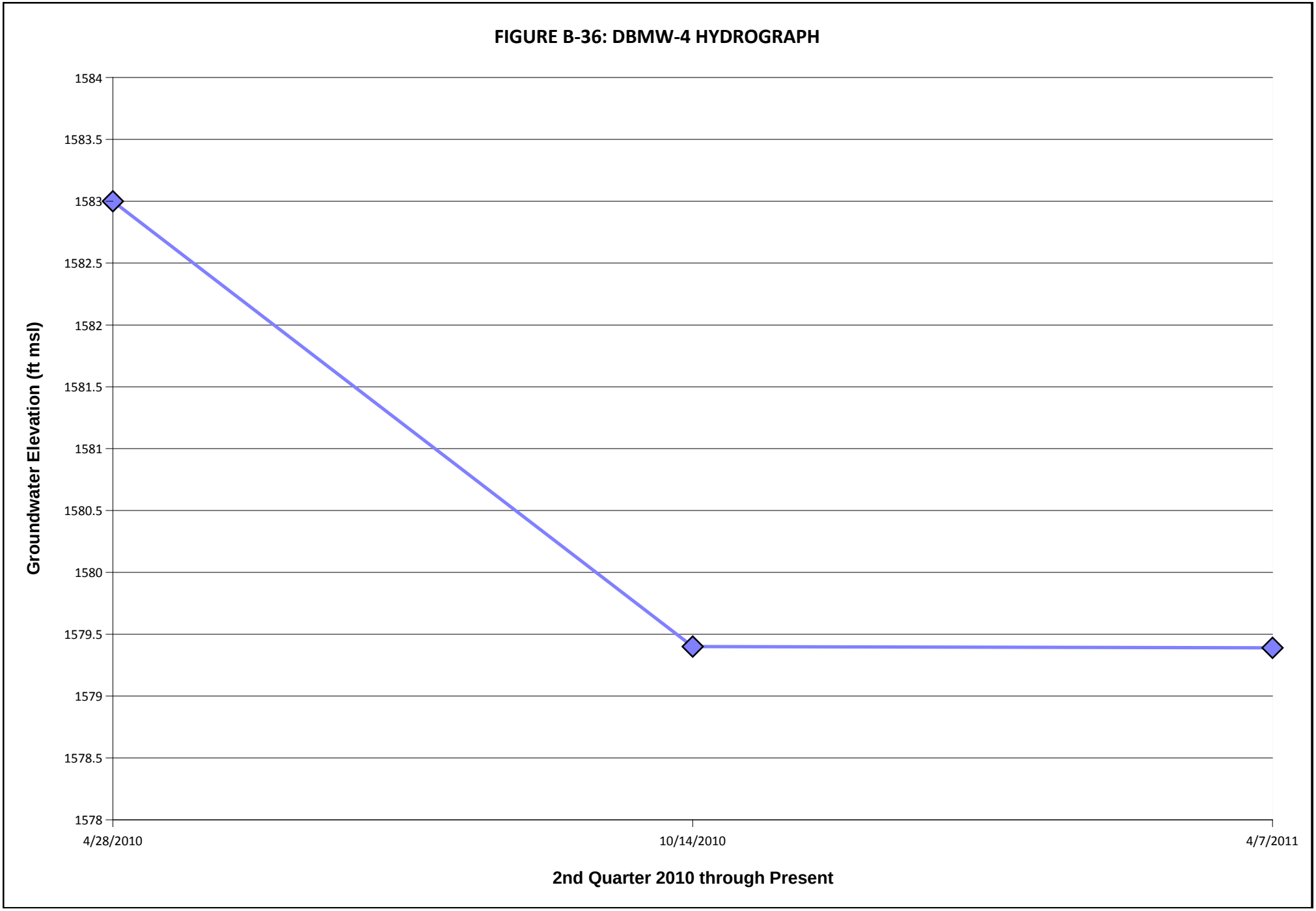


FIGURE B-36: DBMW-4 HYDROGRAPH
Groundwater Elevation (ft msl)
1584
1583.5
1583
1582.5
1582
1581.5
1581
1580.5
1580
1579.5
1579
1578.5
1578
4/28/2010
10/14/2010
4/7/2011
2nd Quarter 2010 through Present

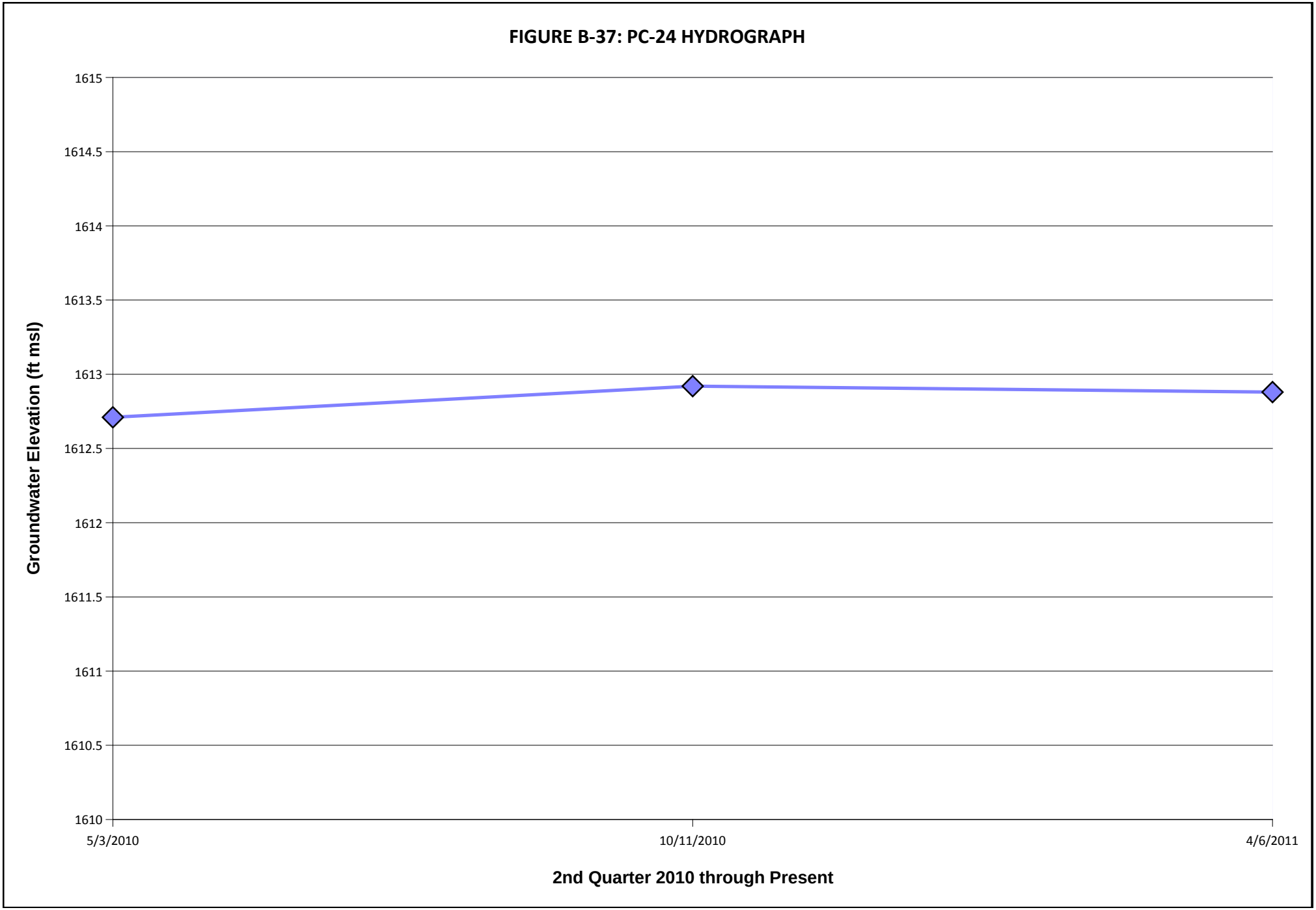


FIGURE B-37: PC-24 HYDROGRAPH
Groundwater Elevation (ft msl)
1615
1614.5
1614
1613.5
1613
1612.5
1612
1611.5
1611
1610.5
1610
5/3/2010
10/11/2010
4/6/2011
2nd Quarter 2010 through Present

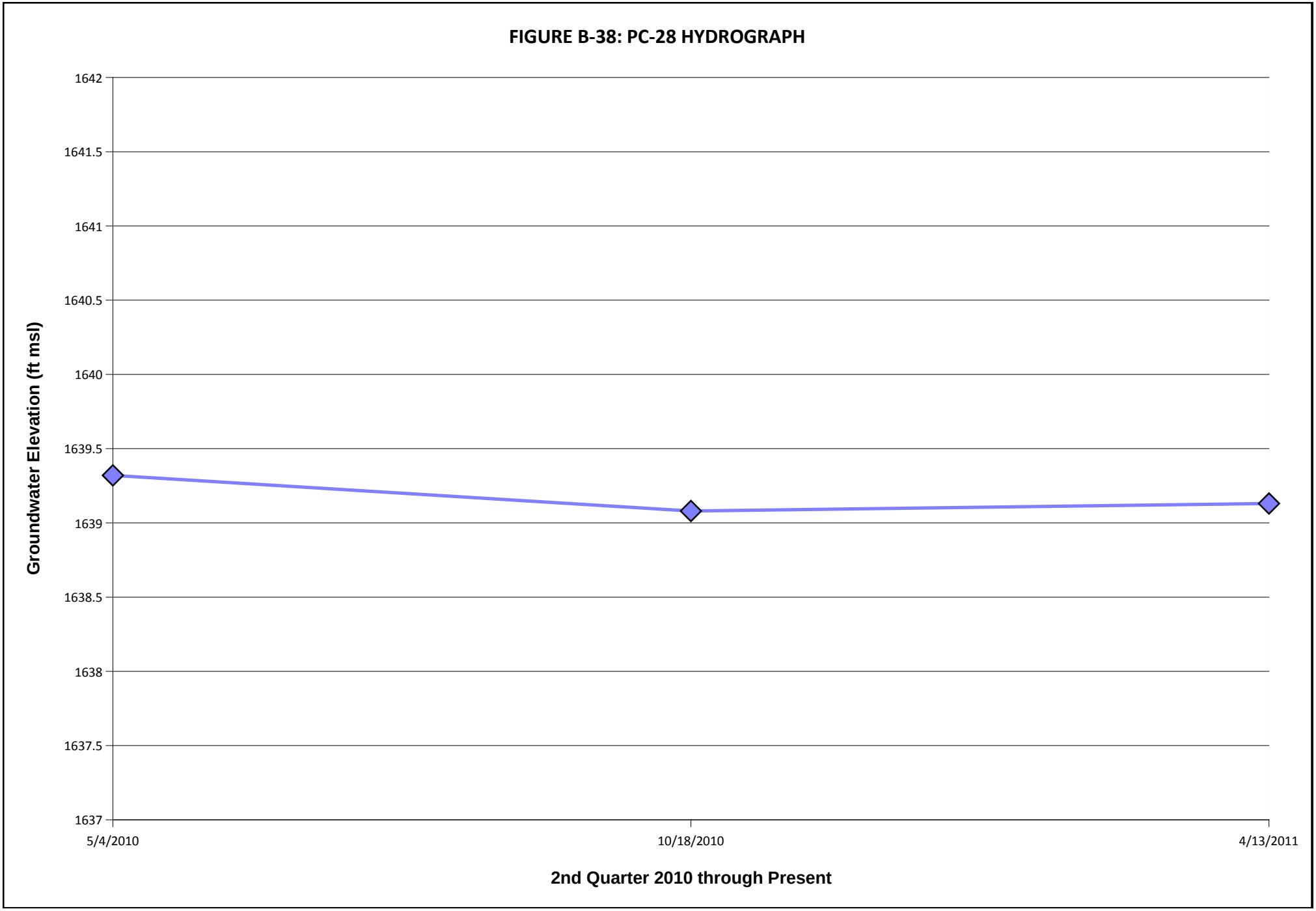


FIGURE B-38: PC-28 HYDROGRAPH
Groundwater Elevation (ft msl)
1642
1641.5
1641
1640.5
1640
1639.5
1639
1638.5
1638
1637.5
1637
5/4/2010
10/18/2010
4/13/2011
2nd Quarter 2010 through Present

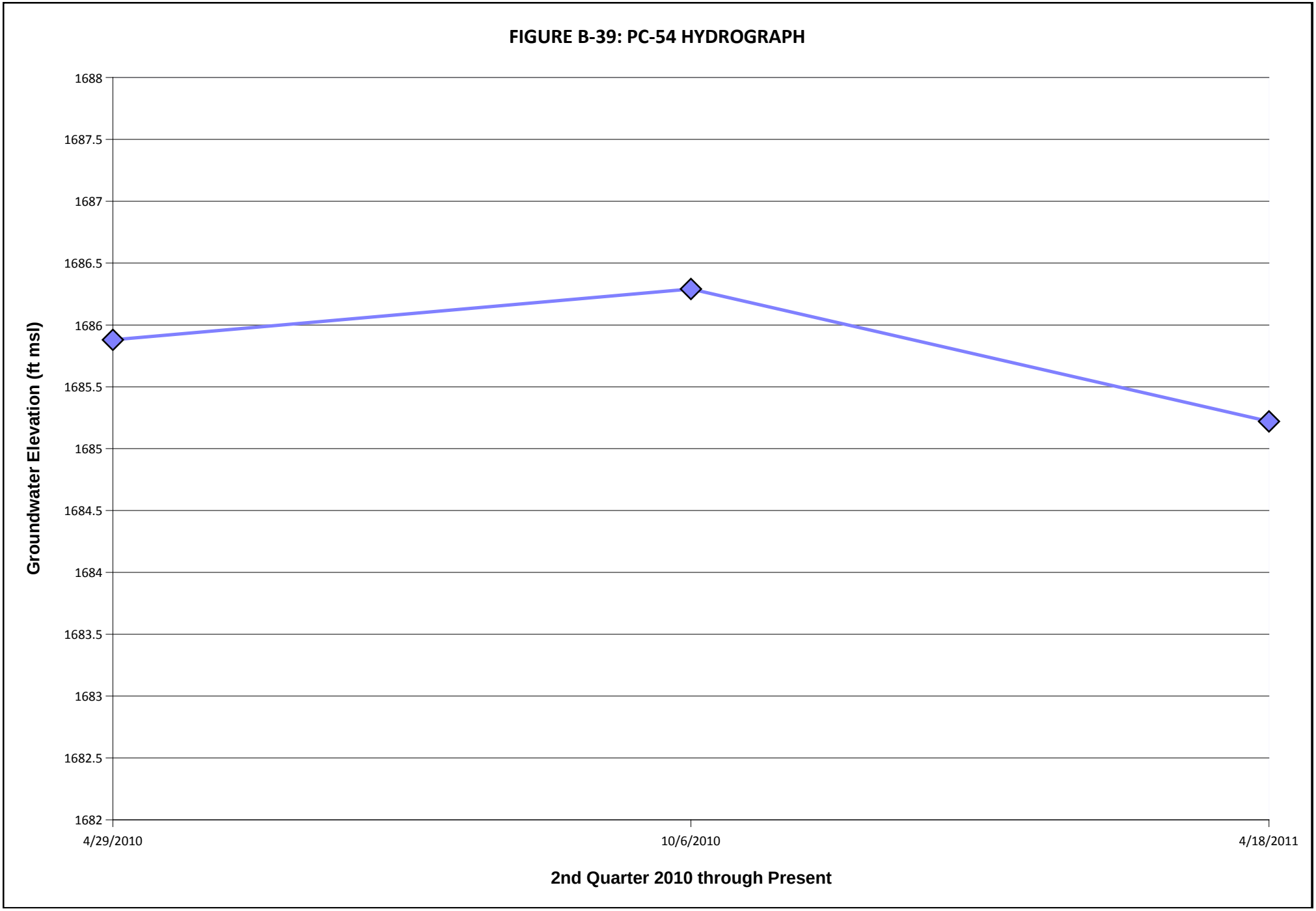


FIGURE B-39: PC-54 HYDROGRAPH
Groundwater Elevation (ft msl)
1688
1687.5
1687
1686.5
1686
1685.5
1685
1684.5
1684
1683.5
1683
1682.5
1682
4/29/2010
10/6/2010
4/18/2011
2nd Quarter 2010 through Present

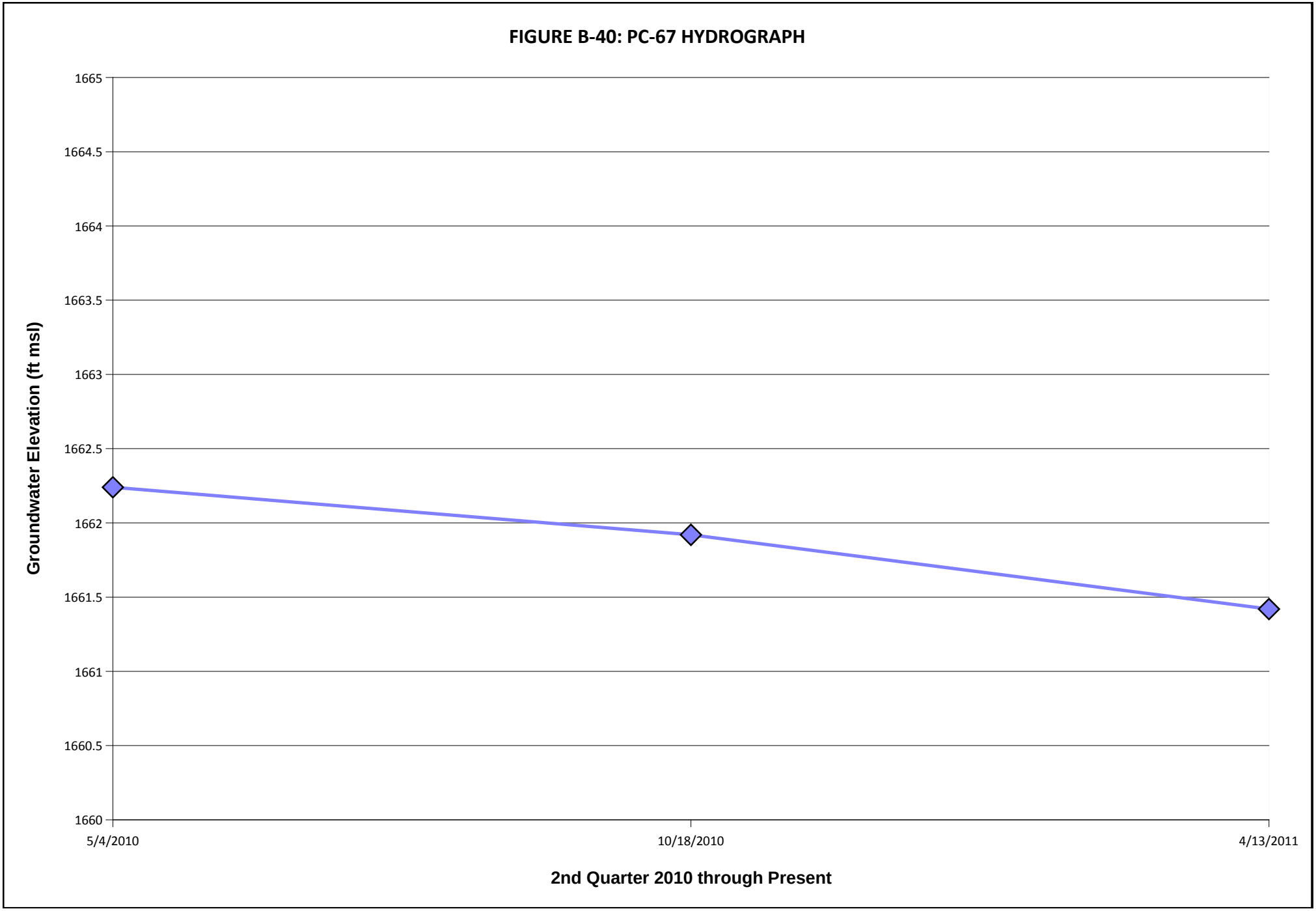


FIGURE B-40: PC-67 HYDROGRAPH
Groundwater Elevation (ft msl)
1665
1664.5
1664
1663.5
1663
1662.5
1662
1661.5
1661
1660.5
1660
5/4/2010
10/18/2010
4/13/2011
2nd Quarter 2010 through Present

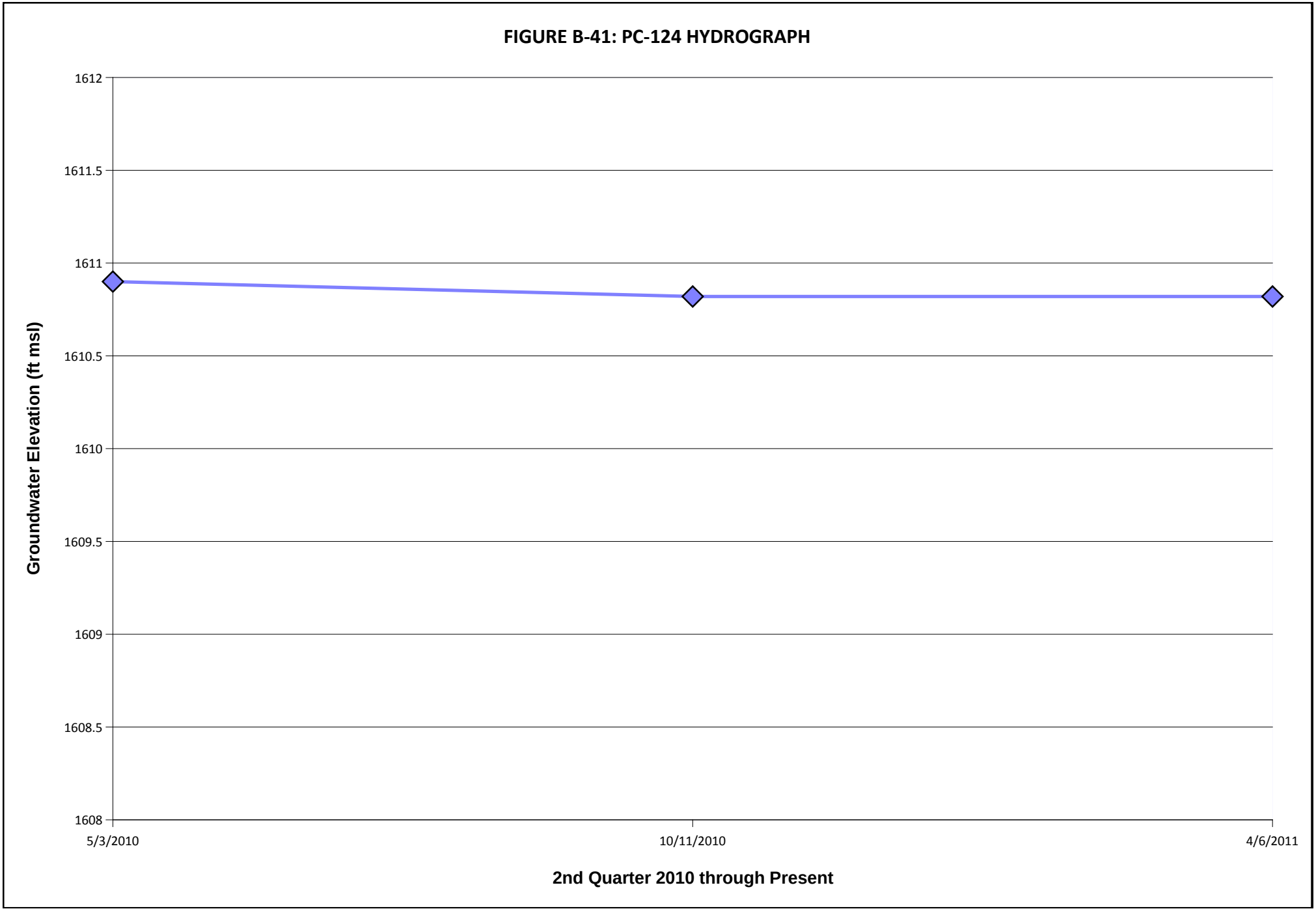


FIGURE B-41: PC-124 HYDROGRAPH
Groundwater Elevation (ft msl)
1612
1611.5
1611
1610.5
1610
1609.5
1609
1608.5
1608
5/3/2010
10/11/2010
4/6/2011
2nd Quarter 2010 through Present

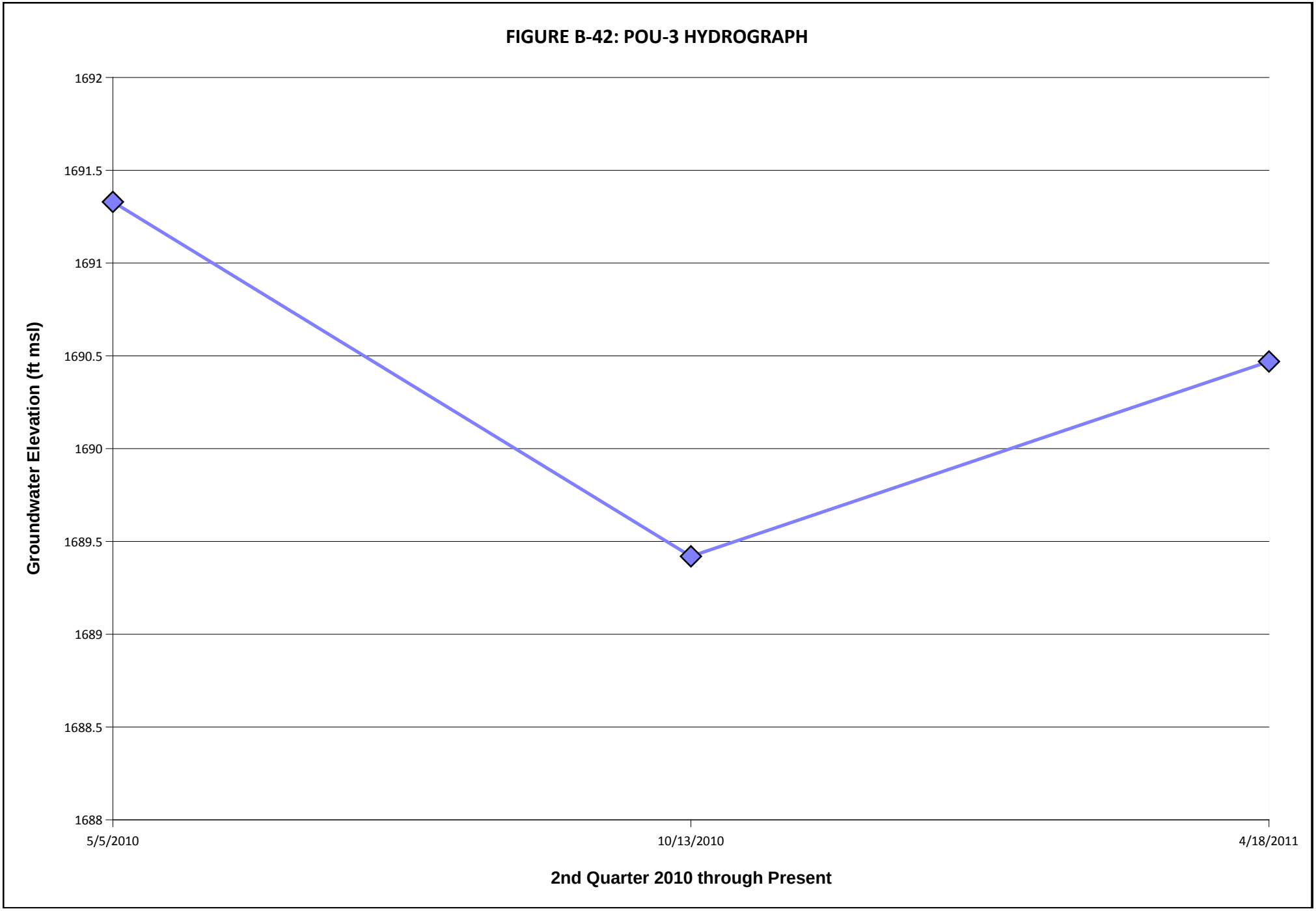


FIGURE B-42: POU-3 HYDROGRAPH
Groundwater Elevation (ft msl)
1692
1691.5
1691
1690.5
1690
1689.5
1689
1688.5
1688
5/5/2010
10/13/2010
4/18/2011
2nd Quarter 2010 through Present

APPENDIX C

CONCENTRATION TREND GRAPHS

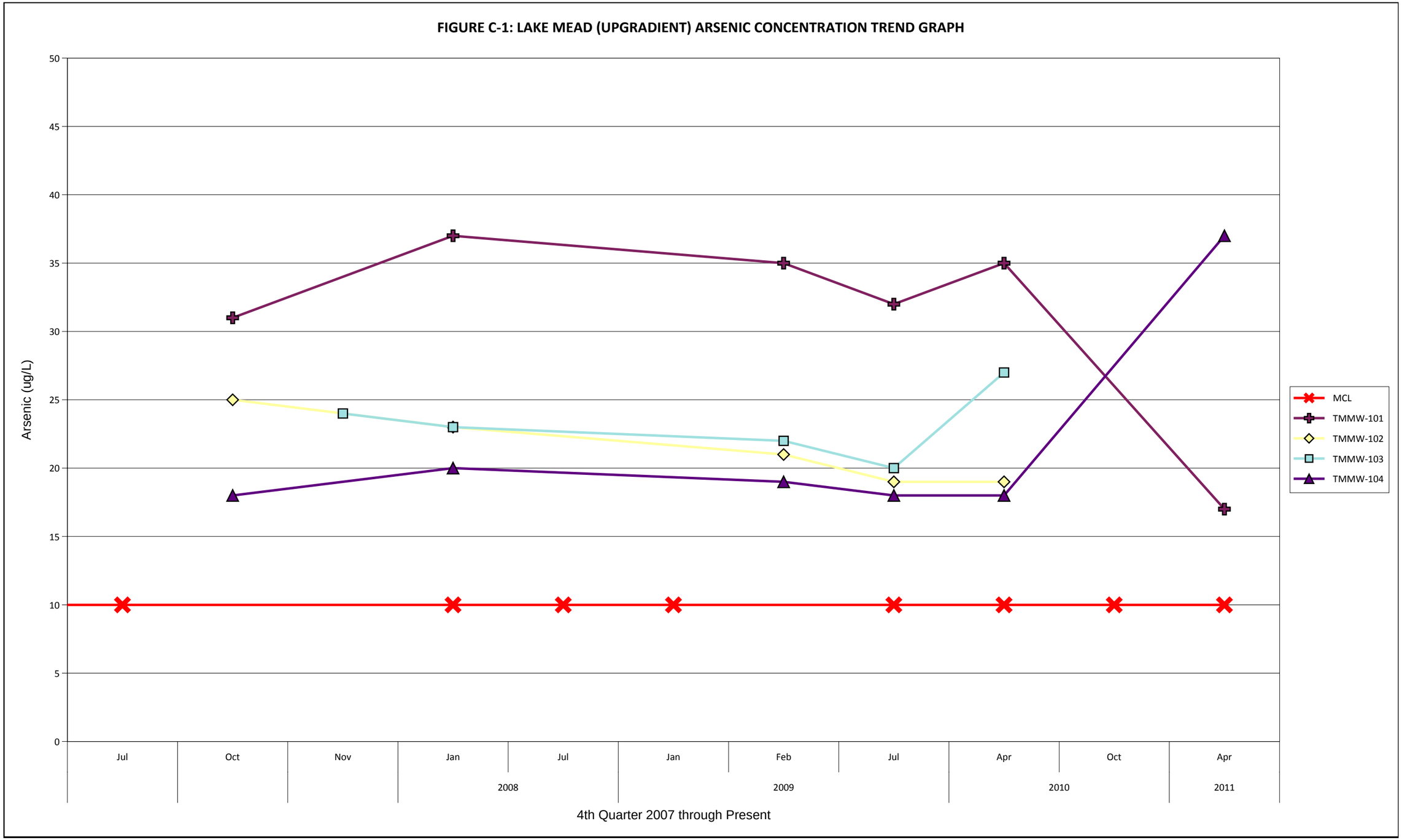


FIGURE C-1: LAKE MEAD (UPGRADIENT) ARSENIC CONCENTRATION TREND GRAPH
Arsenic (ug/L)
50
45
40
35
30
25
20
15
10
5
0
Jul
Oct
Nov
Jan
Jul
Jan
Feb
Jul
Apr
Oct
Apr
2008
2009
2010
2011
4th Quarter 2007 through Present
MCL
TMMW-101
TMMW-102
TMMW-103
TMMW-104

FIGURE C-2: PLANT SITE ARSENIC CONCENTRATION TREND GRAPH

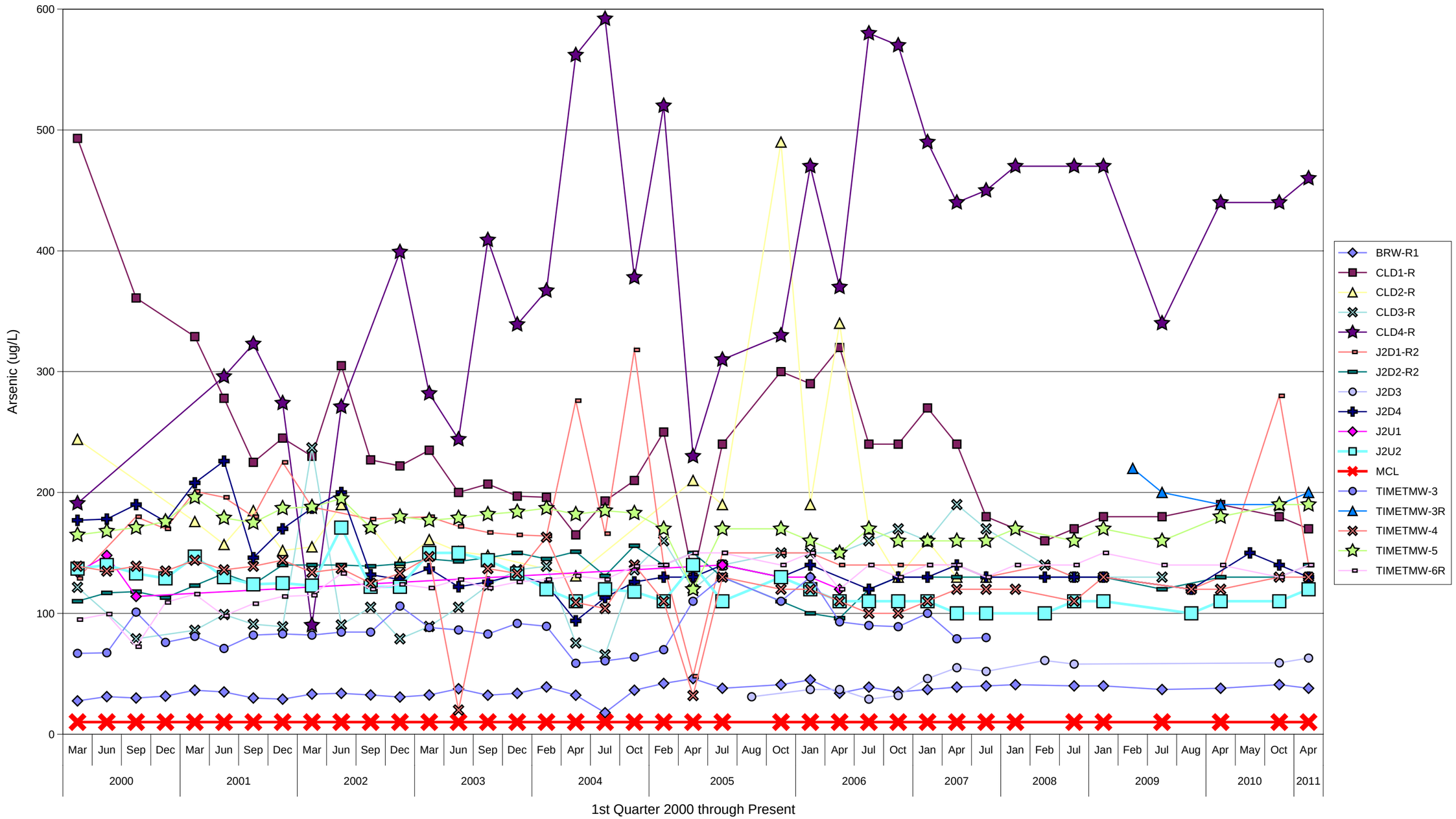
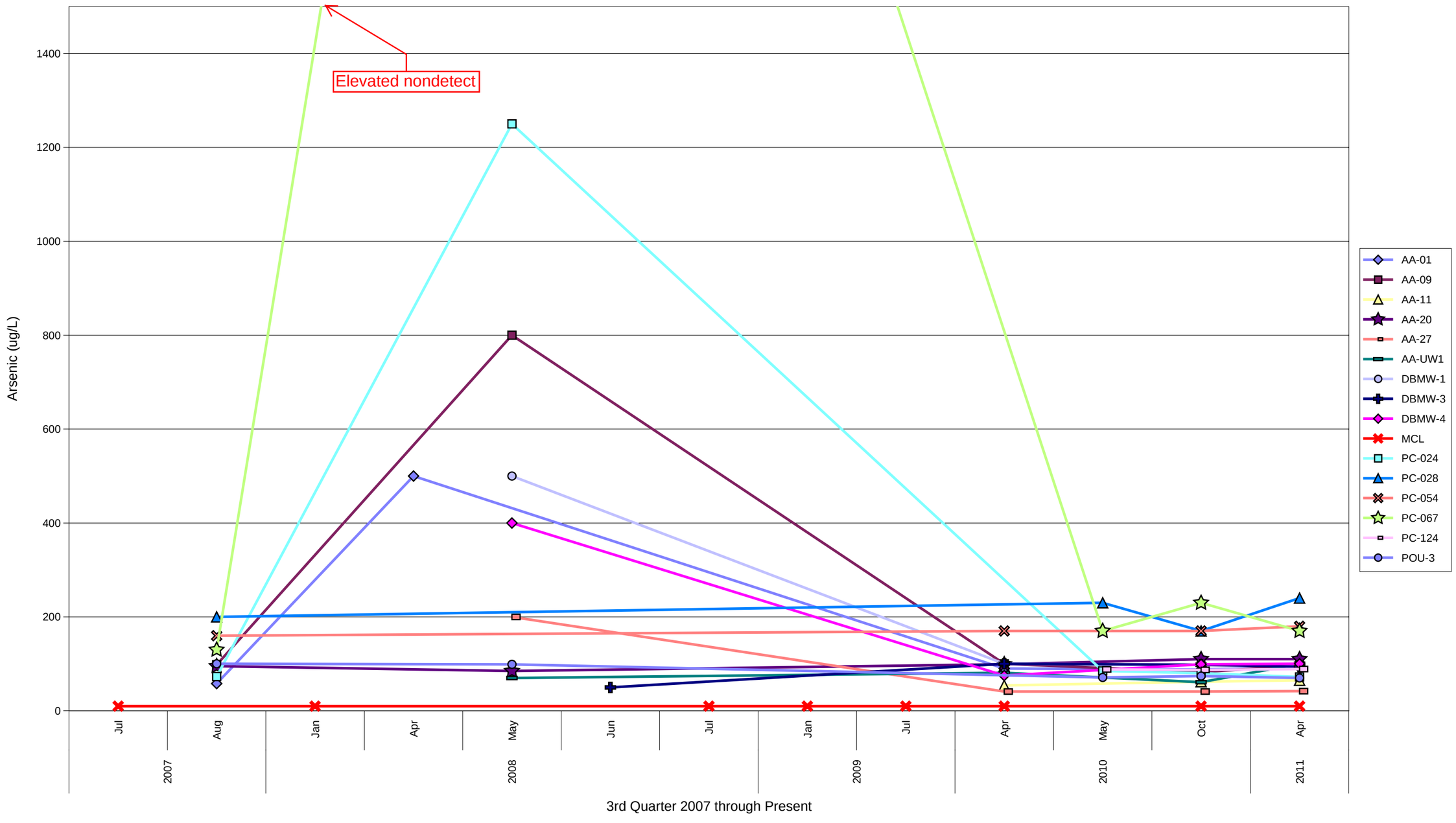


FIGURE C-3: DOWNGRADIENT ARSENIC CONCENTRATION TREND GRAPH



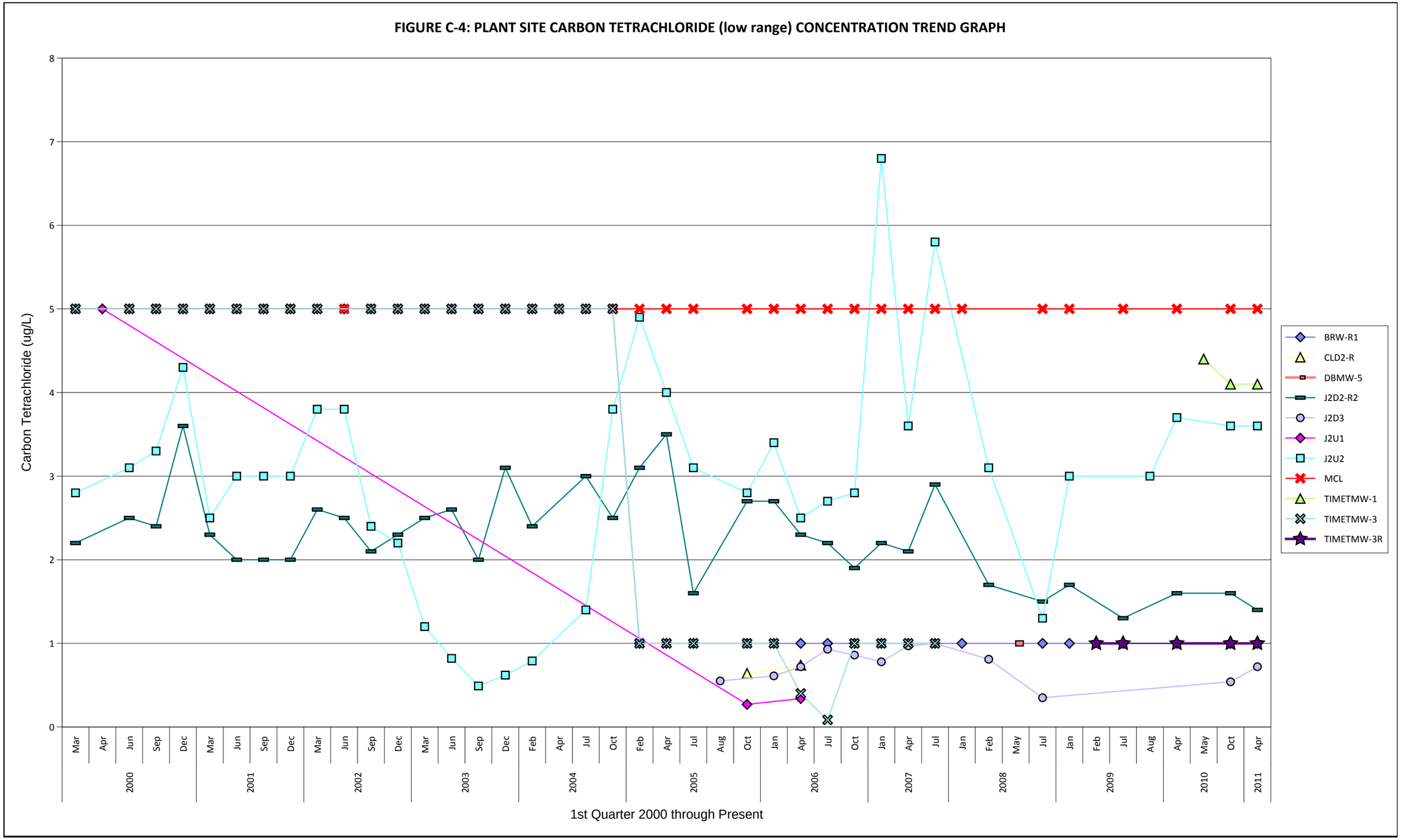


FIGURE C-4: PLANT SITE CARBON TETRACHLORIDE (low range) CONCENTRATION TREND GRAPH
Carbon Tetrachloride (ug/L)
8
7
6
5
4
3
2
1
0
Mar Apr Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb May Jul Jan Feb Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD2-R
DBMW-5
J2D2-R2
J2D3
J2U1
J2U2
MCL
TIMETMW-1
TIMETMW-3
TIMETMW-3R

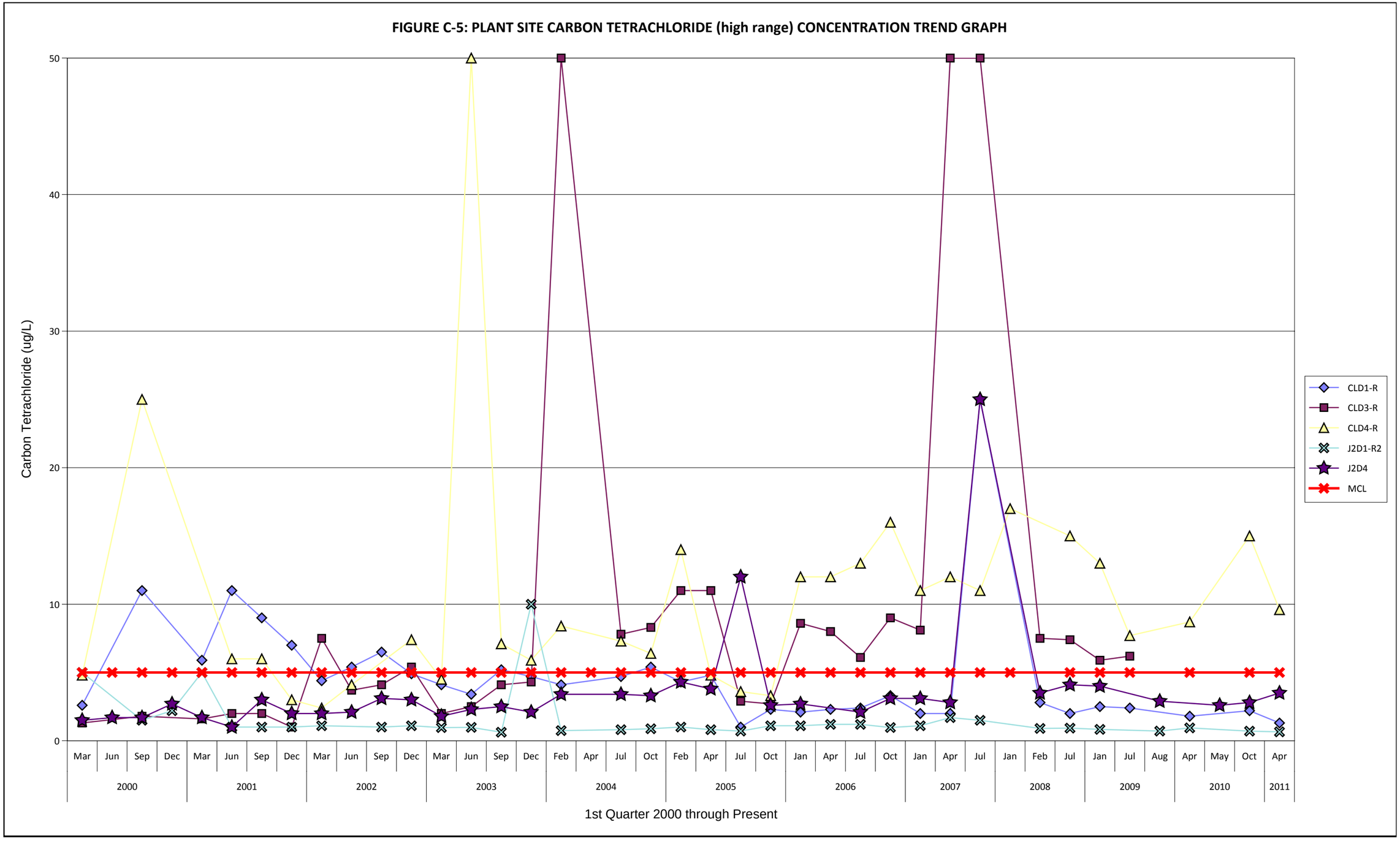
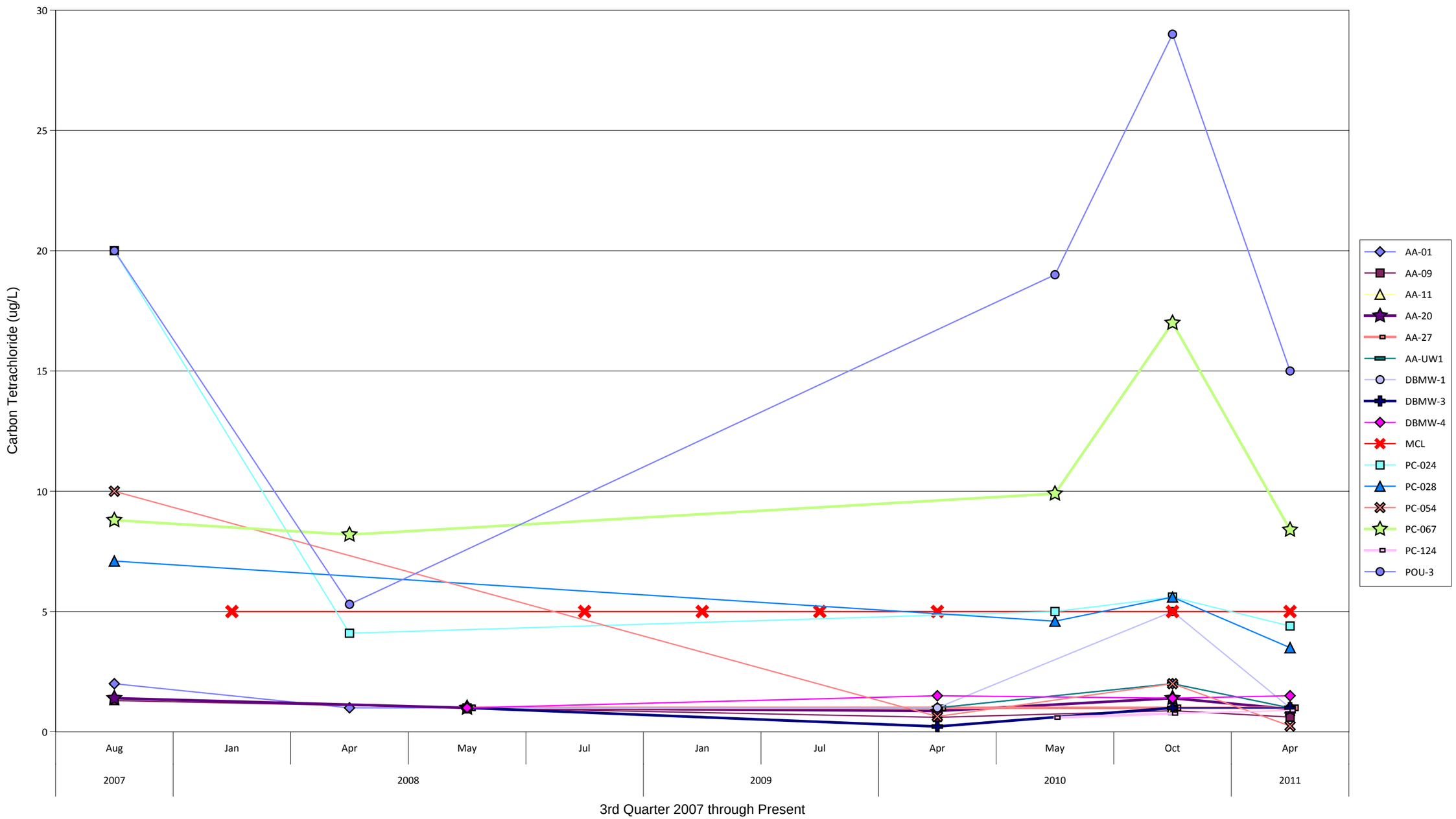
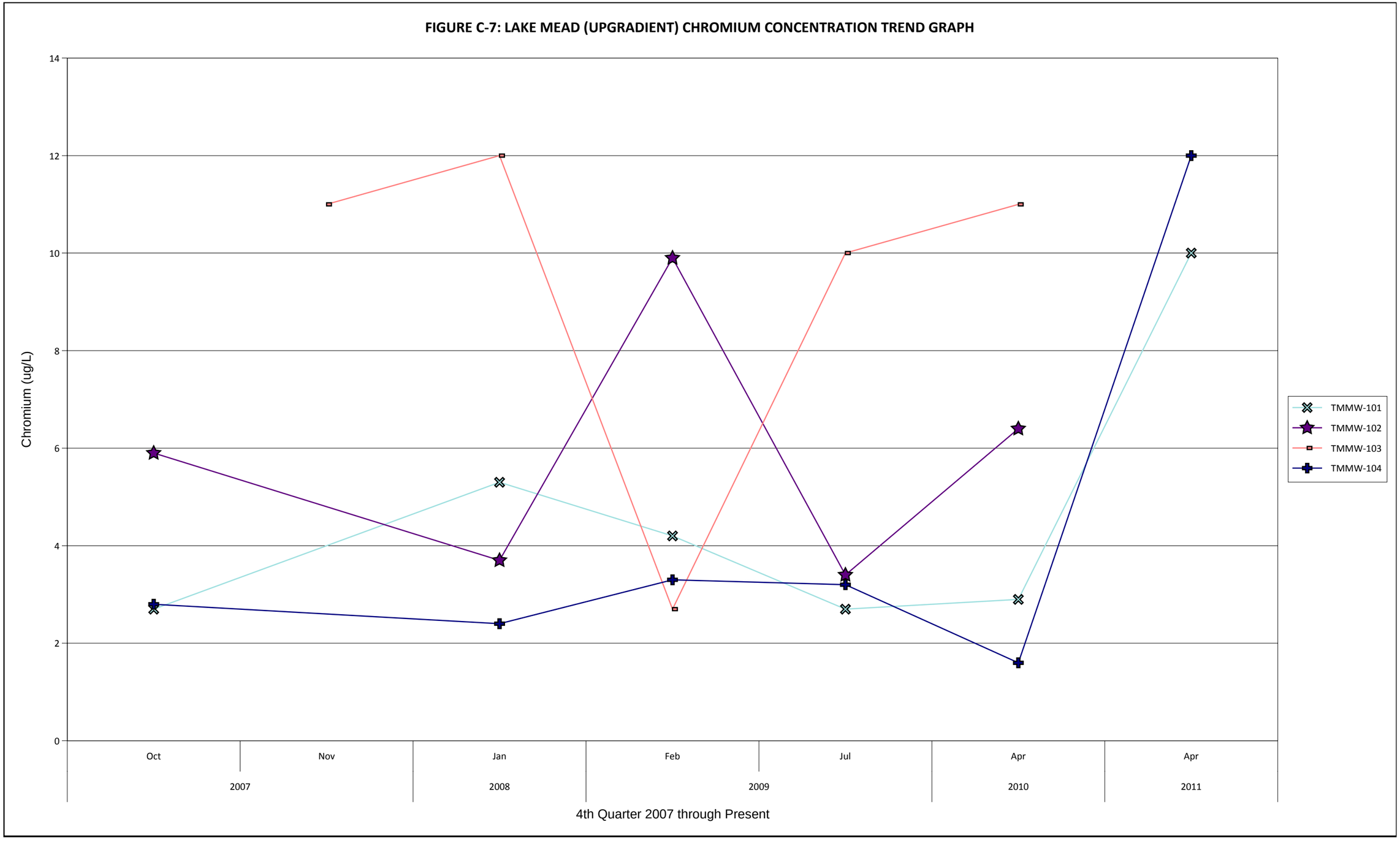


FIGURE C-5: PLANT SITE CARBON TETRACHLORIDE (high range) CONCENTRATION TREND GRAPH
Carbon Tetrachloride (ug/L)
50
40
30
20
10
0
Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
CLD1-R
CLD3-R
CLD4-R
J2D1-R2
J2D4
MCL

FIGURE C-6: DOWNGRADIENT CARBON TETRACHLORIDE CONCENTRATION TREND GRAPH





MCL - 100 ug/L

Lake Mead (Upgradient) Chromium C-7

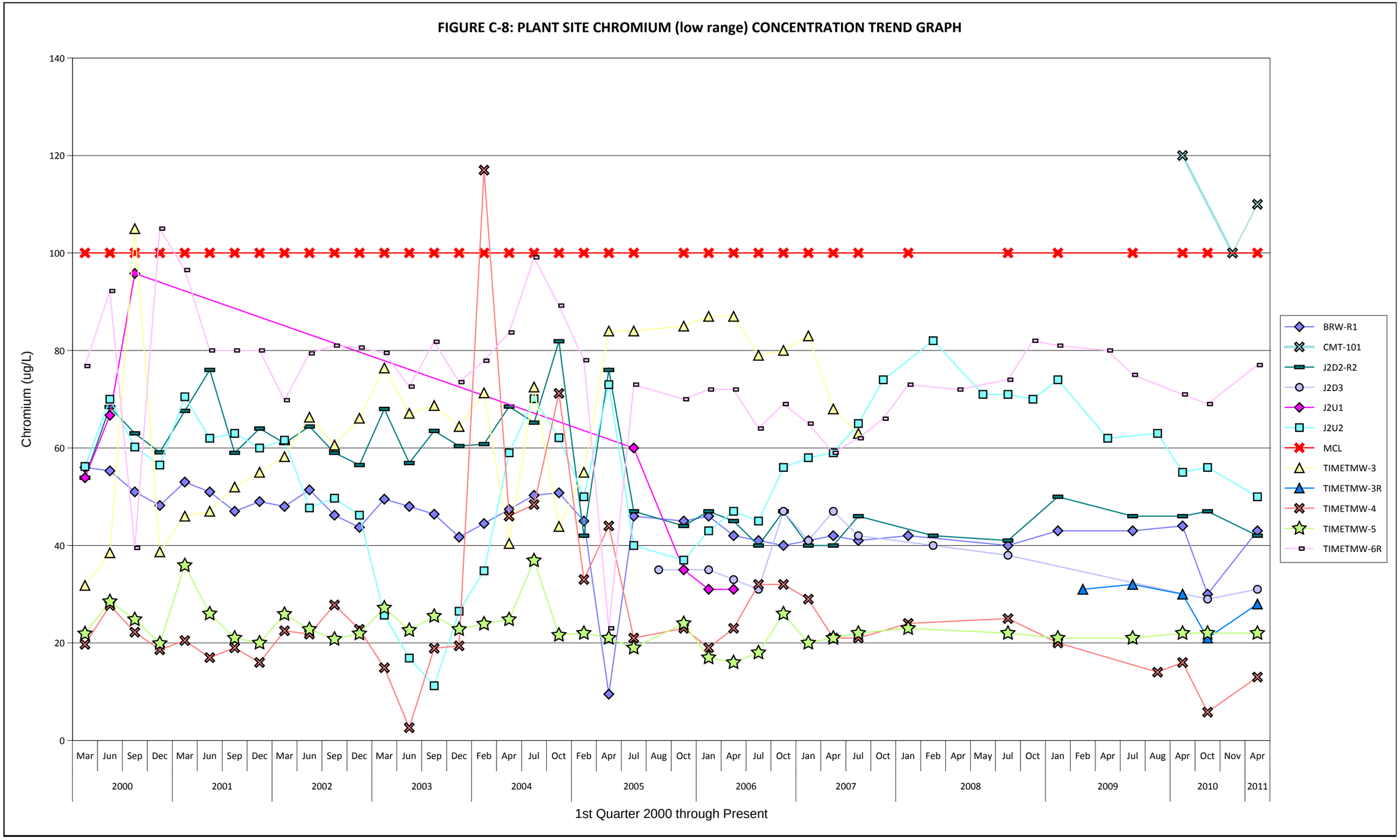


FIGURE C-8: PLANT SITE CHROMIUM (low range) CONCENTRATION TREND GRAPH
Chromium (ug/L)
140
120
100
80
60
40
20
0
Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Feb Apr May Jul Oct Jan Feb Apr Jul Aug Apr Oct Nov Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CMT-101
J2D2-R2
J2D3
J2U1
J2U2
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-4
TIMETMW-5
TIMETMW-6R

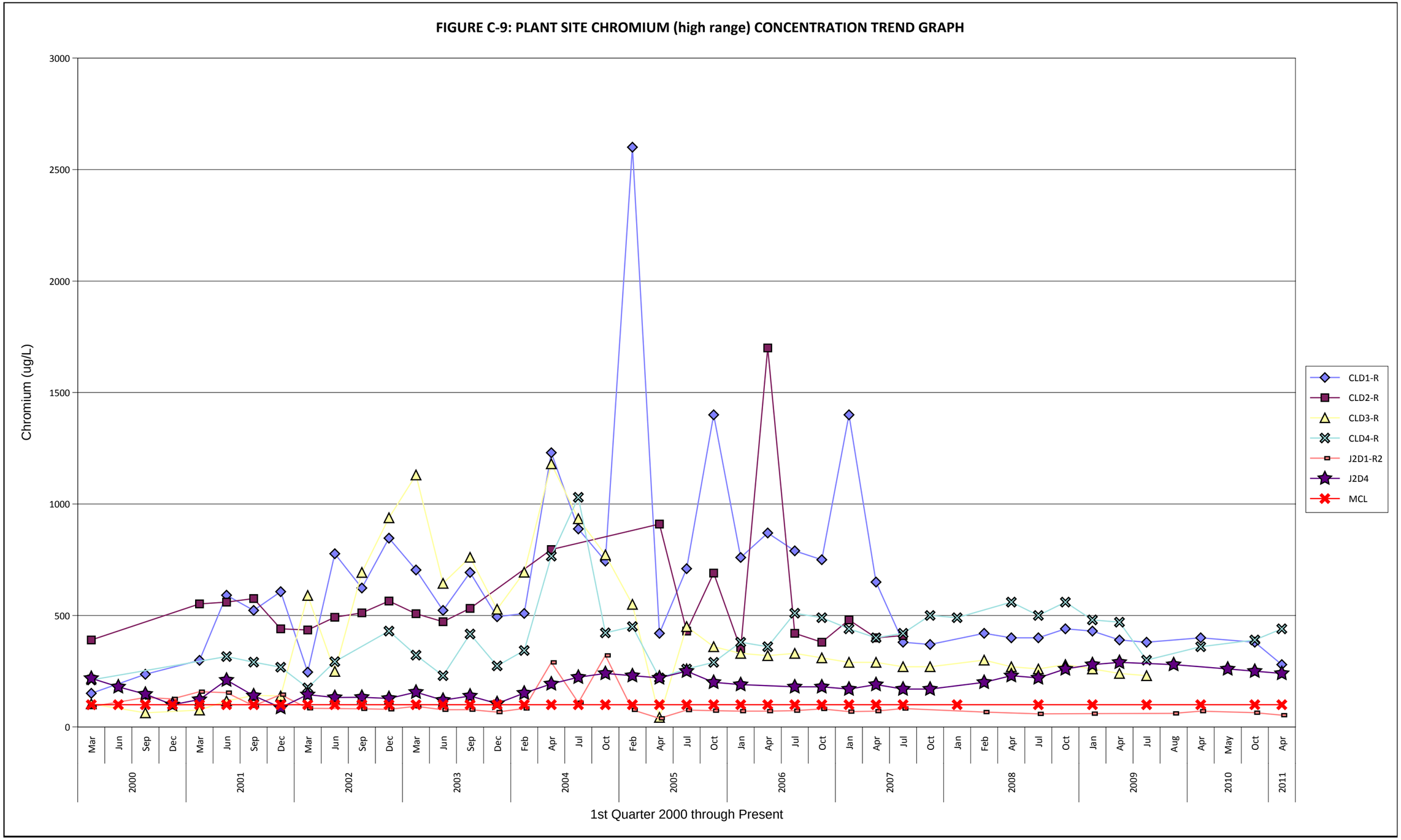


FIGURE C-9: PLANT SITE CHROMIUM (high range) CONCENTRATION TREND GRAPH
Chromium (ug/L)
3000
2500
2000
1500
1000
500
0
Mar
Jun
Sep
Dec
Feb
Apr
Jul
Oct
Jan
Aug
May
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
1st Quarter 2000 through Present
CLD1-R
CLD2-R
CLD3-R
CLD4-R
J2D1-R2
J2D4
MCL

FIGURE C-10:DOWNGRADIENT CHROMIUM CONCENTRATION TREND GRAPH

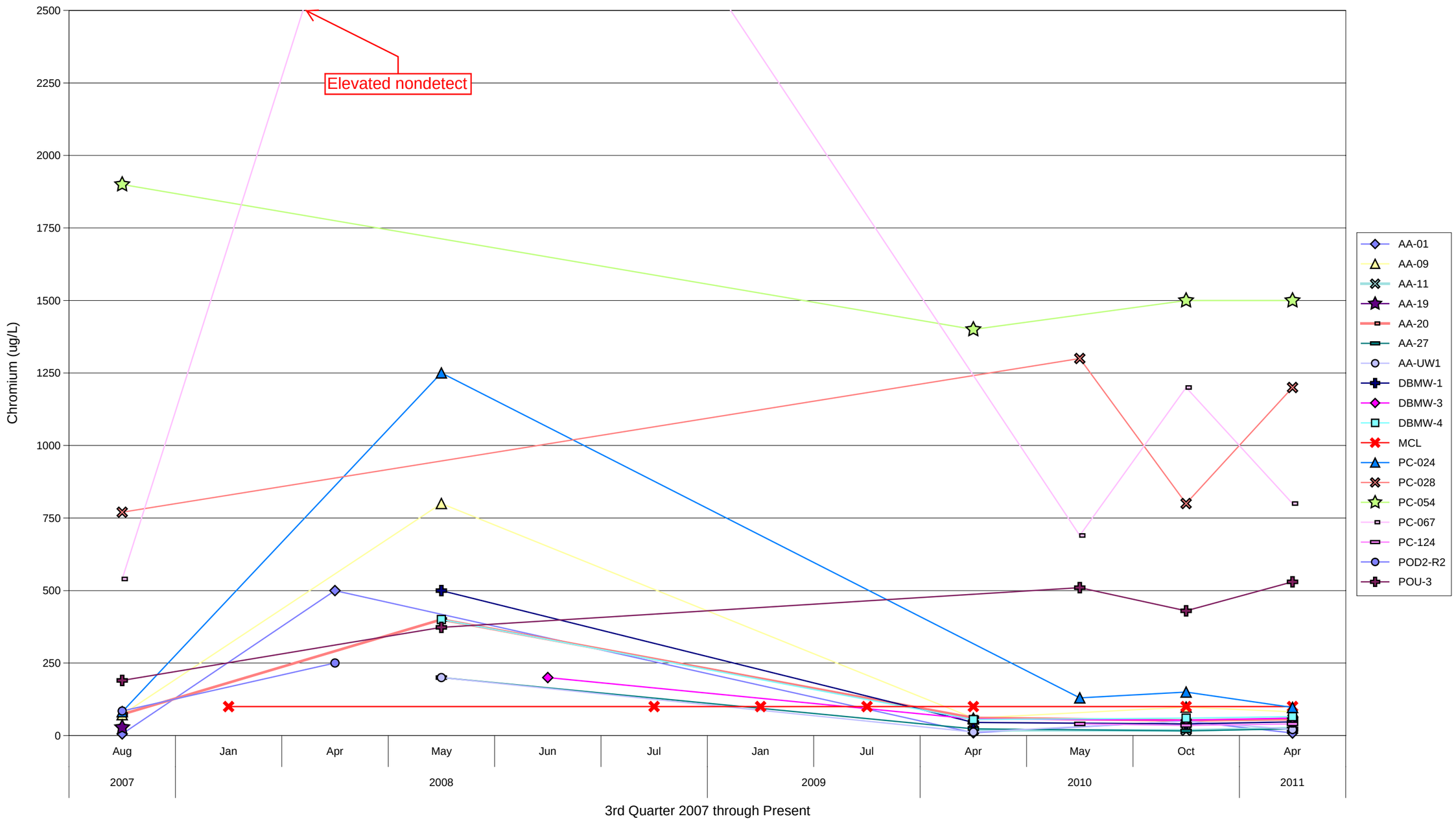
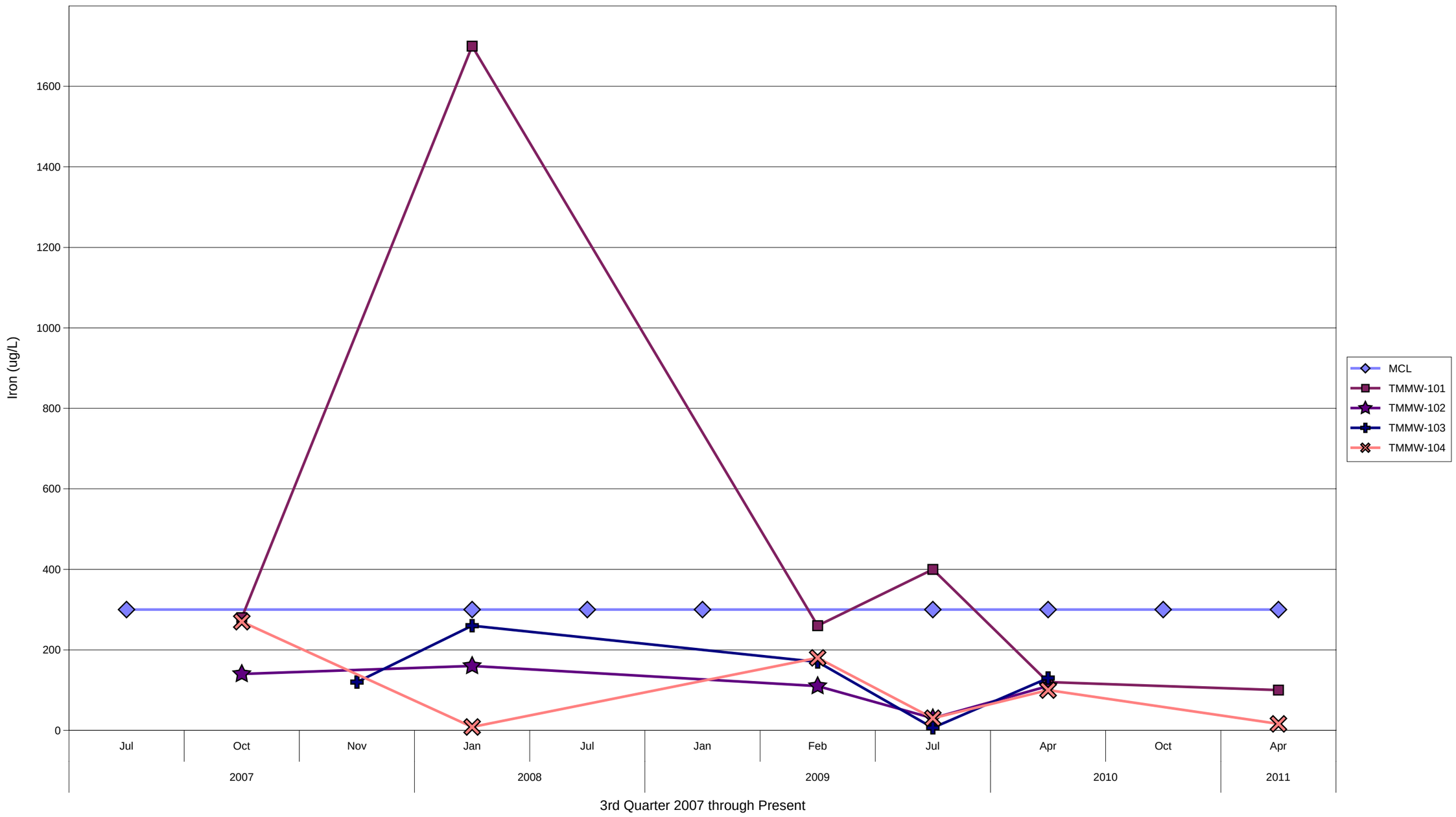


FIGURE C-11: LAKE MEAD (UPGRADIENT) IRON CONCENTRATION TREND GRAPH



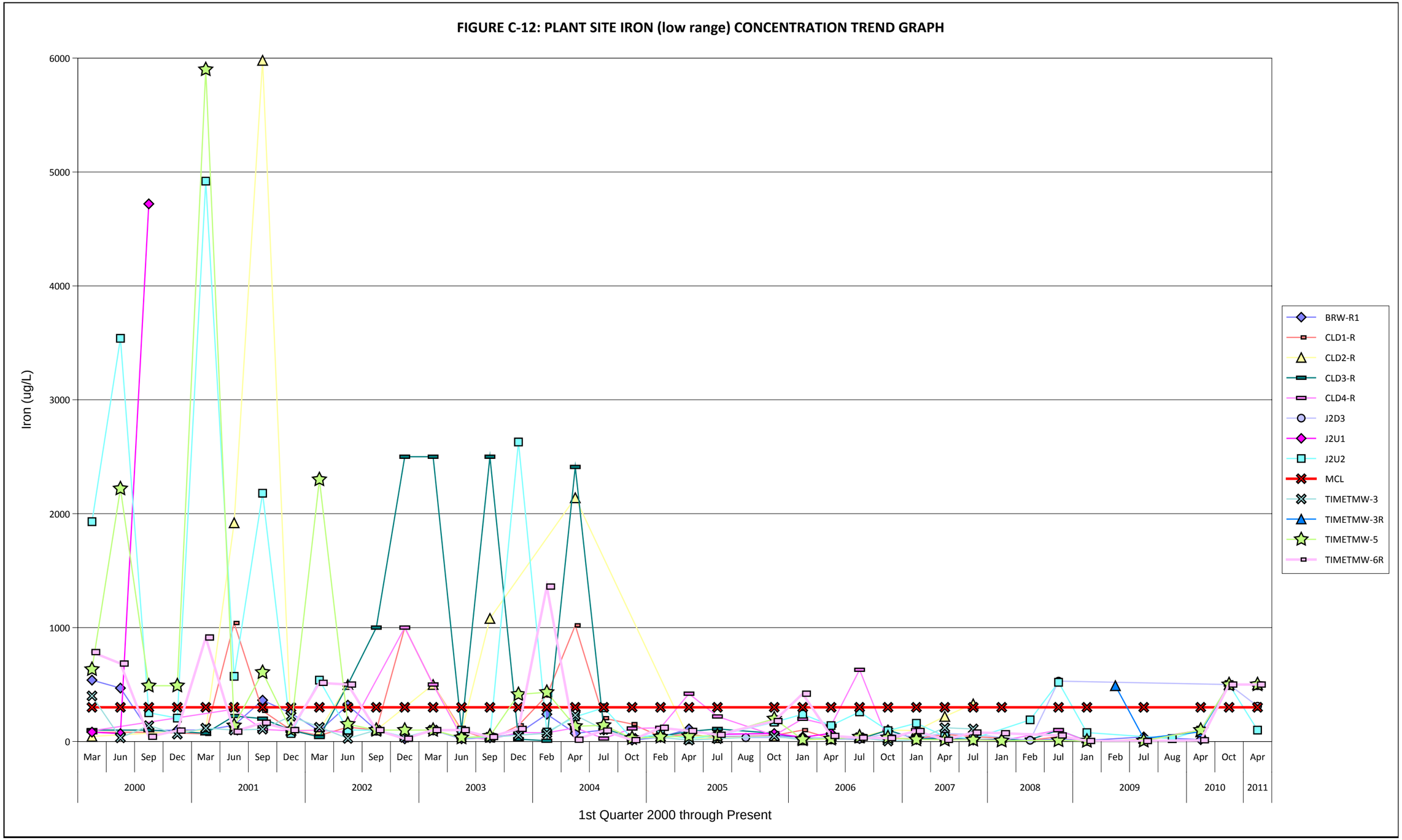


FIGURE C-12: PLANT SITE IRON (low range) CONCENTRATION TREND GRAPH
Iron (ug/L)
6000
5000
4000
3000
2000
1000
0
Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Feb Jul Aug Apr Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD1-R
CLD2-R
CLD3-R
CLD4-R
J2D3
J2U1
J2U2
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-5
TIMETMW-6R

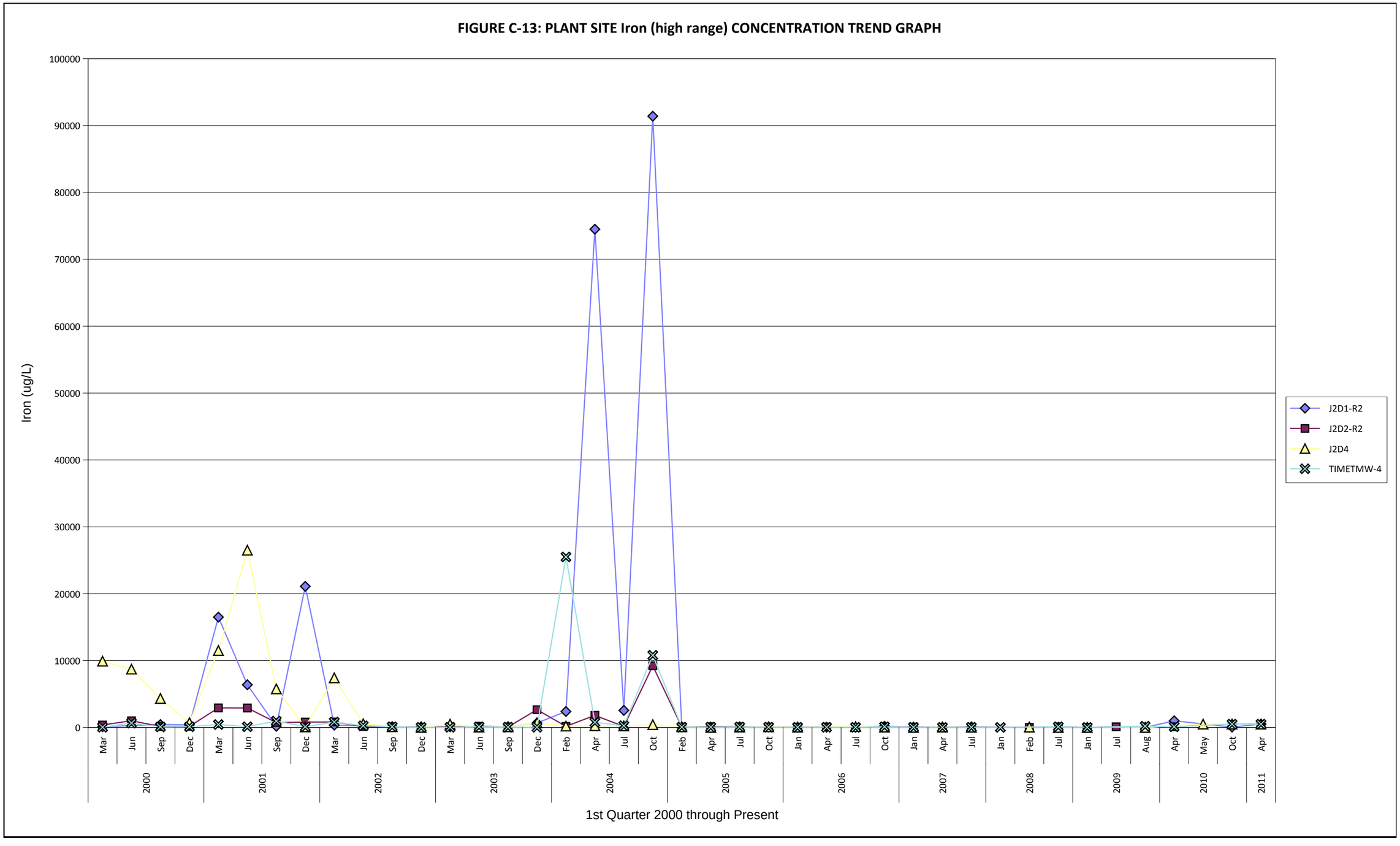
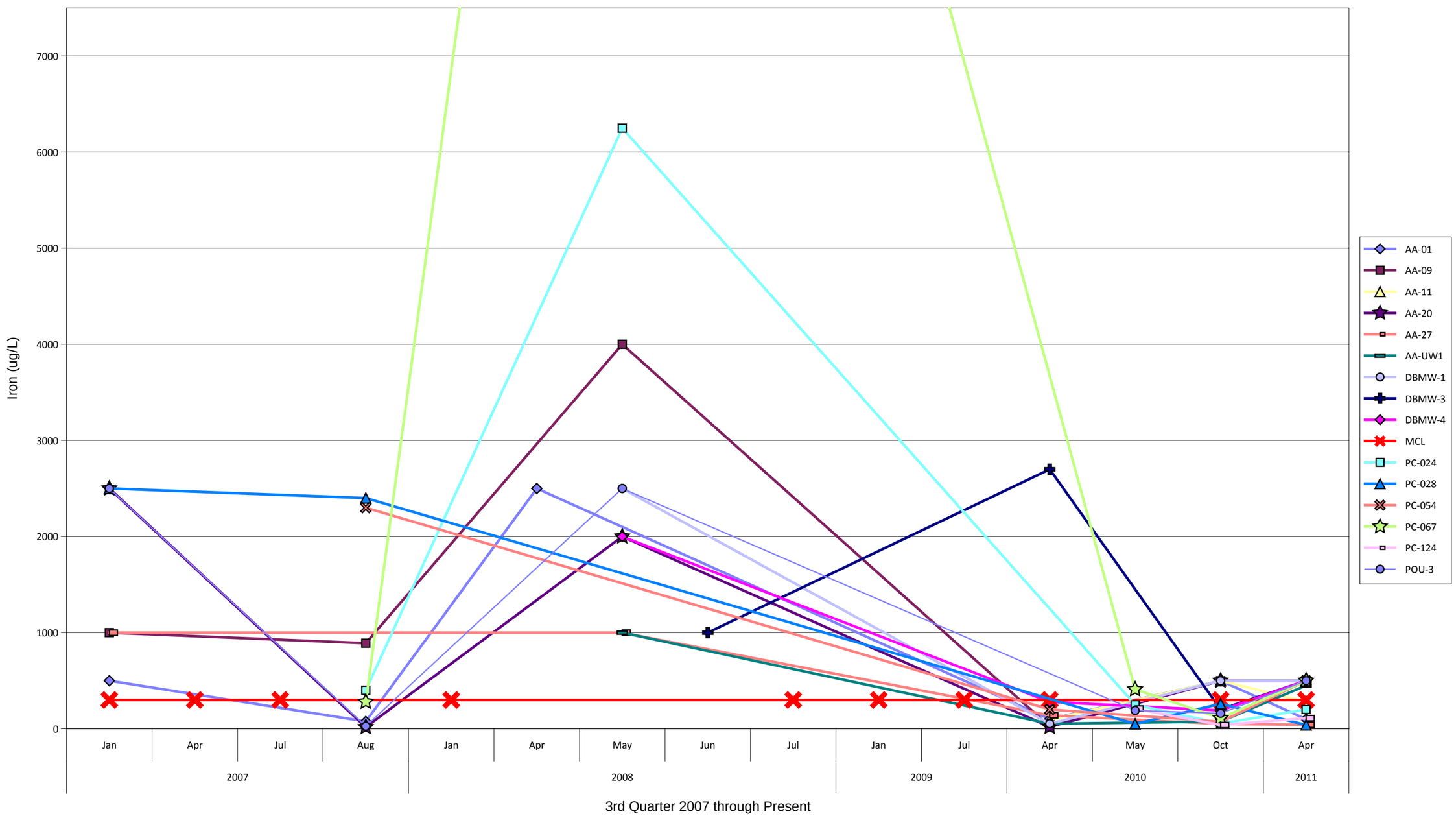


FIGURE C-13: PLANT SITE Iron (high range) CONCENTRATION TREND GRAPH
Iron (ug/L)
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Mar
Jun
Sep
Dec
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Feb
Apr
Jul
Oct
Jan
Aug
May
1st Quarter 2000 through Present
J2D1-R2
J2D2-R2
J2D4
TIMETMW-4

MCL = 300 ug/L

FIGURE C-14: DOWNGRADIENT IRON CONCENTRATION TREND GRAPH



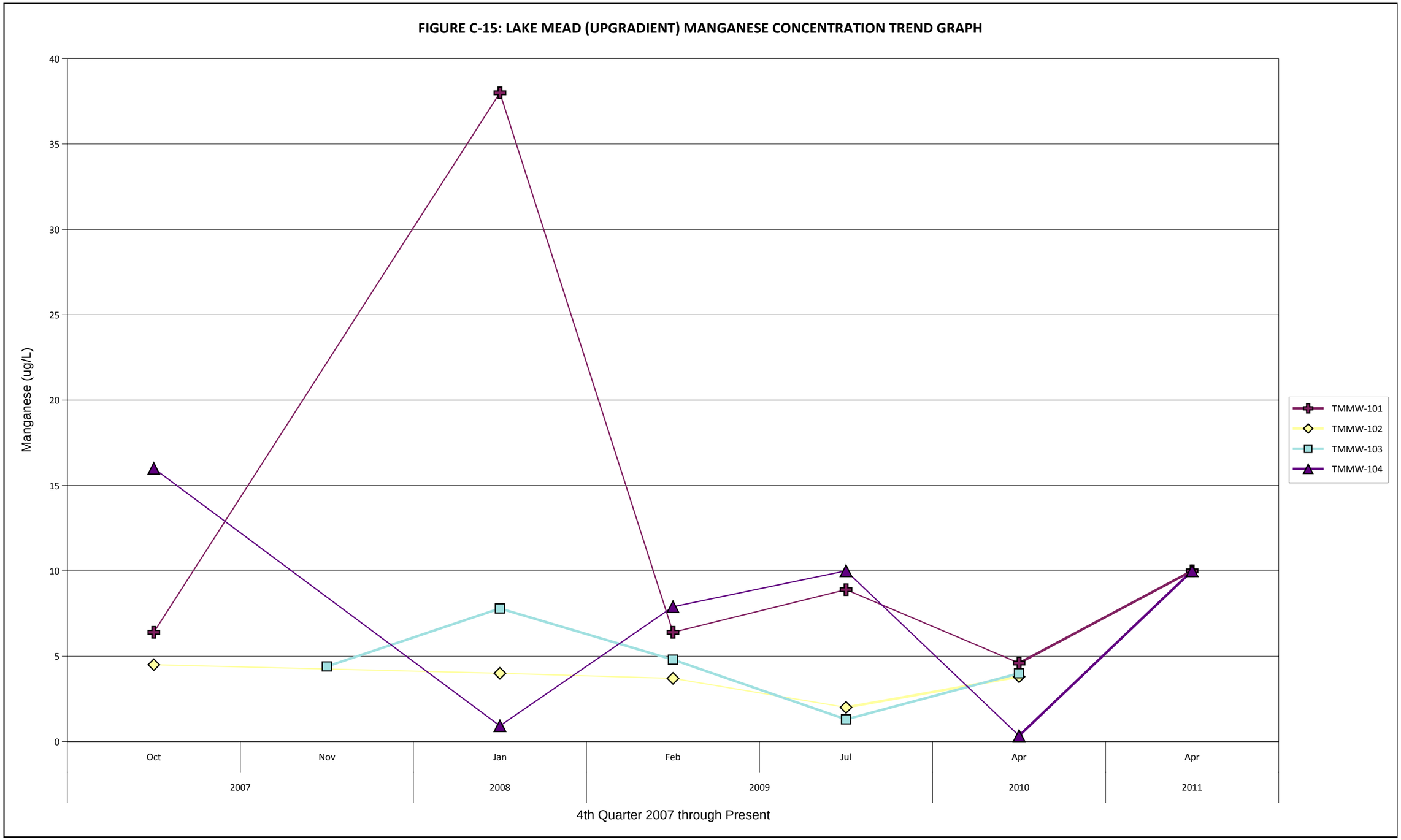
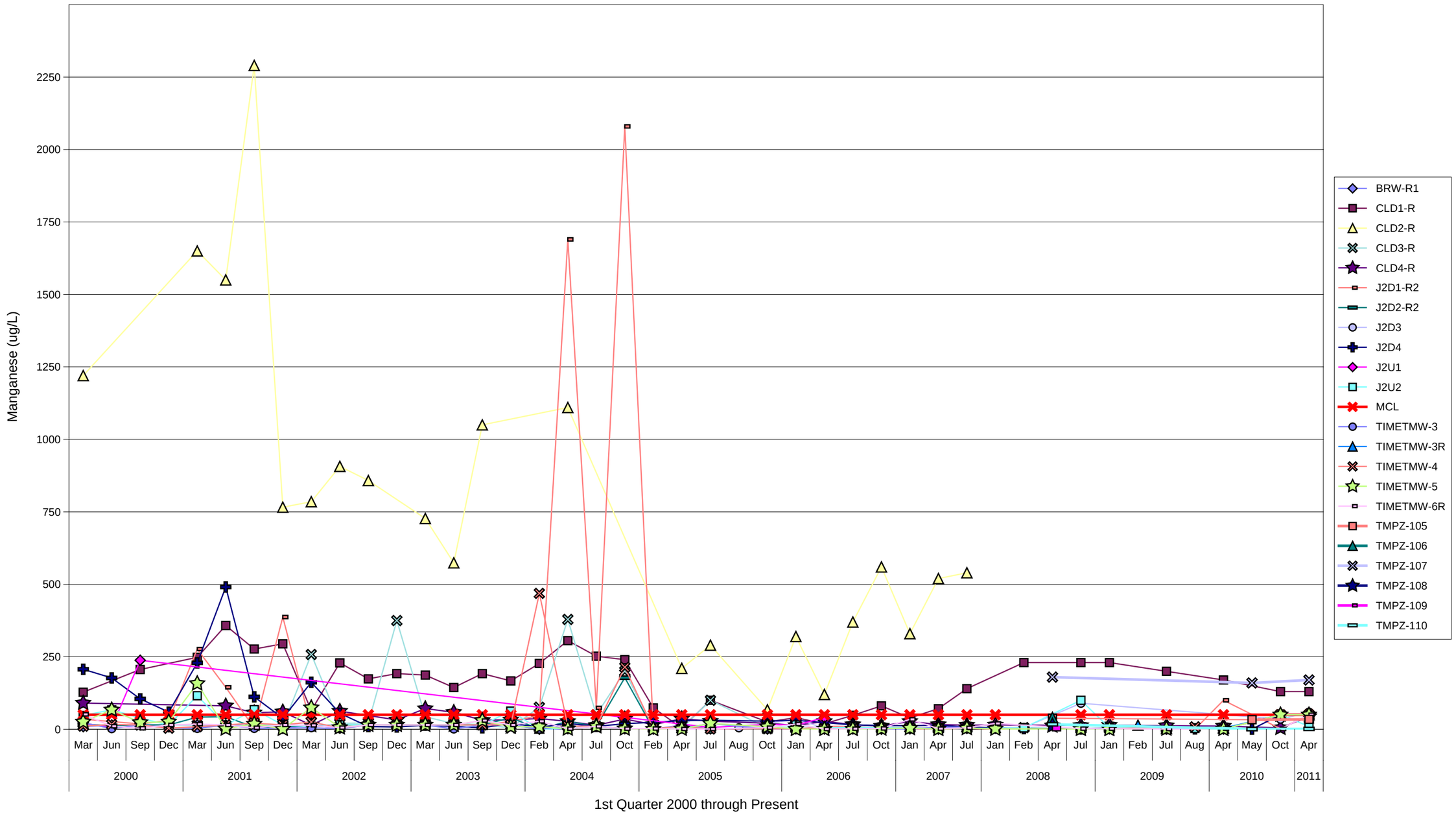


FIGURE C-15: LAKE MEAD (UPGRADIENT) MANGANESE CONCENTRATION TREND GRAPH
Manganese (ug/L)
40
35
30
25
20
15
10
5
0
Oct
Nov
Jan
Feb
Jul
Apr
Apr
2007
2008
2009
2010
2011
4th Quarter 2007 through Present
TMMW-101
TMMW-102
TMMW-103
TMMW-104

MCL = 50 ug/L

FIGURE C-16: PLANT SITE MANGANESE CONCENTRATION TREND GRAPH



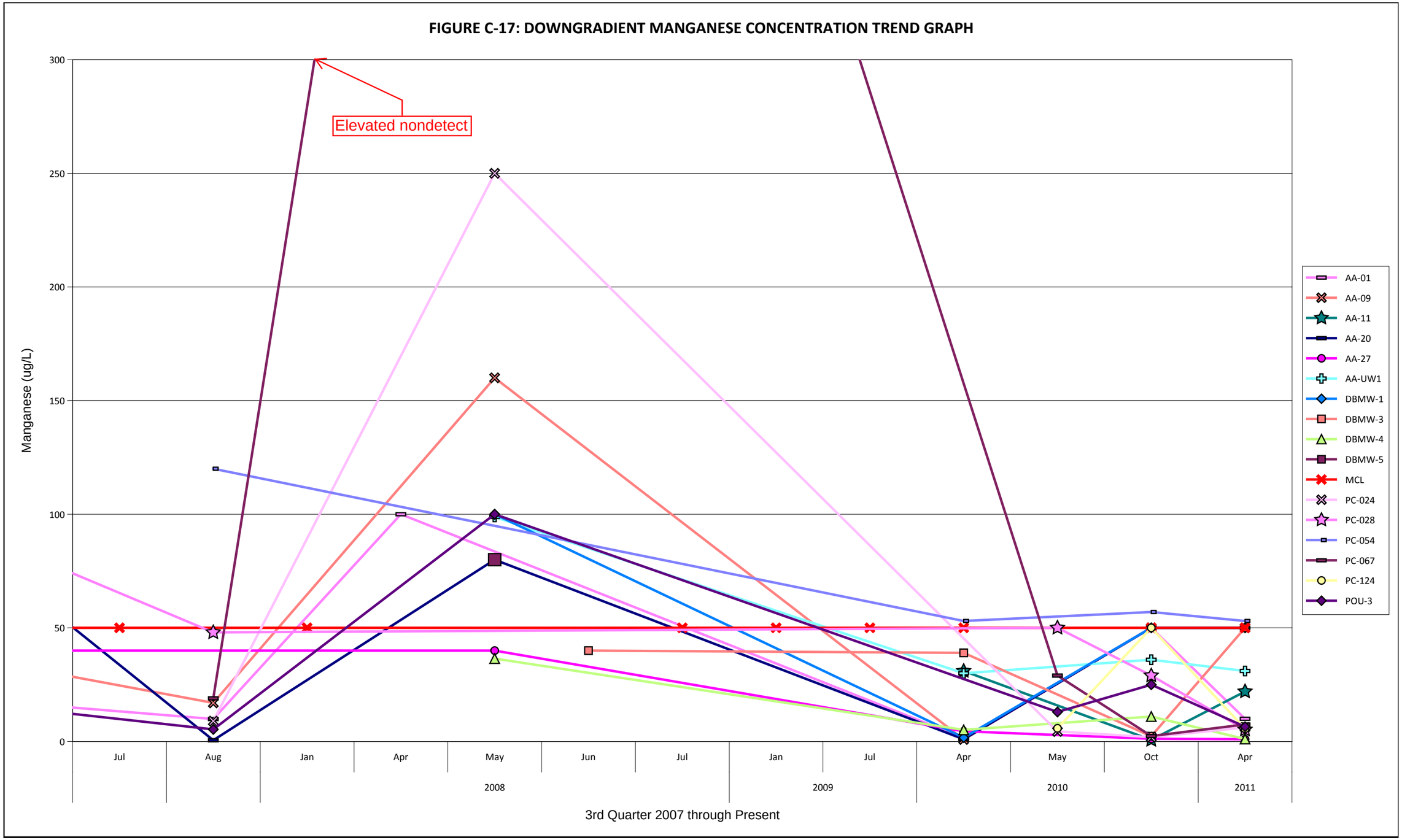


FIGURE C-17: DOWNGRADIENT MANGANESE CONCENTRATION TREND GRAPH
Elevated nondetect
Manganese (ug/L)
300
250
200
150
100
50
0
Jul
Aug
Jan
Apr
May
Jun
Jul
Jan
Jul
Apr
May
Oct
Apr
2008
2009
2010
2011
3rd Quarter 2007 through Present
AA-01
AA-09
AA-11
AA-20
AA-27
AA-UW1
DBMW-1
DBMW-3
DBMW-4
DBMW-5
MCL
PC-024
PC-028
PC-054
PC-067
PC-124
POU-3

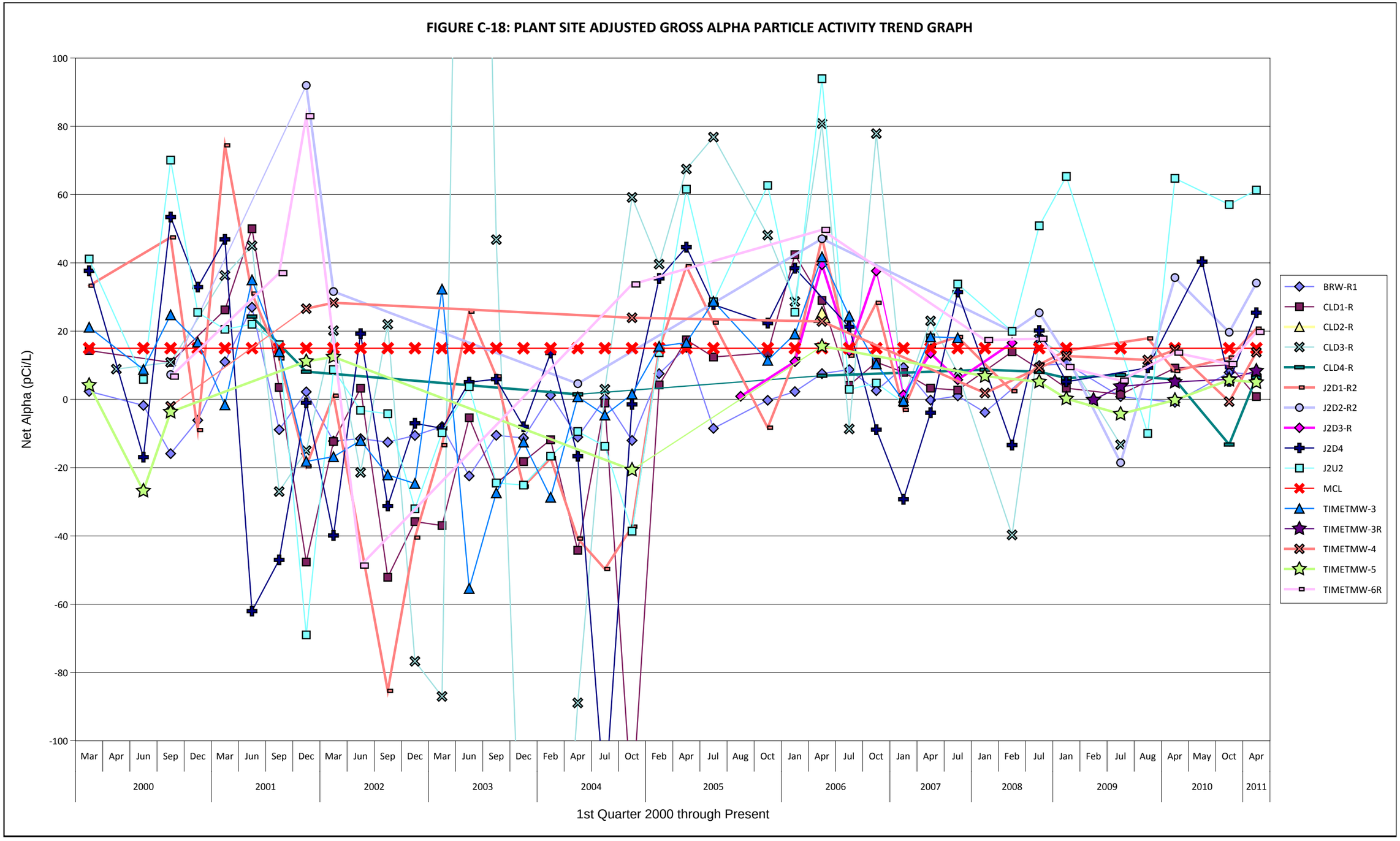


FIGURE C-18: PLANT SITE ADJUSTED GROSS ALPHA PARTICLE ACTIVITY TREND GRAPH
Net Alpha (pCi/L)
100
80
60
40
20
0
-20
-40
-60
-80
-100
Mar Apr Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Feb Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD1-R
CLD2-R
CLD3-R
CLD4-R
J2D1-R2
J2D2-R2
J2D3-R
J2D4
J2U2
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-4
TIMETMW-5
TIMETMW-6R

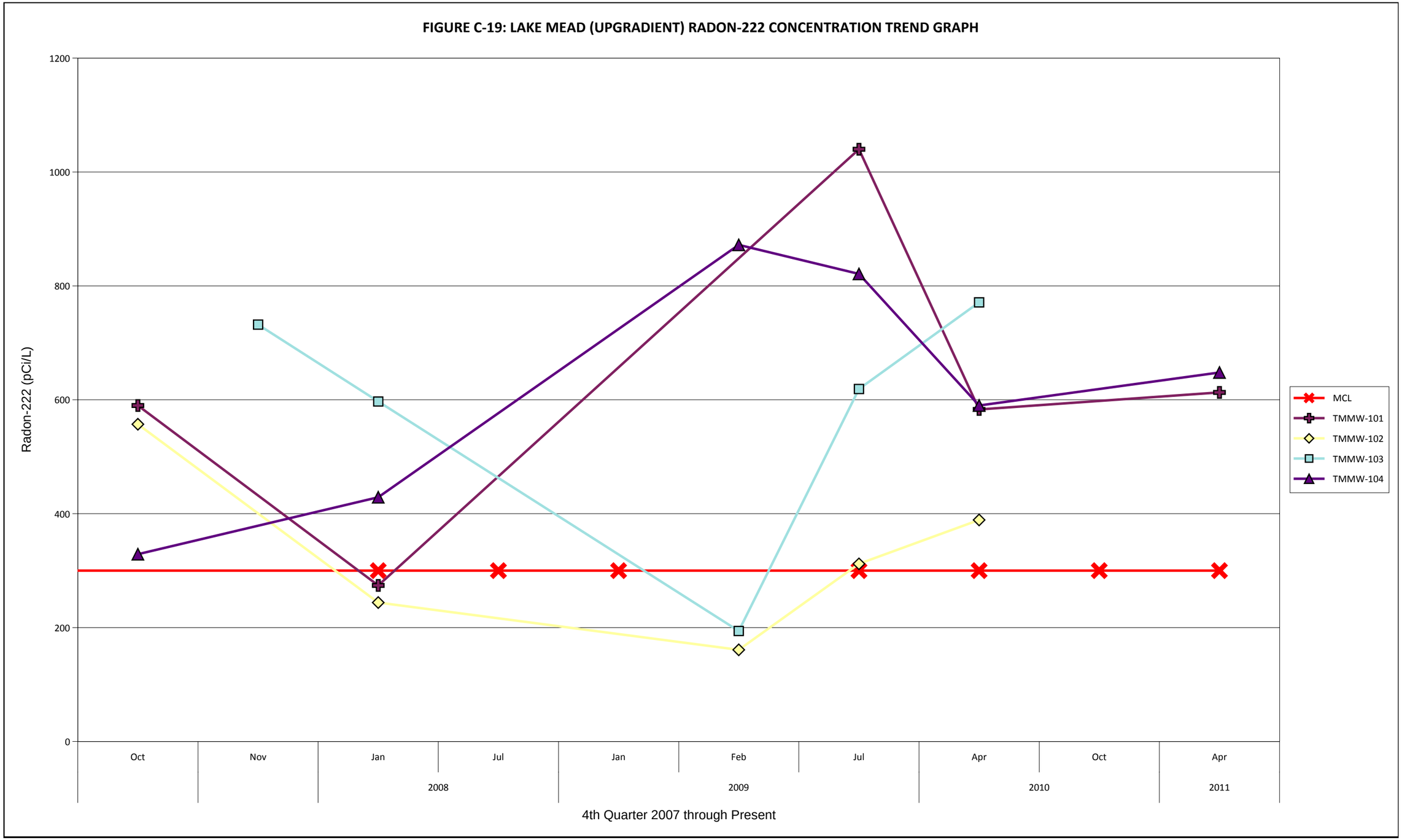


FIGURE C-19: LAKE MEAD (UPGRADIENT) RADON-222 CONCENTRATION TREND GRAPH
Radon-222 (pCi/L)
1200
1000
800
600
400
200
0
Oct
Nov
Jan
Jul
Jan
Feb
Jul
Apr
Oct
Apr
2008
2009
2010
2011
4th Quarter 2007 through Present
MCL
TMMW-101
TMMW-102
TMMW-103
TMMW-104

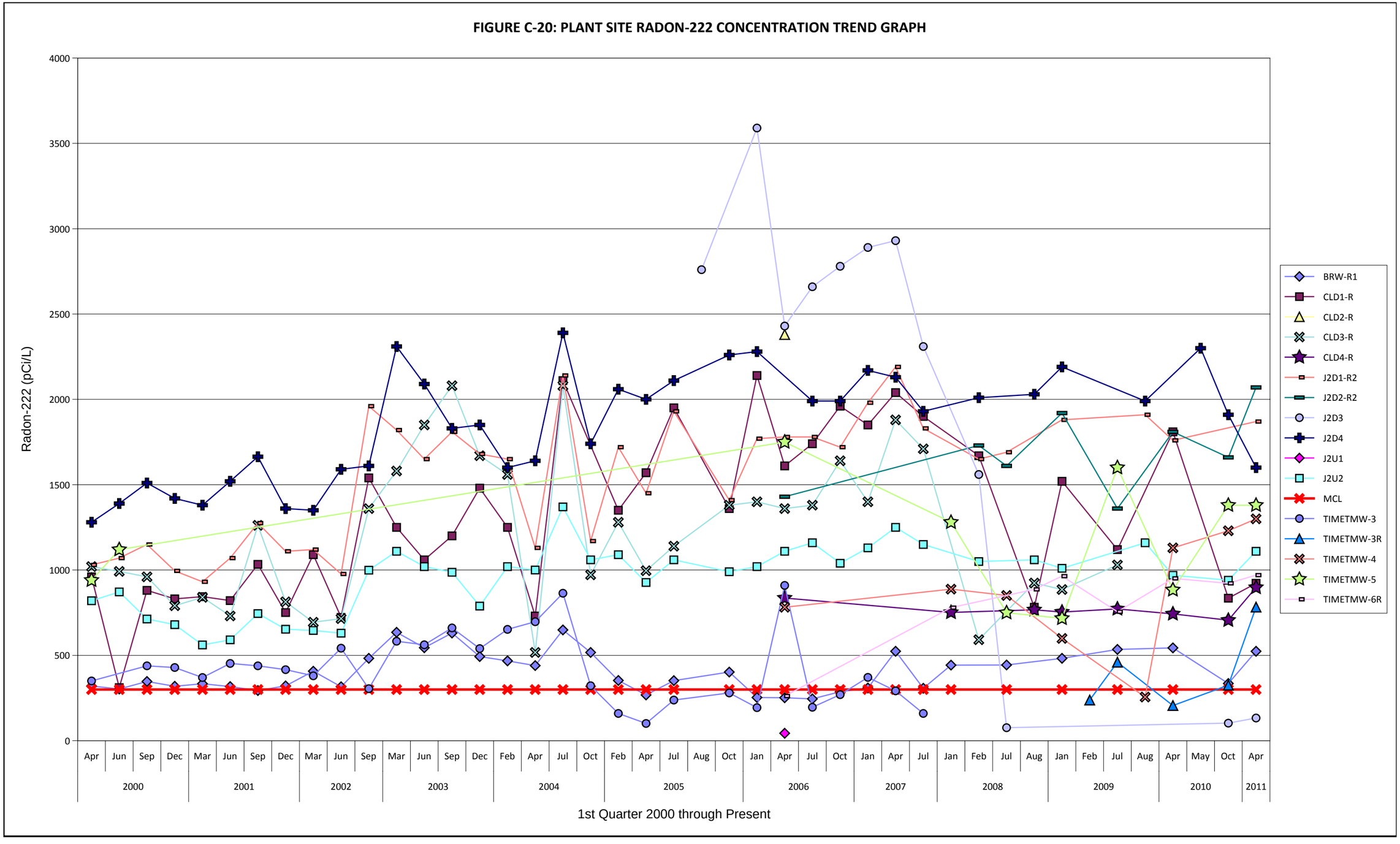


FIGURE C-20: PLANT SITE RADON-222 CONCENTRATION TREND GRAPH
Radon-222 (pCi/L)
4000
3500
3000
2500
2000
1500
1000
500
0
Apr Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Aug Jan Feb Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD1-R
CLD2-R
CLD3-R
CLD4-R
J2D1-R2
J2D2-R2
J2D3
J2D4
J2U1
J2U2
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-4
TIMETMW-5
TIMETMW-6R

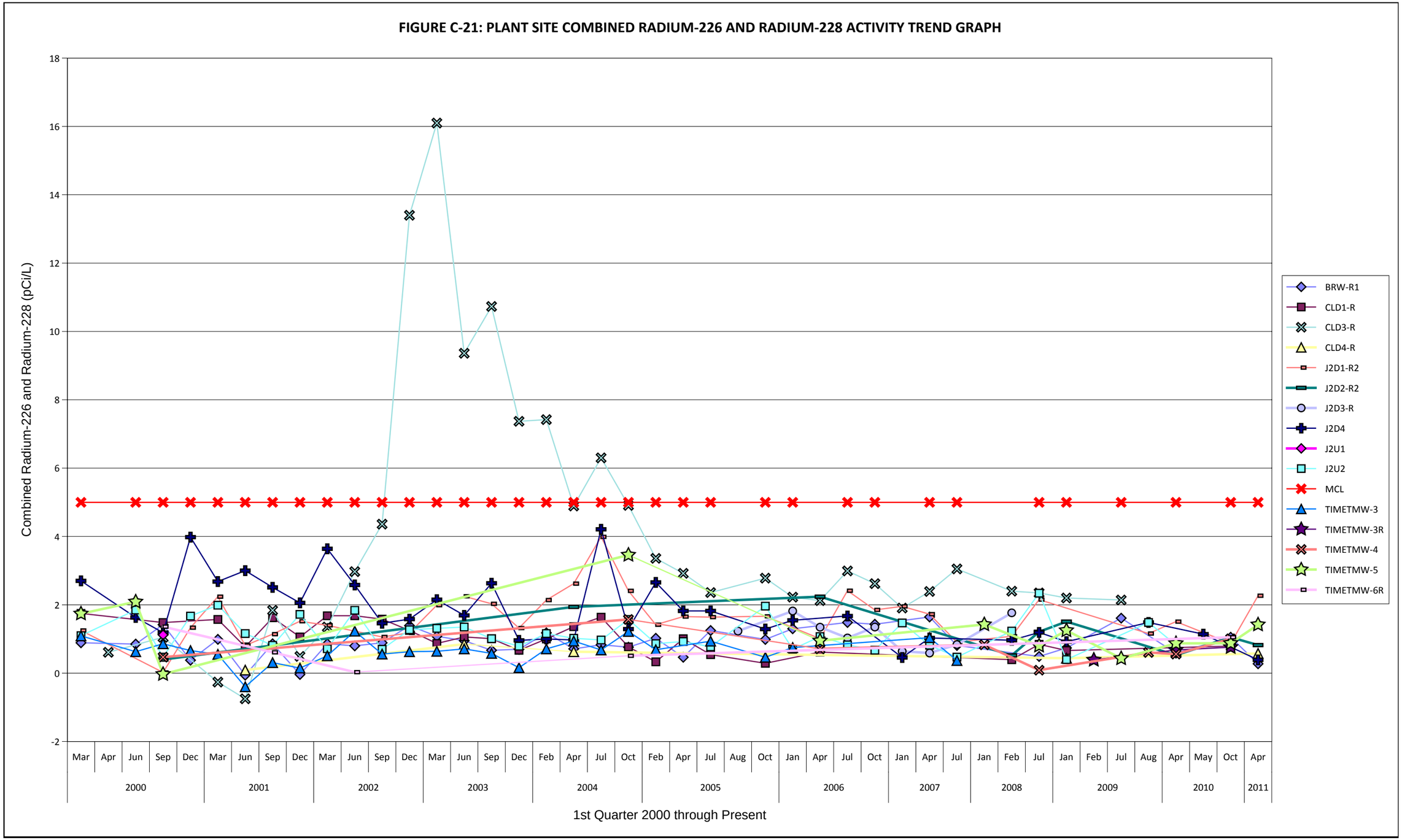


FIGURE C-21: PLANT SITE COMBINED RADIUM-226 AND RADIUM-228 ACTIVITY TREND GRAPH
Combined Radium-226 and Radium-228 (pCi/L)
18
16
14
12
10
8
6
4
2
0
-2
Mar Apr Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Feb Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD1-R
CLD3-R
CLD4-R
J2D1-R2
J2D2-R2
J2D3-R
J2D4
J2U1
J2U2
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-4
TIMETMW-5
TIMETMW-6R

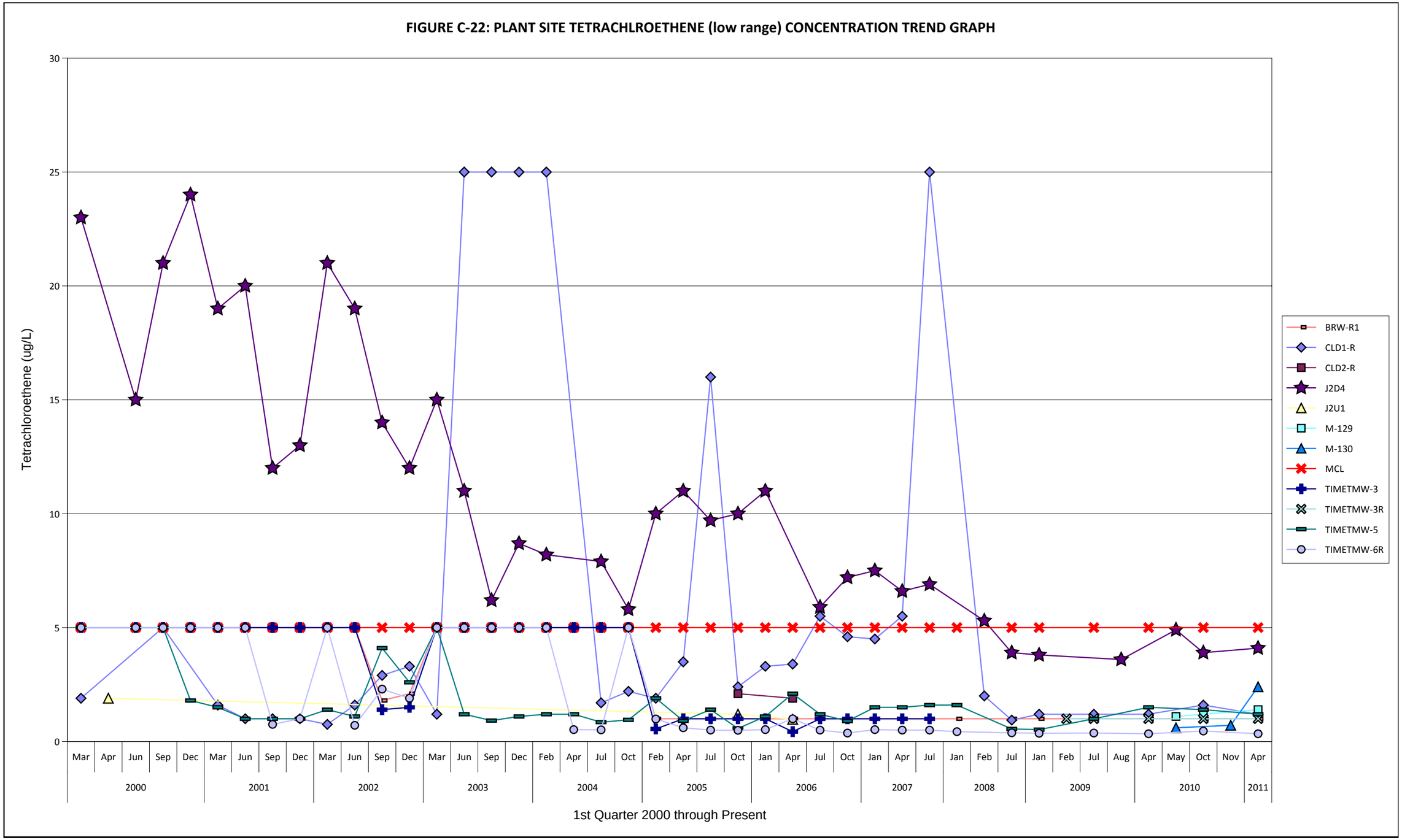


FIGURE C-22: PLANT SITE TETRACHLROETHENE (low range) CONCENTRATION TREND GRAPH
Tetrachloroethene (ug/L)
30
25
20
15
10
5
0
Mar Apr Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Feb Jul Aug Apr May Oct Nov Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD1-R
CLD2-R
J2D4
J2U1
M-129
M-130
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-5
TIMETMW-6R

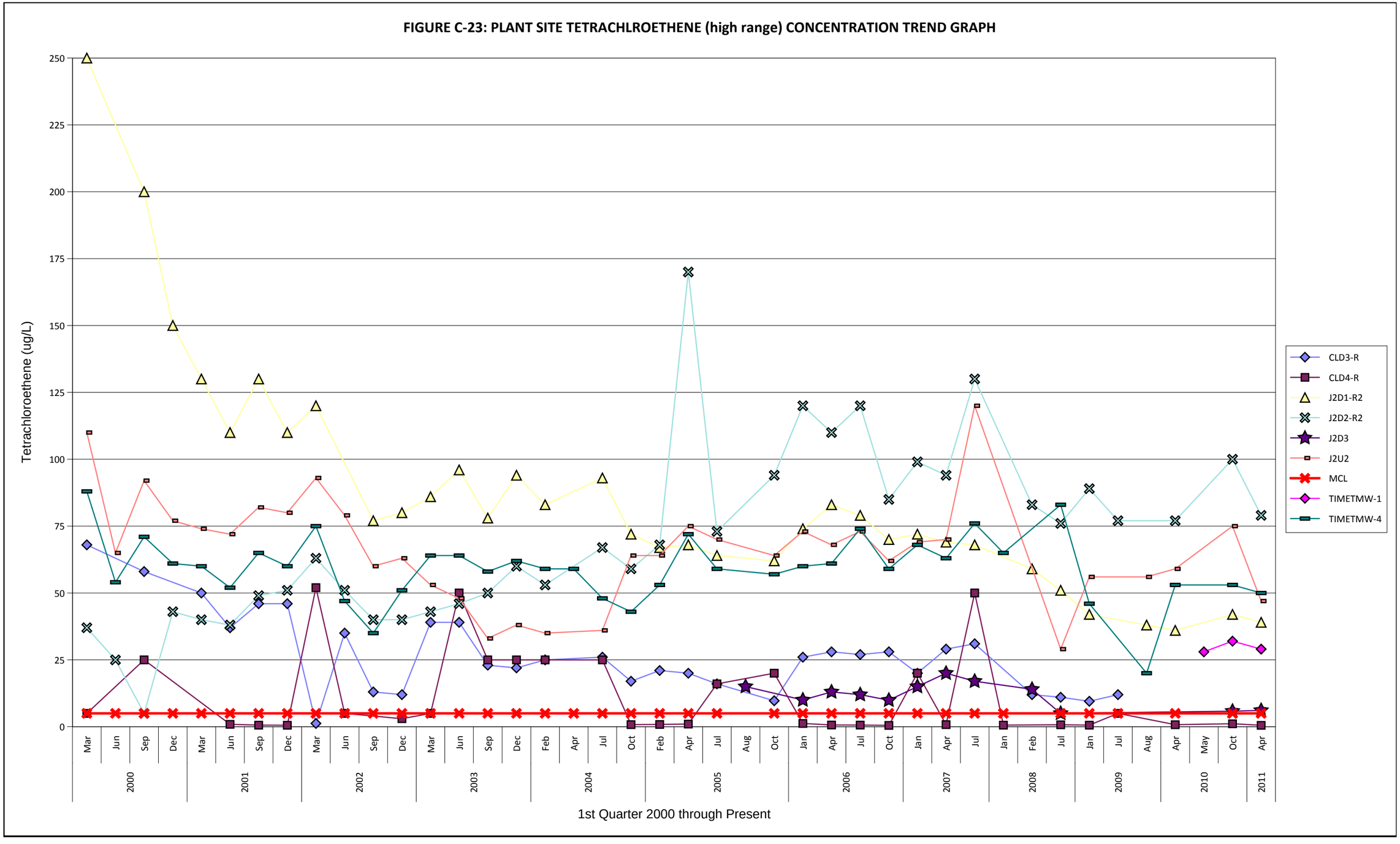


FIGURE C-23: PLANT SITE TETRACHLROETHENE (high range) CONCENTRATION TREND GRAPH
Tetrachloroethene (ug/L)
250
225
200
175
150
125
100
75
50
25
0
Mar
Jun
Sep
Dec
Feb
Apr
Jul
Oct
Aug
Jan
May
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
1st Quarter 2000 through Present
CLD3-R
CLD4-R
J2D1-R2
J2D2-R2
J2D3
J2U2
MCL
TIMETMW-1
TIMETMW-4

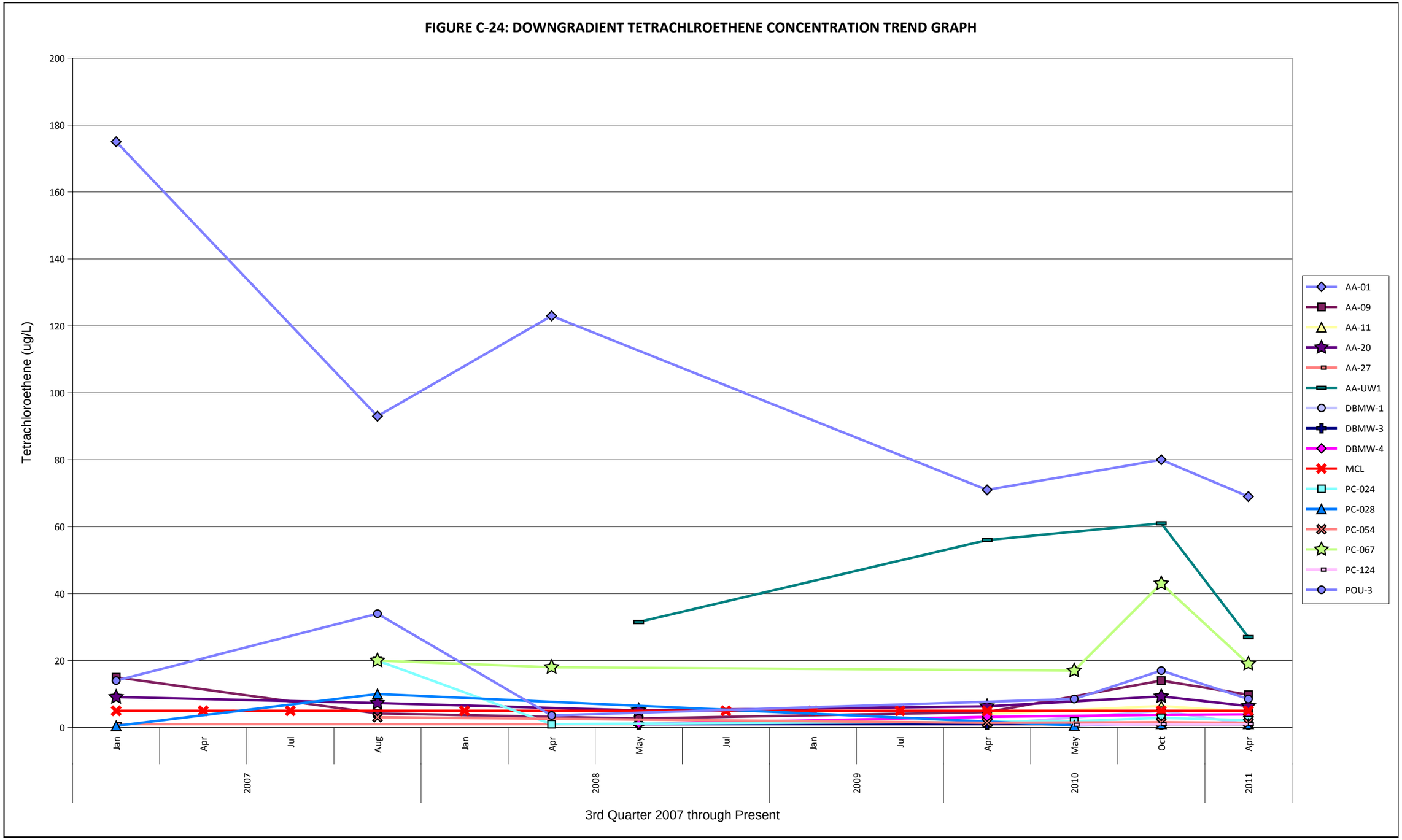


FIGURE C-24: DOWNGRADIENT TETRACHLROETHENE CONCENTRATION TREND GRAPH
Tetrachloroethene (ug/L)
200
180
160
140
120
100
80
60
40
20
0
Jan
Apr
Jul
Aug
Jan
Apr
May
Jul
Jan
Jul
Apr
May
Oct
Apr
2007
2008
2009
2010
2011
3rd Quarter 2007 through Present
AA-01
AA-09
AA-11
AA-20
AA-27
AA-UW1
DBMW-1
DBMW-3
DBMW-4
MCL
PC-024
PC-028
PC-054
PC-067
PC-124
POU-3

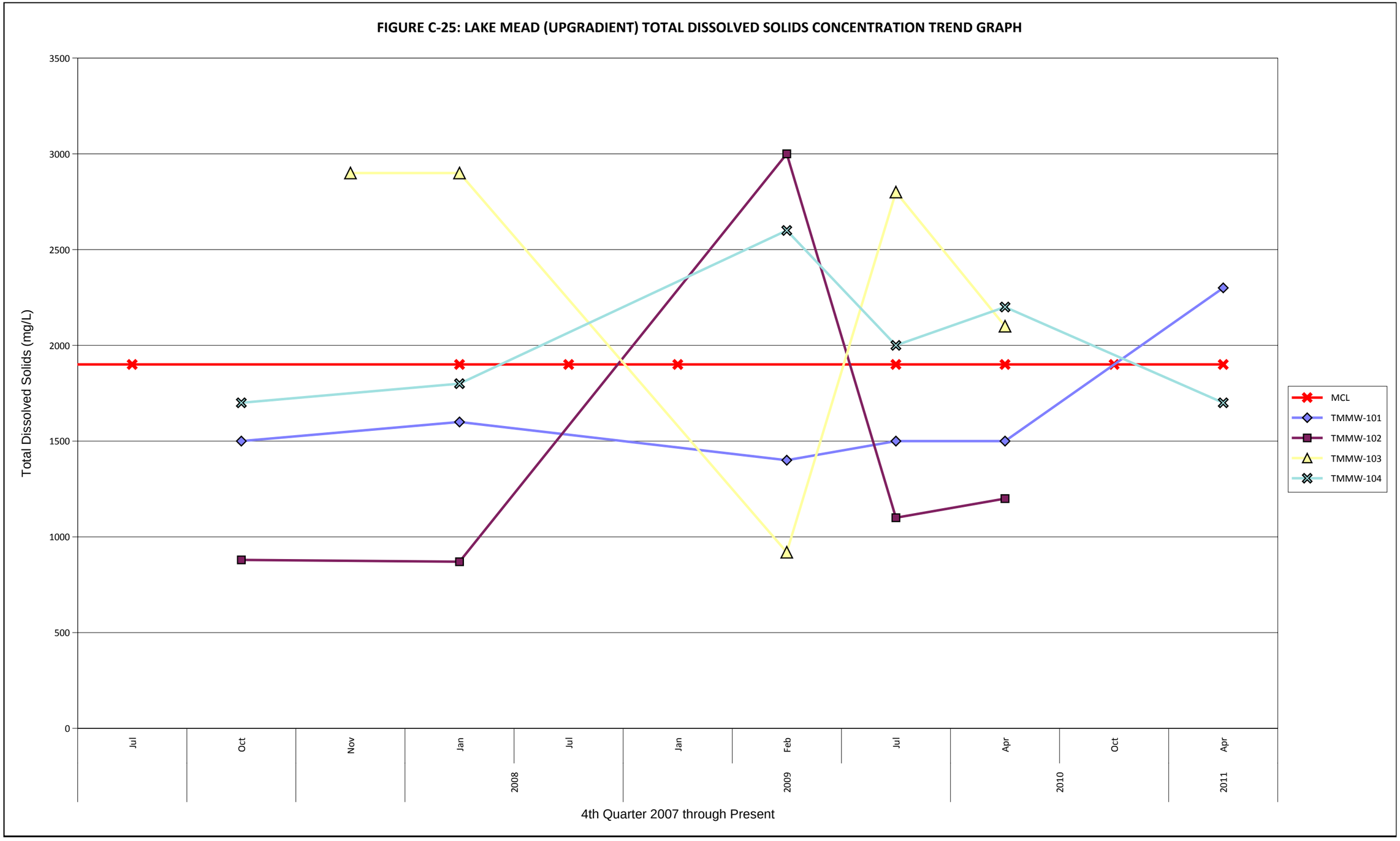
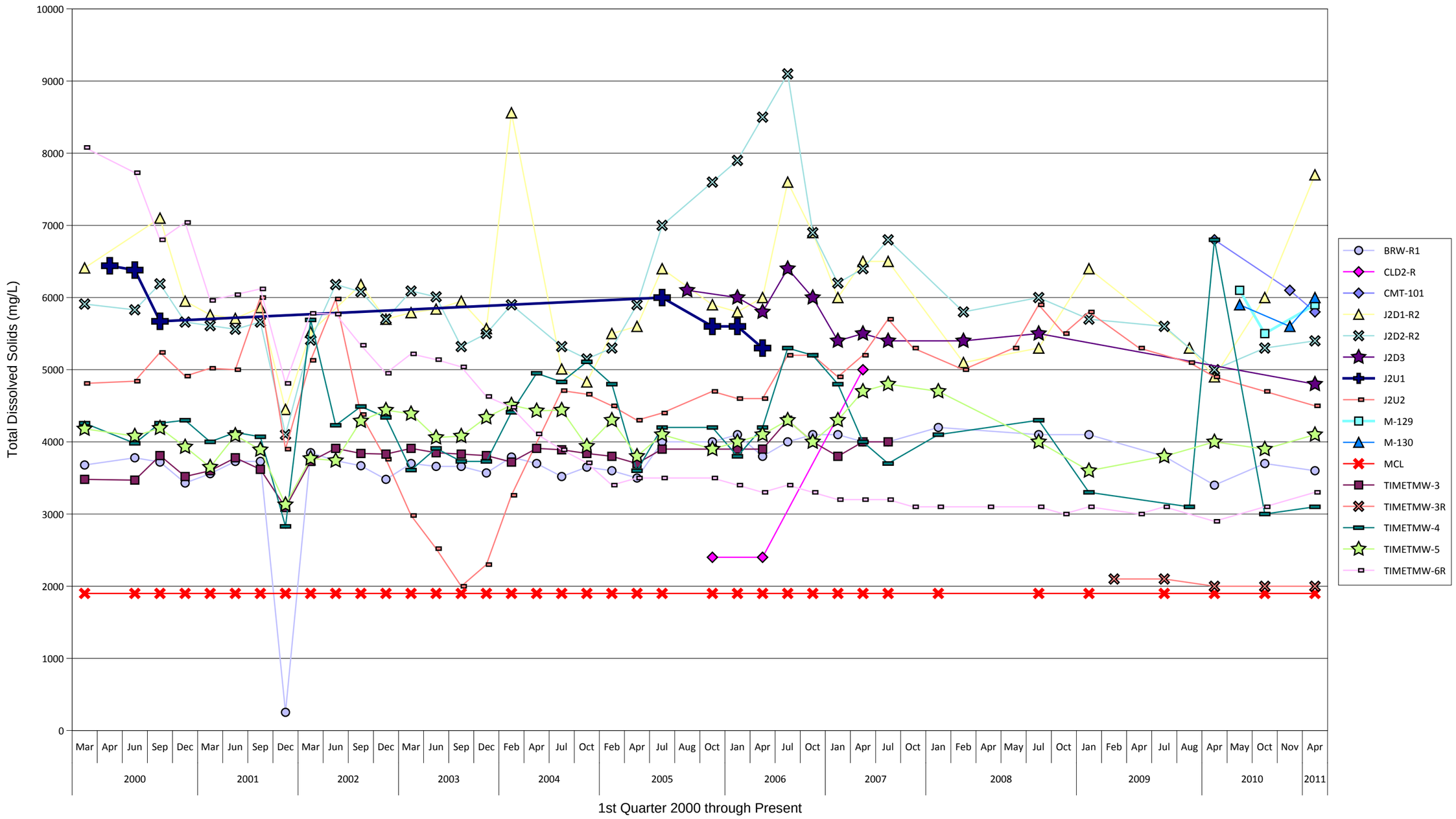


FIGURE C-25: LAKE MEAD (UPGRADIENT) TOTAL DISSOLVED SOLIDS CONCENTRATION TREND GRAPH
Total Dissolved Solids (mg/L)
3500
3000
2500
2000
1500
1000
500
0
Jul
Oct
Nov
Jan
Jul
Jan
Feb
Jul
Apr
Oct
Apr
2008
2009
2010
2011
4th Quarter 2007 through Present
MCL
TMMW-101
TMMW-102
TMMW-103
TMMW-104

FIGURE C-26: PLANT SITE TOTAL DISSOLVED SOLIDS (low range) CONCENTRATION TREND GRAPH



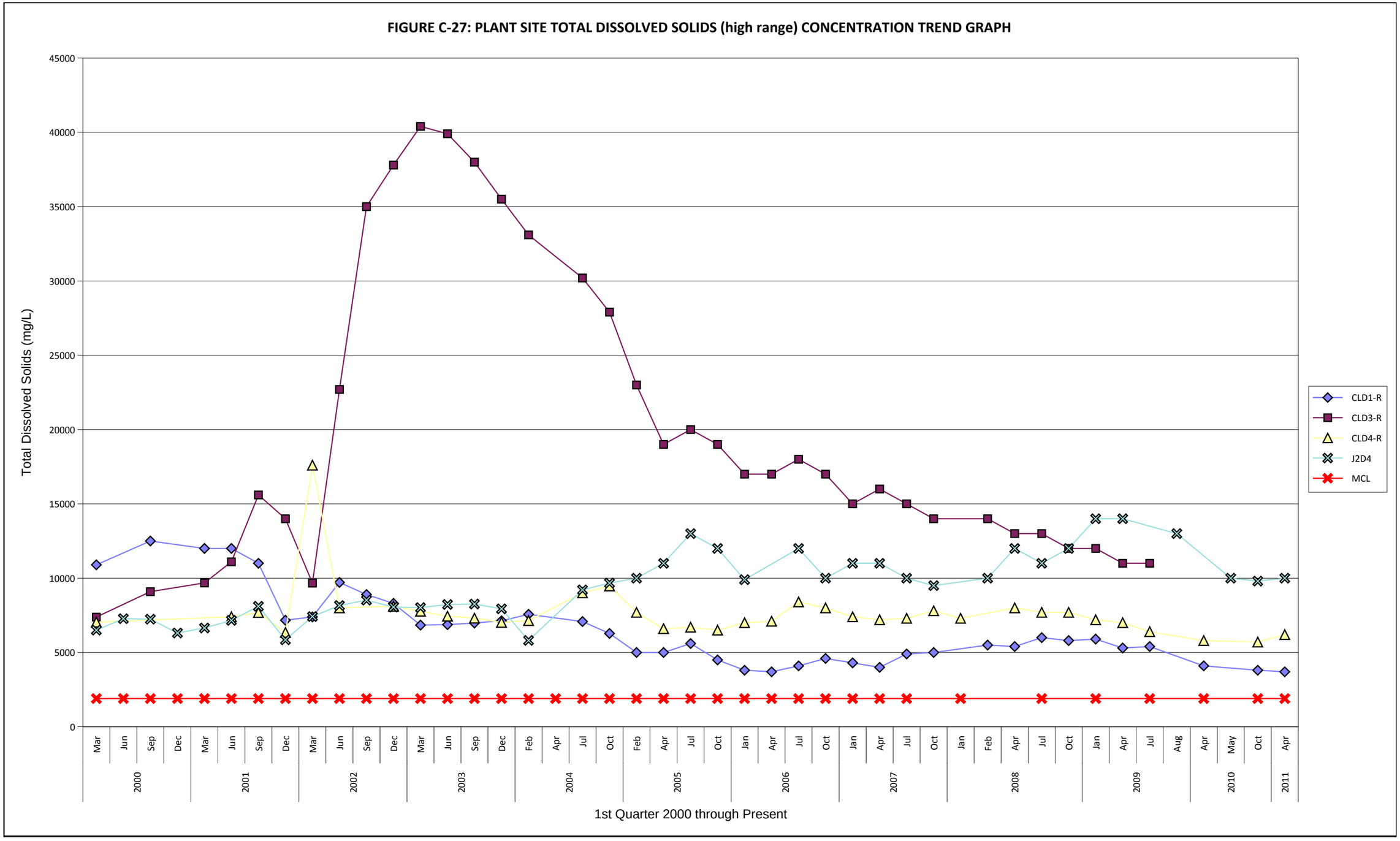


FIGURE C-27: PLANT SITE TOTAL DISSOLVED SOLIDS (high range) CONCENTRATION TREND GRAPH
Total Dissolved Solids (mg/L)
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Feb Apr Jul Oct Jan Apr Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
CLD1-R
CLD3-R
CLD4-R
J2D4
MCL

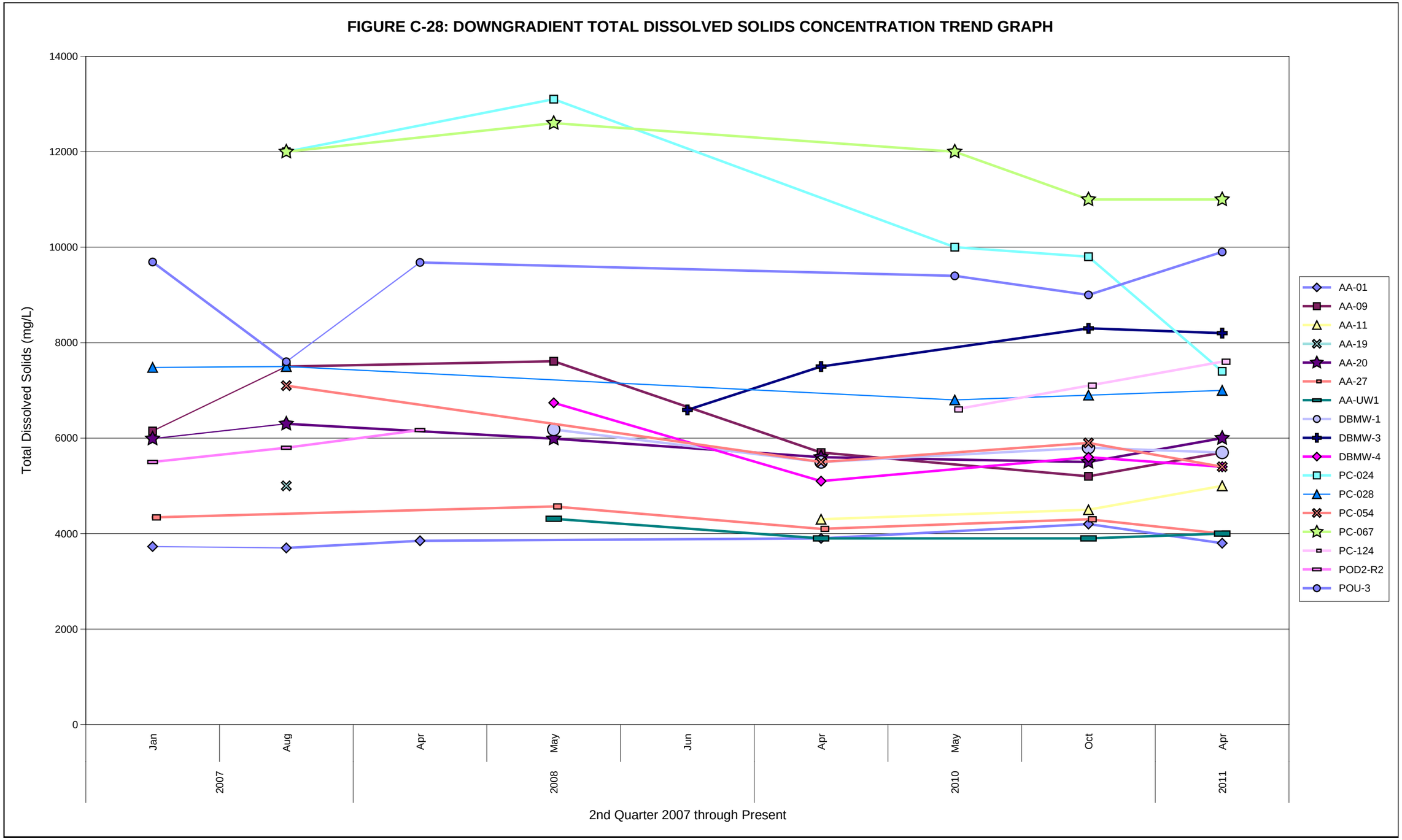


FIGURE C-28: DOWNGRADIENT TOTAL DISSOLVED SOLIDS CONCENTRATION TREND GRAPH
Total Dissolved Solids (mg/L)
14000
12000
10000
8000
6000
4000
2000
0
Jan
Aug
Apr
May
Jun
Apr
May
Oct
Apr
2007
2008
2010
2011
2nd Quarter 2007 through Present
AA-01
AA-09
AA-11
AA-19
AA-20
AA-27
AA-UW1
DBMW-1
DBMW-3
DBMW-4
PC-024
PC-028
PC-054
PC-067
PC-124
POD2-R2
POU-3

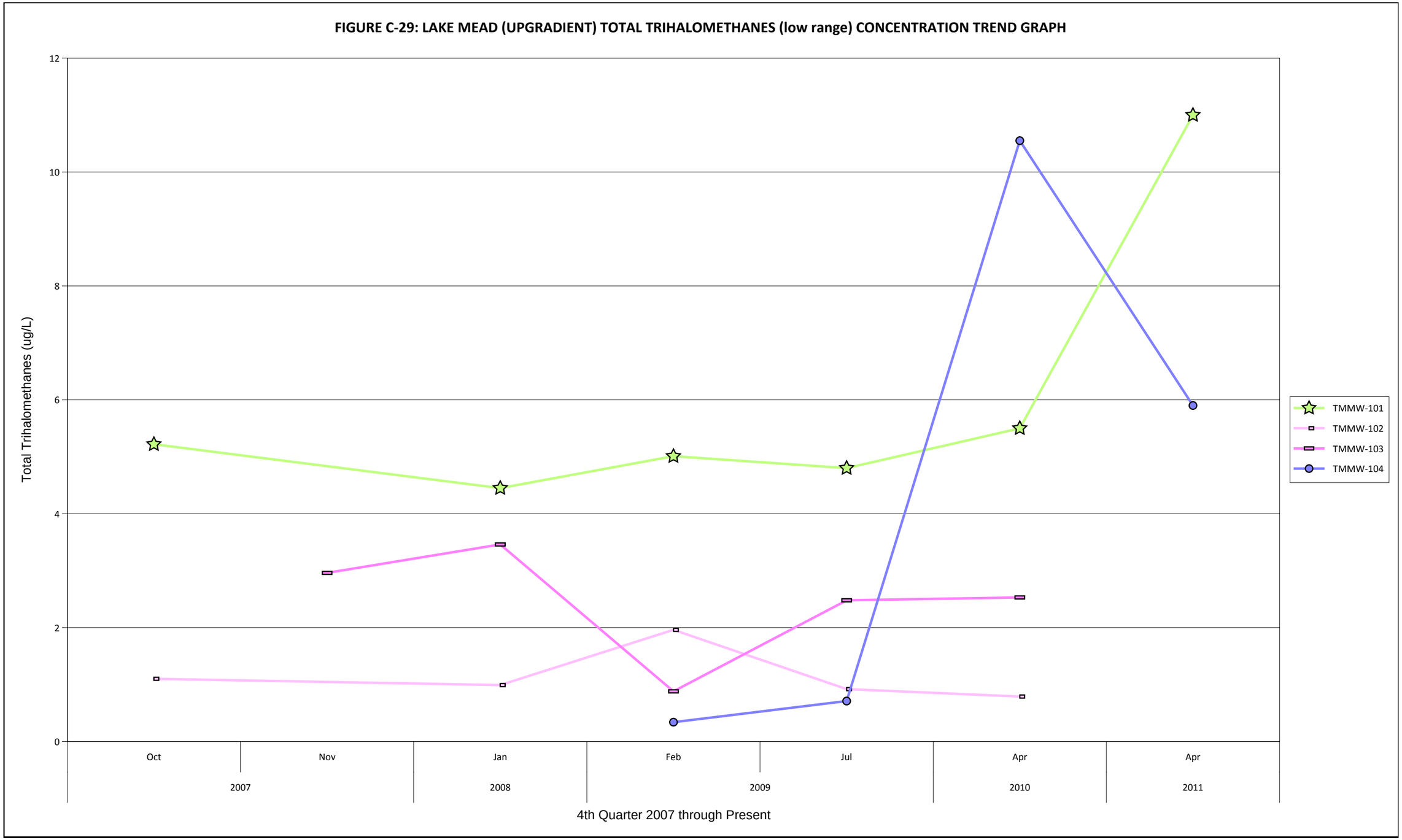


FIGURE C-29: LAKE MEAD (UPGRADIENT) TOTAL TRIHALOMETHANES (low range) CONCENTRATION TREND GRAPH
Total Trihalomethanes (ug/L)
12
10
8
6
4
2
0
Oct
Nov
Jan
Feb
Jul
Apr
Apr
2007
2008
2009
2010
2011
4th Quarter 2007 through Present
TMMW-101
TMMW-102
TMMW-103
TMMW-104

MCL = 80 ug/L

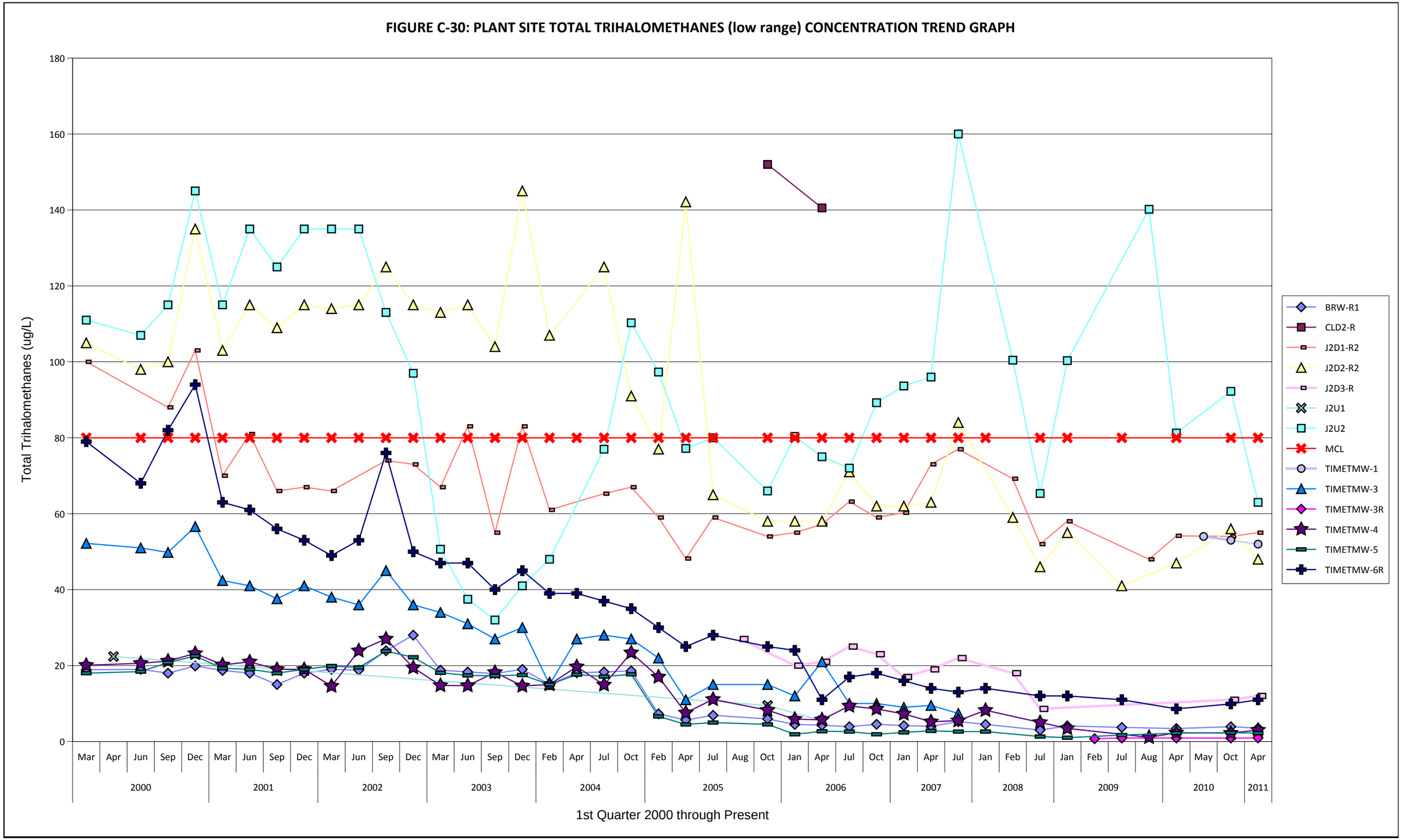


FIGURE C-30: PLANT SITE TOTAL TRIHALOMETHANES (low range) CONCENTRATION TREND GRAPH
Total Trihalomethanes (ug/L)
180
160
140
120
100
80
60
40
20
0
Mar Apr Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Feb Jul Aug Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD2-R
J2D1-R2
J2D2-R2
J2D3-R
J2U1
J2U2
MCL
TIMETMW-1
TIMETMW-3
TIMETMW-3R
TIMETMW-4
TIMETMW-5
TIMETMW-6R

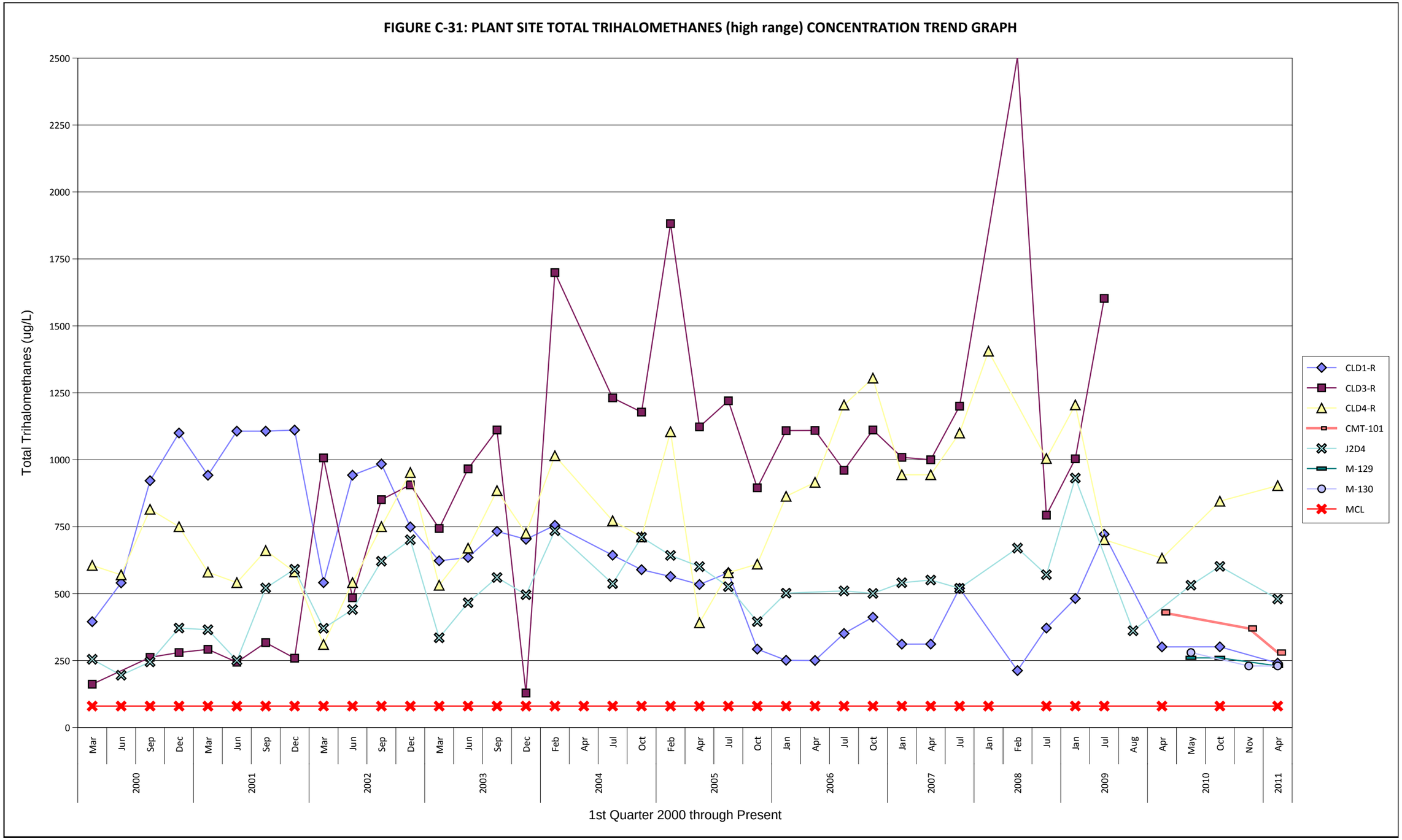


FIGURE C-31: PLANT SITE TOTAL TRIHALOMETHANES (high range) CONCENTRATION TREND GRAPH
Total Trihalomethanes (ug/L)
2500
2250
2000
1750
1500
1250
1000
750
500
250
0
Mar
Jun
Sep
Dec
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Feb
Apr
Jul
Oct
Jan
Aug
May
Nov
1st Quarter 2000 through Present
CLD1-R
CLD3-R
CLD4-R
CMT-101
J2D4
M-129
M-130
MCL

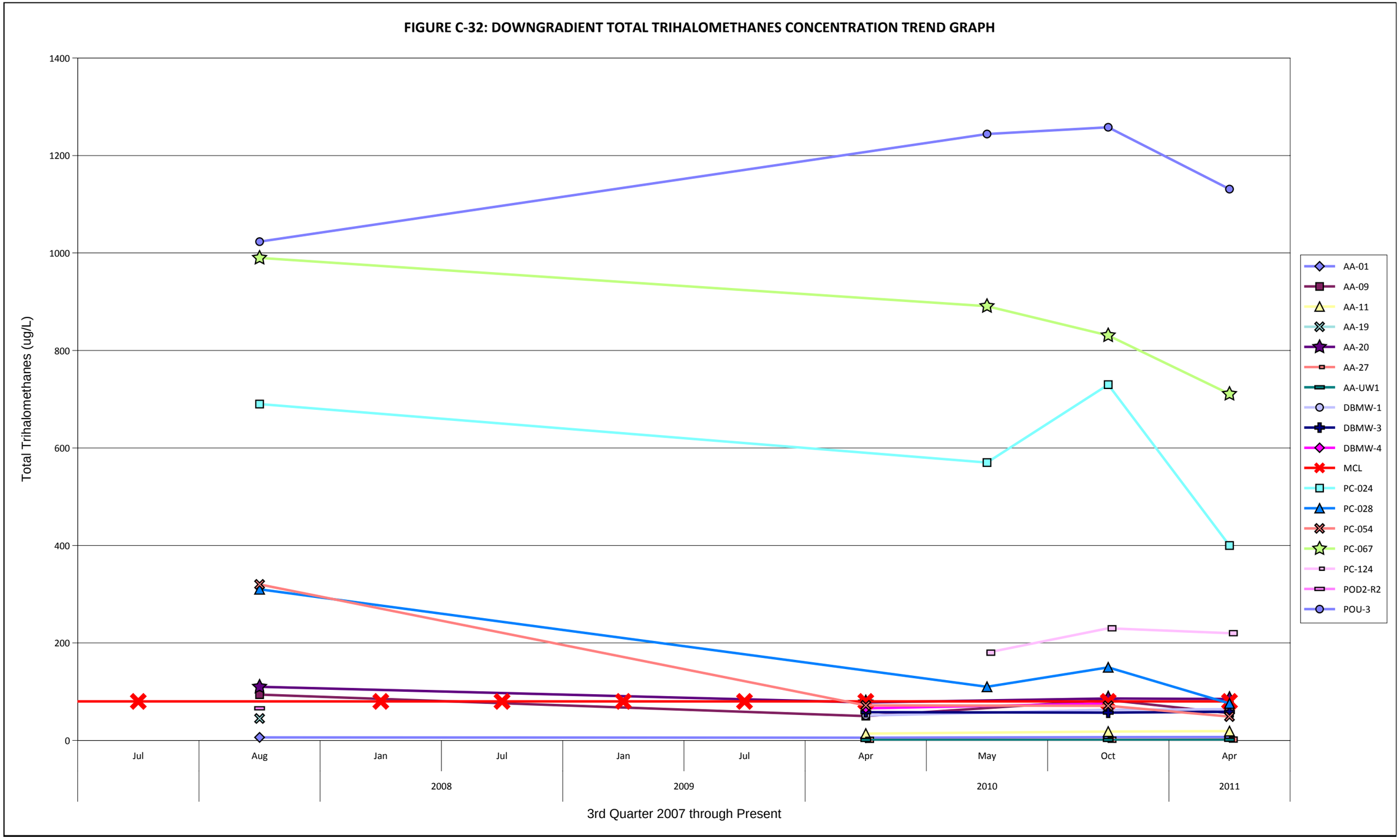


FIGURE C-32: DOWNGRADIENT TOTAL TRIHALOMETHANES CONCENTRATION TREND GRAPH
Total Trihalomethanes (ug/L)
1400
1200
1000
800
600
400
200
0
Jul
Aug
Jan
Jul
Jan
Jul
Apr
May
Oct
Apr
2008
2009
2010
2011
3rd Quarter 2007 through Present
AA-01
AA-09
AA-11
AA-19
AA-20
AA-27
AA-UW1
DBMW-1
DBMW-3
DBMW-4
MCL
PC-024
PC-028
PC-054
PC-067
PC-124
POD2-R2
POU-3

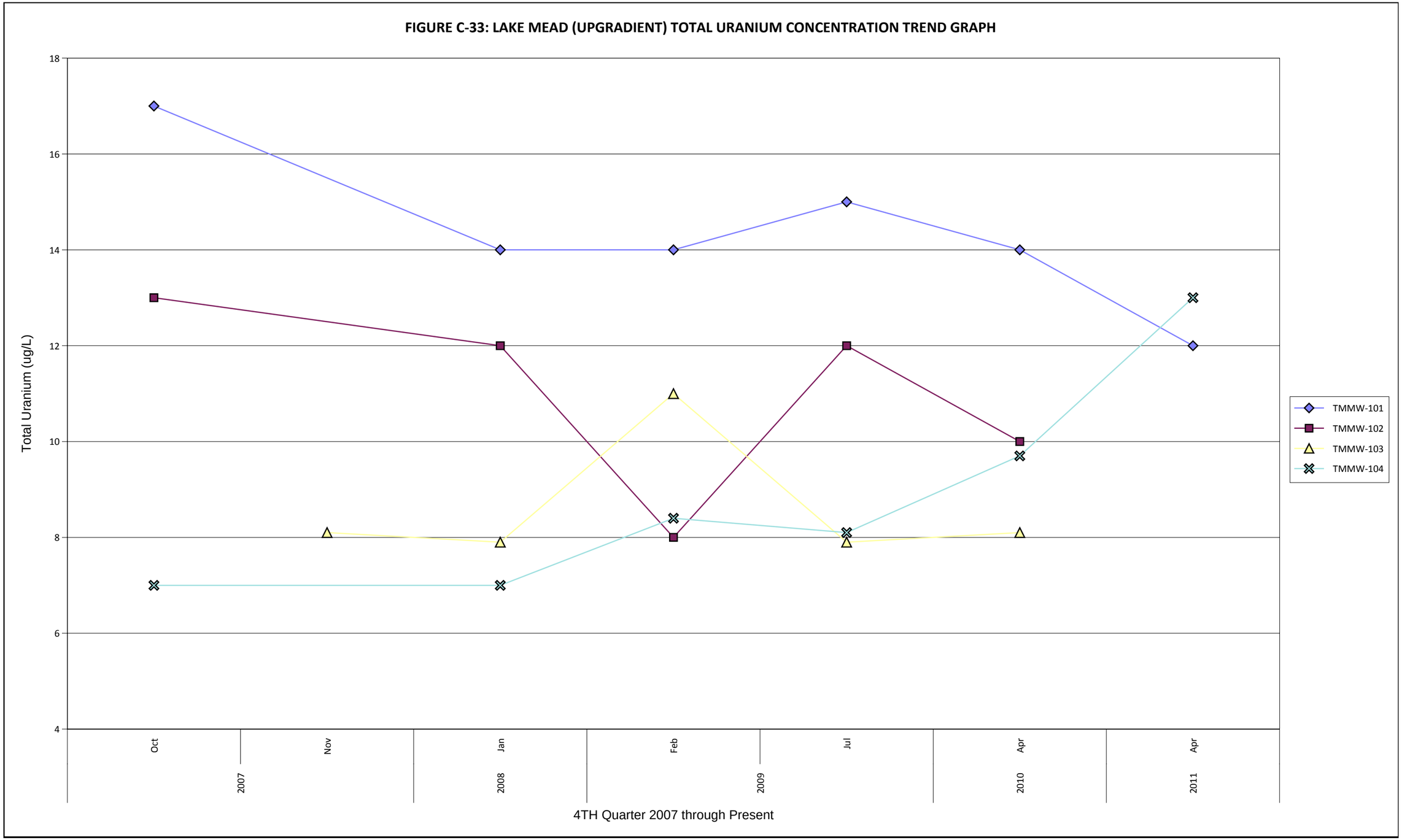


FIGURE C-33: LAKE MEAD (UPGRADIENT) TOTAL URANIUM CONCENTRATION TREND GRAPH
Total Uranium (ug/L)
18
16
14
12
10
8
6
4
Oct
Nov
Jan
Feb
Jul
Apr
Apr
2007
2008
2009
2010
2011
4TH Quarter 2007 through Present
TMMW-101
TMMW-102
TMMW-103
TMMW-104

MCL = 30 ug/L

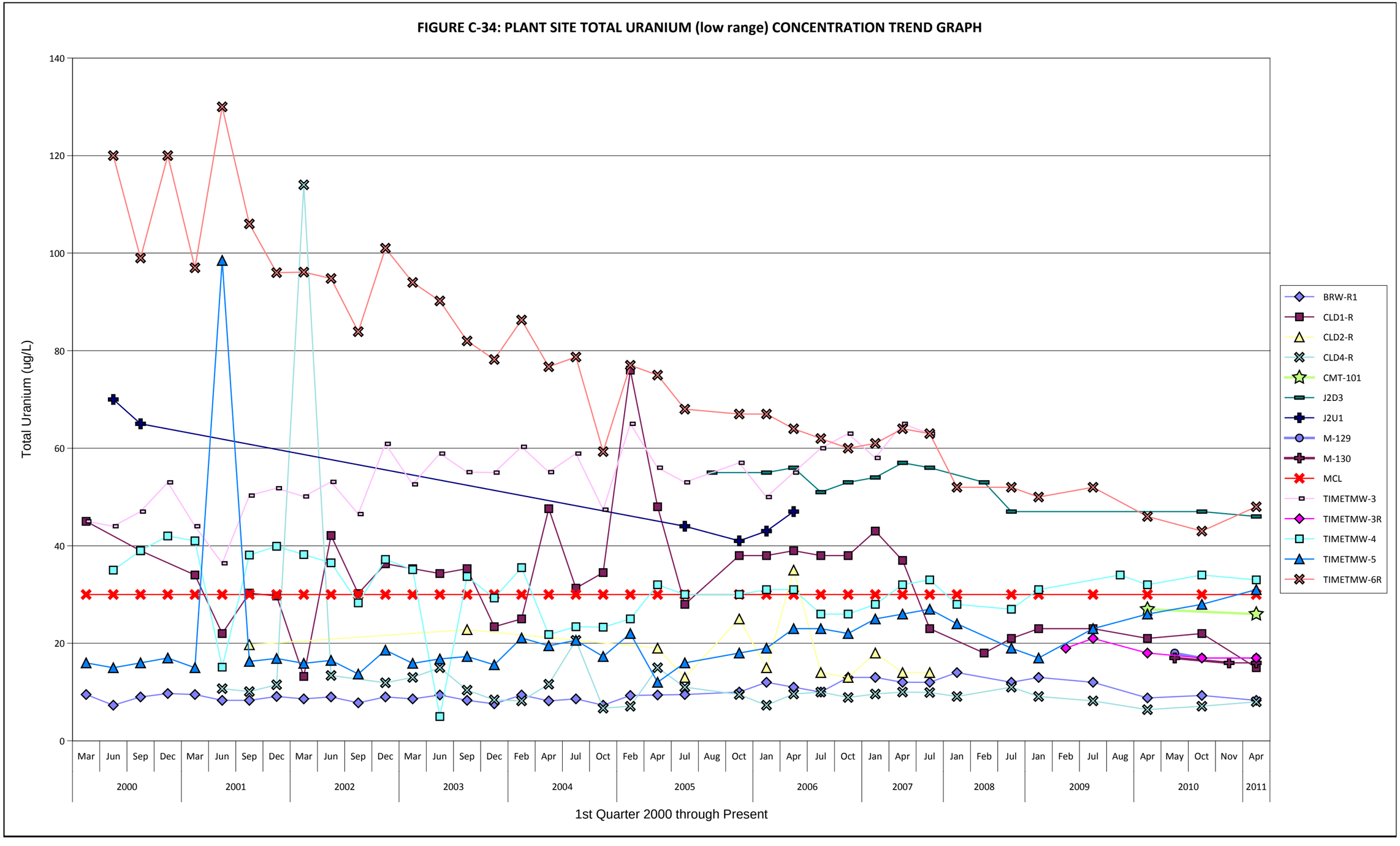


FIGURE C-34: PLANT SITE TOTAL URANIUM (low range) CONCENTRATION TREND GRAPH
Total Uranium (ug/L)
140
120
100
80
60
40
20
0
Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Aug Oct Jan Apr Jul Oct Jan Apr Jul Jan Feb Jul Jan Feb Jul Aug Apr May Oct Nov Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
BRW-R1
CLD1-R
CLD2-R
CLD4-R
CMT-101
J2D3
J2U1
M-129
M-130
MCL
TIMETMW-3
TIMETMW-3R
TIMETMW-4
TIMETMW-5
TIMETMW-6R

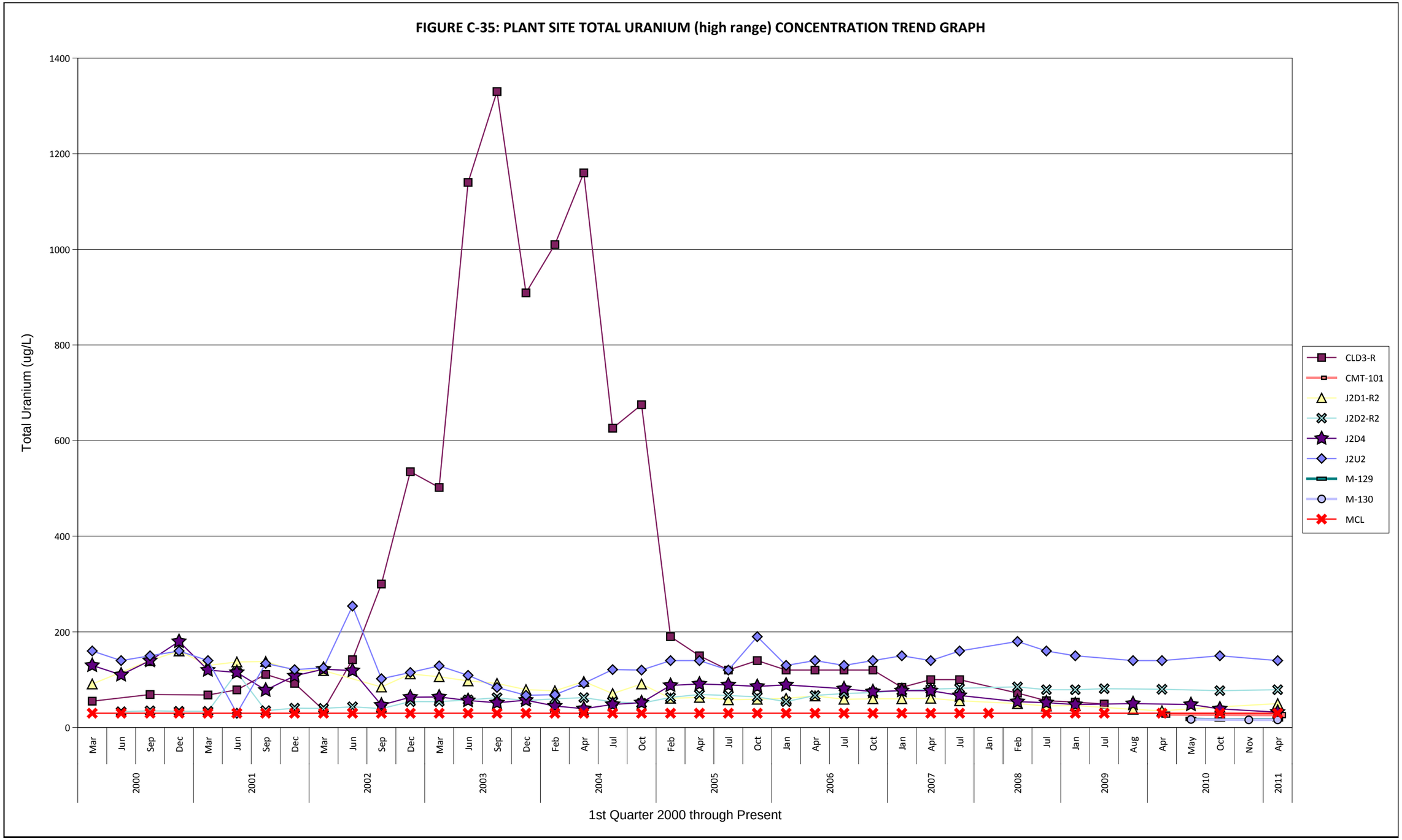


FIGURE C-35: PLANT SITE TOTAL URANIUM (high range) CONCENTRATION TREND GRAPH
Total Uranium (ug/L)
1400
1200
1000
800
600
400
200
0
Mar
Jun
Sep
Dec
Feb
Apr
Jul
Oct
Jan
Aug
May
Nov
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
1st Quarter 2000 through Present
CLD3-R
CMT-101
J2D1-R2
J2D2-R2
J2D4
J2U2
M-129
M-130
MCL

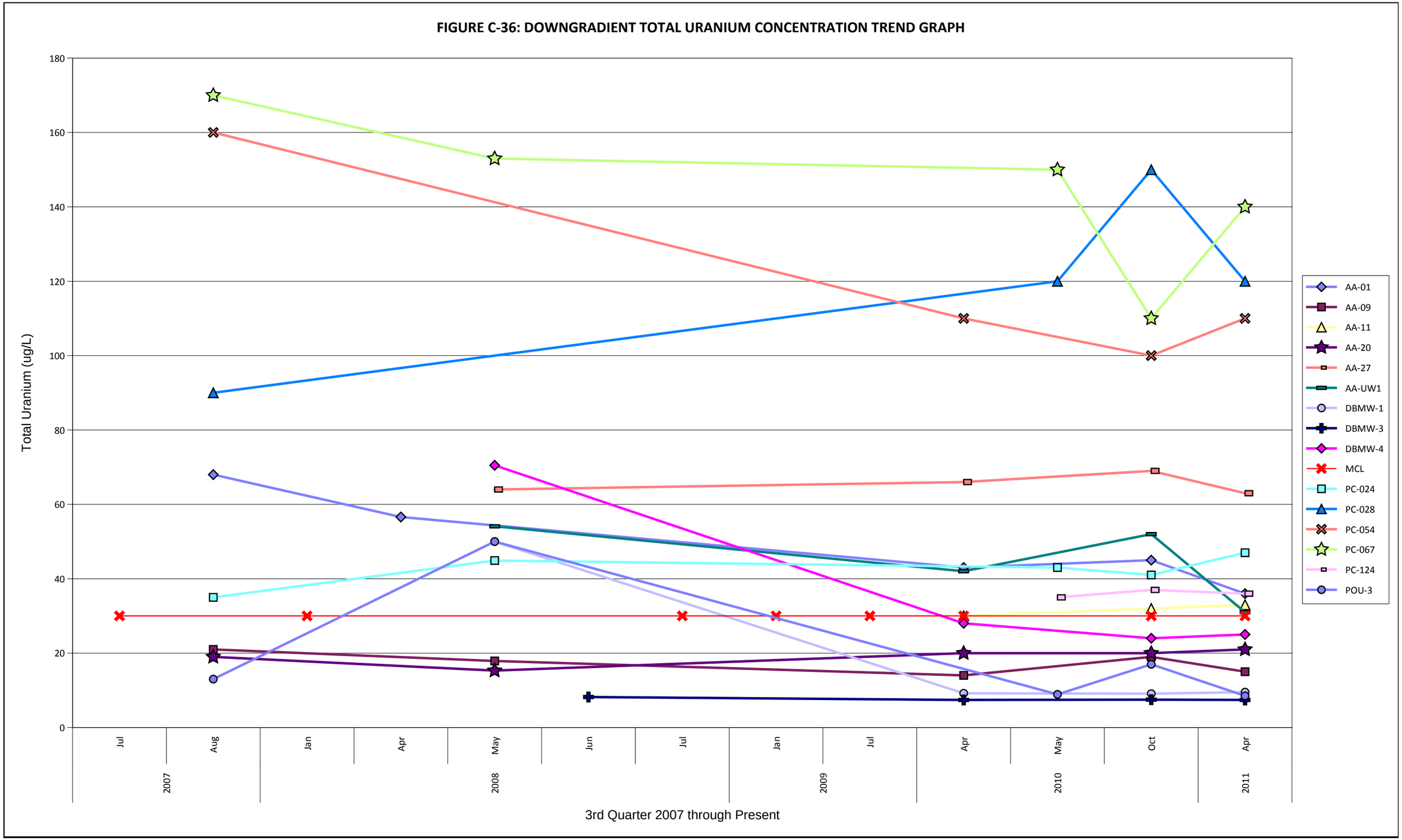
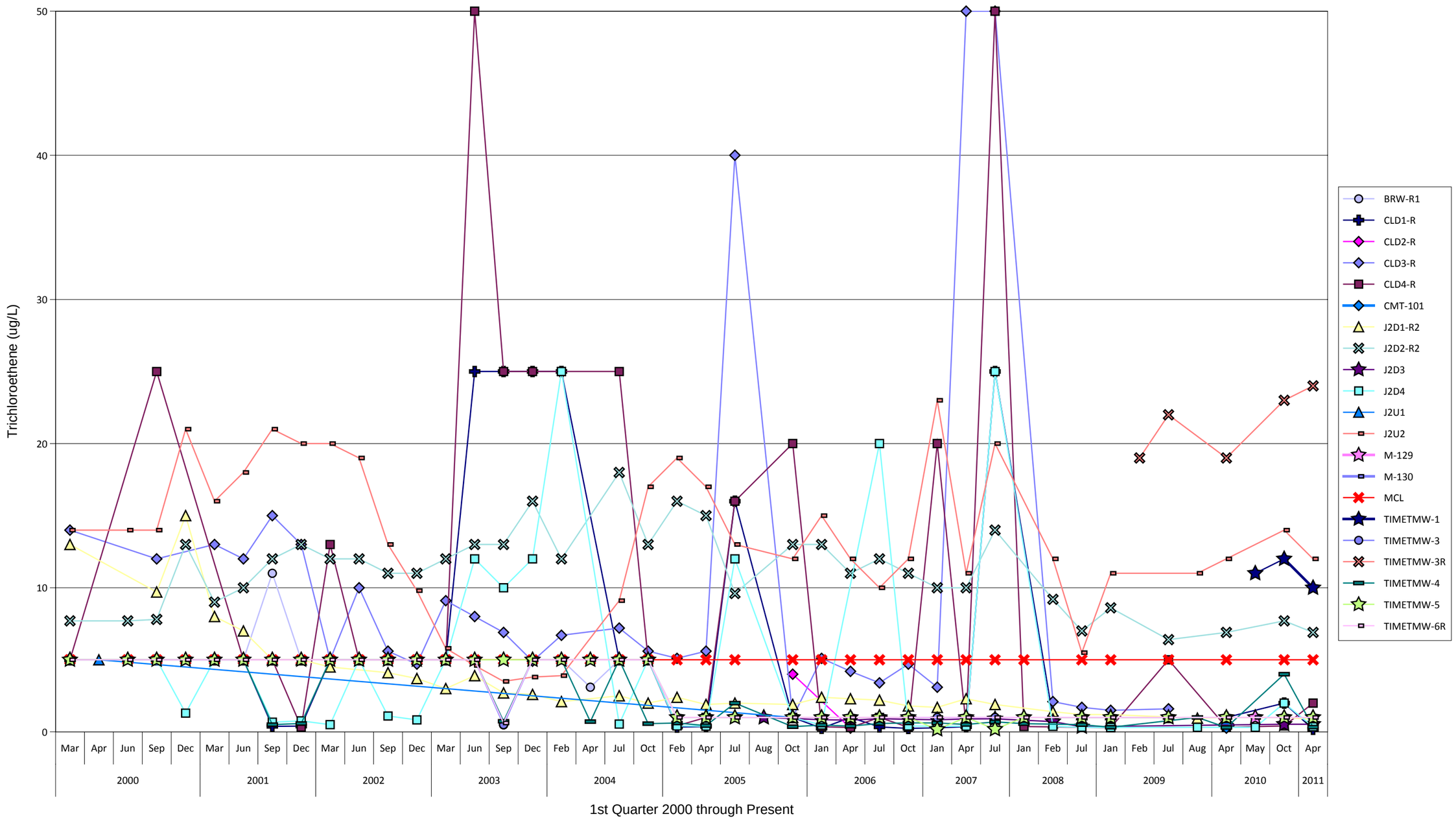


FIGURE C-36: DOWNGRADIENT TOTAL URANIUM CONCENTRATION TREND GRAPH
Total Uranium (ug/L)
180
160
140
120
100
80
60
40
20
0
Jul
Aug
Jan
Apr
May
Jun
Jul
Jan
Jul
Apr
May
Oct
Apr
2007
2008
2009
2010
2011
3rd Quarter 2007 through Present
AA-01
AA-09
AA-11
AA-20
AA-27
AA-UW1
DBMW-1
DBMW-3
DBMW-4
MCL
PC-024
PC-028
PC-054
PC-067
PC-124
POU-3

FIGURE C-37: PLANT SITE TRICHLOROETHENE CONCENTRATION TREND GRAPH



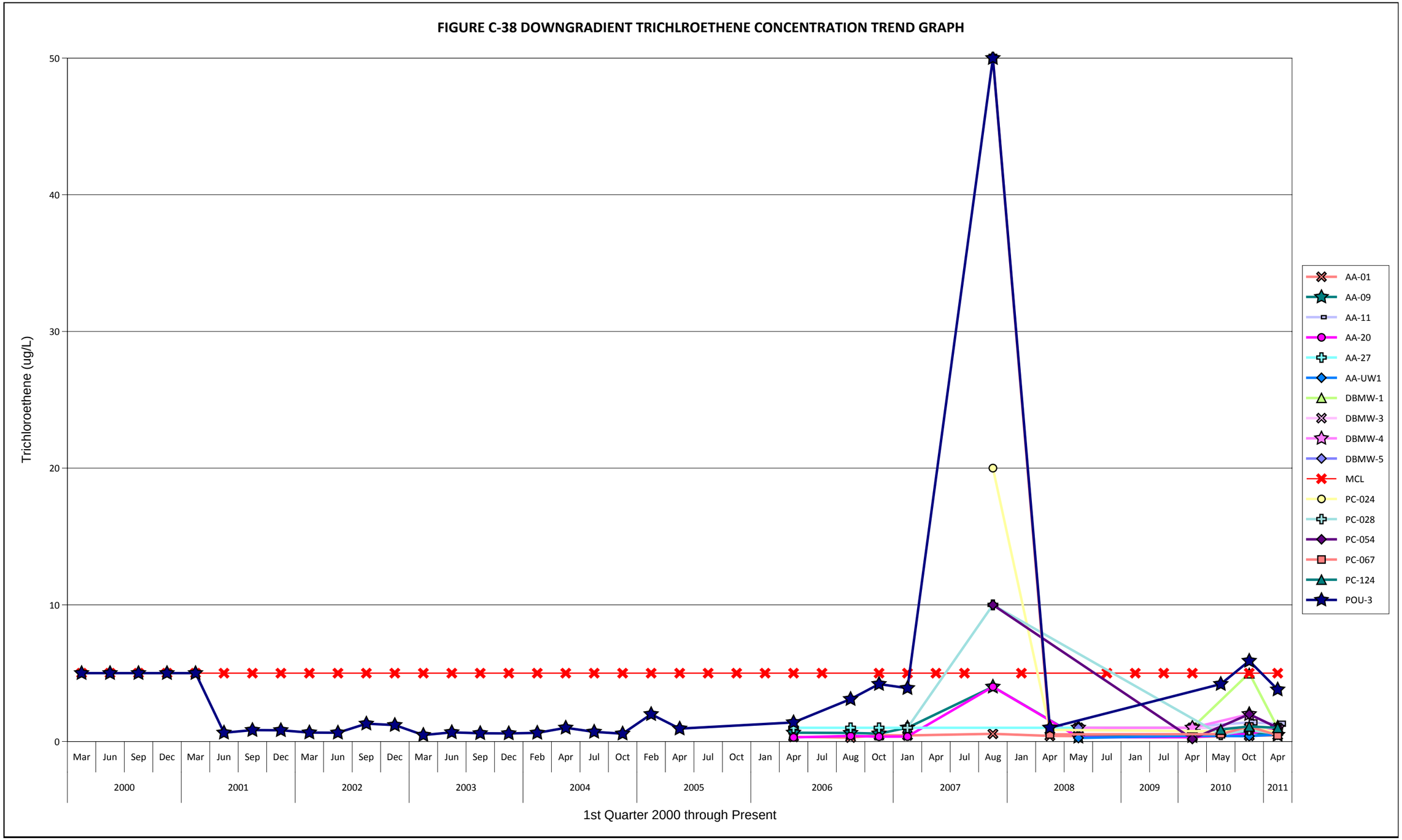


FIGURE C-38 DOWNGRADIENT TRICHLROETHENE CONCENTRATION TREND GRAPH
Trichloroethene (ug/L)
50
40
30
20
10
0
Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Mar Jun Sep Dec Feb Apr Jul Oct Feb Apr Jul Oct Jan Apr Jul Aug Oct Jan Apr Jul Aug Jan Apr May Jul Jan Jul Apr May Oct Apr
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
1st Quarter 2000 through Present
AA-01
AA-09
AA-11
AA-20
AA-27
AA-UW1
DBMW-1
DBMW-3
DBMW-4
DBMW-5
MCL
PC-024
PC-028
PC-054
PC-067
PC-124
POU-3

FIGURE C-39: PLANT SITE VANADIUM CONCENTRATION TREND GRAPH

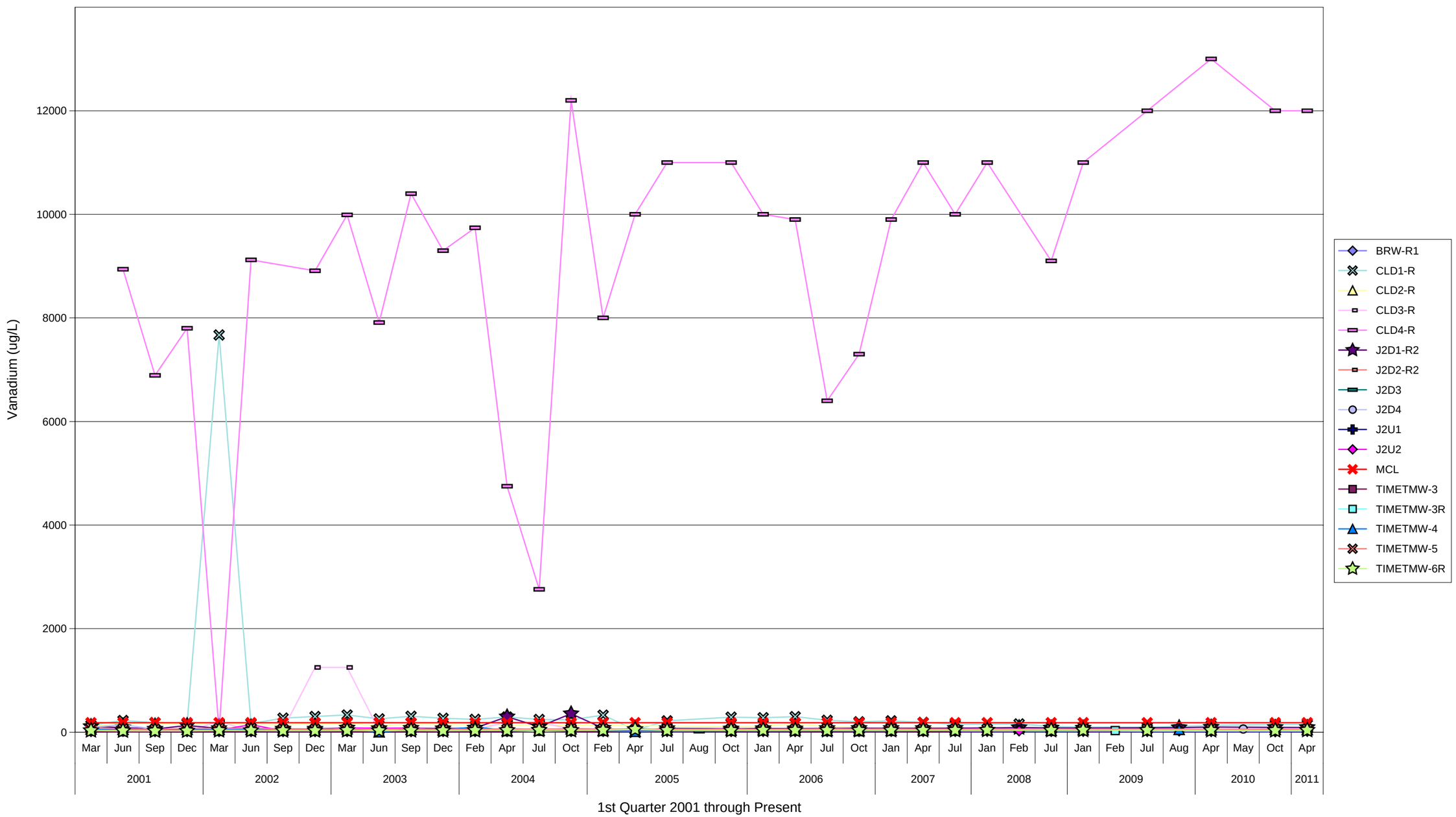
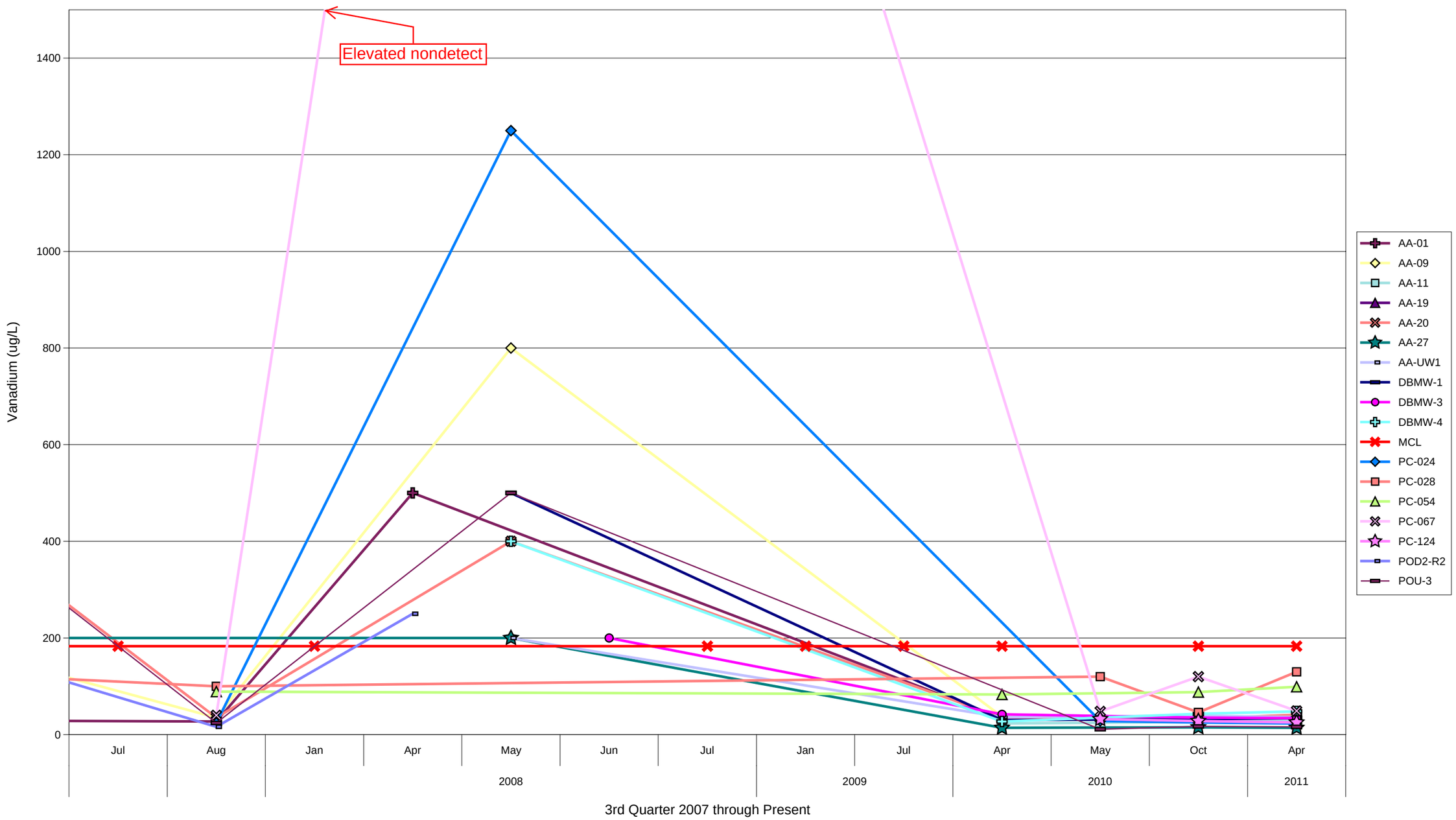


FIGURE C-40: DOWNGRADIENT VANADIUM CONCENTRATION TREND GRAPH



APPENDIX D

ISOCONCENTRATION MAPS

BRW-R1 38 ● MONITORING WELL WITH ARSENIC CONCENTRATION (µg/L)

WELL NOT ANALYZED

100 ARSENIC CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

Note:
The screening level used for arsenic is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL). The MCL for arsenic is 10 µg/L.

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FIGURE D-1
ARSENIC
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteAS.mxd michelle.handley

BRW-R1 43 J- ● MONITORING WELL WITH CHROMIUM CONCENTRATION (µg/L)

WELL NOT ANALYZED

100 CHROMIUM CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

100 TRONOX CHROMIUM CONTOUR (µg/L)

APPROXIMATE TRONOX CONTOUR

Note:
The screening level used for chromium is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL). The MCL for chromium is 100 µg/L.

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FIGURE D-2
CHROMIUM
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteCR.mxd michelle.handley

BRW-R1 47 ● MONITORING WELL WITH HEXAVALENT CHROMIUM CONCENTRATION (µg/L)

WELL NOT ANALYZED

100 HEXAVALENT CHROMIUM CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

Note:
The screening level used for hexavalent chromium is the residential water NDEP Basic Comparison Level (BCL). The NDEP BCL for hexavalent chromium is 100 ug/L.

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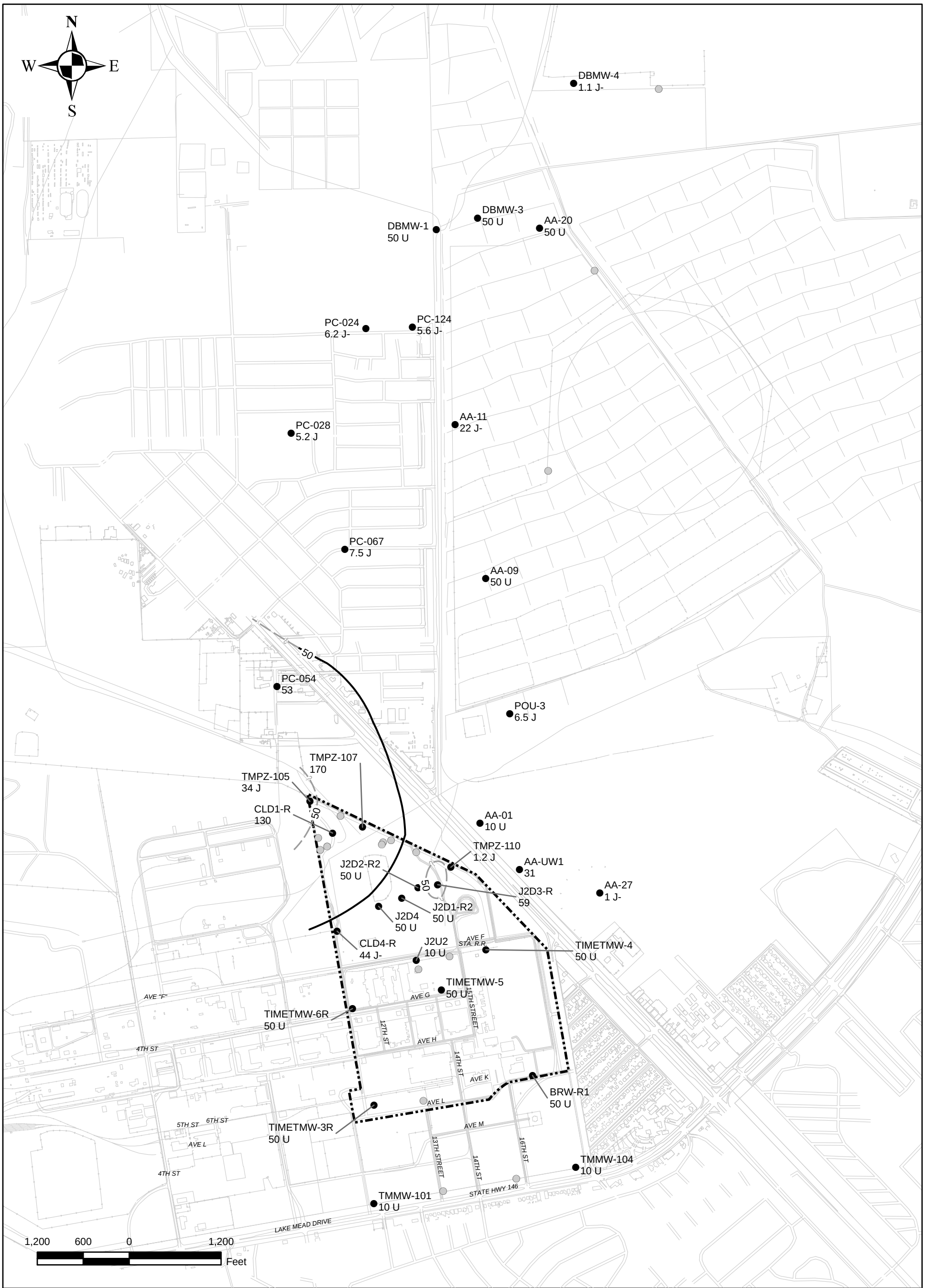
FIGURE D-3
HEXAVALENT CHROMIUM
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteHEXCR.mxd michelle.handley



BRW-R1 50 U — MONITORING WELL WITH MANGANESE CONCENTRATION (µg/L)

WELL NOT ANALYZED

10 — MANGANESE CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

Note:
The screening level used for manganese is the EPA National Secondary Drinking Water Standard. The standard for manganese is 50 µg/L.

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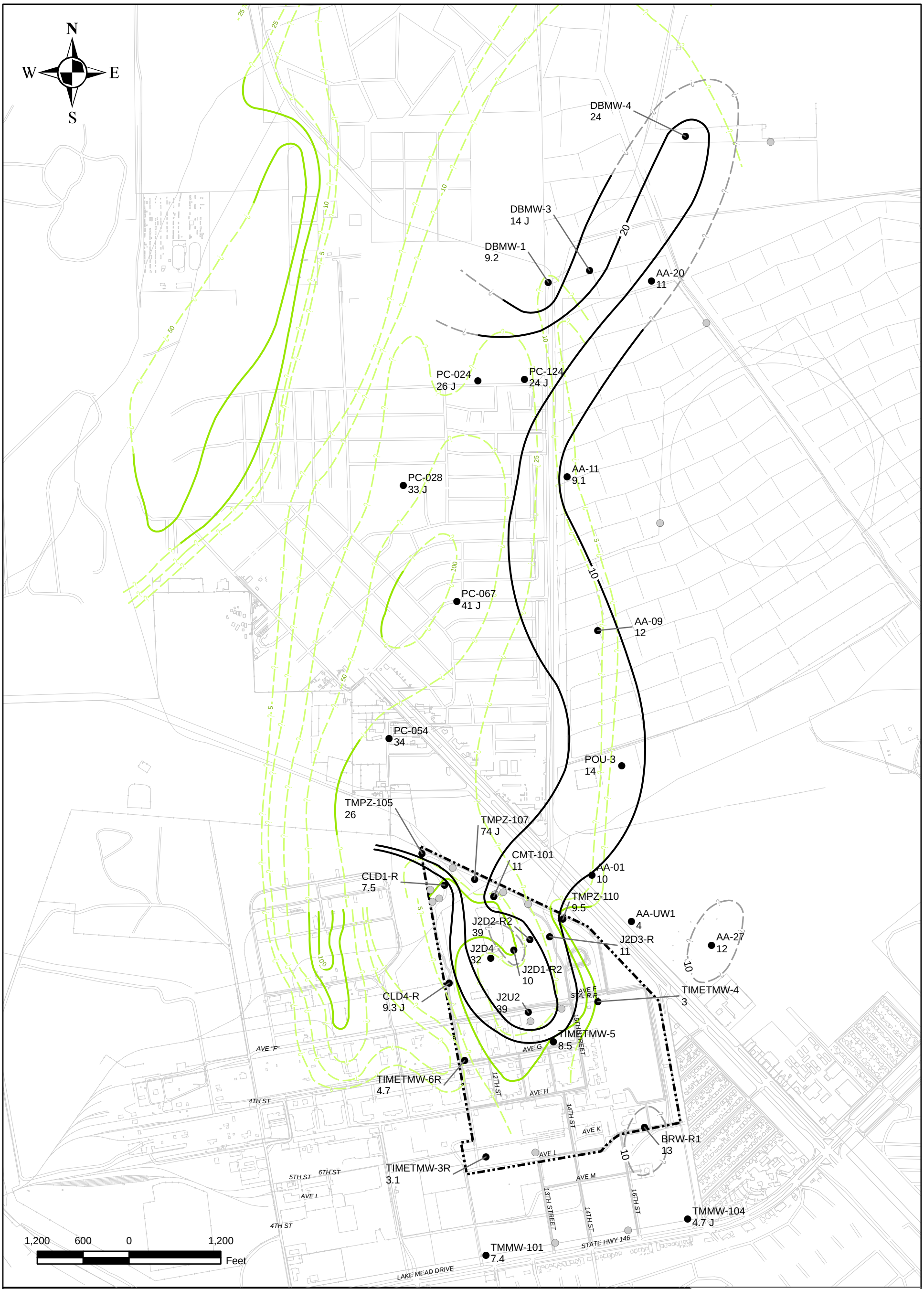
FIGURE D-4
MANGANESE
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteMN.mxd michelle.handley



BRW-R1 13 — MONITORING WELL WITH NITRATE AS NITROGEN CONCENTRATION (mg/L)

WELL NOT ANALYZED

10 — NITRATE AS NITROGEN CONTOUR (mg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

100 — TRONOX NITRATE CONTOUR (µg/L)

APPROXIMATE TRONOX CONTOUR

Note:
The screening level used for nitrate is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL). The MCL for nitrate is 10 mg/L.

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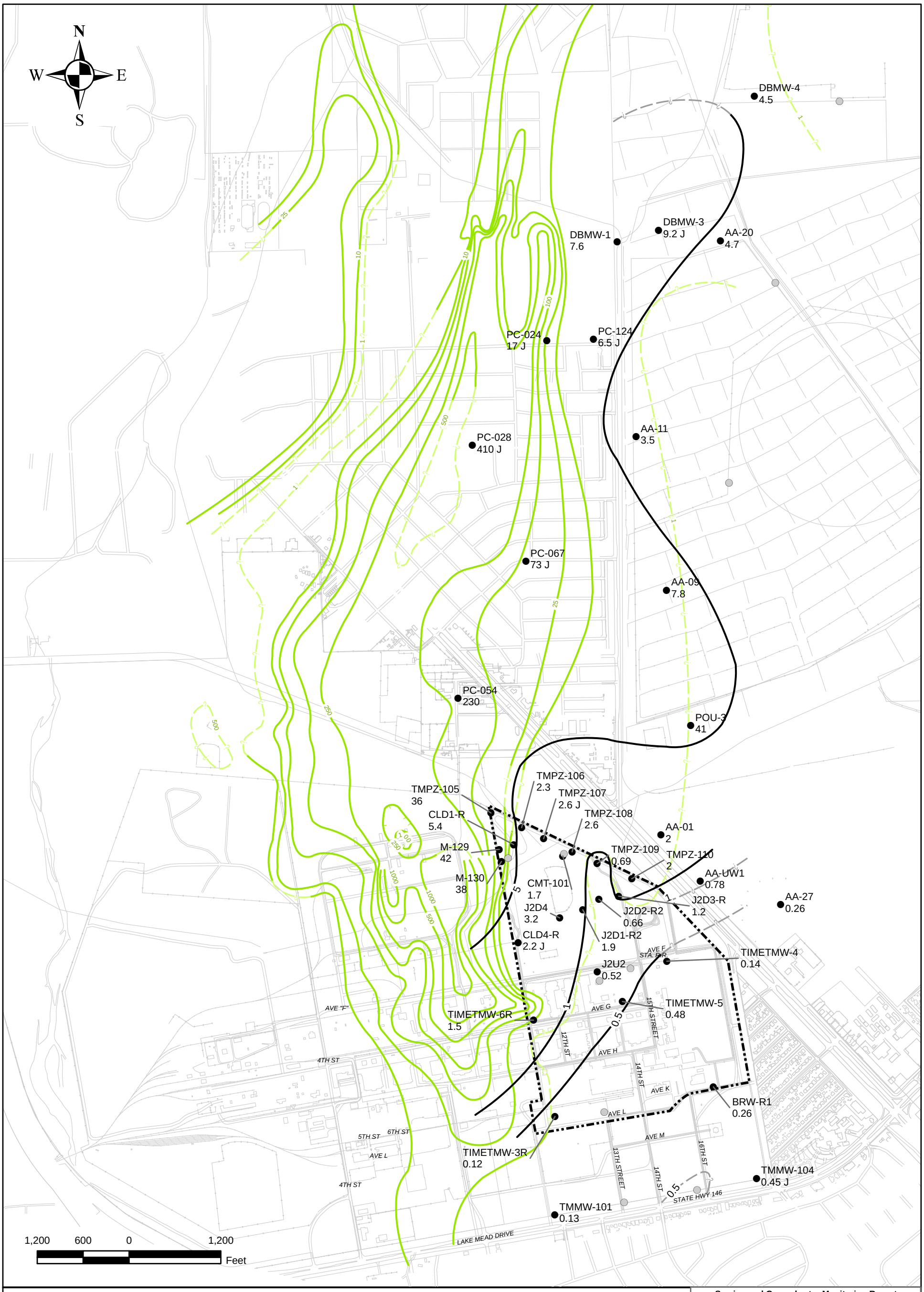
FIGURE D-5
NITRATE AS NITROGEN ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteN.mxd michelle.handley



BRW-R1 0.26 ● MONITORING WELL WITH PERCHLORATE CONCENTRATION (mg/L)

WELL NOT ANALYZED

100 PERCHLORATE CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

100 TRONOX PERCHLORATE CONTOUR (mg/L)

APPROXIMATE TRONOX CONTOUR

Note:
The screening level used for perchlorate is the residential water NDEP Basic Comparison Level (BCL). The NDEP BCL for perchlorate is 0.018 mg/L.

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FIGURE D-6
PERCHLORATE
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_sitePERCHLORATE.mxd michelle.handley

BRW-R1 0.28 — MONITORING WELL WITH COMBINED RADIUM-226 AND RADIUM-228 CONCENTRATION (pCi/L)

WELL NOT ANALYZED

TIMET PROPERTY BOUNDARY

pCi/L PICOCURIE PER LITER

Note:
The screening level used for combined radium is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL). The MCL for combined radium is 5 pCi/L.

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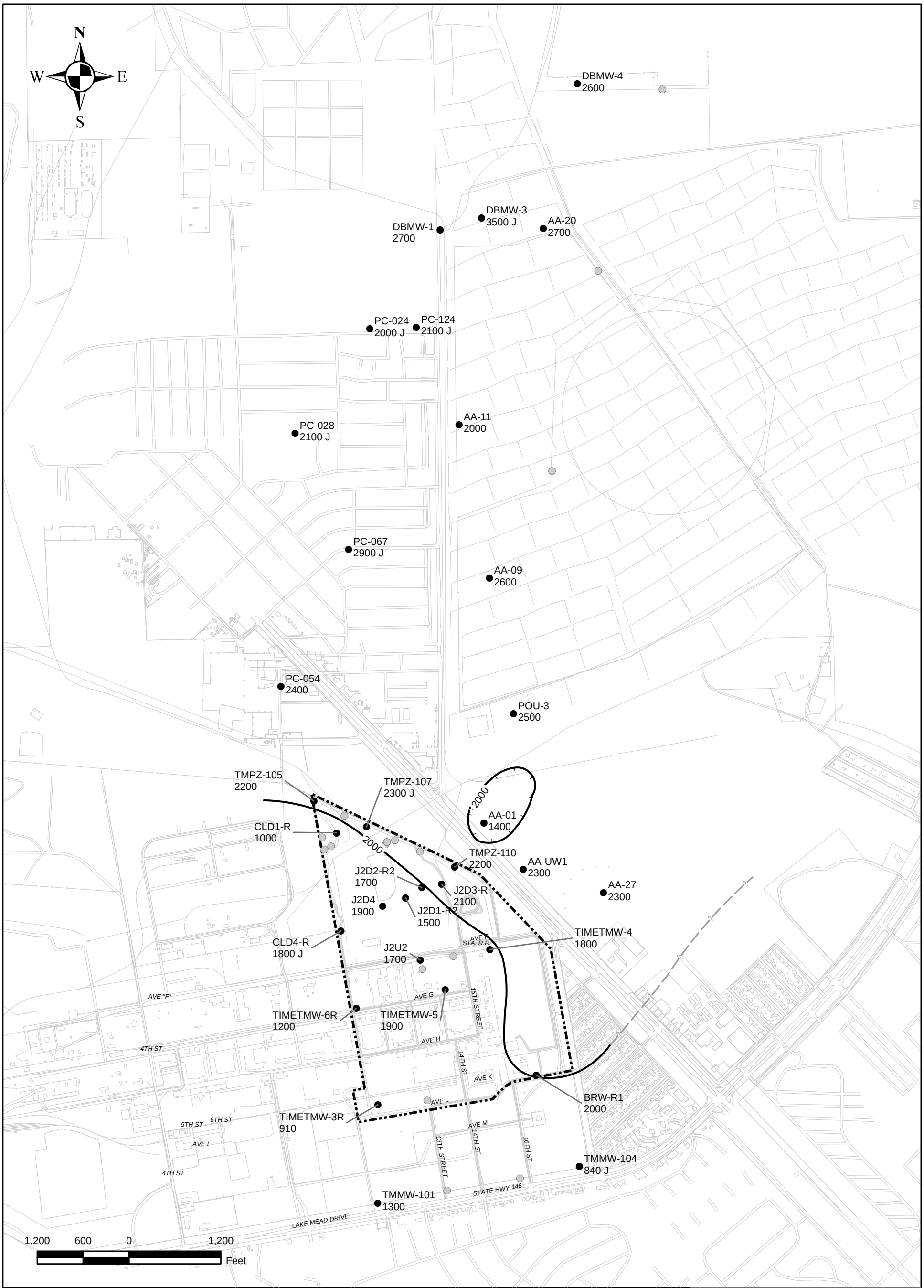
FIGURE D-7
COMBINED RADIUM-226 AND RADIUM-228 ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteRAD.mxd michelle.handley



BRW-R1 2000 ● MONITORING WELL WITH SULFATE CONCENTRATION (mg/L)

○ WELL NOT ANALYZED

2500 SULFATE CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

Note:
The screening level used for sulfate is the EPA National Secondary Drinking Water Standard. The standard for sulfate is 250 mg/L.

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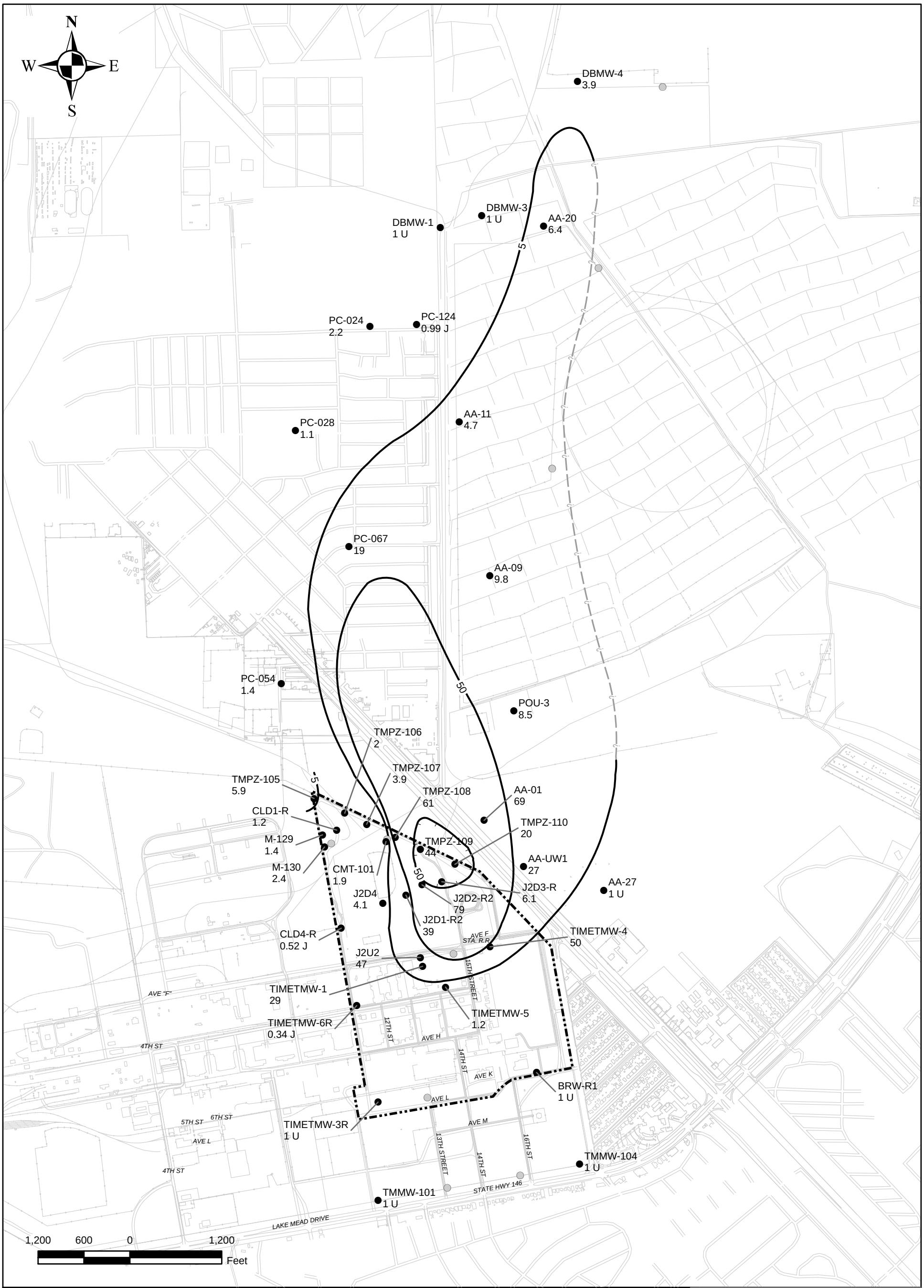
FIGURE D-8
SULFATE
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteS.mxd michelle.handley



BRW-R1 1 U ● MONITORING WELL WITH TETRACHLOROETHENE CONCENTRATION (µg/L)

WELL NOT ANALYZED

50 TETRACHLOROETHENE CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

Note:
The screening level used for tetrachloroethene is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL).
The MCL for tetrachloroethene is 5 µg/L.

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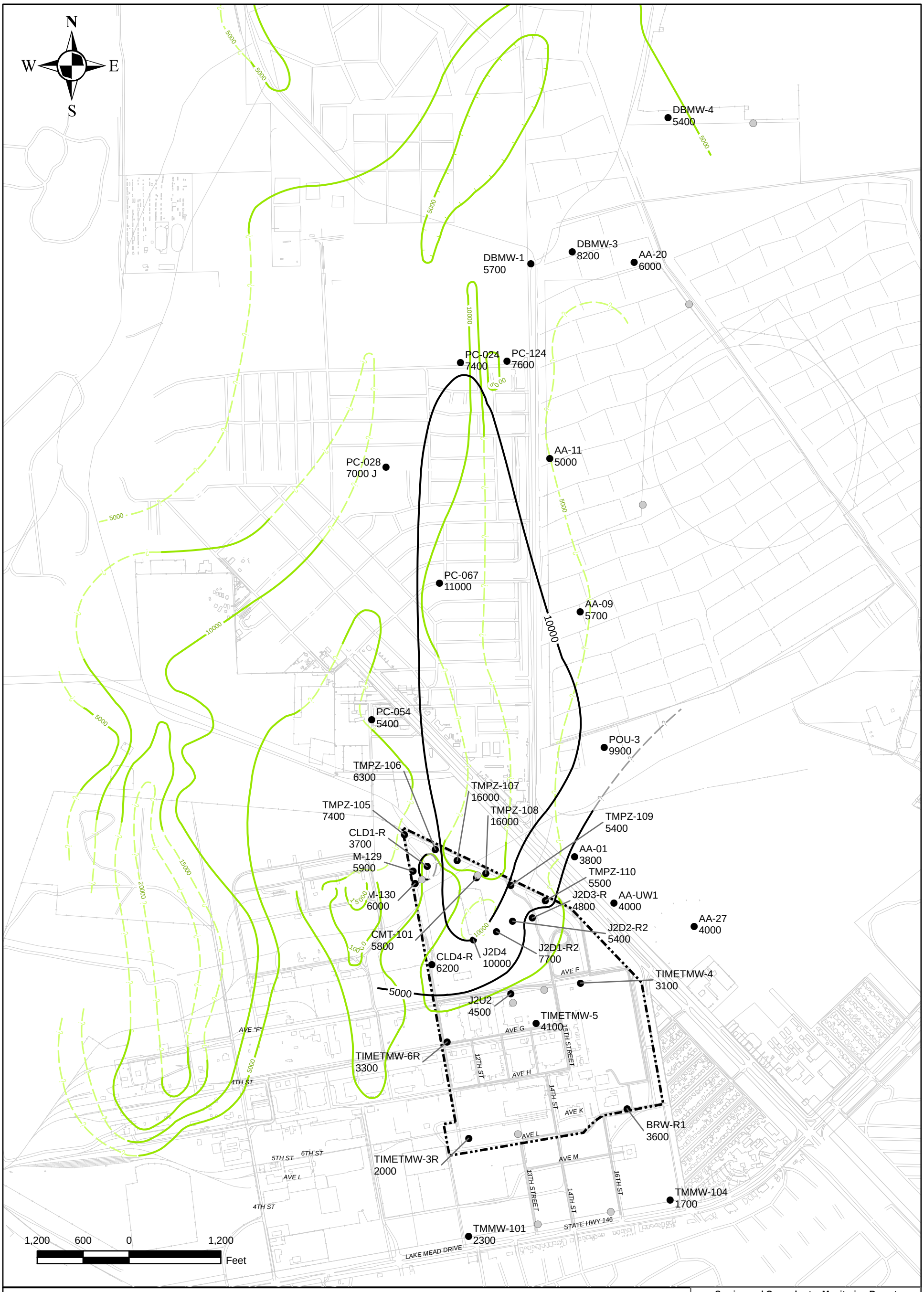
FIGURE D-9
TETRACHLOROETHENE
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_sitePCE.mxd michelle.handley



BRW-R1 3600 ● MONITORING WELL WITH TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)

mg/L MILLIGRAM PER LITER

WELL NOT ANALYZED

10000 TOTAL DISSOLVED SOLIDS CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

10000 TRONOX TDS CONTOUR (mg/L)

APPROXIMATE TRONOX CONTOUR

Note:
The screening level used for total dissolved solids is the EPA National Secondary Drinking Water Standard. The standard for total dissolved solids is 500 mg/L.

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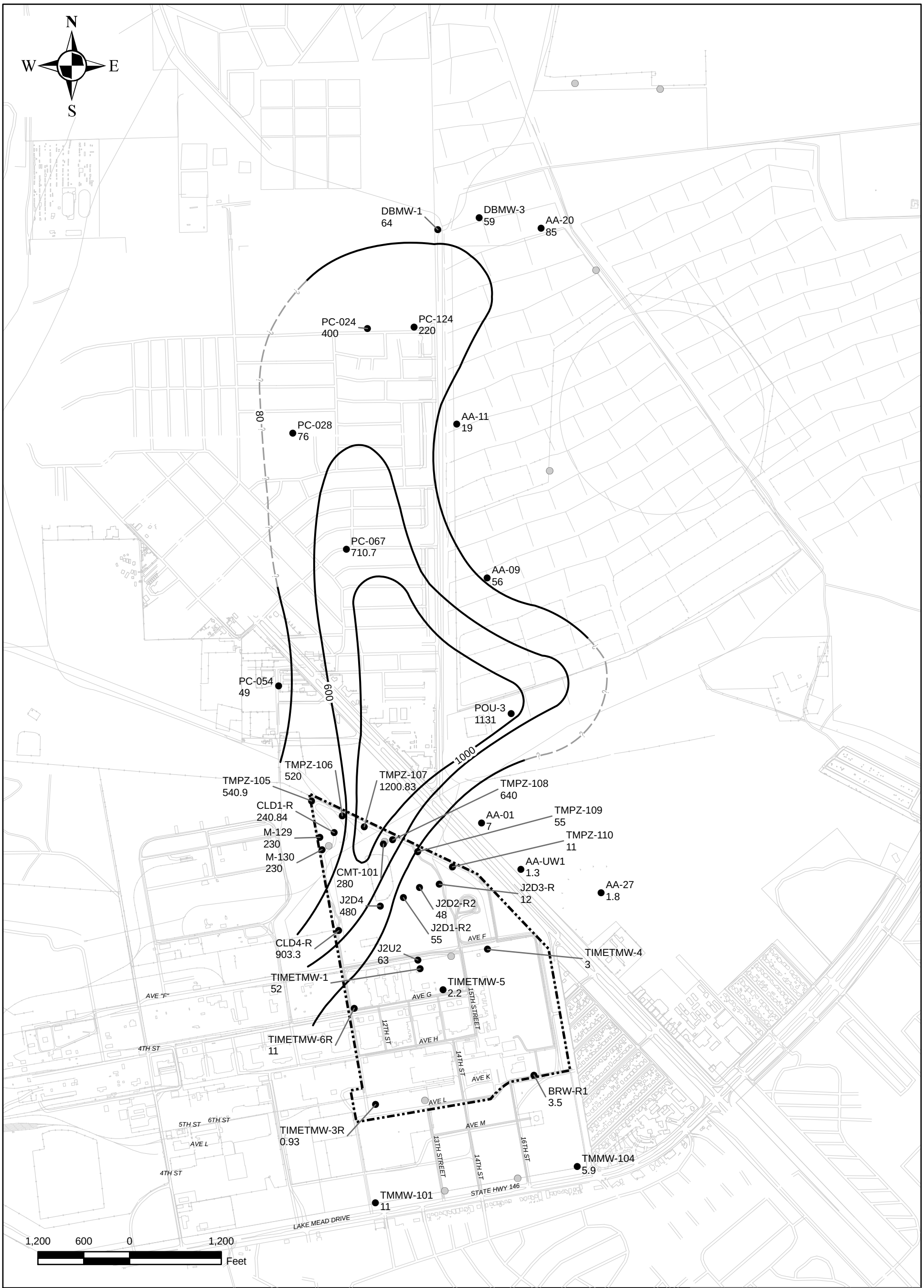
FIGURE D-10
TOTAL DISSOLVED SOLIDS ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteTDS.mxd michelle.handley



BRW-R1 3.5 ● MONITORING WELL WITH TOTAL TRIHALOMETHANES CONCENTRATION (µg/L)

WELL NOT ANALYZED

100 TOTAL TRIHALOMETHANES CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

Note:
The screening level used for total trihalomethanes is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL).
The MCL for total trihalomethanes is 80 µg/L.
[a] CMT data excluded from contouring.

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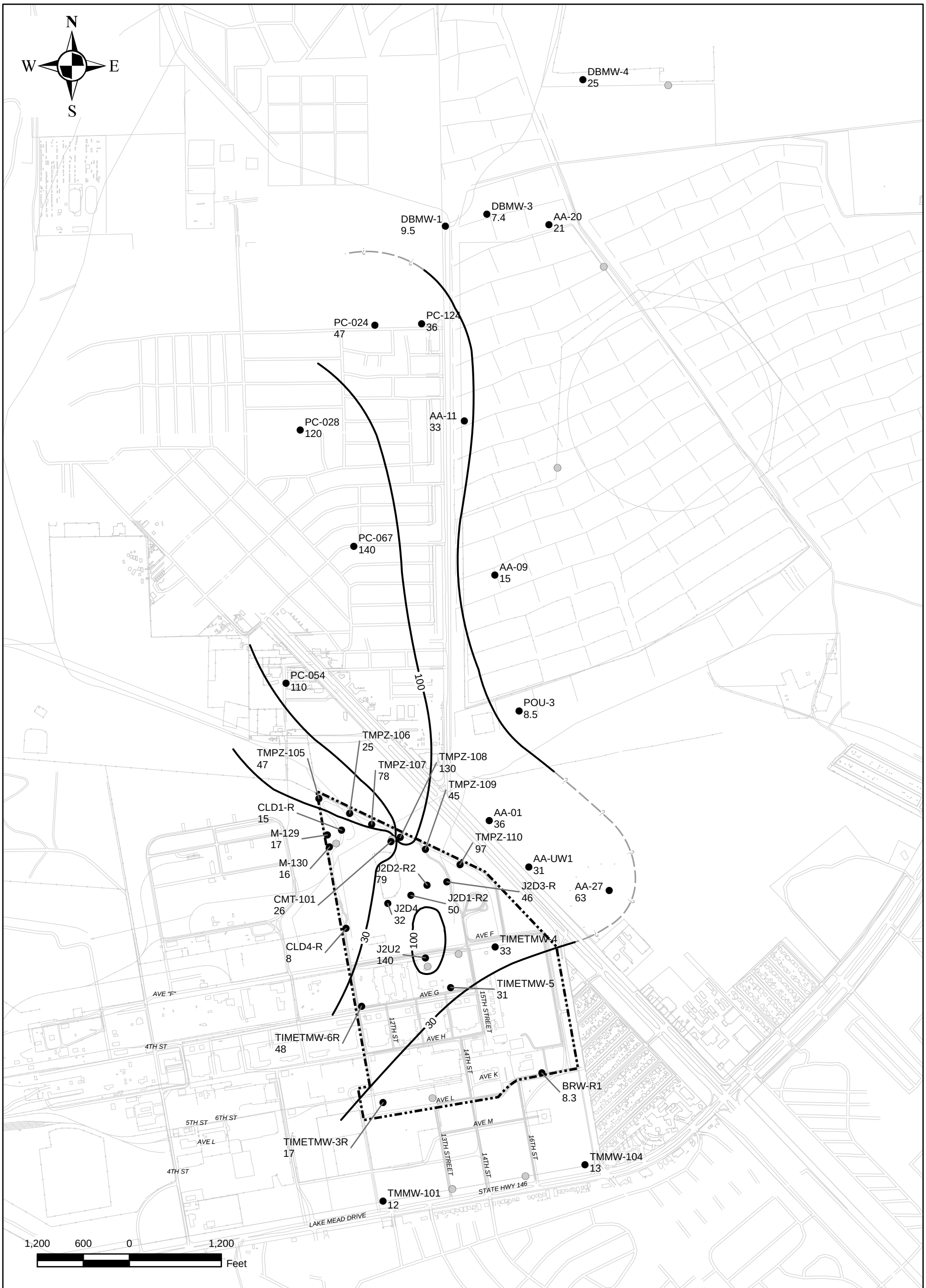
FIGURE D-11
TOTAL TRIHALOMETHANES ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteTHM.mxd michelle.handley



BRW-R1 8.3 ● MONITORING WELL WITH TOTAL URANIUM CONCENTRATION (µg/L)

WELL NOT ANALYZED

100 TOTAL URANIUM CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

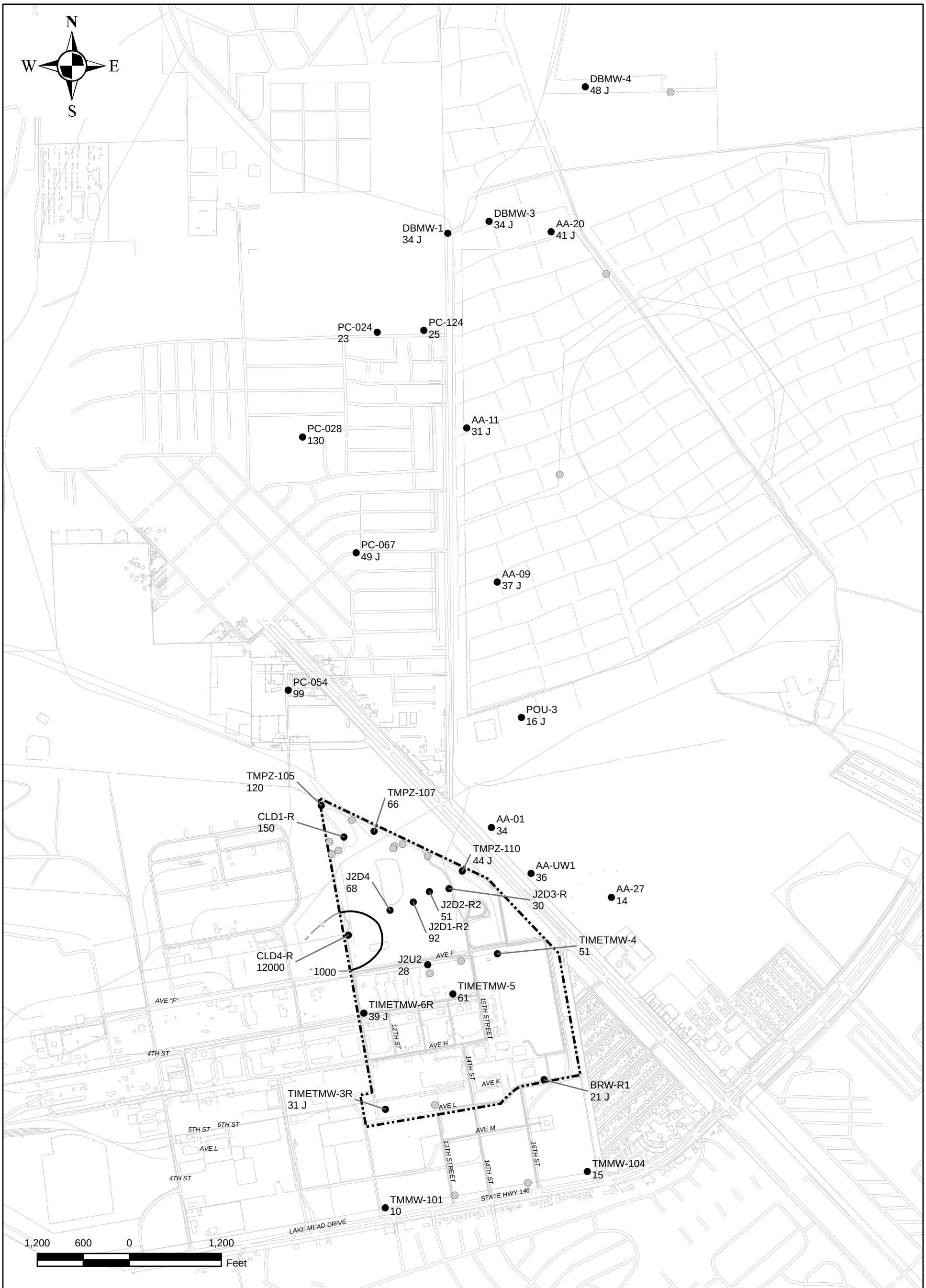
Note:
The screening level used for uranium is the EPA National Drinking Water Standard Maximum Contaminant Level (MCL). The MCL for uranium is 30 µg/L.

Semiannual Groundwater Monitoring Report
1st Semester 2011
Titanium Metals Corporation
Henderson, Nevada

FIGURE D-12
TOTAL URANIUM ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteU.mxd michelle.handley



BRW-R1 21 J ● MONITORING WELL WITH VANADIUM CONCENTRATION (µg/L)

WELL NOT ANALYZED

100 VANADIUM CONTOUR (µg/L)

APPROXIMATE CONTOUR LOCATION

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

Note:
The screening level used for vanadium is the NDEP BCL for residential water of 182.5 ug/L.

Semiannual Groundwater Monitoring Report
1st Semester 2011
Titanium Metals Corporation
Henderson, Nevada

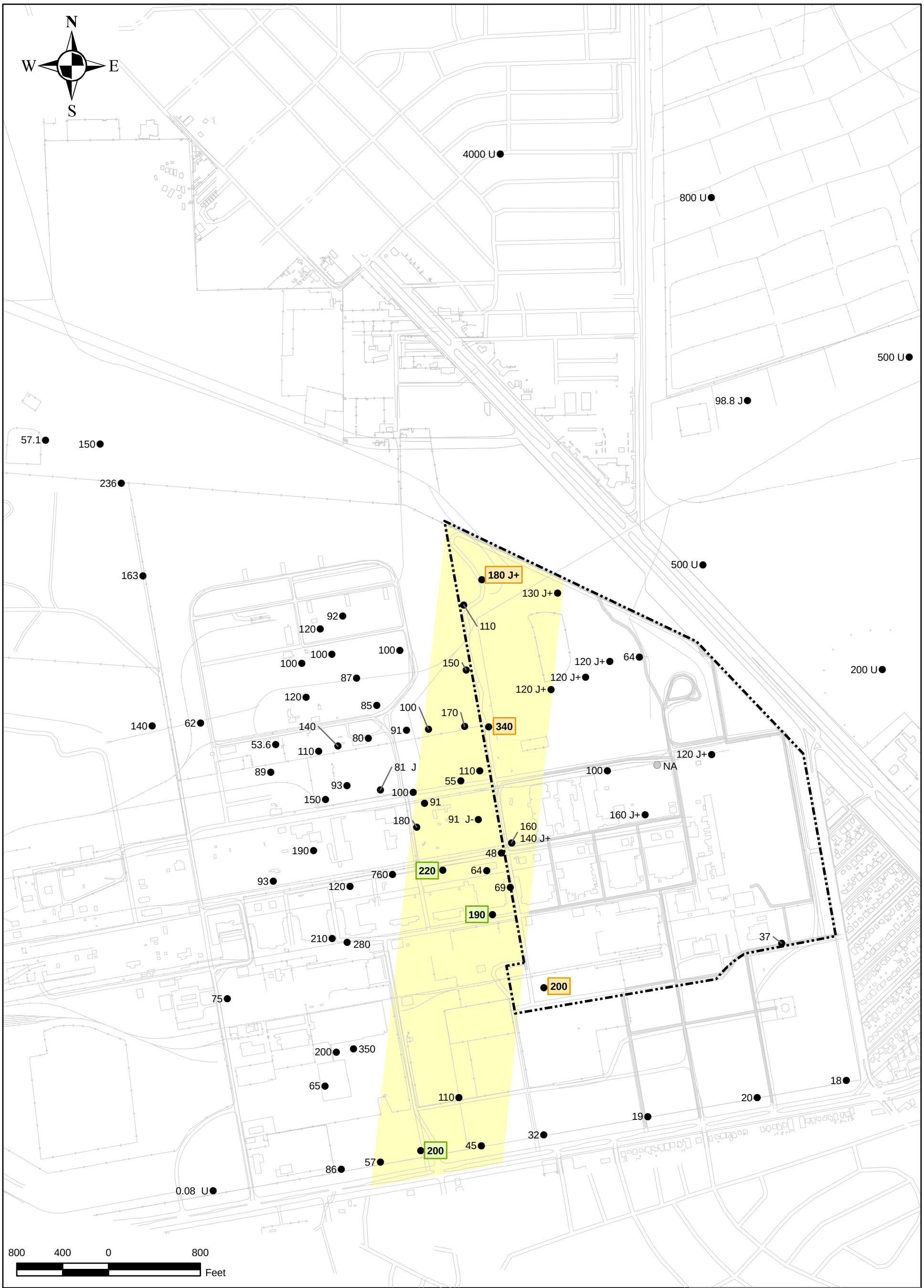
FIGURE D-13
VANADIUM
ISOCONCENTRATION MAP
1ST SEMESTER 2011

TIMET

2011-08-24 C:\TIMET\1stSEM2011\mxd\TIMET_siteV.mxd michelle.handley

APPENDIX E

2009 REGIONAL MAPPING



160 ● MONITORING WELL WITH ARSENIC CONCENTRATION (µg/L)

NA ○ WELL NOT ANALYZED

160 ● REPRESENTATIVE TIMET IMPACTED WELL

220 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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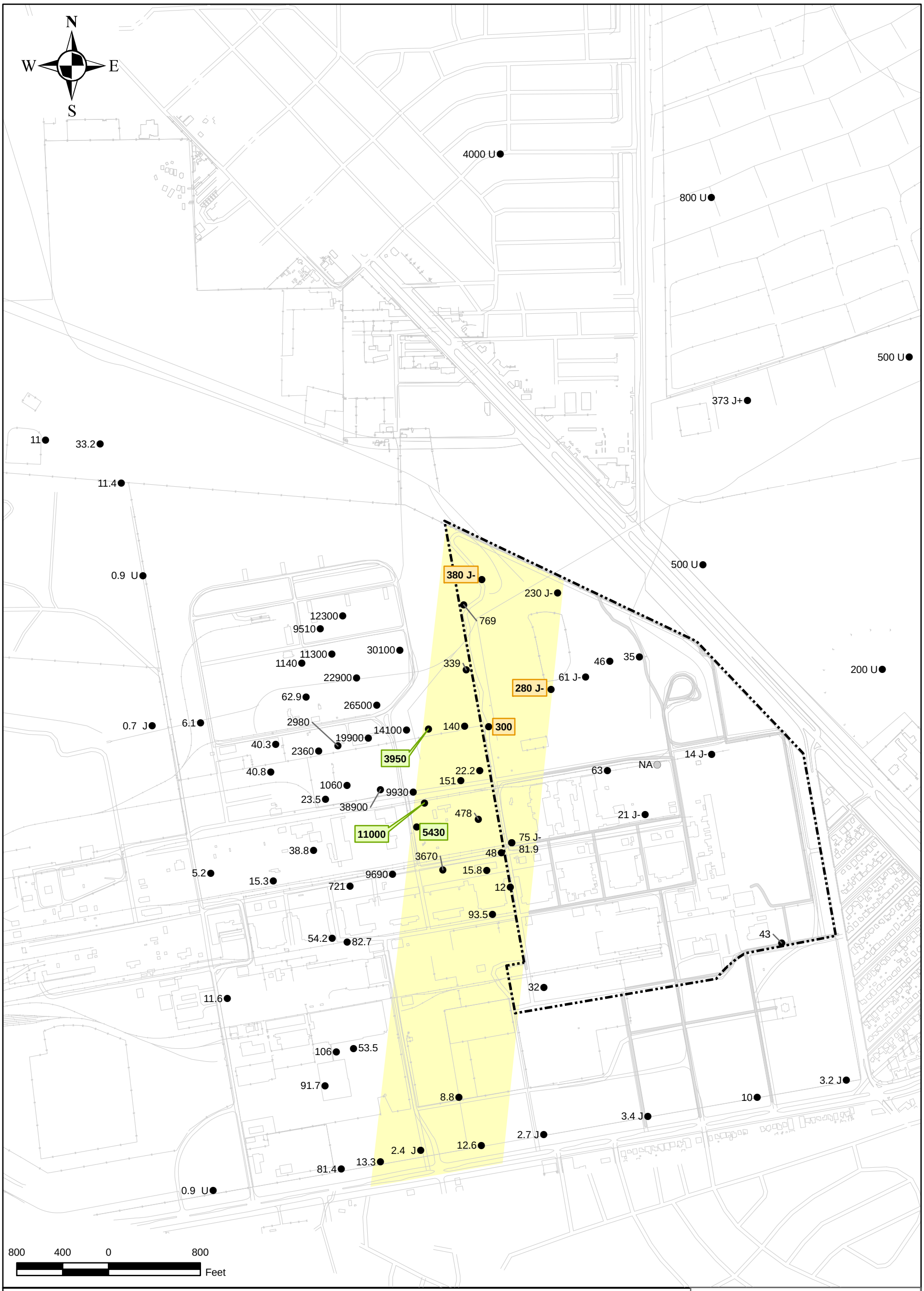
FIGURE E-1
REGIONAL MAPPING OF ARSENIC

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_AS2.mxd michelle.handley



63 ● MONITORING WELL WITH CHROMIUM CONCENTRATION (µg/L)

NA ○ WELL NOT ANALYZED

380 ● REPRESENTATIVE TIMET IMPACTED WELL

11000 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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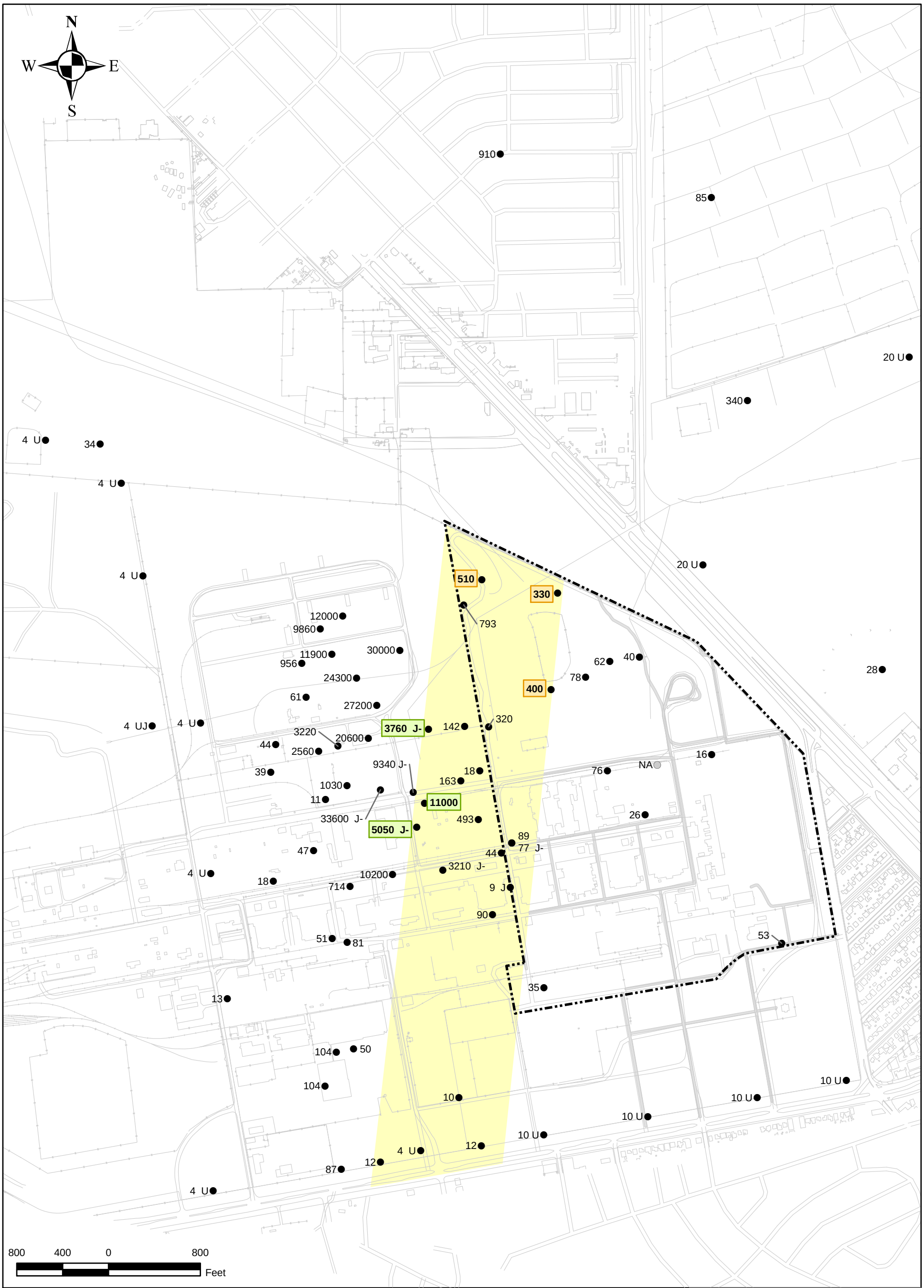
FIGURE E-2a
REGIONAL MAPPING OF CHROMIUM

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_CR.mxd michelle.handley



78 ● MONITORING WELL WITH HEXAVALENT CHROMIUM CONCENTRATION (µg/L)

NA ○ WELL NOT ANALYZED

510 ● REPRESENTATIVE TIMET IMPACTED WELL

11000 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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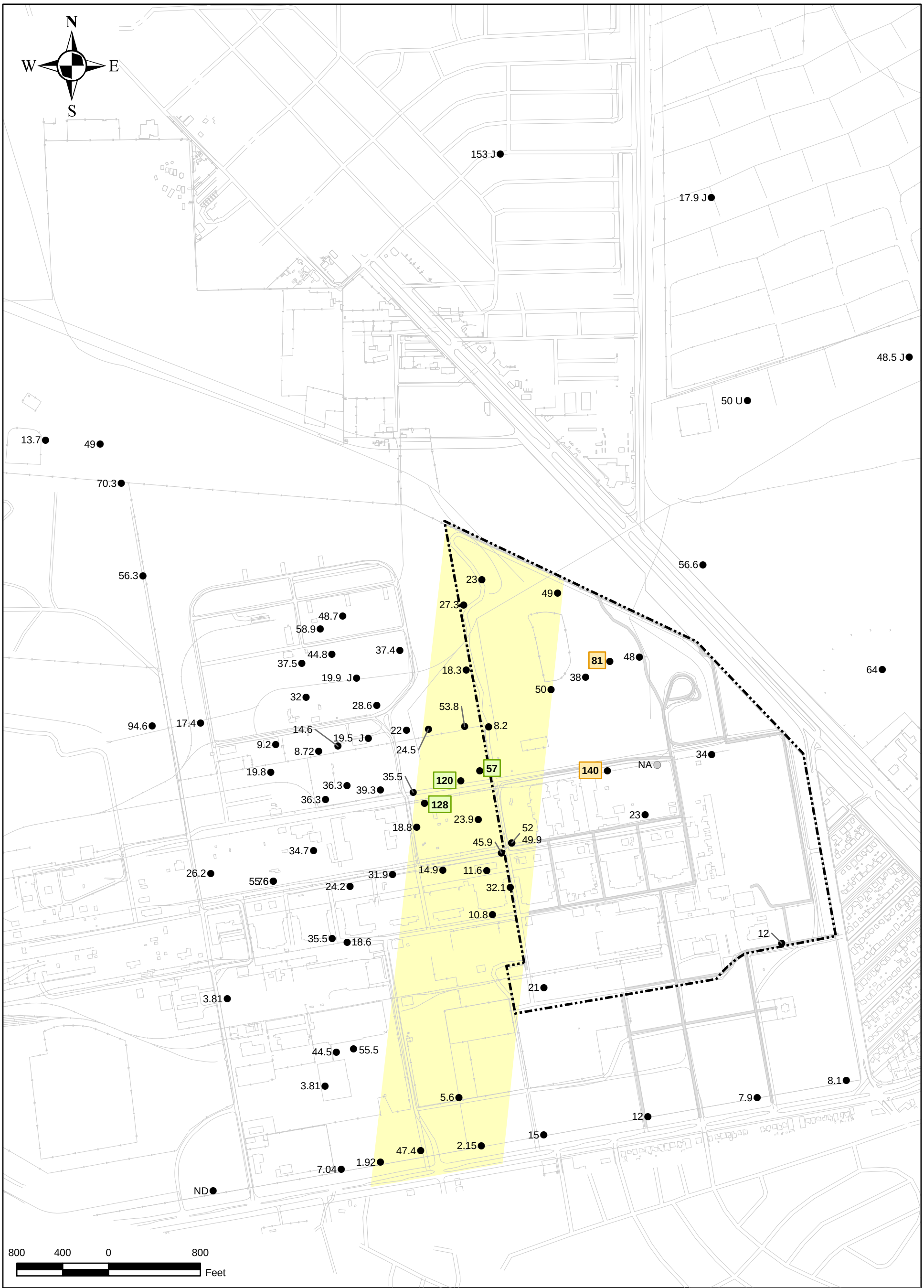
FIGURE E-2b
REGIONAL MAPPING
OF HEXAVALENT CHROMIUM

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_CRVI.mxd michelle.handley



128 ● MONITORING WELL WITH URANIUM CONCENTRATION (µg/L)

NA ○ WELL NOT ANALYZED

140 ● REPRESENTATIVE TIMET IMPACTED WELL

128 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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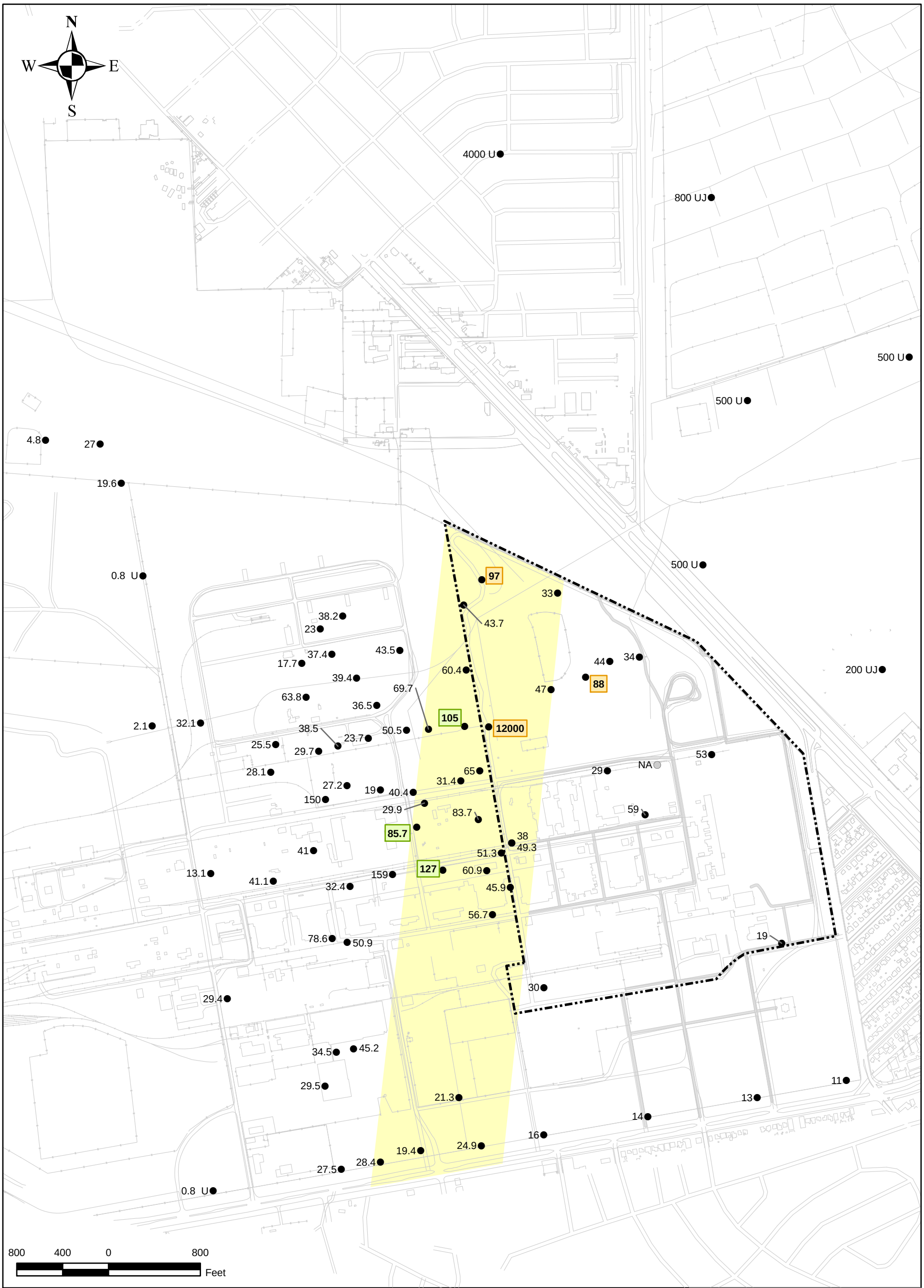
FIGURE E-3
REGIONAL MAPPING OF URANIUM

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_U.mxd michelle.handley



88 ● MONITORING WELL WITH VANADIUM CONCENTRATION (µg/L)

NA ○ WELL NOT ANALYZED

12000 ● REPRESENTATIVE TIMET IMPACTED WELL

127 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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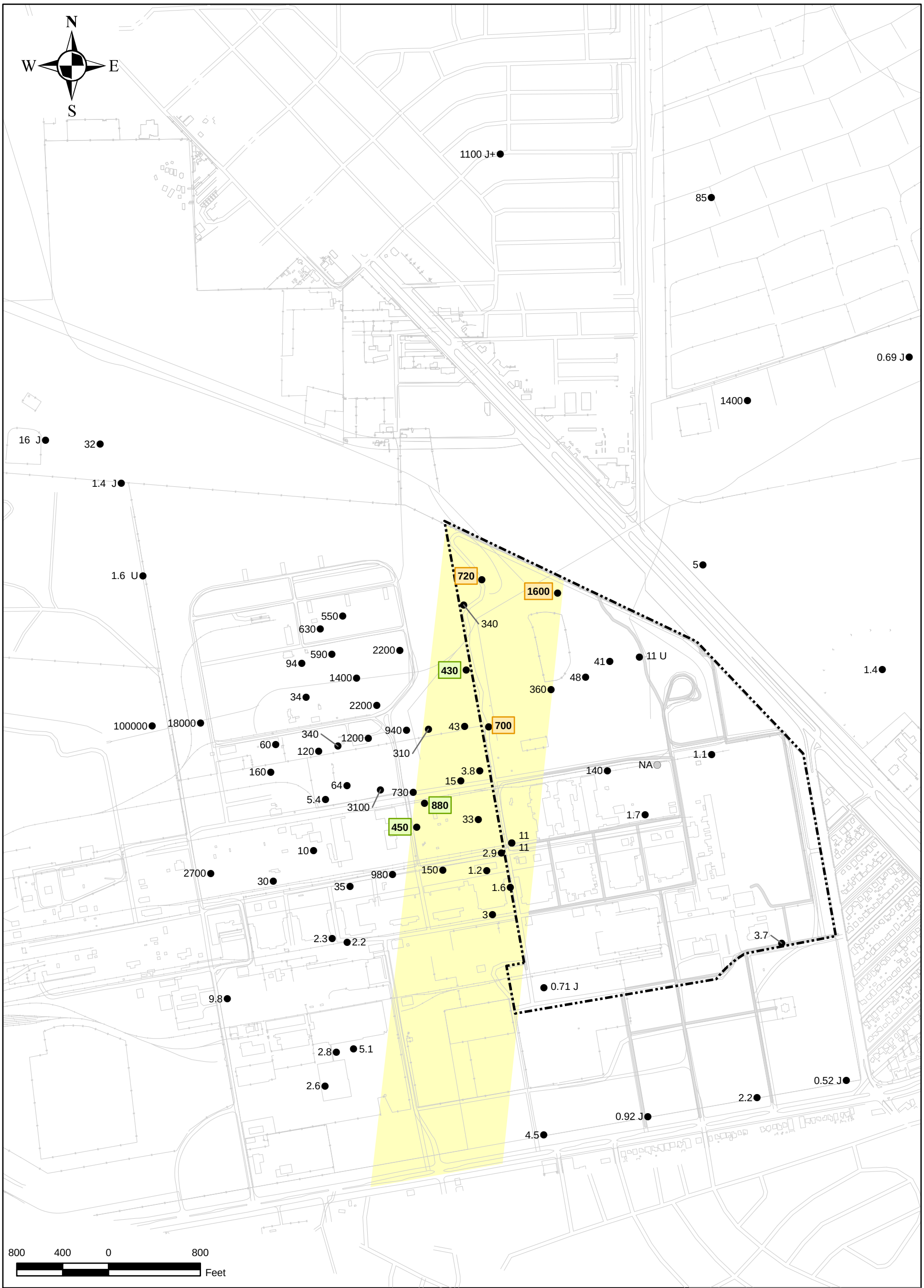
FIGURE E-4
REGIONAL MAPPING OF VANADIUM

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_V.mxd michelle.handley



145 ● MONITORING WELL WITH CHLOROFORM CONCENTRATION (µg/L)

NA ○ WELL NOT ANALYZED

1600 ● REPRESENTATIVE TIMET IMPACTED WELL

880 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

µg/L MICROGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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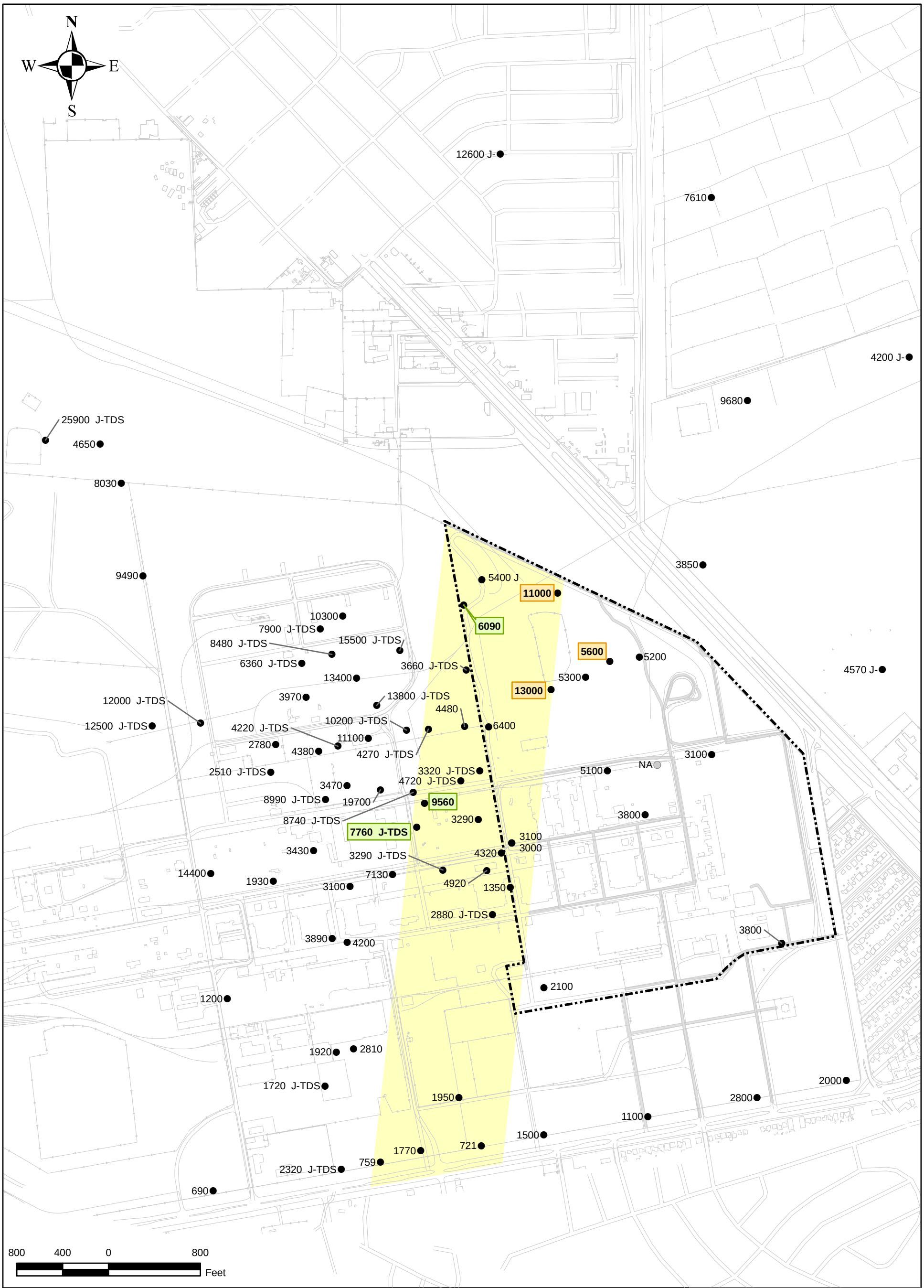
FIGURE E-5
REGIONAL MAPPING OF CHLOROFORM

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_CHLOROFORM.mxd michelle.handley



3800 ● MONITORING WELL WITH TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)

NA ○ WELL NOT ANALYZED

5600 ● REPRESENTATIVE TIMET IMPACTED WELL

6090 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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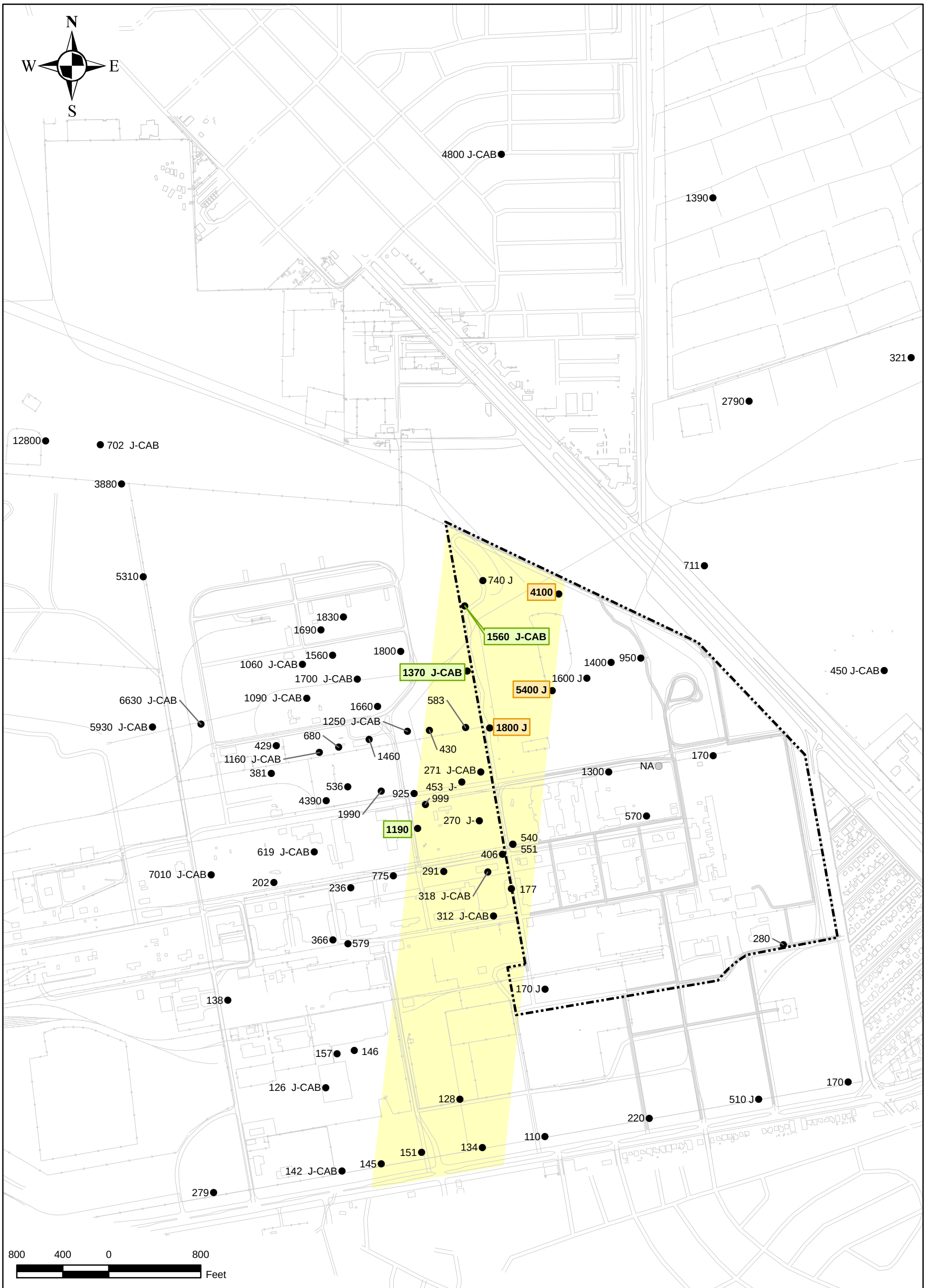
Henderson, Nevada

FIGURE E-6
REGIONAL MAPPING
OF TOTAL DISSOLVED SOLIDS

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_TDS.mxd michelle.handley



570 ● MONITORING WELL WITH CHLORIDE CONCENTRATION (mg/L)

NA ○ WELL NOT ANALYZED

4100 ● REPRESENTATIVE TIMET IMPACTED WELL

1370 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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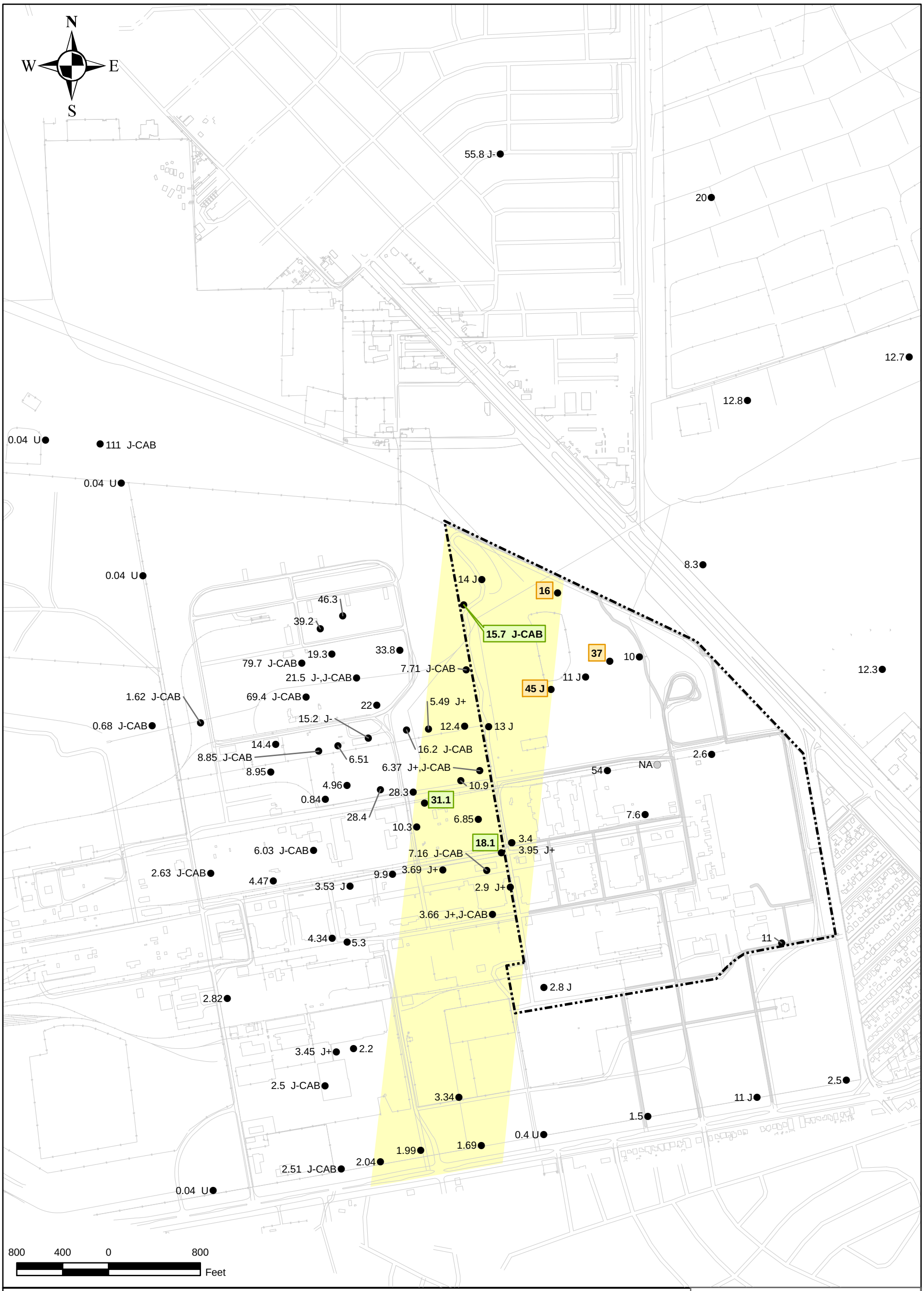
FIGURE E-7
REGIONAL MAPPING OF CHLORIDE

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_PERCHLORATE.mxd michelle.handley



11 ● MONITORING WELL WITH NITRATE CONCENTRATION (mg/L)

NA ○ WELL NOT ANALYZED

37 ● REPRESENTATIVE TIMET IMPACTED WELL

31.1 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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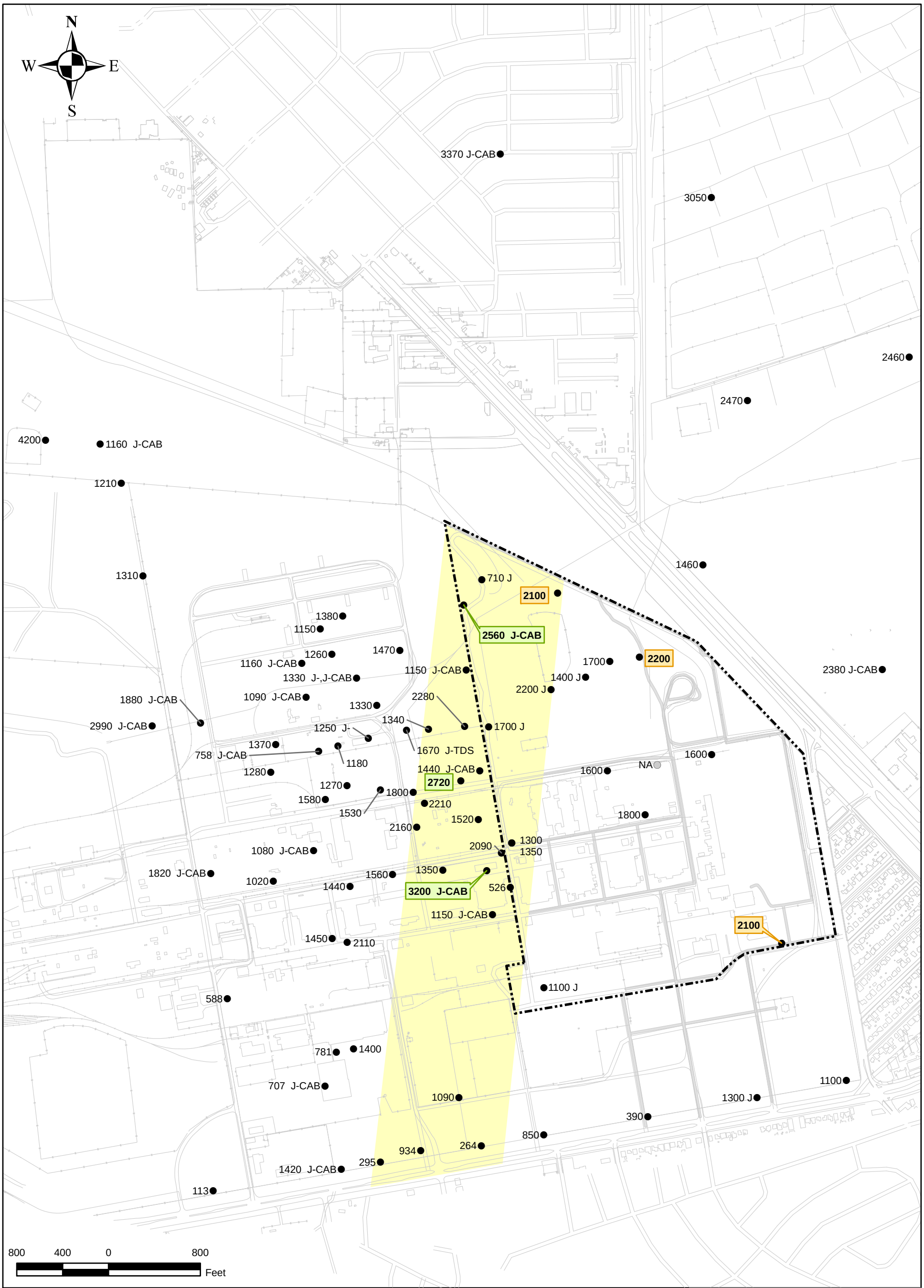
Henderson, Nevada

FIGURE E-8
REGIONAL MAPPING OF NITRATE

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_N.mxd michelle.handley



1600 ● MONITORING WELL WITH SULFATE CONCENTRATION (mg/L)

NA ○ WELL NOT ANALYZED

2100 ● REPRESENTATIVE TIMET IMPACTED WELL

2090 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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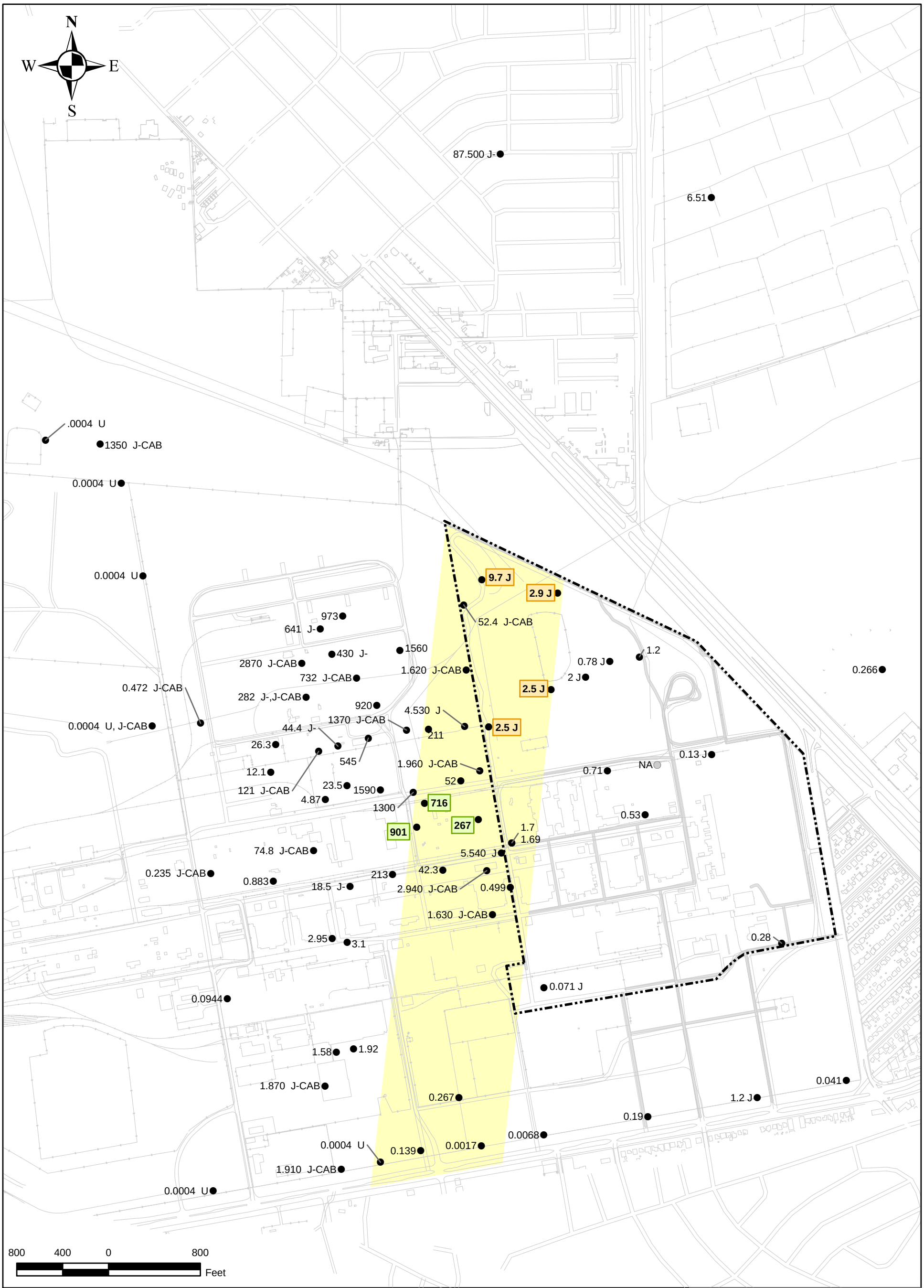
FIGURE E-9
REGIONAL MAPPING OF SULFATE

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_S.mxd michelle.handley



0.71 MONITORING WELL WITH PERCHLORATE CONCENTRATION (mg/L)

NA WELL NOT ANALYZED

9.7 REPRESENTATIVE TIMET IMPACTED WELL

901 REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

mg/L MILLIGRAM PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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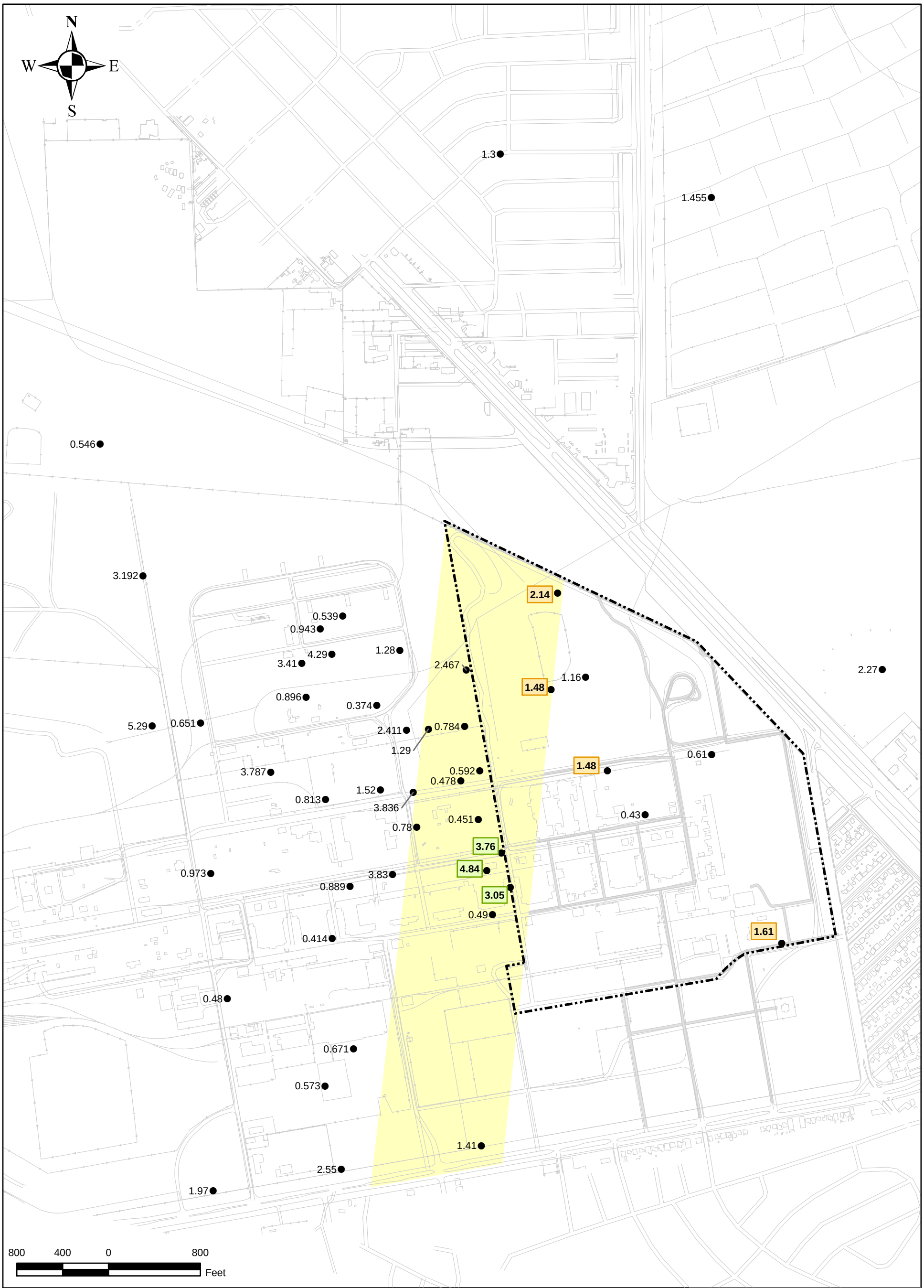
FIGURE E-10
REGIONAL MAPPING OF PERCHLORATE

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_PERCHLORATE.mxd michelle.handley



1.48 ● MONITORING WELL WITH COMBINED RADIUM-226 AND RADIUM-228 CONCENTRATION (pCi/L)

NA ○ WELL NOT ANALYZED

1.48 ● REPRESENTATIVE TIMET IMPACTED WELL

4.84 ● REPRESENTATIVE TRONOX GROUNDWATER WELL

UPGRADIENT ENCROACHMENT CORRIDOR

TIMET PROPERTY BOUNDARY

pCi/L PICOCURIE PER LITER

SOURCE: Tronox Phase B Groundwater Data and TIMET 2nd Semester Groundwater Monitoring Event. Combined dataset is from late 2009.

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FIGURE E-11
REGIONAL MAPPING
OF
COMBINED RADIUM-226 AND RADIUM-228

TIMET

2010-08-16 C:\TIMET\RegionalMapping\mxd\Regional_RAD.mxd michelle.handley