



Sierrita Operations  
Environment, Land & Water Department  
6200 West Duval Mine Road  
PO Box 527  
Green Valley, Arizona 85622-0527

October 28, 2014

**Certified Mail # 7013 1090 0000 3213 3991**  
**Return Receipt Requested**

Ms. Mindi Cross  
Arizona Department of Environmental Quality  
Water Quality Compliance Section  
1110 West Washington Street  
Phoenix, Arizona 85007-2935

**Re:      Semi-annual Groundwater Monitoring Report  
                For Samples Collected During the 2nd and 3<sup>rd</sup>  
                Quarters 2014. Mitigation Order on Consent Docket No. P-50-06**

Dear Ms. Cross:

Attached please find three (3) hard copies and one (1) disc of the *Semiannual Groundwater Monitoring Report for Samples Collected During the Second and Third Quarters 2014*, prepared by Clear Creek Associates for Freeport-McMoRan Sierrita Inc. (Sierrita). This document provides results of groundwater monitoring conducted during the second and third quarters of 2014, as agreed upon and described in the letter from ADEQ dated April 17, 2009.

If you have any questions please feel free to contact me at 520-393-2655.

Sincerely,

Diana Kelts  
Chief Environmental Engineer

DK:dk  
20141028\_002  
Enclosures

xc:     Henry Darwin, Arizona Department of Environmental Quality  
             Marcia Colquitt, Arizona Department of Environmental Quality  
             John Broderick, Sierrita  
             Lana Fretz, Sierrita  
             Ned Hall, Freeport-McMoRan Inc.  
             Stuart Brown, Freeport-McMoRan Inc.  
             Jim Norris, Clear Creek Associates

**SEMIANNUAL GROUNDWATER MONITORING REPORT  
FOR SAMPLES COLLECTED DURING THE SECOND AND  
THIRD QUARTERS 2014**

**MITIGATION ORDER ON CONSENT DOCKET NO. P-50-06  
PIMA COUNTY, ARIZONA**



*Prepared for:*

**FREEPORT-MCMORAN SIERRITA INC.**  
6200 West Duval Mine Road  
Green Valley, Arizona 85614

*Prepared by:*

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October 27, 2014

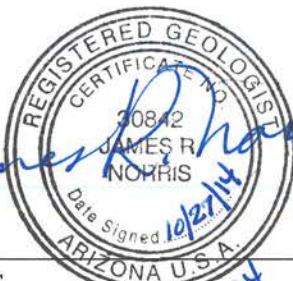
**SEMIANNUAL GROUNDWATER MONITORING REPORT  
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PIMA COUNTY, ARIZONA**

*Prepared for:*

**FREEPORT-MCMORAN SIERRITA INC.**  
6200 West Duval Mine Road  
Green Valley, Arizona 85614

Approved by:

  
  
James R. Norris  
Arizona Registered Geologist No. 30842

October 27, 2014

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## 1. INTRODUCTION

This report provides the results of groundwater monitoring conducted in the second and third quarters 2014 in the vicinity of the Freeport-McMoRan Sierrita Inc. (Sierrita) Tailing Impoundment (STI). Groundwater monitoring is conducted by Sierrita to characterize groundwater sulfate concentrations and groundwater elevations in the vicinity of the STI. This semiannual groundwater monitoring report was prepared by Clear Creek Associates (Clear Creek) on behalf of Sierrita.

### 1.1 Scope of Groundwater Monitoring

Quarterly groundwater monitoring pursuant to the Mitigation Order on Consent Docket No. P-50-06 has been conducted since the fourth quarter 2006 according to the specifications of the Work Plan (Hydro Geo Chem, Inc. [HGC], 2006) submitted to and approved by Arizona Department of Environmental Quality (ADEQ). The purpose of the groundwater monitoring under the Work Plan was to document sulfate concentrations and water levels to determine the lateral and vertical extent of the sulfate plume, and to provide data for the development of conceptual and numerical models of the plume. Submittal of the Aquifer Characterization Report (HGC, 2009) and Feasibility Study (HGC, 2008) fulfilled the objectives of monitoring recommended by the Work Plan.

In 2009, the groundwater monitoring requirements were revised in collaboration with ADEQ. The objectives of the revised groundwater monitoring plan were to track the location of the plume edge and monitor drinking water supply wells near the plume prior to implementation of the mitigation action recommended in the Feasibility Study. For this reason, the 2009 revised monitoring was called the “Pre-Implementation Groundwater Monitoring Plan.” The details of the pre-implementation groundwater monitoring are outlined in letters from Sierrita to ADEQ on May 15, 2009 (Sierrita, 2009a) and June 12, 2009 (Sierrita, 2009b).

In the fourth quarter of 2013, Sierrita completed construction of the mitigation wellfield facilities and submitted the *Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of Freeport-McMoRan Sierrita Inc. Tailing Impoundment* (Clear Creek, 2013). Groundwater pumping for the mitigation action commenced in January 2014 under specifications in the Mitigation Plan. The Mitigation Plan contains a “Post-Implementation Groundwater Monitoring Plan” for monitoring after startup of the mitigation wellfield. The post-implementation groundwater monitoring was implemented in the first quarter 2014.

Table 1 lists the wells identified for annual, quarterly, and semiannual monitoring for the Post-Implementation Groundwater Monitoring Plan. Figure 1 shows the well locations and sampling frequency. The post-implementation monitoring plan retains the specifications of the pre-implementation plan and includes additional water quality monitoring at the fourteen extraction wells put into service in the first quarter 2014 and water level measurement at 40 monitor wells surrounding the wellfield<sup>1</sup>. The extraction wells added for sampling are FFS-1, FFS-2, FFS-3, FFS-4, FFS-5, FFS-6, MC-1, MC-2, MC-3, MC-4, PS-1, PS-2, PS-3, and PS-4.

The groundwater sampling and analysis methods followed by Sierrita are described in the Quality Assurance Project Plan (QAPP) contained in Appendix E of the Work Plan. The results of groundwater monitoring for the second and third quarters 2014 are presented in Section 2.1.

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<sup>1</sup> The Post-Implementation Groundwater Monitoring Plan specifies monthly water level measurement at 40 monitoring wells for the first year of wellfield operation and quarterly measurements thereafter. The monthly water level measurements began in March 2014.

## **2. GROUNDWATER MONITORING**

### **2.1 Monitoring Results**

Analytical results and groundwater elevation data for the second and third quarters 2014 are tabulated in Tables 2 and 3, respectively. Figures 2 and 3 show the concentrations of dissolved sulfate in the wells sampled in second and third quarters 2014, respectively. The highest sulfate concentration measured at co-located wells was used for concentration contouring<sup>2</sup>. Sulfate concentrations are reported as received from the laboratory with no modifications to the number of significant figures. Groundwater elevations in the second and third quarters 2014 are presented on Figures 4 and 5, respectively. These figures show the most recent measurement for wells with multiple water level measurements during the quarter.

Groundwater elevations for the second and third quarters of 2014 were calculated using depth to water measurements taken under non-pumping (static) conditions at most wells. Depth to water was also measured under pumping (dynamic) conditions at the extraction wells operated for the Mitigation Plan. Figures 4 and 5 note which water level data are static and which are dynamic. The dynamic water levels are lower than nearby static water levels because drawdown due to pumping lowers the water table in the vicinity of the extraction wells. Areas of depressed water table around pumping wells are depicted on Figures 4 and 5.

### **2.2 Quality Assurance/Quality Control Review**

Pursuant to Section 6.4 of the QAPP, a data verification report was prepared for quality assurance and quality control purposes. The data verification report reviews groundwater data collected by Sierrita during the second and third quarters 2014, and is included as Appendix A.

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<sup>2</sup> The 250 milligram per liter (mg/L) sulfate contour in the vicinity of the MO-2007-1 wells is drawn based on the calculated maximum distances that the sulfate plume could have migrated since groundwater concentrations at MO-2007-1C exceeded 250 mg/L in the fourth quarter of 2009. The calculated maximum distances are 1,780 feet for second quarter 2014 and 1,875 feet for third quarter 2014. The distances migrated were calculated based on groundwater velocity of 375 feet per year determined using an average hydraulic gradient of 0.00828 between MO-2007-1C and TMM-1 from the fourth quarter 2009 to the second quarter 2014, a hydraulic conductivity of 31 feet per day, and an assumed effective porosity of 25 percent. The distance is considered a maximum because the groundwater velocity was calculated with the highest measured average hydraulic gradient between the MO-2007-1A, -1B, and -1C wells and TMM-1 and the highest hydraulic conductivity measured at the MO-2007-1 wells.

Analytical laboratory reports for samples collected in second and third quarters 2014 are provided in portable document format on the compact diskette in Appendix B. As determined by the data verification report, all data are of acceptable quality for use in the groundwater monitoring program conducted pursuant to the Mitigation Order.

### **2.3 Errata**

Table 2 of the fourth quarter 2013 and first quarter 2014 groundwater monitoring report contained erroneous specific conductance data. Incorrect specific conductance data were reported for the following wells: MO-2007-3C, MO-2007-4A, MO-2007-4B, MO-2007-4C, MO-2007-5B, MO-2007-5C, MO-2007-6A, MO-2007-6B, MO-2009-1, NP-2, PZ-7, PZ-8, and TMM-1. Corrected specific conductance values are reported on Table 2 of this report.

### 3. FINDINGS

This semiannual data report provides the results of groundwater monitoring conducted in the vicinity of the STI for the second and third quarters 2014. Groundwater samples were collected from 85 plume area wells and depth to water measurements were collected from 98 wells during the second quarter 2014. In the third quarter 2014, groundwater samples were collected from 28 plume area wells and depth to water measurements were collected from 55 plume area wells. All wells were sampled according to the schedule in the Post-Implementation Groundwater Monitoring Plan except for ESP-1, IW-8, and IW-26, which were not operational during the second quarter 2014.

- Sulfate concentration data indicate that the sulfate plume from the STI (as defined by the 250 mg/L sulfate concentration contour) extends northeast from the southeastern corner of the tailing impoundment to the east of co-located wells CW-3/MO-2007-5. The plume then extends north from wells CW-3/MO-2007-5 to the west of wells NP-2/MO-2007-3 and north to well TMM-1 (Figures 2 and 3). Comparison of the sulfate concentration data for the second and third quarters of 2014 with those collected in previous quarters indicates that there has not been any significant change to the overall plume geometry, except in the vicinity of the MO-2007-1 wells where northward migration of the plume is interpreted.
- Appendix C presents time series graphs of sulfate concentrations for drinking water supply wells in the vicinity of the edge of the plume, sentinel wells between the plume and the drinking supply wells, and other monitoring wells that document the edge of the plume (Figures 1, 2, and 3).
  - Water Supply Wells - The time series graphs for drinking water supply wells CW-6, CW-9, CW-10, and GV-01-GVDWID, and GV-02-GVDWID indicate that sulfate concentrations are less than the interim action trigger level of 135 mg/L (Clear Creek, 2013). Sulfate concentrations at CW-9, CW-10, and GV-01-GVDWID are steady over time at approximately 50 mg/L. Sulfate concentrations at CW-6 are less than 100 mg/L and have increased since 2010. Sulfate concentrations at GV-02-GVDWID are approximately 50 mg/L and have been declining since the first quarter of 2011.
  - Sentinel Wells - Sulfate concentrations reported for groundwater samples collected from all sentinel wells are less than the 135 mg/L trigger level for more frequent monitoring (Clear Creek, 2013). Sulfate concentrations at the sentinel wells display varying patterns over time, but do not indicate movement of the plume edge toward the drinking water supply wells.
  - Monitoring Wells – Sulfate concentrations at ESP-2, ESP-3, and MO-2007-1A have been steady over time at concentrations less than 50 mg/L. Sulfate concentrations in MO-2007-1B and MO-2007-1C at the north end of the plume increased above 250 mg/L between 2009 and 2011, indicating downgradient

migration of the plume. Sulfate concentrations in ESP-1 on the east side of the plume increased above 250 mg/L in 2010, although the current concentration at ESP-1 is unknown because the well cannot be sampled due to a pump malfunction.

The January 2014 start of groundwater pumping under the Mitigation Plan is expected to prevent downgradient movement of the plume in the future. It will take time for the effect of the Mitigation Plan pumping to be evident in the groundwater monitoring data. Groundwater monitoring and periodic performance reviews of the mitigation action will be conducted according to the Mitigation Plan to track the plume location over time and verify the sulfate concentration of drinking water supplies.

- Appendix D presents time series graphs of groundwater elevation at the sentinel wells. The time series graphs show that since 2007 water levels at these wells have declined at rates ranging from 2.6 to 5.7 feet per year. Groundwater elevations at the sentinel wells are typically slightly higher in the first and second quarters of the year than during the third and fourth quarters.

#### **4. REFERENCES**

- Clear Creek Associates. 2013. Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06. December 18, 2013.
- Hydro Geo Chem, Inc. (HGC). 2006. Work Plan to Characterize and Mitigate Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Phelps Dodge Sierrita Tailing Impoundment, Pima County, Arizona. August 11, 2006, revised October 31, 2006.
- HGC. 2008. Feasibility Study for Mitigation of Sulfate in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06. October 22, 2008.
- HGC. 2009. Revision 1, Aquifer Characterization Report, Task 5 of Aquifer Characterization Plan, Mitigation Order on Consent Docket No. P-50-06. Pima County, Arizona. January 30, 2009.
- Sierrita. 2009a. Letter from Ned Hall (Sierrita) to Cynthia Campbell (ADEQ) Regarding Mitigation Order on Consent Docket P-50-06, Response to ADEQ Comments on Recommended Groundwater Monitoring for Sulfate. May 15, 2009.
- Sierrita. 2009b. Letter from Ned Hall (Sierrita) to Cynthia Campbell (ADEQ) Regarding Mitigation Order on Consent Docket P-50-06, Supplemental Information on Recommended Groundwater Monitoring for Sulfate. June 12, 2009.

## **TABLES**

**TABLE 1**  
**Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	Annual Sampling (Second Quarter)	Semianual Sampling (Fourth Quarter)	Quarterly Sampling	Monthly Water Level Monitoring*
CC of GV	501760	Monitor	Sierrita	✓			
CW-3	627483	DWS	CWC	✓	✓		✓
CW-6	627485	DWS	CWC	✓	✓	✓	
CW-7	502546	Monitor	CWC	WLO			
CW-8	543600	Monitor	CWC	WLO			
CW-9	588121	DWS	CWC	✓	✓	✓	
CW-10	207982	DWS	CWC	✓	✓	✓	
ESP-1	623102	Monitor	Sierrita	✓	✓		
ESP-2	623103	Monitor	Sierrita	✓	✓		✓
ESP-3	623104	Monitor	Sierrita	✓	✓		
ESP-4	623105	Monitor	Sierrita	✓	✓		
ESP-5	623106	Monitor	Sierrita	WLO			
FFS-1	221662	Extraction	Sierrita	✓			
FFS-2	221663	Extraction	Sierrita	✓			
FFS-3	221664	Extraction	Sierrita	✓			
FFS-4	221665	Extraction	Sierrita	✓			
FFS-5	221666	Extraction	Sierrita	✓			
FFS-6	221667	Extraction	Sierrita	✓			
GV-01-GVDWID	603428	DWS	GVDWID	✓	✓	✓	
GV-02-GVDWID	603429	DWS	GVDWID	✓	✓	✓	
GV-SI-GVDWID	208825	DWS	GVDWID	✓			
HAVEN GOLF	515867	Monitor	Haven Golf	✓			
I-10	608525	Monitor	Sierrita	✓			
IW-1	623129	Extraction	Sierrita	✓			
IW-2A	216464	Extraction	Sierrita	✓			
IW-3A	623131	Extraction	Sierrita	✓			
IW-4	623132	Extraction	Sierrita	✓			
IW-5A	623133	Extraction	Sierrita	✓			
IW-6A	545565	Extraction	Sierrita	✓			
IW-8	508236	Extraction	Sierrita	✓			
IW-9	508238	Extraction	Sierrita	✓			
IW-10	508237	Extraction	Sierrita	✓			
IW-11	508235	Extraction	Sierrita	✓			
IW-12	545555	Extraction	Sierrita	✓			

**TABLE 1**  
**Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	Annual Sampling (Second Quarter)	Semianual Sampling (Fourth Quarter)	Quarterly Sampling	Monthly Water Level Monitoring*
IW-13	545556	Extraction	Sierrita	✓			
IW-14	545557	Extraction	Sierrita	✓			
IW-15	545558	Extraction	Sierrita	✓			
IW-16	545559	Monitor	Sierrita	WLO			
IW-17	545560	Monitor	Sierrita	WLO			
IW-18	545561	Monitor	Sierrita	WLO			
IW-19	545562	Extraction	Sierrita	✓			
IW-20	545563	Extraction	Sierrita	✓			
IW-21	545564	Extraction	Sierrita	✓			
IW-22	200554	Extraction	Sierrita	✓			
IW-23	200555	Extraction	Sierrita	✓			
IW-24	200556	Extraction	Sierrita	✓			
IW-25	219596	Extraction	Sierrita	✓			
IW-26	219143	Extraction	Sierrita	✓			
IW-27	219136	Extraction	Sierrita	✓			
IW-28	219137	Extraction	Sierrita	✓			
M-8	87390	Monitor	Sierrita	✓	✓		✓
M-9	501652	Monitor	Sierrita	✓			✓
M-10	501653	Monitor	Sierrita	✓	✓		
M-20	906595	Monitor	Sierrita	✓			
MC-1	221660	Extraction	Sierrita	✓			
MC-2	221761	Extraction	Sierrita	✓			
MC-3	221661	Extraction	Sierrita	✓			
MC-4	220842	Extraction	Sierrita	✓			
MH-1	803629	Monitor	Sierrita	WLO			
MH-3	803630	Monitor	Sierrita	WLO			✓
MH-5	803632	Monitor	Sierrita	WLO			
MH-6	803633	Monitor	Sierrita	WLO			
MH-7	803634	Monitor	Sierrita	WLO			
MH-9	803635	Monitor	Sierrita	WLO			✓
MH-10	803636	Monitor	Sierrita	✓			
MH-11	803637	Monitor	Sierrita	✓			✓
MH-12	803638	Monitor	Sierrita				✓
MH-13A	904071	Monitor	Sierrita	✓			✓

**TABLE 1**  
**Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	Annual Sampling (Second Quarter)	Semianual Sampling (Fourth Quarter)	Quarterly Sampling	Monthly Water Level Monitoring*
MH-13B	904072	Monitor	Sierrita	✓			✓
MH-13C	904073	Monitor	Sierrita	✓			✓
MH-14	528098	Monitor	Sierrita	WLO			✓
MH-15E	528094	Monitor	Sierrita	WLO			✓
MH-15W	528093	Monitor	Sierrita	WLO			✓
MH-16E	528100	Monitor	Sierrita	WLO			✓
MH-16W	528099	Monitor	Sierrita	WLO			✓
MH-24	563799	Monitor	Sierrita	WLO			
MH-25A	201528	Monitor	Sierrita	✓			✓
MH-25B	208429	Monitor	Sierrita	✓			✓
MH-25C	208426	Monitor	Sierrita	✓			✓
MH-26A	201527	Monitor	Sierrita	✓			✓
MH-26B	208427	Monitor	Sierrita	✓			✓
MH-26C	208428	Monitor	Sierrita	✓			✓
MH-28	903648	Monitor	Sierrita	✓	✓		✓
MH-29	903649	Monitor	Sierrita	✓	✓		✓
MH-30	903884	Monitor	Sierrita	✓			✓
MO-2007-1A	907342	Monitor	Sierrita	✓	✓		✓
MO-2007-1B	907210	Monitor	Sierrita	✓	✓		✓
MO-2007-1C	907209	Monitor	Sierrita	✓	✓		✓
MO-2007-2	906765	Monitor	Sierrita	✓			✓
MO-2007-3B <sup>1</sup>	906816	Sentinel	Sierrita	✓	✓	✓	✓
MO-2007-3C <sup>1</sup>	906817	Sentinel	Sierrita	✓	✓	✓	✓
MO-2007-4A <sup>2</sup>	907213	Sentinel	Sierrita	✓	✓	✓	✓
MO-2007-4B <sup>2</sup>	907212	Sentinel	Sierrita	✓	✓	✓	✓
MO-2007-4C <sup>2</sup>	907211	Sentinel	Sierrita	✓	✓	✓	✓
MO-2007-5B	907456	Monitor	Sierrita	✓	✓		✓
MO-2007-5C	907457	Monitor	Sierrita	✓	✓		✓
MO-2007-6A <sup>3</sup>	907607	Sentinel	Sierrita	✓	✓	✓	✓
MO-2007-6B <sup>3</sup>	907606	Sentinel	Sierrita	✓	✓	✓	✓
MO-2009-1 <sup>4</sup>	910458	Sentinel	Sierrita	✓	✓	✓	✓
NP-2 <sup>1</sup>	605898	Sentinel	CWC	✓	✓	✓	✓
PS-1	220861	Extraction	Sierrita	✓			
PS-2	220862	Extraction	Sierrita	✓			

**TABLE 1**  
**Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	Annual Sampling (Second Quarter)	Semianual Sampling (Fourth Quarter)	Quarterly Sampling	Monthly Water Level Monitoring*
PS-3	220863	Extraction	Sierrita	✓			
PS-4	220864	Extraction	Sierrita	✓			
PZ-7	561870	Monitor	Sierrita	✓			
PZ-8	561866	Monitor	Sierrita	✓			
TMM-1	616156	Monitor	Pima County	✓	✓		
1350	ND	Monitor	Sierrita	WLO			

*Notes:*

ADWR = Arizona Department of Water Resources

CC OF GV = Country Club of Green Valley

CWC = Community Water Company of Green Valley

DWS = Drinking Water Supply

GVDWID = Green Valley Domestic Water Improvement District

ND = No Data

Sierrita = Freeport-McMoRan Sierrita Inc.

WLO = Water Level Only

<sup>1</sup> Sentinel Well for CW-9

<sup>2</sup> Sentinel Well for CW-6

<sup>3</sup> Sentinel Well for GV-01-GVDWID and GV-02-GVDWID

<sup>4</sup> Sentinel Well for CW-10

\* Monthly water level monitoring for first year of operation, quarterly thereafter

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
CC OF GV	501760	1/15/07	7.31	23.0	767	133
		4/16/07	7.44	22.6	767	133
		7/9/07	7.58	24.5	658	104
		1/10/08	7.27	22.5	689	143
		4/16/08	7.37	25.2	426	69.4
		7/7/08	6.97	23.7	736	119
		10/9/08	7.26	24.8	476	72.4
		2/4/09	8.08	13.8	399	107
		4/21/09	6.92	19.8	526	90.1
		4/22/10	6.99	21.26	929	95
		4/21/11	6.95	17.6	494	82
		6/26/12	7.13	27.7	565	88.69
		5/14/13	7.46	23.3	706	147.80
		4/23/14	6.94	22.3	744	156
		6/6/07	7.74	25.3	449	57.9
		8/10/07	7.40	25.9	444	59.5
		1/11/08	7.55	25.1	432	55.7
CW-3	627483	4/17/08	7.32	25.6	398	54.1
		7/11/08	7.53	25.7	484	56.7
		10/6/08	7.50	25.3	430	56.2
		2/9/09	7.68	24.3	347	54.3
		4/24/09	6.75	25.4	520	56.2
		12/31/09	7.57	23.8	419	56.2
		4/22/10	7.32	23.03	475	57.7
		10/25/10	7.60	25.5	460	57.6
		5/2/11	7.55	26.4	390	56.8
		12/5/11	7.79	22.7	437	55.18
		6/18/12	7.57	28.4	517	61.70
		12/13/12	7.64	24.1	473	63.84
		12/13/12 DUP	7.64	24.1	473	64.04
		6/13/13	7.63	24.4	444	70.8
		11/12/13	7.24	23.8	417	67.2
		11/12/13 DUP	7.24	23.8	417	67.2
		5/6/14	7.81	24.3	393	70.7
		5/6/14 DUP	7.81	24.3	393	70.6

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
CW-6	627485	12/4/06	NM	NM	NM	46.2
		1/3/07	7.73	26.8	418	49.2
		1/3/07	7.73	26.8	418	49.5
		5/14/07	7.58	26.1	507	68.7
		7/10/07	7.60	26.9	475	57.6
		7/10/07	7.60	26.9	475	58
		1/8/08	7.64	27.1	368	48.9
		4/15/08	7.25	26.9	382	51.2
		7/8/08	7.43	27.2	416	47.9
		10/7/08	7.52	26.6	431	51.5
		10/7/08 DUP	7.52	26.6	431	51.5
		2/6/09	7.87	26.6	317	48.2
		4/22/09	7.62	25.3	377	47.9
		4/22/09 DUP	7.62	25.3	377	47.3
		9/17/09	7.18	24.8	478	70
		11/5/09	7.52	25.1	434	59.7
		2/10/10	7.68	24.4	369	46.6
		5/14/10	7.70	26.50	380	52.1
		7/27/10	7.50	27.5	444	55.2
		10/14/10	7.67	26.2	429	52.5
		2/24/11	7.57	23.4	455	70.3
		4/28/11	7.66	25.2	453	58.1
		7/20/11	7.52	25.5	417	81
		12/14/11	7.76	23.7	429	54.50
		12/14/11 DUP	7.76	23.7	429	54.42
		1/24/12	7.49	25.2	303	60.17
		5/9/12	7.70	26.5	489	80.99
		8/29/12	7.44	25.2	537	82.24
		12/12/12	7.47	23.6	541	82.98
		2/6/13	7.32	24.0	457	76.54
		5/15/13	7.63	24.7	513	91.94
		7/17/13	7.47	25.3	500	91.60
		10/23/13	7.50	25.1	365	85.1
		1/14/14	7.49	22.4	395	87.2
		4/16/14	7.65	24.4	434	85.6
		7/22/14	7.21	25.5	614	78.0

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
CW-7	502546	1/3/07	7.38	27.4	1799	807
		5/14/07	7.40	27.4	1860	874
		7/10/07	7.32	27.4	1945	860
		1/8/08	7.26	27.3	1860	1080
		4/15/08	7.31	27.6	1758	900
		7/8/08	7.11	27.9	2037	890
		7/8/08 DUP	7.11	27.9	2037	910
CW-8	543600	1/24/07	7.67	29.7	1232	449
		5/14/07	7.69	29.4	1379	529
		7/10/07	7.63	29.8	1401	500
		1/8/08	7.59	7.6	1160	466
		4/15/08	7.54	29.5	1135	441
		7/8/08	7.40	29.8	1373	504
CW-9	588121	12/4/06	NM	NM	NM	44.5
		1/3/07	7.74	27.0	387	44.9
		5/14/07	7.74	27.5	414	47.8
		7/10/07	7.68	22.6	414	46.7
		1/8/08	7.55	27.3	356	47.3
		4/15/08	7.39	27.4	347	43.7
		7/8/08	7.26	27.9	396	44.1
		10/7/08	7.50	27.7	395	43.5
		2/6/09	7.79	26.8	300	45.1
		4/22/09	7.81	26.3	361	44.3
		7/30/09	7.57	28.3	379	43.8
		11/5/09	6.82	27.4	376	44.7
		2/10/10	7.55	26.0	351	43.4
		5/14/10	7.62	28.1	345	44.2
		7/27/10	7.58	28.4	390	44.1
		10/14/10	7.72	27.5	389	44.2
		2/24/11	7.75	26.3	347	42.7
		4/28/11	7.68	28.8	377	44.4
		7/20/11	7.71	27.8	379	43.9
		12/14/11	7.69	26.5	373	43.80
		1/24/12	7.70	25.1	262	45.60
		5/9/12	7.67	28.3	356	44.39
		8/29/12	7.62	27.9	372	43.94
		12/12/12	7.75	26.6	382	42.14
		2/6/13	7.43	26.7	325	39.87
		5/15/13	7.70	27.0	367	45.78
		7/17/13	7.66	28.1	374	43.70
		10/23/13	7.66	26.9	260	44.4
		1/14/14	7.60	26.1	275	44.3
		1/14/14 DUP	7.60	26.1	275	44.1
		4/16/14	7.84	26.7	304	44.2
		7/22/14	7.47	27.6	446	41.8
		7/22/14 DUP	7.47	27.6	446	42.0

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
CW-10	207982	12/4/06	NM	NM	NM	37.2
		1/24/07	7.90	30.2	385	48.6
		5/14/07	7.81	31.3	392	52.8
		7/10/07	7.82	31.3	403	51.7
		1/8/08	7.79	28.2	334	45.3
		4/15/08	7.51	30.6	339	50.8
		7/8/08	7.34	31.2	385	50.5
		10/7/08	7.59	30.5	380	48.3
		2/6/09	7.91	29.8	295	51.3
		4/22/09	7.71	29.2	349	47.9
		7/30/09	7.60	31.5	375	49.2
		7/30/09 DUP	7.60	31.5	375	49.4
		11/5/09	7.60	29.7	364	49.9
		2/10/10	7.69	28.4	346	44.9
		5/14/10	7.79	30.7	349	49.1
		7/27/10	7.69	31.4	380	48.9
		10/14/10	7.74	30.2	377	48.5
		2/24/11	7.83	29.3	346	50.2
		2/24/11 DUP	7.83	29.3	346	50.2
		4/28/11	7.54	27.9	372	49.6
		7/20/11	7.72	31.4	383	50.7
		12/14/11	7.81	29.8	370	49.24
		1/24/12	7.77	28.7	265	52.32
		5/9/12	7.85	30.9	354	52.51
		8/29/12	7.74	31.4	369	50.95
		12/12/12	7.77	29.3	392	52.33
		2/6/13	7.52	29.3	332	47.91
		5/15/13	7.85	30.6	365	52.35
		5/15/13 DUP	7.85	30.6	365	52.77
		7/17/13	8.12	31.5	353	54.80
		10/25/13	7.70	29.8	260	51.7
		1/14/14	7.45	29.2	266	50.8
		4/16/14	7.93	30.0	298	50.2
		7/22/14	7.93	31.0	427	47.9
ESP-1	623102	12/4/06	NM	NM	NM	262
		1/3/07	7.65	28.0	869	242
		5/14/07	7.70	28.7	592	113
		7/10/07	7.66	28.8	584	94
		1/23/08	7.73	27.6	492	100
		4/18/08	7.61	29.6	474	102
		7/25/08	7.52	28.4	561	104
		10/30/08	7.55	26.9	576	121
		1/29/09	7.44	25.2	491	113
		4/16/09	7.72	25.4	541	130
		11/10/09	7.45	26.8	649	173
		4/28/10	7.49	28.7	639	204
		10/15/10	7.49	27.7	953	291
		5/3/11	7.51	28.1	1060	359
		12/13/11	7.49	26.1	1046	387.52
		6/19/12	7.43	30.4	1221	395.72

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
ESP-2	623103	12/4/06	NM	NM	NM	29.6
		1/3/07	7.82	28.4	377	31.3
		5/14/07	7.86	27.8	368	28.4
		7/10/07	7.73	28.9	380	28.6
		1/23/08	7.85	25.8	366	30
		4/18/08	7.80	27.3	325	27.6
		7/25/08	7.65	28.6	361	26.8
		10/30/08	7.22	27.5	374	30.1
		10/30/08 DUP	7.22	27.5	374	30
		1/29/09	6.38	25.4	317	27.8
		4/16/09	7.55	24.0	307	28.2
		11/10/09	7.58	27.0	343	28.9
		4/28/10	7.67	27.9	324	28.7
		10/15/10	7.78	27.6	355	27.9
		10/15/10 DUP	7.78	27.6	355	27.8
		5/3/11	7.72	27.8	361	28.1
		5/3/11 DUP	7.72	27.8	361	28.1
		11/22/11	7.84	26.0	350	26.65
		6/19/12	7.65	31.7	387	27.75
		11/21/12	7.55	28.8	333	26.79
		5/20/13	7.70	28.2	350	27.86
		11/5/13	7.72	27.9	245	26.9
		4/28/14	7.91	27.5	291	28.3
ESP-3	623104	12/4/06	NM	NM	NM	36.2
		1/3/07	7.83	27.8	393	37.5
		5/14/07	7.78	28.8	374	36.6
		5/14/07	7.78	28.8	374	36.6
		7/10/07	7.84	29.2	378	36.6
		1/23/08	7.99	26.1	373	30
		4/18/08	7.82	27.8	322	35.7
		7/25/08	7.70	28.2	358	34
		10/30/08	7.58	27.8	375	36.8
		1/29/09	7.73	23.9	327	35.2
		4/16/09	7.62	26.1	327	35.3
		11/12/09	7.71	27.0	354	39.5
		4/28/10	7.77	25.8	326	35.8
		10/15/10	7.76	27.5	356	35.2
		5/3/11	7.82	27.2	362	35.1
		11/22/11	7.95	27.6	337	34.18
		6/19/12	7.87	30.6	390	34.98
		11/21/12	7.59	28.4	327	35.4
		5/22/13	7.71	26.7	368	35.87
		11/5/13	7.76	27.2	242	35.6
		4/28/14	7.90	27.7	287	35.9

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
ESP-4	623105	3/20/07	7.67	26.7	1187	393
		6/4/07	7.45	28.4	733	385
		7/24/07	7.34	28.4	918	410
		7/24/07	7.34	28.4	918	420
		1/23/08	7.83	24.4	787	520
		4/18/08	7.71	27.2	821	462
		7/25/08	7.52	28.6	1096	420
		10/30/08	7.23	25.9	962	489
		1/29/09	7.52	24.7	950	522
		4/16/09	7.30	25.4	873	521
		10/23/09	7.41	27.8	954	485
		4/28/10	7.37	26.7	936	558
		4/28/10 DUP	7.37	26.7	936	520
		10/15/10	7.41	27.9	1356	539
		5/3/11	7.54	27.1	1465	595
		11/12/12	7.60	26.3	1337	618.5
		5/20/13	7.46	28.5	1173	581.6
		11/5/13	7.47	26.8	843	585
		4/28/14	7.70	25.8	814	352
FFS-1	221662	2/4/14	7.63	23.2	3230	1780
		2/4/14 DUP	7.63	23.2	3230	1750
		4/15/14	7.61	25.6	1871	1760
		7/9/14	7.08	26.4	3080	1850
FFS-2	221663	2/4/14	7.61	24.4	3120	1730
		4/15/14	7.46	27.0	1788	1710
		4/15/14 DUP	7.46	27.0	1788	1730
		7/9/14	6.97	27.4	2920	1840
		7/9/14 DUP	6.97	27.4	2920	1820
FFS-3	221664	2/4/14	7.37	29.5	2630	1450
		4/15/14	7.41	31.1	1559	1440
		7/9/14	6.98	32.0	2580	1560
FFS-4	221665	2/4/14	7.59	29.1	1857	1100
		4/15/14	7.64	31.4	1347	1140
		7/9/14	7.09	32.6	2190	1260
FFS-5	221666	2/4/14	7.36	27.5	2580	1360
		4/15/14	7.56	28.8	1528	1360
		7/9/14	6.93	30.0	2460	1400
FFS-6	221667	2/4/14	7.41	27.4	2250	1260
		4/15/14	7.53	29.2	1378	1130
		7/9/14	6.94	29.9	2220	1210

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
GV-01-GVDWID	603428	8/6/06	NM	NM	NM	41.2
		1/9/07	8.00	25.8	424	40.9
		4/10/07	7.69	27.2	421	43.2
		7/11/07	7.64	26.8	447	41.5
		1/7/08	7.49	25.7	422	45.7
		4/16/08	7.29	25.8	399	44.1
		7/7/08	7.14	26.1	466	45.2
		10/9/08	7.25	26.6	414	39
		2/4/09	7.50	26.4	338	42.3
		4/22/09	7.05	27.8	380	40.6
		7/29/09	7.17	24.6	606	44.3
		11/4/09	7.45	25.1	415	45.1
		1/27/10	7.54	24.5	411	47.0
		4/1/10	7.49	24.6	420	48.5
		7/28/10	7.20	28.1	348	39.4
		10/14/10	7.29	26.4	411	38.4
		1/20/11	7.04	23.0	408	40.0
		4/28/11	7.30	27.5	421	42.9
		7/20/11	6.88	27.1	429	39.6
		12/7/11	7.68	25.4	416	39.31
		3/14/12	7.61	26.0	406	35.56
		6/7/12	7.21	26.9	420	37.87
		8/29/12	7.38	27.6	409	36.15
		11/15/12	7.27	23.9	450	33.95
		1/29/13	7.34	24.9	373	38.61
		5/16/13	7.64	26.8	398	38.80
		7/11/13	7.79	26.4	367	42.60
		7/11/13 DUP	7.79	26.4	367	42.50
		10/16/13	6.72	26.0	388	33.0
		1/10/14	7.31	24.2	486	34.2
		1/10/2014 DUP	7.31	24.2	486	34.2
		4/15/14	7.95	25.2	325	35.5
		7/21/14	7.42	27.3	498	31.9

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
GV-02-GVDWID	603429	8/6/06	NM	NM	NM	48.6
		10/4/06	NM	NM	NM	95.3
		1/9/07	7.68	23.6	626	103
		4/10/07	7.60	24.1	479	106
		7/11/07	7.50	24.0	649	98
		1/7/08	7.32	23.3	611	98
		4/16/08	7.28	23.7	553	97
		7/7/08	7.12	23.8	642	93.2
		10/9/08	7.18	24.2	599	93.5
		2/4/09	7.36	23.9	489	98.8
		4/22/09	6.67	26.5	485	79.5
		7/29/09	7.02	26.4	427	91.6
		11/4/09	7.25	24.3	547	93.2
		1/27/10	7.47	22.0	547	94.9
		1/27/10 DUP	7.47	22.0	547	94.5
		4/1/10	7.33	22.9	555	99.5
		7/28/10	7.23	24.6	650	83
		10/14/10	7.36	24.5	629	90.7
		1/20/11	7.37	23.1	611	92.7
		4/28/11	7.43	24.5	612	87.3
		7/20/11	7.35	24.0	624	87.2
		12/7/11	7.53	21.8	578	77.88
		3/14/12	7.37	23.8	566	77.35
		6/7/12	7.14	24.0	559	71.78
		8/29/12	7.49	26.3	495	62.98
		8/29/12 DUP	7.49	26.3	495	63.26
		11/15/12	7.55	23.4	543	63.97
		1/29/13	7.35	22.7	457	61.02
		1/29/13 DUP	7.35	22.7	457	61.23
		5/16/13	7.54	24.4	482	63.14
		7/11/13	7.72	24.4	423	64.20
		10/16/13	6.67	23.5	469	53.3
		1/10/14	7.37	22.1	553	55.3
		4/15/14	7.92	23.5	343	45.7
		7/21/14	7.31	24.8	544	42.1
GV-SI-GVDWID	208825	10/4/06	NM	NM	NM	5.9
		1/9/07	7.90	26.7	358	5.7
		4/10/07	7.48	26.8	367	6.6
		7/11/07	7.59	27.1	389	6.9
		1/7/08	7.00	26.6	342	8
		4/16/08	7.27	26.4	331	2
		7/7/08	7.18	27.2	382	<0.5
		10/9/08	7.44	26.7	352	5.4
		2/4/09	7.56	27.3	290	6.2
		4/22/09	6.95	28.0	330	5.6
		4/1/10	7.55	26.1	339	6.9
		4/28/11	7.57	27.1	364	6.0
		6/20/12	7.33	28.5	367	8.46
		5/16/13	7.55	26.6	359	6.10
		4/14/14	7.92	25.8	290	5.89

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
HAVEN GOLF	515867	2/6/07	7.28	23.0	683	107
		4/16/07	7.26	23.3	655	105
		7/9/07	7.57	32.8	622	80.1
		1/7/08	7.18	21.0	610	99
		4/15/08	7.34	24.8	629	106
		7/7/08	6.93	23.9	727	112
		10/7/08	7.31	27.8	588	92.3
		2/4/09	7.33	23.7	554	120
		2/4/09 DUP	7.33	23.7	554	119
		4/21/09	7.40	23.6	306	109
		4/22/10	6.85	20.8	726	109
		4/21/11	7.10	20.4	588	95
		5/29/12	6.41	279.0	633	88.05
		5/7/13	7.46	23.5	537	105.13
		4/22/14	6.99	24.5	571	97.4
		4/16/07	7.17	28.8	878	533
		7/11/07	7.13	31.3	1013	550
I-10	608525	1/8/08	7.46	24.6	1164	520
		4/14/08	7.29	29.5	836	490
		7/21/08	7.19	30.9	1036	480
		10/28/08	7.18	29.7	1034	526
		1/20/09	7.13	27.6	1040	544
		5/12/09	7.15	28.0	997	495
		4/30/14	7.52	27.0	1072	629
		11/15/06	NM	NM	NM	490
IW-1	623129	1/10/07	6.97	25.1	1033	520
		4/9/07	7.24	26	918	480
		7/16/07	6.86	32.7	884	510
		1/16/08	7.38	28.5	959	610
		5/7/08	6.87	29.8	847	610
		7/23/08	6.57	29.5	1228	670
		10/24/08	7.01	30.9	1201	700
		1/27/09	6.61	23.6	1134	660
		4/20/09	7.01	29.0	1092	670
		4/12/10	6.79	29.6	1148	940
		5/11/11	7.02	27.1	2110	1050
		5/21/12	6.71	32.0	1689	900
		4/15/13	7.25	27.4	1676	980
		4/14/14	7.44	28.2	1120	896

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-2A	216464	11/15/06	NM	NM	NM	100
		1/10/07	6.91	23.8	528	110
		4/3/07	7.08	25.3	492	90
		7/16/07	7.18	32.2	506	90
		1/16/08	7.76	28.1	470	70
		4/22/08	6.99	30.5	382	80
		7/23/08	6.88	30.3	474	60
		10/24/08	7.43	30.3	473	60
		1/27/09	7.02	25	420	53
		4/20/09	6.85	28.0	405	54
		4/12/10	7.04	NM	28.9	77
		5/11/11	7.12	26.7	541	87
		5/11/11 DUP	7.12	26.7	541	88
		5/21/12	6.89	31.1	638	121
		4/15/13	7.01	27.0	550	123
		4/14/14	7.64	27.7	430	116
		11/15/06	NM	NM	NM	1590
IW-3A	623131	4/3/07	7.29	25.1	1374	1540
		7/16/07	6.85	29.8	1184	1500
		1/16/08	7.20	27.4	1280	1490
		4/22/08	7.03	29.3	1224	1420
		7/23/08	6.62	29.3	1789	1460
		10/27/08	6.97	28.7	1679	1450
		1/27/09	6.82	23.1	1520	1550
		1/27/09 DUP	6.82	23.1	1520	1310
		4/20/09	6.69	27.2	1448	1400
		4/12/10	6.55	27.5	1380	1500
		5/11/11	6.75	25.6	2260	1650
		6/20/12	6.51	275.0	3170	1700
		5/14/13	7.01	27.7	2660	1600
		4/14/14	7.34	25.9	1757	1720
		1/18/07	6.81	22.4	2210	1610
		1/18/07	6.81	22.4	2210	1590
		4/11/07	6.6	28.2	1252	1600
IW-4	623132	7/18/07	6.61	29.1	1462	1450
		1/16/08	7.00	25.2	1326	1590
		4/22/08	6.59	28.6	1264	1540
		7/23/08	6.70	31.0	1899	1640
		10/24/08	6.92	27.9	1924	1630
		1/27/09	6.58	23.9	1718	1460
		4/20/09	6.79	25.6	1604	1400
		4/12/10	6.49	26.8	1483	1600
		5/11/11	6.57	25.8	3070	1700
		5/21/12	6.57	27.5	2650	1500
		4/15/13	6.93	24.2	2750	1800
		4/14/14	7.01	24.3	1903	1690

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-5A	219131	1/16/07	7.34	23.1	1511	1710
		7/18/07	6.82	27.0	1716	1610
		1/16/08	7.11	24.1	1380	1690
		4/21/08	6.64	27.5	1326	1550
		7/23/08	6.76	30.1	1370	1730
		10/27/08	6.57	26.8	1886	1720
		1/27/09	6.44	19.5	1560	1630
		4/20/09	6.73	24.7	1635	1600
		4/12/10	6.59	25.7	1476	1800
		4/12/10 DUP	6.59	25.7	1476	1700
		4/20/11	6.78	22.2	3210	1740
		5/22/12	6.68	26.6	2880	1600
		4/15/13	6.84	24.2	2910	1760
		4/15/13 DUP	6.84	24.2	2910	1740
		4/14/14	6.96	24.5	3120	1750
		11/15/06	NM	NM	NM	1760
		1/16/07	7.25	22.5	1562	1800
		4/9/07	6.69	26	1627	1830
IW-6A	545565	7/25/07	6.67	24.5	1609	1930
		1/16/08	7.21	23.1	1489	1910
		1/16/08 DUP	7.21	23.1	1489	1800
		4/21/08	7.30	25.4	1309	1920
		7/17/08	6.84	27.1	1510	1850
		10/24/08	6.61	25.5	1999	1930
		1/26/09	6.58	21.9	1959	1600
		4/20/09	6.78	25.6	1710	1700
		4/12/10	6.99	34.2	1437	1800
		5/11/11	6.82	23.4	3390	1900
		5/22/12	6.61	27.3	2950	1800
		4/15/13	6.86	23.9	3030	1840
		4/14/14	6.99	23.4	3270	1890
		4/3/07	7.11	24.1	1523	1760
		7/18/07	6.82	29.5	1328	1870
		1/16/08	7.30	24.3	1386	1900
IW-8	508236	4/22/08	6.86	27.5	1301	1700
		7/23/08	6.78	27.5	1440	1870
		10/24/08	6.85	27.4	1976	1890
		1/27/09	6.38	20.4	1816	1630
		4/20/09	6.75	25.4	1620	1700
		4/12/10	6.52	25.6	1547	1900
		5/11/11	6.67	23.9	1965	1900
		5/21/12	6.62	28.7	2670	1700
		5/14/13	6.96	26.9	2800	1700

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-9	508239	11/15/06	NM	NM	NM	1760
		1/18/07	7.40	22.6	1690	1670
		4/11/07	6.73	25.1	1424	1750
		7/18/07	6.78	29.4	1547	1810
		1/16/08	7.01	26.1	1359	1700
		4/22/08	6.86	28.5	1328	1670
		7/23/08	6.88	28.8	1420	1730
		10/24/08	6.88	28.6	1981	1720
		10/24/08 DUP	6.88	28.6	1981	1720
		1/27/09	6.69	21.7	1774	1500
		4/20/09	6.79	26.9	1585	1600
		4/12/10	6.95	29.2	1579	1800
		4/12/10 DUP	6.95	29.2	1579	1800
		5/26/11	6.95	26.2	3850	1810
		5/21/12	6.58	29.2	2680	1700
		4/15/13	6.90	25.6	2880	1730
		4/14/14	7.20	25.3	1882	1780
IW-10	508237	11/15/06	NM	NM	NM	1650
		1/16/07	7.38	23.7	1303	1670
		4/3/07	7.11	26.7	1520	1750
		7/18/07	6.78	28.3	1734	1770
		1/16/08	7.91	24.0	537	1800
		4/21/08	6.68	27.2	1338	1470
		7/23/08	6.90	28.4	1460	1740
		10/24/08	6.77	27.0	1969	1730
		1/27/09	6.64	20.7	1560	1490
		4/20/09	6.80	24.8	1607	1600
		4/12/10	6.61	26.5	1431	1700
		5/11/11	6.67	24.3	3310	1800
		5/22/12	6.78	26.9	2890	1700
		4/15/13	6.85	23.6	2980	1740
		4/14/14	6.94	23.4	3320	1820
IW-11	508235	11/21/06	NM	NM	NM	1600
		1/16/07	7.10	21.7	1516	1700
		4/9/07	6.76	26.2	1342	1760
		7/18/07	6.84	26.8	1788	1770
		1/16/08	7.15	22.3	1370	1800
		4/21/08	6.53	26	1303	1770
		4/21/08 DUP	6.53	26	1303	1850
		7/29/08	6.58	24.4	1830	1720
		10/24/08	6.89	26.3	1958	2260
		1/27/09	6.56	19.1	1540	1600
		4/20/09	6.64	25.1	1632	1600
		4/12/10	6.63	24.6	1492	1700
		5/11/11	6.51	25.0	3250	1700
		5/22/12	6.76	25.5	2810	1600
		4/15/13	6.82	23.7	2890	1730
		4/14/14	7.00	22.3	3210	1710

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-12	545555	1/16/07	6.93	22.3	1444	1620
		4/17/07	6.56	25.9	1345	1630
		7/25/07	6.55	25.2	1483	1700
		1/16/08	6.87	23.4	1428	1700
		1/16/08 DUP	6.87	23.4	1428	1700
		4/11/08	6.51	27.4	1426	1580
		7/17/08	6.76	28.4	1917	1630
		10/24/08	6.81	26.5	1879	1520
		1/26/09	6.70	23.7	1792	1440
		4/20/09	6.63	26.5	1576	1500
		4/12/10	6.70	22.8	1579	1500
		5/11/11	6.74	25.8	3120	1700
		5/22/12	6.66	27.7	2640	1600
		5/14/13	6.92	27.2	2540	1500
		4/14/14	7.02	24.4	2980	1430
		4/17/07	6.81	25.8	1430	1690
		7/25/07	6.61	25.1	1560	1940
		7/25/07	6.61	25.1	1560	1780
IW-13	545556	1/16/08	6.64	24.0	1599	1800
		4/11/08	6.61	26.8	1502	1800
		7/17/08	6.6	30	1898	1850
		10/24/08	6.70	26.1	1999	1930
		1/26/09	6.49	23.6	1951	1600
		4/20/09	6.73	27.2	1697	1700
		4/12/10	6.64	24.1	1669	1900
		5/11/11	6.70	25.3	3360	1900
		6/20/12	6.67	25.9	3450	1900
		4/15/13	6.73	24.9	3030	1760
		4/14/14	6.99	23.6	3440	1900
		4/14/14 DUP	6.99	23.6	3440	1730
		11/15/06	NM	NM	NM	1820
		1/16/07	6.72	22.4	1484	1790
		1/16/07	6.72	22.4	1484	1810
IW-14	545557	4/16/07	6.63	24.4	1383	1790
		7/25/07	6.51	24.7	1462	1910
		1/16/08	7.03	23.2	1646	1800
		4/11/08	6.49	26.8	1460	1810
		7/16/08	6.59	29.9	1901	1870
		10/24/08	6.51	26.4	1929	1840
		1/26/09	6.52	23	1869	1600
		4/20/09	6.66	27.1	1612	1700
		4/21/10	6.89	24.8	1428	1900
		5/11/11	7.54	25.7	3460	1900
		5/22/12	6.48	31.8	2620	1800
		4/15/13	6.91	24.4	3020	1870
		4/14/14	7.01	23.1	3490	1730

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-15	545558	11/15/06	NM	NM	NM	1710
		1/16/07	7.04	23.9	1420	1730
		4/16/07	6.82	27.4	1314	1740
		7/25/07	6.32	26.6	1388	1760
		1/16/08	7.07	22.3	1561	1740
		4/11/08	6.42	28.3	1395	1670
		7/15/08	6.75	31.3	1790	1730
		10/24/08	6.6	26.0	1892	1850
		1/27/09	6.86	21.8	1935	1630
		4/20/09	7.71	28.5	1302	1600
		4/20/09 DUP	7.71	28.5	1302	1700
		4/12/10	6.69	25.0	1669	1700
		5/11/11	7.54	26.2	3270	1800
		5/11/11 DUP	7.54	26.2	3270	1800
		5/22/12	6.74	29.4	2850	1800
		5/14/13	7.03	27.1	2770	1700
		4/14/14	6.98	23.9	3240	1800
IW-16	545559	11/15/06	NM	NM	NM	1730
		1/16/07	7.18	23.8	1415	1730
		4/17/07	6.86	26.8	1320	1770
		4/17/07	6.86	26.8	1320	1790
		7/25/07	6.63	26.5	1368	1800
		1/16/08	7.07	23.3	1561	1740
		4/11/08	6.64	26.4	1404	1770
		7/15/08	6.52	31.2	1778	1840
		10/24/08	6.35	25.7	1879	1850
		1/26/09	6.44	23.9	1773	1620
		4/20/09	6.69	27.1	1347	1700
		4/12/10	6.79	25.6	1652	1800
IW-17	545560	11/15/06	NM	NM	NM	1570
		1/16/07	6.79	21.8	1402	1600
		4/16/07	6.90	26.3	1303	1670
		7/25/07	6.61	27.2	1348	1730
		1/16/08	6.74	16.5	1485	1720
		4/11/08	6.49	28.5	1398	1730
		7/15/08	6.63	31.7	1853	1770
		10/24/08	6.70	27.0	1864	1720
		1/26/09	6.41	24.1	1828	1480
		4/20/09	6.77	30.1	1332	1600
		4/12/10	6.63	26.5	1604	1700
IW-18	545561	11/21/06	NM	NM	NM	1610
		1/18/07	7.26	15.4	1460	1660
		4/16/07	6.80	24.9	1161	1610
		7/25/07	6.45	28.1	1293	1760
		1/14/08	6.39	21.9	1899	1700
		4/11/08	6.61	27.5	1388	1540
		7/15/08	6.71	30.2	1847	1710
		10/24/08	6.34	27.1	1883	1680
		1/26/09	6.39	24.7	1779	1460
		4/20/09	6.77	29.9	1337	1700
		4/29/10	6.63	23.7	1455	1600

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-19	545562	11/21/06	NM	NM	NM	1570
		1/11/07	7.19	25.1	1802	1630
		4/16/07	6.69	26.7	1296	1630
		7/25/07	6.91	26.3	1310	1650
		1/10/08	6.39	22.4	1881	1800
		1/10/08 DUP	6.39	22.4	1881	1800
		4/11/08	6.62	26.3	1409	1680
		7/15/08	6.78	29.4	1807	1670
		10/24/08	6.6	28.7	1685	1710
		1/26/09	6.47	24.3	1852	1370
		4/20/09	6.82	27.9	1366	1600
		4/12/10	6.62	26.4	1570	1600
		5/11/11	6.68	26.6	3200	1700
		5/22/12	6.56	30.7	2730	1300
		5/14/13	6.85	28.7	2690	1600
		4/14/14	7.01	24.5	3170	1780
IW-20	545563	11/21/06	NM	NM	NM	1550
		1/11/07	7.23	26.4	2360	1630
		4/9/07	7.07	27.2	1260	1500
		7/24/07	6.69	30.8	1822	1580
		1/9/08	6.72	26.4	1710	1700
		4/11/08	6.74	27.3	1400	1560
		7/15/08	6.6	29.4	1650	1640
		10/24/08	6.81	28.6	1779	1600
		1/26/09	6.48	24.1	1837	1450
		4/20/09	6.76	30.0	1375	1500
		4/29/10	6.62	24.2	1417	1600
		5/11/11	7.07	26.3	3080	1600
		6/20/12	6.67	28.2	3080	1600
		6/17/13	7.21	31.1	1785	1900
		6/17/13 DUP	7.21	31.1	1785	1800
		4/14/14	7.04	26.2	3220	1690
IW-21	545564	11/21/06	NM	NM	NM	1580
		1/11/07	7.15	27.8	1848	1620
		4/17/07	6.85	29.4	1424	1650
		7/24/07	6.68	30.6	1828	1630
		1/9/08	6.33	25.4	1975	1800
		4/11/08	6.85	24.6	1375	1610
		4/11/08 DUP	6.85	24.6	1375	1610
		7/29/08	6.49	29	1780	1670
		10/24/08	6.91	29.7	1833	1640
		1/26/09	6.59	25.7	1410	1390
		4/20/09	6.83	30.7	1422	1600
		4/12/10	6.72	28.1	1621	1700
		5/11/11	6.77	29.6	3140	1700
		6/20/12	6.65	29.2	3130	1700
		4/15/13	6.94	28.8	2840	1690
		4/14/14	7.18	28.2	3170	1720

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-22	200554	11/21/06	NM	NM	NM	1710
		1/23/07	6.90	22.1	1253	1660
		4/9/07	7.09	26	1325	1740
		7/18/07	6.99	28.1	1683	1790
		1/16/08	7.19	23.1	1378	1700
		4/21/08	6.53	28.7	1362	1760
		4/21/08 DUP	6.53	28.7	1362	1410
		7/23/08	6.86	28.9	1370	1760
		10/24/08	6.89	26.4	1929	1720
		1/27/09	6.58	19.9	1570	1610
		4/20/09	6.77	25.5	1635	1700
		4/12/10	6.59	25.4	1472	1800
		5/11/11	6.75	24.5	3290	1800
		5/22/12	6.72	26.6	2870	1600
		4/15/13	7.19	22.5	2990	1810
		4/14/14	7.05	22.5	3240	1620
IW-23	200555	11/21/06	NM	NM	NM	1540
		1/23/07	6.6	22.8	1249	1640
		4/11/07	6.88	26.7	1528	1670
		7/25/07	6.49	24.7	1541	1670
		1/16/08	7.17	24.3	1303	1680
		4/21/08	6.71	28.6	1314	1710
		7/23/08	6.84	27.5	1420	1730
		10/24/08	6.81	27.9	1966	1780
		1/27/09	6.52	19.9	1963	1650
		4/20/09	6.82	25.4	1607	1700
		4/12/10	6.81	26.6	1491	1700
		5/11/11	6.83	24.6	3280	1800
		5/22/12	6.72	28.9	2700	1600
		4/15/13	6.79	24.0	2930	1800
		4/14/14	6.95	23.9	3180	1800
IW-24	200556	7/18/07	6.78	29.0	1739	1790
		1/16/08	7.06	24.2	1387	1700
		4/22/08	6.68	28.7	1141	1650
		4/22/08 DUP	6.68	28.7	1141	1750
		7/23/08	6.68	30.7	1420	1730
		10/24/08	6.71	28.1	1058	1640
		1/27/09	6.43	21.3	1510	1560
		4/20/09	6.79	25.6	1604	1600
		4/20/09 DUP	6.79	25.6	1604	1500
		4/12/10	6.70	27.1	1450	1600
		5/11/11	6.76	24.6	3260	1700
		5/22/12	6.47	27.3	2800	1700
		4/15/13	6.83	24.4	2800	1900
		4/14/14	7.06	25.0	1958	1710
		4/14/14 DUP	7.06	25.0	1958	1760

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
IW-25	219596	4/15/13	7.01	27.6	932	390
		4/14/14	7.56	27.9	688	348
IW-26	219143	4/15/13	7.00	25.6	2620	1700
IW-27	219136	4/14/14	7.16	22.4	3210	1760
IW-28	219137	4/15/13	7.03	24.2	2930	1720
		4/14/14	7.08	25.0	3230	1740
M-8	087390	12/6/06	7.50	25.5	380	NA
		12/6/06	7.60	NM	380	NA
		4/16/07	7.87	23.1	424	<0.5
		7/11/07	7.67	28.2	415	16.5
		1/9/08	7.68	23.7	458	50
		4/15/08	6.85	28	362	28.7
		7/25/08	7.62	27	398	24.5
		10/28/08	7.67	27.8	406	26.3
		10/28/08 DUP	7.67	27.8	406	26.2
		1/20/09	7.49	25.2	397	36.8
		5/12/09	7.62	26.8	387	29.6
		11/5/09	7.61	26.6	382	31.4
		5/28/10	7.63	26.9	448	45.1
		10/21/10	7.64	25.5	435	46.9
		6/15/11	7.57	26.1	501	59.3
		11/17/11	7.88	23.6	522	84.577
		6/29/12	7.73	27.9	417	24
		10/29/12	7.62	25.7	419	16.45
		4/17/13	7.74	27.1	567	140.61
		5/21/13	7.78	27.0	374	28.85
		10/29/13	7.61	25.6	258	18.3
		4/22/14	7.85	23.4	351	20.2
M-9	501652	1/17/07	7.50 <sup>2</sup>	26.0	460	NA
		7/11/07	7.72	27.0	334	NA
		1/8/08	6.51	25.7	533	80
		1/8/08	7.67	26.7	480.7	65
		4/14/08	7.74	27.8	422	67.2
		7/21/08	7.52	29.5	485	68.7
		10/28/08	7.66	30.3	503	74.8
		1/20/09	7.64	24.1	470	81.6
		5/13/09	7.54	27.3	487	80.2
		7/14/09	7.60	27.0	420	81.7
		6/16/10	7.63	26.6	511	77
		6/2/11	7.59	27.1	525	75
		6/27/12	7.26	27.4	581	81
		5/1/13	7.81	26.5	461	66.05
		4/22/14	7.82	26.2	550	106

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
M-10	501653	7/19/06	NM	NM	NM	66
		1/16/07	7.90	29.0	440	NA
		4/16/07	7.97	28.2	475	72.6
		7/12/07	8.05	27.0	322	NA
		1/8/08	7.91	24.8	537	73
		4/15/08	7.99	27.6	428	81
		7/21/08	7.69	31	489	89.8
		10/28/08	8.08	28.1	521	97.1
		1/20/09	7.91	29	467	95
		5/12/09	7.77	26.9	487	97
		7/14/09	7.20	25.0	420	96
		11/5/09	7.13	30.5	479	110
		11/5/09 DUP	7.13	30.5	479	107
		5/28/10	7.83	30.1	497	121
		10/21/10	7.76	27.1	585	139
		5/10/11	7.86	28.9	641	149
		11/16/11	8.04	27.6	612	162
		6/25/12	7.61	29.8	162	162
		10/29/12	7.88	27.0	645	158
		4/17/13	7.90	28.9	618	170.32
		10/29/13	7.94	27.3	431	164
		4/22/14	8.16	25.4	585	165
M-20	906595	3/22/07	7.10	27.0	3500	NA
		7/12/07	7.44	27.0	1970	NA
		1/9/08	7.15	25.6	1853	1750
		1/9/08	7.29	26.3	2878	1500
		4/14/08	7.18	27	1277	1550
		7/25/08	6.99	27.6	1857	1550
		10/28/08	7.03	28.2	1688	1660
		1/20/09	6.95	27.1	1506	1760
		5/12/09	6.88	28.0	1501	1580
		5/28/10	7.22	28.2	3050	1620
		5/9/11	7.29	27.8	2790	1710
		6/26/12	7.15	28.3	3050	1722.9
		4/23/13	7.50	26.6	2720	1801.6
		4/22/14	9.25	26.2	2590	1460
		4/22/14 DUP	9.25	26.2	2590	1440
MC-1	221660	2/4/14	7.57	25.4	3080	1620
		4/15/14	7.55	27.2	1797	1680
		7/9/14	6.97	28.2	2850	1750
MC-2	221761	2/4/14	7.61	25.4	2630	1330
		4/15/14	7.45	27.3	1546	1320
		7/9/14	6.93	28.6	2410	1360
MC-3	221661	2/4/14	7.46	24.6	2690	1380
		4/15/14	7.68	27.9	1555	1350
		7/9/14	6.91	28.7	2480	1510

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MC-4	220842	2/4/14	7.11	25.9	2440	1210
		4/15/14	7.64	29.2	1437	1160
		7/9/14	6.76	29.2	2320	1300
		7/9/14 DUP	6.76	29.2	2320	1310
MH-10	803636	11/8/06	NM	NM	NM	1330
		1/9/07	6.70	28.5	1717	1310
		4/3/07	6.86	30.2	1267	1360
		7/16/07	6.87	31.4	1138	1410
		1/3/08	6.41	24.8	1626	1430
		4/28/08	6.60	31	973	1460
		7/31/08	7.07	32.5	1827	1550
		11/4/08	7.02	26.0	1856	1450
		1/2/09	6.54	26.1	1798	1400
		4/14/09	6.62	28.1	1260	1260
		4/26/10	7.05	29.9	1365	1500
		4/26/10 DUP	7.05	29.9	1365	1400
		5/18/11	7.03	27.4	2900	1600
		6/5/12	6.88	29.3	2910	1500
		6/10/13	7.17	30.2	1791	1720
		4/23/14	7.05	26.8	2910	1540
MH-11	803637	1/11/07	7.33	25.0	1778	1590
		4/10/07	7.02	28.3	1327	1580
		7/17/07	6.87	28.8	1848	1650
		1/4/08	6.44	26.3	1690	1560
		4/29/08	6.48	30.2	959	1700
		7/29/08	6.97	32.2	1767	1550
		11/7/08	7.01	27.1	1350	1560
		1/16/09	7.04	27.5	1454	1400
		5/13/09	6.62	31.0	1569	1500
		4/27/10	6.61	29.3	1382	1400
		5/24/11	6.77	27.4	2650	1500
		5/30/12	6.83	30.3	2730	1440
		4/23/13	7.34	27.7	2410	1480
		4/29/14	7.12	27.6	1946	1590
MH-13A	904071	11/10/06	NM	NM	NM	1680
		1/24/07	7.87	25.0	1458	1700
		4/18/07	7.1	27.4	1609	1720
		7/17/07	6.98	28.1	1553	1760
		1/4/08	6.97	26.1	1810	1710
		4/29/08	7.09	28.8	1174	1800
		7/16/08	7.03	27.4	1824	1720
		7/16/08 DUP	7.03	27.4	1824	1710
		10/20/08	7.07	27.7	1984	1800
		1/23/09	6.84	25.1	1510	1700
		4/15/09	7.12	25.6	1643	1650
		4/21/10	7.24	25.3	1384	1700
		5/23/11	7.12	26.9	3450	1840
		6/11/12	7.10	27.6	3340	1680
		4/3/13	7.20	25.9	2870	1760
		4/10/14	10.34	22.9	1820	1190

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MH-13B	904072	11/10/06	NM	NM	NM	1080
		1/24/07	8.07	25.9	1262	1100
		4/18/07	7.36	30	1396	1120
		7/17/07	7.28	28.5	1786	1150
		1/4/08	7.21	27.2	1576	1110
		4/29/08	7.26	29.6	985	1110
		7/16/08	7.42	31.5	1589	1110
		10/20/08	7.34	29.6	1627	1080
		1/23/09	7.13	26.6	1639	1130
		4/15/09	7.50	25.4	1370	1030
		4/15/09 DUP	7.50	25.4	1370	1100
		4/21/10	7.57	28.8	1100	1030
		5/23/11	7.28	28.3	2400	1090
		5/23/11 DUP	7.28	28.3	2400	1110
		6/11/12	7.24	29.1	2310	1020
		4/3/13	7.42	27.5	1818	1050
		4/10/14	9.56	25.7	1510	849
MH-13C	904073	11/10/06	NM	NM	NM	90
		1/24/07	9.12	22.9	450	100
		4/18/07	9.2	29.1	379	20
		7/17/07	8.78	33.8	380	20
		1/4/08	8.99	26.6	396	20
		5/7/08	8.71	30.4	363	40
		7/16/08	8.69	32.01	371	70
		10/20/08	8.90	32.8	380	60
		1/27/09	7.99	27.3	323	30
		4/15/09	8.79	25.9	421	42
		4/21/10	8.84	28.0	385	27
		5/23/11	8.65	30.4	364	43
		6/11/12	8.61	30.7	411	50
		4/3/13	8.77	28.3	340	45
		4/10/14	9.69	25.6	275	1.2
MH-25A	201528	11/13/06	NM	NM	NM	190
		1/10/07	8.09	26.0	344	10
		4/4/07	7.82	26.6	322	<10
		7/20/07	7.63	28.6	431	<10
		1/2/08	7.91	25.3	401	10
		4/25/08	7.54	27	311	30
		7/2/08	7.66	27.6	342	<10
		10/17/08	7.84	27.5	333	50
		1/5/09	7.75	24.5	336	12
		4/15/09	7.81	25.1	350	4
		4/13/10	7.76	25.3	334	9
		4/27/11	7.76	25.9	358	16
		5/1/12	7.83	27.8	376	13
		4/3/13	7.69	26.8	335	9
		4/15/14	7.92	25.0	265	16.5

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MH-25B	208429	11/13/06	NM	NM	NM	1660
		1/10/07	7.54	26.1	1440	1680
		4/4/07	7.32	28.7	1333	1550
		7/20/07	7.16	28.4	1649	1760
		1/2/08	7.10	26.5	1900	1730
		4/25/08	7.05	28.6	1138	1750
		7/2/08	7.04	28.6	1851	1650
		10/17/08	7.74	28.8	1768	1660
		1/5/09	7.22	24.9	1581	1590
		4/15/09	7.25	25.2	1483	1600
		4/13/10	7.59	28.1	1120	900
		4/27/11	7.35	27.0	3050	1810
		6/15/11	7.31	29.3	3690	1700
		5/1/12	7.31	29.3	1864	1690
		4/3/13	7.46	27.9	2620	1700
		4/15/14	7.82	26.6	1714	1740
MH-25C	208426	11/13/06	NM	NM	NM	1290
		1/10/07	7.46	26.3	1361	1250
		4/13/07	7.24	26	1357	1260
		7/20/07	7.13	30.2	1599	1240
		1/2/08	7.25	28.2	1608	1250
		4/25/08	7.20	30	1031	1240
		7/2/08	7.13	28.4	1736	1330
		10/17/08	7.17	30.4	1624	1270
		1/5/09	7.15	27	1466	1250
		4/15/09	7.28	26.6	1368	1270
		4/13/10	7.24	27.6	1292	1600
		4/27/11	8.41	25.1	1874	1290
		5/1/12	7.39	29.5	1667	1290
		4/3/13	7.44	28.0	1838	1270
		4/3/13 DUP	7.44	28.0	1838	1290
		4/15/14	7.87	27.6	1411	1090
MH-26A	201527	11/13/06	NM	NM	NM	10
		1/15/07	7.89	26.2	316	<10
		4/4/07	7.83	27	325	10
		7/19/07	7.80	26.9	428	20
		1/2/08	7.72	25.3	395	<10
		4/25/08	7.62	25.3	317	100
		7/2/08	7.57	27.8	337	20
		10/17/08	7.70	27.4	327	20
		1/5/09	7.65	26.4	343	13
		4/21/09	7.57	26.3	322	10
		4/13/10	7.60	26.7	332	8
		4/27/11	7.78	25.7	357	8
		4/27/11 DUP	7.78	25.7	357	9
		5/2/12	7.59	27.5	386	9
		4/4/13	7.72	27.0	350	8
		4/15/14	7.78	24.3	210	11.6

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MH-26B	208427	11/13/06	NM	NM	NM	1560
		1/15/07	7.53	26.4	1310	1590
		4/4/07	7.31	30.5	1448	1620
		7/19/07	7.10	29.0	1652	1590
		7/19/07	7.10	29.0	1652	1570
		1/2/08	7.09	26.5	1849	1670
		4/25/08	6.95	28.8	1095	1630
		7/2/08	6.98	29.1	1835	1660
		10/20/08	7.16	29.2	1760	1650
		1/5/09	7.07	26.4	1661	1540
		1/5/09 DUP	7.07	26.4	1661	1500
		4/21/09	6.85	28.8	1238	1520
		4/13/10	7.27	27.3	1290	1600
		5/5/11	7.17	27.2	2910	1710
		5/1/12	7.26	29.7	1912	1680
		5/1/12 DUP	7.26	29.7	1912	1750
		4/4/13	7.26	28.4	2550	1690
		4/15/14	7.89	27.2	1661	1570
MH-26C	208428	11/13/06	NM	NM	NM	730
		1/15/07	7.89	24.6	1059	740
		4/4/07	7.58	29.5	1128	720
		7/19/07	7.55	30.5	1267	730
		7/19/07	7.55	30.5	1267	740
		1/2/08	7.68	28.2	1411	740
		4/25/08	8.58	27.8	872	580
		7/2/08	7.90	30.8	1251	720
		7/2/08 DUP	7.90	30.8	1251	720
		1/5/09	7.36	25.7	1270	680
		4/21/09	7.49	29.6	1034	660
		4/13/10	7.57	28.4	1078	770
		4/13/10 DUP	7.57	28.4	1078	780
		4/27/11	7.59	29.1	1755	810
		5/1/12	7.56	30.6	1428	820
		4/4/13	7.58	29.3	1533	880
		4/15/14	8.08	28.1	1203	909
		4/15/14 DUP	8.08	28.1	1203	908

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MH-28	903548	11/14/06	NM	NM	NM	1860
		1/9/07	7.22	25.8	2690	1920
		4/17/07	6.98	26.1	1359	1920
		7/16/07	6.89	27.1	1206	1880
		1/21/08	7.39	23.9	903	1940
		4/8/08	6.99	25.5	1852	1900
		7/1/08	6.95	26.62	3322	1680
		10/6/08	6.97	26.7	3500	1910
		1/8/09	7.05	25.7	3600	1910
		4/7/09	6.84	26.4	6300	1860
		10/13/09	6.88	25.7	1589	1800
		4/15/10	7.11	25.1	1399	1900
		10/12/10	6.99	25.3	3460	1820
		5/17/11	6.94	25.6	3380	2000
		10/4/11	7.12	25.8	1390	1800
		5/21/12	6.64	28.8	3360	1600
		10/9/12	6.97	26.8	2980	1900
		4/2/13	6.95	26.9	2930	1867.1
		10/21/13	7.78	25.3	2916	2020
		4/9/14	7.81	24.4	3365	2020
MH-29	903649	11/14/06	NM	NM	NM	1640
		1/9/07	7.47	25.8	2600	1660
		1/9/07	7.47	25.8	2600	1650
		4/17/07	7.01	25.1	1345	1690
		7/16/07	6.95	27.4	1177	1650
		1/18/08	7.17	23.5	1045	1710
		4/8/08	6.98	24.1	1580	1700
		7/1/08	6.99	25.95	3361	1730
		10/6/08	6.95	26.9	3300	1740
		1/9/09	7.03	25.7	9200	1730
		4/7/09	6.80	26.4	7700	1720
		4/7/09 DUP	6.80	26.4	7700	1700
		10/13/09	6.95	25.0	1421	1600
		10/13/09 DUP	6.95	25.0	1421	1700
		4/15/10	6.99	24.9	1358	1700
		10/12/10	7.04	23.9	3290	1520
		4/20/11	6.98	26.0	2950	1790
		4/20/11 DUP	6.98	26.0	2950	1770
		10/4/11	6.91	25.3	1765	1600
		5/21/12	6.62	26.6	3210	1600
		10/9/12	6.97	26.3	2710	1700
		4/2/13	7.06	24.9	2750	1707.1
		12/11/13	7.31	24.3	1645	1770
		4/9/14	7.28	23.6	3176	1800

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MH-30	903884	11/10/06	NM	NM	NM	1690
		1/9/07	7.33	26.2	2780	1760
		4/9/07	7.3	27.3	1529	1810
		7/11/07	7.18	31.9	1694	1820
		1/18/08	7.13	28.5	1147	1830
		4/8/08	7.27	27.1	1505	1830
		7/1/08	7.02	30.73	3740	1660
		10/6/08	6.95	29.8	3900	1810
		1/7/09	7.12	28	3600	1840
		4/7/09	6.81	29.5	3400	1790
		4/7/09 DUP	6.81	29.5	3400	1800
		4/15/10	6.96	28.9	1697	1480
		5/17/11	6.95	27.5	3360	1760
		5/17/11 DUP	6.95	27.5	3360	1750
		4/26/12	7.05	28.1	1618	1738
		6/6/13	7.26	29.5	2630	1760
		6/6/13 DUP	7.26	29.5	2630	1800
		4/8/14	7.20	27.7	3242	1720
MO-2007-1A	907342	8/8/07	7.17	29.0	370	19.2
		1/24/08	7.83	24.0	370	20
		4/9/08	7.42	24.1	383	21
		7/14/08	7.41	27.9	359	16.6
		10/17/08	7.46	27.7	357	17.9
		1/16/09	7.31	22.6	365	18.1
		4/1/09	7.55	26.5	387	18.2
		7/1/09	7.64	28.5	361	16.3
		10/22/09	7.53	26.4	360	16.6
		10/22/09 DUP	7.53	26.4	360	16.6
		4/16/10	7.52	26.7	357	18.5
		10/13/10	7.51	27.5	372	16
		5/5/11	7.51	27.4	401	17.9
		10/6/11	7.79	23.4	371	16.143
		6/12/12	7.40	27.9	371	16.98
		10/24/12	7.69	25.1	368	16.5
		4/8/13	7.55	25.6	363	17.92
		10/23/13	7.72	26.2	246	16.2
		4/29/14	7.73	25.6	278	16.2

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2007-1B	907210	8/2/07	7.41	30.7	321	18.9
		1/24/08	7.78	26.9	375	30
		4/9/08	7.70	23.1	400	35
		7/14/08	7.68	26.6	402	39.8
		10/17/08	7.56	28.1	423	54.3
		1/16/09	7.49	28.2	427	69.7
		4/1/09	7.78	26.4	511	84.1
		7/1/09	7.57	30.1	527	99
		10/22/09	7.63	28.5	600	143
		4/16/10	7.59	26.9	663	212
		10/13/10	7.46	28.7	1026	337
		10/13/10 DUP	7.46	28.7	1026	360
		5/5/11	7.42	28.6	1214	479
		10/6/11	7.84	24.8	1178	604.67
		10/6/11 DUP	7.84	24.8	1178	614.84
		6/12/12	6.99	29.0	1664	766.0
		10/24/12	7.56	26.2	1460	975.8
		4/8/13	7.57	26.5	1577	873.7
		10/23/13	8.51	26.3	971	806
		4/29/14	8.86	26.3	1522	1070
MO-2007-1C	907209	7/31/07	7.35	27.9	523	112
		1/24/08	7.84	26.9	520	140
		4/9/08	7.57	27.3	596	149
		4/9/08 DUP	7.57	27.3	596	153
		7/14/08	7.64	31.4	608	165
		10/21/08	7.80	29.8	573	146
		1/16/09	7.17	27.5	652	233
		1/16/09 DUP	7.17	27.5	652	218
		4/1/09	7.66	27.1	700	229
		7/1/09	7.33	30.8	367	236
		7/1/09 DUP	7.33	30.8	367	227
		10/22/09	7.66	28.1	356	301
		4/16/10	7.66	28.5	730	320
		10/13/10	7.72	29.1	1004	377
		4/20/11	7.28	29.2	1009	381
		10/6/11	8.10	25.9	942	393.94
		6/12/12	7.05	29.5	1085	406.4
		10/24/12	8.40	26.5	694	239.2
		10/24/12 DUP	8.40	26.5	694	235.26
		4/8/13	7.88	26.4	1017	416.3
		10/23/13	8.47	27.9	463	132
		4/29/14	8.49	26.8	610	240
		4/29/14 DUP	8.49	26.8	610	247

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2007-2	906765	6/14/07	7.05	32.2	1372	591
		8/9/07	7.11	32.2	1271	520
		1/22/08	7.48	30.9	757	530
		4/17/08	7.32	29.8	818	473
		7/14/08	7.11	31.3	987	472
		7/14/08 DUP	7.11	31.3	987	446
		1/16/09	7.27	30.6	1200	456
		4/1/09	7.34	28.5	922	458
		4/13/10	7.17	30.3	855	439
		4/13/10 DUP	7.17	30.3	855	450
		4/27/11	7.27	28.7	1249	507
		4/27/11 DUP	7.27	28.7	1249	503
		5/2/12	7.30	31.8	1245	543.50
		4/8/13	7.34	30.1	1164	455.7
		4/9/14	8.12	30.0	608	254
		4/9/14 DUP	8.12	30.0	608	248
MO-2007-3B	906816	1/21/08	7.94	26.5	353	40
		4/16/08	7.77	28.2	322	37
		7/14/08	7.70	30.2	338	37.8
		10/22/08	7.69	28.1	379	42.4
		10/22/08 DUP	7.69	28.1	379	41.6
		1/19/09	7.82	28.1	342	36.9
		1/19/09 DUP	7.82	28.1	342	36.4
		4/1/09	7.89	25.7	376	38.2
		7/27/09	7.78	28.2	353	37.2
		10/22/09	7.76	28.0	354	39.1
		1/20/10	7.97	27.6	328	37.9
		4/14/10	7.83	28.6	336	40.4
		7/21/10	7.86	27.7	372	38.7
		10/26/10	7.78	26.6	361	39.1
		1/18/11	7.83	27.3	353	38.2
		5/4/11	7.81	29.3	359	38.1
		7/6/11	7.75	30.2	362	38.3
		10/5/11	8.04	25.7	395	37.822
		11/22/11	8.00	26.1	286	36.7
		1/11/12	7.55	27.0	211	39.00
		5/8/12	7.88	30.8	329	37.64
		8/7/12	7.88	29.1	419	36.26
		10/10/12	7.94	28.1	390	37.01
		1/8/13	8.10	27.0	374	33.77
		4/9/13	8.01	25.5	329	37.54
		5/21/13	8.17	26.9	284	26.96
		8/27/13	8.59	27.8	204	3.47
		8/27/13 DUP	8.59	27.8	204	4.13
		10/24/13	8.03	26.1	279	33.8
		10/24/13 DUP	8.03	26.1	279	33.9
		1/7/14	8.11	24.6	230	2.16
		4/16/14	8.91	25.0	153	<0.5
		7/9/14	8.98	26.1	155	<0.5

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2007-3C	906817	6/28/07	7.93	32.2	570	136
		1/21/08	8.21	27.6	507	130
		4/15/08	7.87	30.1	477	127
		7/17/08	7.98	32.7	493	126
		10/21/08	8.07	32.9	519	103
		1/19/09	8.00	30.7	490	113
		4/1/09	8.09	28.3	541	115
		7/22/09	8.07	31.4	510	107
		10/22/09	8.01	29.8	488	108
		1/20/10	8.20	26.2	469	103
		4/14/10	8.07	30.9	465	110
		7/21/10	8.05	30.4	511	101
		10/26/10	7.92	29.5	471	104
		1/18/11	8.06	29.1	492	106
		5/4/11	8.11	30.4	504	107
		7/6/11	8.02	32.5	248	101
		10/5/11	8.28	29.3	524	96.818
		1/11/12	7.92	29.4	283	104.03
		5/7/12	8.10	30.3	440	95.99
		8/7/12	7.93	30.7	553	93.25
		10/10/12	8.04	29.4	487	99.13
		1/8/13	8.09	26.5	431	62.35
		1/8/13 DUP	8.09	26.5	431	62.62
		4/9/13	8.35	28.2	432	89.78
		8/27/13	8.81	29.6	324	47.00
		10/24/13	8.43	27.4	313	79.0
		1/7/14	8.64	25.1	312	56.9
		4/16/14	9.38	26.4	259	35.6
		7/9/14	8.73	26.5	418	32.1
MO-2007-4A	907213	1/22/08	7.82	25.0	405	40
		4/16/08	7.65	25.8	372	33.1
		7/18/08	7.44	27.4	416	35.3
		10/22/08	7.58	26.9	420	40.1
		1/19/09	7.52	28	392	35.9
		4/2/09	7.85	26.8	393	36.7
		4/2/09 DUP	7.85	26.8	393	36.5
		7/1/09	7.55	26.4	395	36.3
		10/26/09	7.64	27.2	378	35.7
		1/26/10	7.66	25.7	356	36.0
		4/14/10	7.63	25.2	379	37.0
		7/21/10	7.54	26.9	420	34.9
		10/13/10	7.55	26.1	414	35.2
		1/19/11	7.61	25.8	403	35.8
		5/4/11	7.57	26.5	411	35.9
		7/6/11	7.47	27.4	417	35.3
		10/5/11	7.82	24.1	435	34.47
		1/17/12	7.54	24.5	274	37.55
		5/7/12	7.49	24.7	381	35.62
		8/13/12	7.53	26.5	378	35.33
		10/23/12	7.48	27.2	380	94.87
		2/21/13	7.53	28.6	337	33.48
		4/10/13	7.82	26.0	319	34.69
		7/10/13	7.68	25.3	347	36.60
		10/22/13	7.81	23.5	282	35.0
		1/10/14	7.73	23.7	281	35.4
		4/8/14	7.65	24.6	353	34.9
		7/8/14	7.52	24.8	465	34.6

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2007-4B	907212	1/7/08	7.69	25.5	445	NA
		4/16/08	7.66	26.9	343	33.6
		7/18/08	7.57	29.2	391	34.8
		7/18/08 DUP	7.57	29.2	391	35.1
		10/22/08	7.73	30.8	407	34.7
		1/21/09	7.71	27.3	377	32.9
		4/2/09	7.93	28.3	363	34.6
		7/1/09	7.64	27.8	370	34.7
		10/26/09	7.68	28.7	348	34.5
		1/26/10	7.74	23.7	332	34.1
		4/14/10	7.76	25.1	342	35.1
		7/21/10	7.71	30.2	379	34
		7/21/10 DUP	7.71	30.2	379	34.9
		10/13/10	7.69	28.1	378	34.2
		1/19/11	7.73	26.9	367	34.6
		1/19/11 DUP	7.73	26.9	367	34.4
		5/4/11	7.72	28.1	379	34.5
		7/6/11	7.73	28.0	381	34.4
		10/5/11	8.01	27.6	401	34.194
		10/5/11 DUP	8.01	27.6	401	33.36
		1/17/12	7.81	26.7	259	33.14
		5/7/12	7.83	29.0	342	34.25
		8/13/12	7.75	28.2	353	34.02
		10/23/12	7.72	27.9	364	34.37
		2/21/13	7.75	25.7	299	32.01
		4/10/13	8.06	24.7	312	33.31
		7/10/13	8.48	25.9	200	4.51
		10/22/13	8.86	24.4	142	<0.5
		1/10/14	8.83	23.6	185	<0.5
		4/8/14	8.90	24.6	165	<0.5
		7/8/14	8.75	25.3	220	<0.5
MO-2007-4C	907211	8/16/07	7.62	35.2	472	78.7
		1/22/08	8.33	27.3	465	80
		4/16/08	8.19	29.9	420	80
		7/18/08	8.27	31.9	467	78.6
		10/22/08	8.45	31.8	467	85.9
		1/21/09	8.84	29.1	467	78.5
		4/2/09	8.48	30.3	444	81
		7/1/09	8.25	31.1	446	82.7
		10/26/09	8.22	30.5	427	83.9
		10/26/09 DUP	8.22	30.5	427	83.8
		1/26/10	8.40	30.0	409	83.2
		4/14/10	8.11	27.6	423	87.7
		7/21/10	8.23	32.4	467	85.6
		10/13/10	8.19	31.1	462	86.5
		1/19/11	8.21	28.9	447	87.6
		5/4/11	8.27	30.1	468	88.1
		7/6/11	8.17	30.8	468	85
		10/5/11	8.43	30.0	505	89.355
		1/12/12	8.52	29.5	329	92.92
		5/7/12	8.32	30.6	439	91.70
		8/13/12	8.31	28.8	451	91.22
		8/13/12 DUP	8.31	28.8	451	91.48
		10/23/12	8.86	28.5	436	94.65
		2/21/13	7.97	28.4	384	90.93
		4/10/13	8.46	29.3	362	93.24
		7/10/13	8.59	26.6	344	66.70
		10/22/13	9.51	25.6	292	63.1
		1/10/14	9.64	24.2	310	63.4
		4/8/14	9.52	26.2	344	61.8
		7/8/14	9.60	26.4	446	55.4

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2007-5B	907456	1/7/08	7.96	26.7	1138	NA
		4/17/08	7.94	27.7	877	390
		7/24/08	7.86	31.1	1040	343
		10/23/08	7.87	26.8	1086	412
		1/21/09	7.92	29.4	1049	400
		4/2/09	8.15	30.6	958	366
		1/25/10	7.98	28.8	1010	462
		4/27/10	7.90	29.3	987	427
		12/10/10	7.92	27.1	1215	454
		6/24/11	7.98	31.0	1199	513
		11/21/11	7.98	27.2	1249	494.3
		6/20/12	7.62	30.0	1465	519.3
		11/6/12	7.53	26.6	1420	453.9
		6/12/13	8.07	27.8	1036	430
		10/24/13	7.89	26.4	783	430
		4/29/14	8.19	27.4	1018	447
MO-2007-5C	907457	8/23/07	7.46	31.4	780	248
		1/7/08	8.26	27.0	851	NA
		4/17/08	8.34	29.7	680	259
		7/24/08	8.30	31.3	746	233
		10/23/08	9.11	30.2	728	257
		1/23/09	9.30	21.1	710	222
		5/13/09	7.64	31.4	715	235
		10/27/09	7.55	30.1	651	238
		4/27/10	7.17	32.3	663	245
		4/27/10 DUP	7.17	32.3	663	248
		12/10/10	7.95	30.5	709	251
		5/24/11	7.76	29.7	682	238
		11/21/11	8.58	26.4	780	235.98
		6/18/12	8.35	30.0	816	238.89
		11/6/12	8.43	26.3	763	262.57
		6/13/13	8.88	25.8	704	251
		11/12/13	8.86	26.1	653	210
		5/6/14	8.92	26.2	565	183

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2007-6A	907607	1/22/08	7.84	26.5	380	30
		1/22/08 DUP	7.84	26.5	380	30
		4/18/08	7.61	27.2	346	20.5
		7/24/08	7.47	28.3	390	16.9
		10/23/08	7.49	25.8	388	18.6
		1/22/09	7.48	26.2	364	26.9
		4/2/09	7.88	25.5	378	23.7
		7/22/09	7.47	29.5	373	19.8
		10/26/09	7.52	27.9	349	23.5
		1/20/10	7.66	26.2	343	24.6
		4/21/10	7.59	27.3	375	34.7
		8/10/10	7.86	31.2	386	26.8
		10/26/10	7.74	28.3	381	33.9
		1/18/11	7.71	26.7	376	30.2
		5/5/11	7.59	29.0	384	29.2
		7/7/11	7.72	29.1	397	36.6
		7/7/11 DUP	7.72	29.1	397	37.1
		10/6/11	8.05	25.8	402	34.109
		1/11/12	7.47	26.8	234	43.51
		1/11/12 DUP	7.47	26.8	234	42.97
		6/12/12	7.65	28.2	389	34.98
		8/13/12	7.84	29.2	362	36.91
		10/18/12	7.77	28.8	368	30.42
		1/8/13	7.70	27.6	354	25.17
		4/9/13	8.04	28.5	329	32.44
		4/9/13 DUP	8.04	28.5	329	32.94
		7/10/13	8.20	27.9	270	18.30
		10/22/13	8.44	28.0	153	10.4
		1/6/14	8.24	36.5	330	19.3
		4/9/14	8.71	26.6	210	5.74
		7/8/14	8.15	28.3	370	10.6
MO-2007-6B	907606	1/21/08	8.13	29.8	467	80
		4/17/08	8.09	29.9	453	90.4
		7/24/08	8.00	33.8	473	81.5
		10/23/08	8.01	28.9	446	63.2
		1/22/09	7.45	29.9	443	84.5
		4/2/09	8.08	27.7	444	75.7
		7/22/09	7.86	32.7	427	63.5
		10/26/09	7.90	30.5	398	62.1
		1/20/10	8.05	27.4	406	69.7
		4/21/10	7.95	29.5	380	57.9
		4/21/10 DUP	7.95	29.5	380	57.9
		8/10/10	7.86	31.2	438	68.8
		8/10/10 DUP	7.86	31.2	438	68.6
		10/26/10	7.89	30.8	399	57.7
		1/18/11	7.85	30.4	396	58.5
		5/5/11	7.84	32.8	404	57.2
		7/7/11	7.88	32.8	405	57.5
		10/6/11	8.08	27.0	405	55.342
		1/11/12	7.57	29.9	235	57.78
		6/12/12	7.62	31.5	399	55.99
		8/13/12	7.61	32.2	374	56.54
		10/18/12	7.82	29.8	383	50.70
		1/8/13	7.68	27.2	380	37.31
		4/9/13	8.03	29.8	361	54.72
		7/10/13	8.80	28.1	306	42.00
		10/22/13	8.79	29.6	261	65.6
		10/22/2013 DUP	8.79	29.6	261	66.8
		1/6/14	9.16	26.4	510	91.5
		4/9/14	9.04	27.3	310	85.7
		7/8/14	9.13	28.7	520	89.2

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
MO-2009-1	910458	4/24/09	7.23	31.3	397	62.1
		7/29/09	8.18	32.9	495	97.7
		7/29/09 DUP	8.18	32.9	495	96.4
		11/3/09	8.17	29.5	513	109
		1/25/10	8.23	29.2	481	82.1
		4/20/10	8.21	30.4	467	99
		8/10/10	8.23	31.4	528	109
		12/15/10	8.29	29.0	504	95
		12/15/10 DUP	8.29	29.0	504	94
		2/2/11	8.69	26.9	432	92
		6/16/11	8.30	32.7	468	102
		8/31/11	8.33	31.1	560	108
		12/1/11	8.57	28.9	479	91.82
		1/11/12	8.18	29.9	292	93.84
		5/9/12	8.47	25.8	479	97.69
		8/15/12	8.47	32.7	454	102.4
		11/29/12	8.64	26.5	480	94.26
		1/8/13	8.79	27.0	522	98.57
		4/10/13	8.67	29.8	403	105.80
		7/11/13	8.67	27.9	450	118.00
		10/16/13	8.62	27.6	526	115
		1/6/14	9.68	24.4	451	89.3
		4/24/14	8.55	29.8	499	98.2
		7/8/14	9.25	26.8	493	81.1
		7/8/14 DUP	9.25	26.8	493	87.1
NP-2	624028	7/18/07	7.30	23.2	816	NA
		6/4/07	7.20	25.9	411	41.2
		8/13/07	7.16	26.0	441	41.7
		1/11/08	7.60	25.0	760	43.5
		1/11/08 DUP	7.60	25.0	760	43.8
		4/17/08	7.34	25.4	379	40
		4/17/08 DUP	7.34	25.4	379	33
		7/11/08	7.62	25.9	455	40.5
		10/6/08	7.57	25.1	405	39.7
		2/9/09	7.61	25.3	337	42.4
		4/24/09	6.89	24.6	510	32.1
		9/17/09	6.68	26.6	414	40
		12/31/09	7.60	23.6	387	40.7
		2/17/10	6.35	24.7	450	42.0
		2/17/10 DUP	6.35	24.7	450	42.0
		4/22/10	7.25	23.49	447	41.9
		8/5/10	7.67	26.0	429	41.2
		10/25/10	7.66	25.3	446	41.4
		1/19/11	7.69	25.5	402	41.9
		5/3/11	7.84	25.3	413	43.5
		7/18/11	7.72	25.8	431	44.8
		7/18/11 DUP	7.72	25.8	431	44.6
		12/5/11	8.11	23.1	396	58.63
		3/21/12	7.86	24.9	337	64.11
		6/18/12	7.83	26.9	463	64.90
		8/15/12	8.01	26.3	357	65.72
		11/29/12	8.02	24.1	396	70.13
		2/20/13	7.94	23.6	376	69.34
		6/17/13	7.96	25.6	379	71.6
		8/27/13	7.82	25.4	337	64.3
		10/30/13	7.57	24.5	264	59.6
		1/7/14	7.57	23.7	329	63.0
		4/23/14	7.80	24.7	410	55.2
		7/1/14	7.59	24.6	448	48.1

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
PS-1	220861	2/3/14	7.21	24.7	2600	1310
		4/14/14	7.56	27.1	1461	1250
		7/9/14	6.71	27.4	2320	1270
PS-2	220862	2/3/14	7.01	25.1	1935	1080
		2/3/14 DUP	7.01	25.1	1935	1090
		4/14/14	7.62	26.6	1303	1050
		7/9/14	6.79	27.5	1934	1120
PS-3	220863	2/3/14	7.04	25.3	1810	975
		4/14/14	7.57	26.7	1270	996
		4/14/14 DUP	7.57	26.7	1270	997
		7/9/14	6.76	27.6	1799	1120
PS-4	220864	2/3/14	7.07	25.2	2570	1280
		4/14/14	7.48	27.6	1393	1260
		7/9/14	7.23	27.5	2330	1300
PZ-7	561870	11/16/06	NM	NM	NM	270
		1/12/07	7.30	21.6	920	340
		4/17/07	7.13	23.8	777	360
		7/24/07	7.31	28.2	979	360
		1/7/08	7.02	19.2	1106	400
		4/28/08	7.09	27.6	699	440
		7/11/08	7.29	24.5	1173	400
		7/11/08 DUP	7.29	24.5	1173	400
		10/14/08	8.31	25.0	1300	420
		1/13/09	7.46	21.6	5200	440
		4/6/09	6.90	24.2	1100	460
		4/23/10	6.12	20.51	1400	432
		5/18/11	7.04	24.2	1463	472
		5/18/11 DUP	7.04	24.2	1463	470
		6/6/12	6.93	25.9	1458	489.1
		6/10/13	7.20	29.2	1038	500
		4/8/14	7.11	24.0	966	428
PZ-8	561866	11/14/06	NM	NM	NM	470
		1/10/07	6.6	21.0	985	460
		4/11/07	7.41	19.8	1074	540
		7/12/07	7.27	27.3	935	450
		1/3/08	7.52	23.1	1045	320
		4/8/08	7.16	25.4	962	500
		7/1/08	7.15	26.49	1203	400
		10/8/08	7.22	28.2	1400	460
		1/8/09	7.05	22.3	1000	330
		4/8/09	6.54	24.1	900	280
		4/22/10	6.88	16.3	1230	305
		4/21/11	7.05	21.5	1147	364
		4/25/12	6.41	24.1	935	344.9
		6/10/13	7.35	26.7	943	380
		4/23/14	7.16	23.7	1216	480

**TABLE 2**  
**Compilation of Field Parameters and Sulfate Analytical Results**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
TMM-1	616156	6/19/07	7.73	29.7	351	14.1
		8/6/07	8.04	25.2	505	<10
		1/10/08	7.77	24.2	254	<0.5
		4/18/08	7.54	25.1	268	<1
		7/9/08	7.94	27.3	296	7.3
		10/9/08	8.14	29.7	281	<0.5
		2/4/09	7.80	24.4	236	5.7
		4/21/09	7.92	26.7	281	5.5
		10/14/09	8.12	31.1	256	0.6
		4/20/10	8.08	27.0	281	12
		10/6/10	8.56	27.4	269	<0.5
		4/21/11	7.96	26.8	303	11.6
		12/21/11	7.10	20.4	1580	<0.5
		5/15/12	8.28	28.8	32.8	7.93
		11/23/12	7.64	22.8	479	<0.5
		11/23/12 DUP	7.64	22.8	479	<0.5
		6/19/13	8.41	29.9	263	1.43
		10/29/13	7.11	24.8	183	<0.5
		4/23/14	8.49	23.6	266	<0.5

*Notes:*

ADWR = Arizona Department of Water Resources

SU = Standard Units

deg C = degrees Celsius

$\mu\text{S}/\text{cm}$  = microsiemens per centimeter

mg/L = milligrams per Liter

NA = not analyzed

NM = not measured

DUP = Duplicate sample

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
1350	NR	Sierrita	3528649.387	499296.387	3033.25	7/12/07	474.29	2558.96
						11/8/07	477.30	2555.95
						1/9/08	477.00	2556.25
						4/14/08	475.50	2557.75
						8/7/08	477.88	2555.37
						11/5/08	479.21	2554.04
						1/19/09	477.33	2555.92
						6/29/09	479.57	2553.68
						5/28/10	478.78	2554.47
						5/9/11	480.42	2552.83
						6/29/12	479.57	2553.68
						5/23/13	481.16	2552.09
						4/29/14	Obstructed	NA
						5/22/14	Obstructed	NA
						5/28/14	494.95	2538.30
						1/15/07	253.15	2570.30
						4/16/07	254.20	2569.25
						7/9/07	259.79	2563.66
						1/10/08	257.26	2566.19
CC OF GV	501760	HGC	3527876.220	501635.382	2823.45	7/7/08	261.09	2562.36
						11/14/08	263.13	2560.32
						2/4/09	258.48	2564.97
						4/21/09	258.79	2564.66
						4/22/10	259.51	2563.94
						5/14/13	258.20	2565.25
						6/6/07	265.35	2676.36
						8/10/07	267.40	2674.31
						11/6/07	269.98	2671.73
						1/11/08	264.40	2677.31
CW-3	627483	HGC	3523809.985	500047.663	2941.71	4/17/08	266.46	2675.25
						7/11/08	270.95	2670.76
						10/6/08	271.78	2669.93
						2/9/09	267.51	2674.20
						4/24/09	269.06	2672.65
						12/31/09	272.10	2669.61
						4/22/10	271.91	2669.80
						10/25/10	273.54	2668.17
						5/2/11	272.50	2669.21
						12/5/11	274.20	2667.51
						6/26/12	259.51	2682.20
						12/13/12	278.81	2662.90
						6/13/13	283.48	2658.23
						11/12/13	286.51	2655.20
						3/12/14	286.62	2655.09
						4/29/14	289.87	2651.84
						5/6/14	289.87	2651.84
						6/23/14	289.83	2651.88
						7/28/14	296.29	2645.42
						8/7/14	297.18	2644.53
						9/8/14	298.21	2643.50

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
CW-6	627485	CWC	3525794.239	500891.072	2867.00	12/4/06	247.50	2619.50
						1/3/07	245.00	2622.00
						5/24/07	252.25	2614.75
						7/10/07	252.15	2614.85
						10/2/07	253.05	2613.95
						1/8/08	245.81	2621.19
						4/17/08	254.20	2612.80
						7/8/08	253.80	2613.20
						10/7/08	256.30	2610.70
						2/6/09	249.27	2617.73
						4/22/09	253.15	2613.85
						9/22/09	256.80	2610.20
						11/5/09	258.10	2608.90
						2/10/10	250.76	2616.24
						5/14/10	252.78	2614.22
						7/27/10	257.35	2609.65
						10/14/10	257.22	2609.78
						2/24/11	250.38	2616.62
						4/28/11	254.32	2612.68
						7/20/11	257.20	2609.80
						12/14/11	253.57	2613.43
						1/24/12	252.33	2614.67
						5/9/12	255.74	2611.26
						8/29/12	258.30	2608.70
						12/12/12	256.33	2610.67
						2/6/13	254.67	2612.33
						5/15/13	259.27	2607.73
						7/17/13	263.01	2603.99
						10/23/13	264.66	2602.34
						1/14/14	259.78	2607.22
						4/16/14	265.79	2601.21
CW-7	502546	CWC	3528094.155	499659.842	2987.50	2/2/07	425.00	2562.50
						5/14/07	424.15	2563.35
						7/10/07	426.50	2561.00
						10/2/07	427.60	2559.90
						1/8/08	427.50	2560.00
						4/17/08	426.40	2561.10
						7/8/08	428.40	2559.10
						10/7/08	429.80	2557.70
						2/6/09	426.62	2560.88
						4/22/09	424.30	2563.20
						5/14/10	438.35	2549.15
						4/28/11	429.50	2558.00
						5/9/12	425.90	2561.60
						5/15/13	458.53	2528.97
						4/16/14	440.68	2546.82
CW-8	543600	CWC	3525661.191	499798.520	2957.50	1/3/07	336.50	2621.00
						5/24/07	338.14	2619.36
						8/10/07	339.80	2617.70
						10/2/07	340.60	2616.90
						1/8/08	337.97	2619.53
						4/17/08	339.20	2618.30
						7/8/08	341.75	2615.75
						10/7/08	342.75	2614.75
						2/6/09	339.12	2618.38
						4/22/09	341.20	2616.30
						4/12/10	342.00	2615.50
						4/28/11	342.68	2614.82
						5/9/12	340.12	2617.38
						5/15/13	347.39	2610.11
						4/16/14	359.08	2598.42

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
CW-9	588121	CWC	3528740.784	501072.040	2834.30	12/4/06	306.00	2528.30
						1/3/07	304.20	2530.10
						5/24/07	309.40	2524.90
						7/10/07	310.20	2524.10
						10/2/07	310.70	2523.60
						1/8/08	308.82	2525.48
						4/17/08	308.00	2526.30
						7/8/08	315.60	2518.70
						10/7/08	316.05	2518.25
						2/6/09	309.80	2524.50
						4/22/09	311.10	2523.20
						7/30/09	316.5	2517.80
						11/5/09	321.60	2512.70
						2/10/10	316.69	2517.61
						5/14/10	316.20	2518.10
						7/27/10	313.63	2520.67
						10/14/10	318.65	2515.65
						2/24/11	309.94	2524.36
						4/28/11	313.41	2520.89
						7/20/11	315.45	2518.85
						12/14/11	314.17	2520.13
						1/24/12	312.56	2521.74
						5/9/12	314.39	2519.91
						8/29/12	318.12	2516.18
						12/12/12	317.48	2516.82
						2/6/13	313.90	2520.40
						5/15/13	313.79	2520.51
						7/17/13	316.52	2517.78
						10/23/13	319.19	2515.11
						1/14/14	319.38	2514.92
						4/16/14	317.82	2516.48
CW-10	207982	CWC	3523455.502	500913.364	2868.50	12/4/06	178.25	2690.25
						1/3/07	177.20	2691.30
						5/24/07	196.30	2672.20
						7/10/07	198.79	2669.71
						10/2/07	190.85	2677.65
						1/8/08	180.95	2687.55
						4/17/08	187.95	2680.55
						7/8/08	203.25	2665.25
						10/7/08	190.65	2677.85
						2/6/09	184.40	2684.10
						4/22/09	191.12	2677.38
						7/30/09	197.3	2671.20
						11/5/09	199.10	2669.40
						2/10/10	186.00	2682.50
						5/14/10	190.10	2678.40
						7/27/10	198.52	2669.98
						10/14/10	195.31	2673.19
						2/24/11	191.62	2676.88
						4/28/11	196.15	2672.35
						7/20/11	199.75	2668.75
						12/14/11	191.70	2676.80
						1/24/12	189.73	2678.77
						5/9/12	197.20	2671.30
						8/29/12	201.50	2667.00
						12/12/12	199.93	2668.57
						2/6/13	197.87	2670.63
						5/15/13	209.50	2659.00
						7/17/13	212.61	2655.89
						10/23/13	215.14	2653.36
						1/14/14	203.86	2664.64
						4/16/14	210.15	2658.35
						7/22/14	220.59	2647.91

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
ESP-1	623102	Sierrita	3526448.677	499969.682	2953.43	11/28/06	352.20	2601.23
						1/3/07	350.10	2603.33
						5/24/07	349.55	2603.88
						7/10/07	351.11	2602.32
						10/12/07	343.00	2610.43
						10/30/08	355.47	2597.96
						1/29/09	354	2599.43
						4/16/09	350.50	2602.93
						11/10/09	355.67	2597.76
						4/28/10	354.10	2599.33
						10/15/10	357.40	2596.03
						5/3/11	355.79	2597.64
						11/22/11	357.82	2595.61
						12/13/11	355.60	2597.83
						6/19/12	357.76	2595.67
						11/21/12	358.70	2594.73
						5/20/13	357.15	2596.28
						4/28/14	Obstructed	NA
ESP-2	623103	Sierrita	3526924.656	500241.637	2934.60	11/28/06	342.55	2592.05
						1/3/07	343.10	2591.50
						5/14/07	339.90	2594.70
						7/10/07	341.25	2593.35
						10/12/07	342.26	2592.34
						1/23/08	340.40	2594.20
						4/18/08	340.93	2593.67
						7/25/08	342.30	2592.30
						10/30/08	344.82	2589.78
						1/29/09	395.16	2539.44
						4/16/09	341.45	2593.15
						11/10/09	346.50	2588.10
						4/28/10	343.99	2590.61
						10/15/10	347.33	2587.27
						5/3/11	345.44	2589.16
						11/22/11	347.26	2587.34
						6/19/12	346.84	2587.76
						11/21/12	348.11	2586.49
						5/20/13	348.45	2586.15
						11/5/13	362.28	2572.32
						3/12/14	354.98	2579.62
						4/28/14	358.88	2575.72
						5/6/14	358.90	2575.70
						6/23/14	358.86	2575.74
						7/28/14	365.59	2569.01
						8/8/14	367.53	2567.07
						9/9/14	368.29	2566.31
ESP-3	623104	Sierrita	3527377.239	500234.067	2935.80	11/28/06	360.40	2575.40
						1/3/07	358.60	2577.20
						5/14/07	355.85	2579.95
						7/1/07	358.05	2577.75
						10/30/08	361.12	2574.68
						1/29/09	410.05	2525.75
						4/16/09	353.20	2582.60
						11/12/09	363.37	2572.43
						4/28/10	361.69	2574.11
						10/15/10	365.00	2570.80
						5/3/11	363.35	2572.45
						11/22/11	364.91	2570.89
						6/19/12	364.50	2571.30
						11/21/12	357.92	2577.88
						5/22/13	356.23	2579.57
						11/5/13	367.84	2567.96
						4/28/14	374.61	2561.19

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
ESP-4	623105	Sierrita	3526132.758	499916.830	2958.60	11/28/06	349.20	2609.40
						1/12/07	348.30	2610.30
						5/4/07	346.90	2611.70
						7/24/07	348.80	2609.80
						10/12/07	352.41	2606.19
						1/23/08	349.65	2608.95
						4/18/08	350.39	2608.21
						7/25/08	352.13	2606.47
						10/30/08	355.42	2603.18
						1/29/09	352.50	2606.10
						4/16/09	356.87	2601.73
						10/23/09	355.64	2602.96
						4/28/10	351.56	2607.04
						10/15/10	358.16	2600.44
						5/3/11	355.65	2602.95
						11/22/11	356.91	2601.69
						11/12/12	358.92	2599.68
						5/20/13	363.95	2594.65
						11/5/13	362.37	2596.23
						4/28/14	372.14	2586.46
ESP-5	623106	Sierrita	3527082.232	502007.895	2820.00	2/12/07	219.50	2600.50
						5/4/07	217.75	2602.25
						7/3/07	224.60	2595.40
						11/8/07	228.42	2591.58
						1/28/08	222.00	2598.00
						4/22/08	220.08	2599.92
						8/7/08	225.88	2594.12
						11/3/08	228.92	2591.08
						2/17/09	221.89	2598.11
						6/2/09	224.10	2595.90
						4/28/10	223.28	2596.72
						5/3/11	224.15	2595.85
						6/19/12	229.73	2590.27
						5/20/13	230.08	2589.92
						4/29/14	232.72	2587.28
FFS-1	221662	Sierrita	3524075.673	498327.36	3071.404	1/15/14	438.94	2632.46
						1/22/14	439.09	2632.31
						1/29/14	379.85	2691.55
						3/12/14	446.91	2624.49
						5/14/14	453.40	2618.00
						6/5/14	457.50	2613.90
						7/31/14	457.00	2614.40
						8/27/14	457.80	2613.60
						1/15/14	459.42	2622.69
						1/22/14	460.08	2622.03
						1/29/14	462.21	2619.90
FFS-2	221663	Sierrita	3524527.902	498316.081	3082.106	3/12/14	468.92	2613.19
						5/13/14	444.00	2638.11
						6/5/14	476.75	2605.36
						7/31/14	480.80	2601.31
						8/27/14	482.20	2599.91
						1/15/14	497.29	2586.61
						1/22/14	497.31	2586.59
						1/29/14	497.98	2585.92
FFS-3	221664	Sierrita	3525294.908	498356.883	3083.898	3/12/14	502.16	2581.74
						5/14/14	508.87	2575.03
						6/9/14	509.68	2574.22
						7/31/14	513.10	2570.80
						8/27/14	514.25	2569.65
						1/15/14	548.14	2549.78
						1/22/14	550.75	2547.17
						1/29/14	552.10	2545.82
FFS-4	221665	Sierrita	3525934.456	498354.148	3097.921	3/12/14	559.71	2538.21
						5/14/14	570.41	2527.51
						6/9/14	572.45	2525.47
						7/31/14	578.25	2519.67
						8/27/14	580.50	2517.42

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
FFS-5	221666	Sierrita	3526692.605	498345.757	3107.731	3/12/14	Obstructed	NA
						5/13/14	554.32	2553.41
						5/15/14	554.32	2553.41
						5/22/14	563.67	2544.06
						6/9/14	565.20	2542.53
						7/31/14	568.60	2539.13
						8/27/14	569.80	2537.93
FFS-6	221667	Sierrita	3527286.712	498329.774	3110.44	3/12/14	559.21	2551.23
						5/13/14	566.06	2544.38
						6/9/14	567.10	2543.34
						7/31/14	571.10	2539.34
						8/27/14	572.90	2537.54
						1/9/07	221.00	2721.35
GV-01-GVDWID	603428	GVDWID	3522254.157	499812.869	2942.35	4/10/07	218.11	2724.24
						8/6/07	231.00	2711.35
						1/7/08	221.50	2720.85
						4/16/08	225.50	2716.85
						7/7/08	231.00	2711.35
						11/25/08	228.00	2714.35
						3/3/09	220.50	2721.85
						7/29/09	201.9	2740.45
						11/4/09	232.80	2709.55
						1/27/10	224.80	2717.55
						4/1/10	227.12	2715.23
						10/14/10	233.00	2709.35
						3/18/11	224.00	2718.35
						4/28/11	231.00	2711.35
						12/7/11	233.20	2709.15
						3/14/12	234.25	2708.10
						6/7/12	242.28	2700.07
						8/29/12	231.00	2711.35
						11/15/12	239.00	2703.35
						1/29/13	238.61	2703.74
						5/16/13	254.09	2688.26
						7/11/13	248.19	2694.16
GV-02-GVDWID	603429	GVDWID	3521654.457	499786.207	2930.47	1/9/07	185.30	2745.17
						4/10/07	187.10	2743.37
						7/11/07	200.45	2730.02
						10/3/07	199.33	2731.14
						1/7/08	190.62	2739.85
						4/16/08	194.95	2735.52
						7/7/08	201.05	2729.42
						11/25/08	199.58	2730.89
						2/4/09	192.88	2737.59
						7/29/09	231.9	2698.57
						11/4/09	203.50	2726.97
						1/27/10	195.15	2735.32
						4/1/10	197.10	2733.37
						7/28/10	202.76	2727.71
						10/14/10	204.55	2725.92
						1/20/11	198.88	2731.59
						4/28/11	204.77	2725.70
						7/20/11	206.14	2724.33
						12/7/11	204.43	2726.04
						3/14/12	204.35	2726.12
						6/7/12	211.76	2718.71
						8/29/12	219.00	2711.47
						11/15/12	214.51	2715.96
						1/29/13	209.49	2720.98
						5/16/13	219.48	2710.99
						7/11/13	220.75	2709.72
						1/10/14	221.29	2709.18

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
GV-SI-GVDWID	208825	HGC	3519509.930	497227.175	3042.65	01/09/07	237.50	2805.15
						04/10/07	238.55	2804.10
						08/06/07	240.31	2802.34
						10/03/07	244.40	2798.25
						01/07/08	237.75	2804.90
						04/16/08	247.55	2795.10
						8/14/08	245.50	2797.15
						11/6/08	246.00	2796.65
						2/4/09	247.46	2795.19
						4/1/10	247.60	2795.05
						4/28/11	257.00	2785.65
						6/20/12	257.92	2784.73
						5/16/13	267.53	2775.12
HAVEN GOLF	515867	ADWR	3526386.000	501651.000	ND	5/29/12	220.00	--
I-10	608525	Sierrita	325607.430	977264.441	3210.58	1/15/07	655.89	2554.69
						4/16/07	630.00	2580.58
						7/10/07	656.00	2554.58
						1/8/08	659.58	2551.00
						4/14/08	658.80	2551.78
						7/21/08	657.10	2553.48
						10/24/08	660.82	2549.76
						5/12/09	660.80	2549.78
						6/15/12	662.39	2548.19
						6/11/13	661.26	2549.32
						4/30/14	668.91	2541.67
IW-1	623129	Sierrita	3521277.779	496905.892	3144.69	12/16/06	360.95	2783.74
						2/24/07	386.70	2757.99
						10/19/07	399.90	2744.79
						1/29/08	400.45	2744.24
						5/7/08	398.90	2745.79
						7/29/08	405.85	2738.84
						10/24/08	404.80	2739.89
						1/21/09	400	2744.69
						5/13/09	370.50	2774.19
						4/12/10	394.45	2750.24
						5/11/11	392.80	2751.89
						5/21/12	438.48	2706.21
						4/15/13	439.81	2704.88
						1/28/14	461.65	2683.04
IW-2	623130	Sierrita	497546.637	497546.637	3098.29	2/24/14	392.49	2752.20
						3/25/14	393.89	2750.80
						4/25/14	Obstructed	NA
						5/30/14	Obstructed	NA
						12/16/06	404.30	2693.99
IW-2A	216464	Sierrita	3521337.953	497469.228	3112.28	2/24/07	406.80	2691.49
						5/4/07	344.00	2754.29
						7/31/07	381.00	2717.29
						4/25/08	412.90	2699.38
						5/13/09	358.80	2753.48
						4/12/10	410.18	2702.10
						5/11/11	394.91	2717.37
						5/21/12	404.32	2707.96
						4/15/13	370.91	2741.37
						1/28/14	439.64	2672.64
						2/24/14	384.22	2728.06
						3/25/14	440.29	2671.99
						4/25/14	384.28	2728.00
						5/30/14	440.37	2671.91

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-3A	201732	Sierrita	3521722.640	497366.220	3121.45	12/5/06	431.80	2689.65
						7/31/07	381.50	2739.95
						10/19/07	427.80	2693.65
						1/29/08	425.60	2695.85
						4/25/08	421.30	2700.15
						7/29/08	420.90	2700.55
						10/24/08	141.50	2979.95
						4/12/10	420.23	2701.22
						5/11/11	413.40	2708.05
						6/20/12	401.37	2720.08
						5/14/13	449.56	2671.89
						1/28/14	455.66	2665.79
						2/24/14	408.59	2712.86
						3/25/14	454.96	2666.49
						4/25/14	403.99	2717.46
						5/30/14	454.72	2666.73
IW-4	623132	Sierrita	3522465.879	497371.700	3137.06	2/24/07	417.70	2719.36
						7/21/07	425.30	2711.76
						10/19/07	428.90	2708.16
						1/19/08	433.70	2703.36
						4/21/08	441.90	2695.16
						7/29/08	409.22	2727.84
						10/24/08	452.10	2684.96
						1/21/09	453	2684.06
						5/13/09	383.20	2753.86
						4/12/10	420.70	2716.36
						5/11/11	414.25	2722.81
						5/21/12	402.19	2734.87
						4/15/13	402.34	2734.72
						1/28/14	410.69	2726.37
						2/24/14	393.32	2743.74
						3/25/14	410.27	2726.79
						4/25/14	390.98	2746.08
						5/30/14	410.30	2726.76
IW-5	623133	Sierrita	3522814.850	497369.528	3137.65	5/13/09	375.90	2761.75
IW-5A	219131	NO SURVEY DATA				4/12/10	430.60	2707.05
						5/22/12	468.65	NA
IW-6A	545565	Sierrita	3523708.756	497381.226	3132.26	4/15/13	514.20	NA
						11/15/06	425.00	2707.26
						2/24/07	433.60	2698.66
						7/31/07	432.28	2699.98
						10/17/07	433.35	2698.91
						1/29/08	416.90	2715.36
						4/22/08	415.45	2716.81
						7/29/08	416.82	2715.44
						10/24/08	419.33	2712.93
						1/29/09	418	2714.26
						5/13/09	387.30	2744.96
						4/12/10	384.70	2747.56
						5/11/11	410.61	2721.65
						5/22/12	419.75	2712.51
						4/15/13	433.21	2699.05
						1/28/14	435.59	2696.67
						2/24/14	407.02	2725.24
						3/24/14	432.16	2700.10
						4/25/14	408.39	2723.87
						5/30/14	431.90	2700.36

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-8	508236	Sierrita	3522020.520	497368.253	3122.19	2/24/07	434.05	2688.14
						7/31/07	438.75	2683.44
						10/19/07	436.80	2685.39
						1/29/08	437.25	2684.94
						4/25/08	436.70	2685.49
						7/29/08	437.00	2685.19
						10/24/08	436.92	2685.27
						1/21/09	439	2683.19
						5/13/09	377.80	2744.39
						4/12/10	438.36	2683.83
						5/11/11	430.52	2691.67
						5/21/12	438.67	2683.52
						5/14/13	379.15	2743.04
						1/28/14	466.20	2655.99
						2/24/14	400.57	2721.62
						3/25/14	392.79	2729.40
						4/25/14	Obstructed	NA
						5/30/14	Obstructed	NA
IW-9	508238	Sierrita	3522207.639	497369.791	3102.94	11/15/06	402.72	2700.22
						2/24/07	405.95	2696.99
						7/21/07	405.68	2697.26
						10/19/07	379.00	2723.94
						1/19/08	491.10	2611.84
						4/21/08	480.80	2622.14
						7/29/08	473.00	2629.94
						10/24/08	475.03	2627.91
						1/21/09	469	2633.94
						5/13/09	357.20	2745.74
						4/12/10	426.67	2676.27
						5/26/11	503.43	2599.51
						5/21/12	518.95	2583.99
						4/15/13	502.13	2600.81
						1/28/14	483.69	2619.25
						2/24/14	373.42	2729.52
						3/25/14	455.68	2647.26
						4/25/14	366.85	2736.09
						5/30/14	367.02	2735.92
IW-10	508237	Sierrita	3523122.199	497370.367	3129.64	11/15/06	464.05	2665.59
						2/24/07	463.40	2666.24
						7/21/07	464.22	2665.42
						10/18/07	465.25	2664.39
						1/19/08	465.75	2663.89
						4/21/08	463.29	2666.35
						7/29/08	466.11	2663.53
						10/24/08	468.33	2661.31
						1/21/09	465	2664.64
						5/13/09	391.20	2738.44
						4/12/10	463.16	2666.48
						5/11/11	456.68	2672.96
						5/22/12	466.57	2663.07
						4/15/13	405.06	2724.58
						1/29/14	487.15	2642.49
						2/24/14	416.79	2712.85
						3/24/14	485.73	2643.91
						4/25/14	415.32	2714.32
						5/30/14	485.78	2643.86

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-11	508235	Sierrita	3523428.954	497371.414	3127.20	11/21/06	429.25	2697.95
						2/24/07	428.05	2699.15
						7/31/07	428.50	2698.70
						10/17/07	430.00	2697.20
						1/29/08	430.00	2697.20
						4/22/08	428.00	2699.20
						7/29/08	430.90	2696.30
						10/24/08	433.01	2694.19
						1/21/09	429	2698.20
						5/13/09	379.70	2747.50
						4/12/10	421.14	2706.06
						5/11/11	414.21	2712.99
						5/22/12	439.67	2687.53
						4/15/13	463.19	2664.01
						1/29/14	472.74	2654.46
						2/25/14	404.71	2722.49
						3/24/14	473.94	2653.26
						4/28/14	403.28	2723.92
						5/30/14	Obstructed	NA
IW-12	803638	Sierrita	3523969.869	497364.911	3138.18	2/24/07	456.20	2681.98
						7/21/07	428.78	2709.40
						10/17/07	433.00	2705.18
						7/29/08	425.90	2712.28
						10/24/08	425.90	2712.28
						1/29/09	427	2711.18
						5/13/09	375.80	2762.38
						4/12/10	425.40	2712.78
						5/11/11	415.81	2722.37
						5/22/12	411.45	2726.73
						5/14/13	420.22	2717.96
						1/28/14	381.41	2756.77
						2/24/14	380.19	2757.99
						3/24/14	380.01	2758.17
						4/28/14	386.78	2751.40
						5/30/14	434.66	2703.52
IW-13	545556	Sierrita	3524166.673	497363.820	3143.35	7/31/07	412.13	2731.22
						10/17/07	413.30	2730.05
						1/29/08	412.21	2731.14
						4/22/08	410.42	2732.93
						7/29/08	410.00	2733.35
						10/24/08	410.95	2732.40
						1/29/09	411	2732.35
						5/13/09	388.90	2754.45
						4/12/10	404.66	2738.69
						5/11/11	401.85	2741.50
						6/20/12	405.53	2737.82
						4/15/13	410.89	2732.46
						1/28/14	432.93	2710.42
						2/25/14	401.88	2741.47
						3/24/14	438.75	2704.60
						4/25/14	403.78	2739.57
						5/30/14	438.80	2704.55

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-14	545557	Sierrita	3526924.656	497367.126	3146.42	11/15/06	471.68	2674.74
						2/24/07	463.35	2683.07
						7/31/07	474.00	2672.42
						10/16/07	480.00	2666.42
						1/29/08	478.50	2667.92
						4/21/08	457.75	2688.67
						7/29/08	478.06	2668.36
						10/24/08	467.07	2679.35
						1/29/09	466	2680.42
						5/13/09	383.30	2763.12
						4/21/10	422.20	2724.22
						5/11/11	404.48	2741.94
						5/22/12	458.57	2687.85
						4/15/13	460.72	2685.70
						1/28/14	459.02	2687.40
						2/25/14	393.02	2753.40
						3/24/14	455.21	2691.21
						4/28/14	394.49	2751.93
						5/30/14	453.19	2693.23
IW-15	545558	Sierrita	3526924.656	497372.873	3152.02	11/15/06	427.27	2724.75
						2/24/07	429.89	2722.13
						7/31/07	430.55	2721.47
						10/16/07	390.30	2761.72
						1/29/08	430.45	2721.57
						4/22/08	429.70	2722.32
						7/29/08	429.50	2722.52
						10/24/08	430.49	2721.53
						1/29/09	430	2722.02
						5/13/09	388.00	2764.02
						4/12/10	419.39	2732.63
						5/11/11	414.82	2737.20
						5/22/12	410.54	2741.48
						5/14/13	439.64	2712.38
						1/28/14	458.15	2693.87
						2/25/14	397.32	2754.70
						3/24/14	477.16	2674.86
						4/28/14	399.11	2752.91
						5/30/14	477.18	2674.84
IW-16	545559	Sierrita	3526924.656	497370.651	3162.85	11/15/06	409.69	2753.16
						2/24/07	409.95	2752.90
						7/31/07	409.50	2753.35
						10/16/07	409.17	2753.68
						1/29/08	409.20	2753.65
						4/22/08	408.89	2753.96
						7/29/08	409.02	2753.83
						10/24/08	408.29	2754.56
						1/29/09	409	2753.85
						5/13/09	402.00	2760.85
						4/12/10	405.68	2757.17
						6/29/11	339.30	2823.55
						6/27/12	402.80	2760.05
						5/14/13	407.10	2755.75
						1/28/14	409.04	2753.81
						2/24/14	410.15	2752.70
						3/24/14	411.11	2751.74
						4/25/14	411.92	2750.93
						5/30/14	411.90	2750.95

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-17	545560	Sierrita	3525002.869	497373.717	3160.76	11/15/06	429.15	2731.61
						2/24/07	429.70	2731.06
						7/26/07	427.97	2732.79
						10/16/07	427.70	2733.06
						1/29/08	428.12	2732.64
						4/22/08	428.23	2732.53
						7/29/08	428.40	2732.36
						10/24/08	428.45	2732.31
						1/29/09	428	2732.76
						5/13/09	425.00	2735.76
						4/12/10	425.12	2735.64
						6/29/11	422.10	2738.66
						6/27/12	424.10	2736.66
						5/14/13	428.86	2731.90
						1/28/14	432.11	2728.65
						2/24/14	422.09	2738.67
						3/24/14	435.40	2725.36
						4/25/14	437.29	2723.47
						5/30/14	437.35	2723.41
IW-18	545561	Sierrita	3525169.771	497374.056	3171.15	11/21/06	449.02	2722.13
						2/24/07	449.55	2721.60
						7/21/07	446.35	2724.80
						10/16/07	445.25	2725.90
						1/19/08	446.75	2724.40
						4/21/08	447.48	2723.67
						7/29/08	447.00	2724.15
						10/24/08	446.30	2724.85
						1/29/09	447	2724.15
						5/13/09	441.50	2729.65
						4/12/10	442.94	2728.21
						6/29/11	435.35	2735.80
						6/27/12	436.97	2734.18
						5/14/13	443.11	2728.04
						1/28/14	447.78	2723.37
						2/24/14	449.75	2721.40
						3/24/14	451.75	2719.40
						4/25/14	453.68	2717.47
						5/30/14	453.70	2717.45
IW-19	545562	Sierrita	3525343.392	497373.630	3155.39	11/21/06	418.60	2736.79
						2/23/07	444.65	2710.74
						7/26/07	435.85	2719.54
						1/29/08	451.28	2704.11
						4/21/08	452.00	2703.39
						7/29/08	451.88	2703.51
						10/24/08	451.08	2704.31
						1/29/09	451	2704.39
						5/13/09	413.90	2741.49
						4/12/10	445.24	2710.15
						5/11/11	436.15	2719.24
						5/22/12	432.62	2722.77
						5/14/13	439.33	2716.06
						1/28/14	465.41	2689.98
						2/25/14	422.21	2733.18
						3/24/14	469.27	2686.12
						4/28/14	425.55	2729.84
						5/30/14	469.21	2686.18

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-20	545563	Sierrita	3525568.770	497364.739	3164.21	11/21/06	421.25	2742.96
						1/29/07	445.30	2718.91
						7/26/07	426.21	2738.00
						10/16/07	424.15	2740.06
						1/29/08	424.65	2739.56
						4/21/08	425.15	2739.06
						7/29/08	422.99	2741.22
						10/24/08	424.14	2740.07
						1/29/09	442	2722.21
						5/13/09	414.00	2750.21
						4/29/10	418.07	2746.14
						5/11/11	413.15	2751.06
						6/20/12	414.50	2749.71
						6/17/13	417.26	2746.95
						1/28/14	424.25	2739.96
						2/25/14	420.71	2743.50
						3/24/14	427.83	2736.38
						4/28/14	421.94	2742.27
						5/30/14	427.89	2736.32
IW-21	545664	Sierrita	3525773.266	497374.585	3171.37	11/21/06	424.80	2746.57
						2/23/07	449.65	2721.72
						7/26/07	454.04	2717.33
						10/16/07	442.10	2729.27
						1/29/08	441.68	2729.69
						4/21/08	441.50	2729.87
						7/29/08	454.00	2717.37
						10/24/08	443.08	2728.29
						1/29/09	484	2687.37
						5/13/09	415.60	2755.77
						5/11/11	736.00	2435.37
						4/15/13	612.58	2558.79
						1/28/14	Obstructed	NA
						3/24/14	Obstructed	NA
						4/25/14	Obstructed	NA
						5/30/14	Obstructed	NA
IW-22	200554	Sierrita	3523273.592	497369.590	3128.25	11/21/06	434.75	2693.50
						2/24/07	433.58	2694.67
						7/31/07	430.00	2698.25
						10/18/07	435.75	2692.50
						1/29/08	438.50	2689.75
						4/25/08	439.30	2688.95
						7/29/08	442.08	2686.17
						10/24/08	455.89	2672.36
						1/21/09	442	2686.25
						5/13/09	384.00	2744.25
						4/12/10	434.62	2693.63
						5/11/11	431.21	2697.04
						5/22/12	448.78	2679.47
						4/15/13	459.72	2668.53
						1/29/14	467.14	2661.11
						2/25/14	414.41	2713.84
						3/24/14	471.95	2656.30
						4/28/14	411.44	2716.81
						5/30/14	466.14	2662.11

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
IW-23	200555	Sierrita	3522970.788	497369.237	3128.53	12/16/06	544.50	2584.03
						2/24/07	499.20	2629.33
						7/31/07	500.00	2628.53
						10/18/07	518.95	2609.58
						5/13/09	375.00	2753.53
						4/12/10	538.78	2589.75
						5/11/11	516.15	2612.38
						5/22/12	523.21	2605.32
						4/15/13	482.11	2646.42
						1/29/14	528.47	2600.06
						2/25/14	389.51	2739.02
						3/24/14	Obstructed	NA
						4/28/14	385.17	2743.36
						5/30/14	519.31	2609.22
IW-24	200556	Sierrita	3522633.594	497371.670	3113.29	4/25/08	522.50	2590.79
						7/29/08	452.50	2660.79
						10/24/08	466.99	2646.30
						5/13/09	348.00	2765.29
						4/12/10	522.90	2590.39
						5/11/11	456.05	2657.24
						5/22/12	512.88	2600.41
						4/15/13	533.21	2580.08
						1/28/14	522.00	2591.29
						2/25/14	358.72	2754.57
						3/25/14	517.78	2595.51
						4/28/14	356.88	2756.41
						5/30/14	514.60	2598.69
IW-25	219596	Sierrita	3521725.393	497631.672	3091.66	4/15/13	422.52	2669.14
IW-26	219143	Sierrita	3522307.296	497652.833	3100.03	4/15/13	492.21	2607.82
IW-28	219137	Sierrita	3523178.619	497650.404	3110.71	4/15/13	447.89	2662.82
M-8	87390	Sierrita	3529692.237	499658.916	2999.53	1/15/07	460.92	2538.61
						4/16/07	458.83	2540.70
						7/10/07	462.57	2536.96
						10/8/07	465.65	2533.88
						1/9/08	464.68	2534.85
						4/14/08	462.50	2537.03
						7/25/08	466.18	2533.35
						10/28/08	468.82	2530.71
						1/20/09	466.25	2533.28
						5/12/09	465.10	2534.43
						11/5/09	465.60	2533.93
						5/28/10	466.61	2532.92
						10/21/10	471.61	2527.92
						6/15/11	467.35	2532.18
						11/17/11	471.23	2528.30
						6/29/12	464.98	2534.55
						10/29/12	472.66	2526.87
						4/17/13	466.32	2533.21
						5/21/13	464.70	2534.83
						10/29/13	472.55	2526.98
						3/12/14	472.63	2526.90
						3/12/14	472.63	2526.90
						4/22/14	473.69	2525.84
						5/8/14	473.53	2526.00
						6/9/14	476.70	2522.83
						7/28/14	479.96	2519.57
						8/7/14	480.13	2519.40
						9/8/14	481.99	2517.54

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
M-9	501652	Sierrita	3530303.954	499984.173	2973.81	7/18/06	442.70	2531.11
						1/15/07	445.76	2528.05
						7/10/07	450.75	2523.06
						10/8/07	453.15	2520.66
						1/8/08	447.50	2526.31
						4/14/08	448.50	2525.31
						7/21/08	454.27	2519.54
						10/28/08	457.72	2516.09
						1/20/09	450.78	2523.03
						5/13/09	452.00	2521.81
						6/16/10	453.85	2519.96
						6/2/11	452.35	2521.46
						6/27/12	455.78	2518.03
						5/1/13	473.80	2500.01
						3/12/14	483.66	2490.15
						3/12/14	483.66	2490.15
						4/22/14	464.39	2509.42
						5/8/14	464.37	2509.44
						6/9/14	457.78	2516.03
						7/28/14	479.96	2493.85
						8/7/14	462.06	2511.75
						9/8/14	463.43	2510.38
M-10	501653	Sierrita	3530143.114	499659.027	3005.68	7/18/06	472.72	2532.96
						1/15/07	473.65	2532.03
						4/16/07	471.47	2534.21
						7/10/07	477.16	2528.52
						10/8/07	478.45	2527.23
						1/8/08	477.60	2528.08
						4/14/08	475.48	2530.20
						7/21/08	480.15	2525.53
						10/28/08	483.70	2521.98
						1/20/09	475.85	2529.83
						5/12/09	478.80	2526.88
						11/5/09	481.20	2524.48
						6/4/10	480.29	2525.39
						10/21/10	486.40	2519.28
						5/10/11	478.33	2527.35
						11/16/11	484.66	2521.02
						6/25/12	482.73	2522.95
						10/29/12	486.64	2519.04
						4/17/13	478.63	2527.05
						10/29/13	486.07	2519.61
						4/22/14	483.06	2522.62
M-20	906595	TBPI	3528491.771	499082.070	3054.00	7/18/06	484.18	2569.82
						1/15/07	489.14	2564.86
						7/10/07	486.70	2567.30
						7/12/07	493.26	2560.74
						1/9/08	495.80	2558.20
						4/14/08	494.22	2559.78
						7/25/08	493.70	2560.30
						10/28/08	498.00	2556.00
						1/20/09	497.75	2556.25
						5/12/09	496.80	2557.20
						5/28/10	498.51	2555.49
						5/9/11	499.14	2554.86
						6/26/12	500.50	2553.50
						4/23/13	499.65	2554.35
						4/22/14	511.42	2542.58

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MC-1	221660	Sierrita	3525205.054	498913.093	3038.621	1/15/14	440.93	2597.69
						1/22/14	437.02	2601.60
						1/29/14	442.57	2596.05
						3/13/14	447.98	2590.64
						5/14/14	455.31	2583.31
						6/9/14	456.50	2582.12
						7/31/14	460.50	2578.12
						8/27/14	462.20	2576.42
MC-2	221761	Sierrita	3526365.512	499369.116	3008.28	3/14/14	Obstructed	NA
						5/14/14	440.68	2567.60
						5/15/14	440.66	2567.62
						5/22/14	442.47	2565.81
						6/9/14	443.70	2564.58
						7/31/14	447.50	2560.78
						8/27/14	449.30	2558.98
						3/13/14	Obstructed	NA
MC-3	221661	Sierrita	3526911.999	498858.417	3062.33	5/13/14	515.62	2546.71
						5/15/14	515.62	2546.71
						5/22/14	516.21	2546.12
						6/5/14	517.70	2544.63
						7/31/14	521.40	2540.93
						8/27/14	522.95	2539.38
						3/13/14	Obstructed	NA
						5/13/14	560.86	2535.18
MC-4	220842	Sierrita	3527773.257	498625.865	3096.035	5/15/14	560.86	2535.18
						5/22/14	561.09	2534.95
						6/5/14	561.90	2534.14
						7/31/14	565.70	2530.34
						8/27/14	567.25	2528.79
						11/21/06	443.90	2735.37
						1/10/07	444.15	2735.12
						4/20/07	442.70	2736.57
MH-1	803629	Sierrita	3525872.911	497372.392	3179.27	7/3/07	441.33	2737.94
						11/8/07	440.10	2739.17
						1/28/08	439.97	2739.30
						4/24/08	440.44	2738.83
						8/7/08	439.65	2739.62
						11/14/08	441.45	2737.82
						2/17/09	440.90	2738.37
						6/2/09	440.70	2738.57
						4/13/10	438.62	2740.65
						4/19/11	436.65	2742.62
						4/25/12	436.95	2742.32
						4/29/14	448.90	2730.37
						12/18/06	427.70	2728.17
						2/23/07	427.31	2728.56
						4/23/07	425.51	2730.36
MH-3	803630	Sierrita	3525270.181	497472.430	3155.87	7/21/07	424.22	2731.65
						10/20/07	422.15	2733.72
						1/19/08	424.80	2731.07
						4/21/08	425.44	2730.43
						7/29/08	424.15	2731.72
						10/24/08	426.10	2729.77
						2/17/09	425.46	2730.41
						6/2/09	425.18	2730.69
						4/13/10	418.92	2736.95
						4/19/11	420.10	2735.77
						4/25/12	419.53	2736.34
						4/2/13	425.84	2730.03
						3/12/14	433.09	2722.78
						4/25/14	436.44	2719.43
						5/14/14	436.40	2719.47
						6/24/14	436.38	2719.49
						7/7/14	439.20	2716.67
						8/8/14	440.46	2715.41
						9/9/14	441.45	2714.42

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-5	803632	Sierrita	3523725.339	497477.352	3123.47	11/21/06	389.22	2734.25
						1/12/07	390.70	2732.77
						4/20/07	391.60	2731.87
						7/3/07	391.66	2731.81
						11/8/07	392.95	2730.52
						1/28/08	391.40	2732.07
						4/24/08	390.30	2733.17
						8/7/08	391.55	2731.92
						11/14/08	391.98	2731.49
						2/17/09	391.33	2732.14
						6/2/09	391.30	2732.17
						4/13/10	381.47	2742.00
						4/18/11	387.96	2735.51
						6/14/12	398.80	2724.67
						5/23/13	403.59	2719.88
						4/29/14	Obstructed	NA
						5/22/14	Obstructed	NA
						5/28/14	408.22	2715.25
MH-6	803633	Sierrita	3522770.451	497436.646	3133.97	11/14/06	381.65	2752.32
						1/9/07	378.32	2755.65
						4/20/07	374.80	2759.17
						7/3/07	379.00	2754.97
						11/8/07	380.30	2753.67
						1/28/08	379.15	2754.82
						4/24/08	379.20	2754.77
						8/7/08	379.50	2754.47
						11/14/08	379.50	2754.47
						2/17/09	378.52	2755.45
						6/2/09	379.45	2754.52
						4/13/10	389.35	2744.62
						5/17/11	387.85	2746.12
						6/7/12	382.63	2751.34
						4/2/13	402.02	2731.95
						4/29/14	403.91	2730.06
MH-7	803634	Sierrita	3522016.471	497502.475	3111.23	11/21/06	357.85	2753.38
						1/12/07	360.20	2751.03
						4/20/07	368.20	2743.03
						7/3/07	370.20	2741.03
						11/8/07	370.60	2740.63
						1/28/08	371.00	2740.23
						4/24/08	370.92	2740.31
						8/8/08	372.22	2739.01
						11/14/08	373.20	2738.03
						2/17/09	372.48	2738.75
						6/2/09	371.53	2739.70
						4/13/10	372.63	2738.60
						4/18/11	368.76	2742.47
						6/14/12	381.09	2730.14
						5/23/13	391.31	2719.92
						4/29/14	389.57	2721.66

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-9	803635	Sierrita	3521252.607	496438.181	3162.57	11/8/06	380.58	2781.99
						1/9/07	362.10	2800.47
						4/20/07	363.60	2798.97
						7/3/07	365.25	2797.32
						11/8/07	367.95	2794.62
						1/28/08	368.58	2793.99
						4/24/08	367.08	2795.49
						8/8/08	370.38	2792.19
						11/14/08	371.70	2790.87
						2/17/09	371.97	2790.60
						6/2/09	370.30	2792.27
						4/15/10	373.30	2789.27
						4/19/11	375.11	2787.46
						4/26/12	380.49	2782.08
						5/23/13	386.04	2776.53
						3/12/14	390.22	2772.35
						4/25/14	390.54	2772.03
						5/14/14	390.45	2772.12
						6/24/14	390.41	2772.16
						7/29/14	388.82	2773.75
						8/8/14	387.62	2774.95
						9/9/14	387.00	2775.57
MH-10	803636	Sierrita	3521236.861	495717.770	3187.84	11/8/06	346.70	2841.14
						1/9/07	364.80	2823.04
						4/3/07	355.65	2832.19
						7/16/07	356.75	2831.09
						10/16/07	357.60	2830.24
						1/3/08	358.32	2829.52
						4/28/08	358.83	2829.01
						7/31/08	358.50	2829.34
						11/4/08	360.00	2827.84
						1/2/09	360.15	2827.69
						4/14/09	363.50	2824.34
						4/26/10	362.04	2825.80
						5/18/11	363.39	2824.45
						6/5/12	366.25	2821.59
						6/10/13	369.96	2817.88
						4/23/14	371.84	2816.00
MH-11	803637	Sierrita	3524463.648	498749.381	3041.76	11/9/06	369.90	2671.86
						1/11/07	369.55	2672.21
						4/10/07	370.46	2671.30
						7/17/07	372.75	2669.01
						10/3/07	373.80	2667.96
						1/4/08	373.36	2668.40
						4/29/08	373.89	2667.87
						7/29/08	375.10	2666.66
						11/7/08	376.85	2664.91
						3/19/09	374.88	2666.88
						5/13/09	375.75	2666.01
						4/27/10	375.85	2665.91
						5/24/11	376.65	2665.11
						5/24/12	376.65	2665.11
						4/23/13	383.85	2657.91
						3/12/14	399.52	2642.24
						4/29/14	404.51	2637.25
						5/14/14	404.48	2637.28
						6/12/14	408.00	2633.76
						7/28/14	411.79	2629.97
						8/7/14	412.19	2629.57
						9/8/14	413.51	2628.25

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-12	803638	Sierrita	3525207.002	498772.161	3055.08	3/12/14	Obstructed	NA
						4/29/14	DRY	NA
						5/14/14	DRY	NA
						6/9/14	DRY	NA
						7/28/14	DRY	NA
						8/7/14	DRY	NA
						9/8/14	DRY	NA
						11/10/06	327.84	2698.39
MH-13A	904071	Sierrita	3523793.443	498823.857	3026.23	1/24/07	326.35	2699.88
						4/18/07	328.14	2698.09
						7/17/07	330.98	2695.25
						10/4/07	331.70	2694.53
						1/4/08	330.85	2695.38
						4/29/08	331.80	2694.43
						7/16/08	333.78	2692.45
						10/20/08	334.64	2691.59
						1/23/09	332.98	2693.25
						4/15/09	332.19	2694.04
						4/21/10	333.27	2692.96
						5/23/11	334.40	2691.83
						6/11/12	337.90	2688.33
						4/3/13	344.58	2681.65
						3/12/14	353.78	2672.45
						4/10/14	355.73	2670.50
						5/14/14	355.70	2670.53
						6/12/14	360.00	2666.23
						7/28/14	362.78	2663.45
						8/7/14	363.32	2662.91
						9/8/14	364.56	2661.67
MH-13B	904072	Sierrita	3523787.358	498829.881	3025.63	11/10/06	330.70	2694.93
						1/24/07	330.58	2695.05
						4/18/07	332.21	2693.42
						7/17/07	335.47	2690.16
						10/3/07	335.90	2689.73
						1/4/08	334.85	2690.78
						4/29/08	336.35	2689.28
						7/16/08	337.92	2687.71
						10/20/08	339.14	2686.49
						1/23/09	337.20	2688.43
						4/15/09	336.50	2689.13
						4/21/10	337.47	2688.16
						5/23/11	338.75	2686.88
						6/11/12	342.50	2683.13
						4/3/13	348.98	2676.65
						3/12/14	358.93	2666.70
						4/10/14	361.02	2664.61
						5/14/14	360.97	2664.66
						6/12/14	365.82	2659.81
						7/28/14	368.39	2657.24
						8/7/14	369.30	2656.33
						9/8/14	369.93	2655.70

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-13C	904073	Sierrita	3523793.032	498797.461	3028.46	11/10/06	335.38	2693.08
						1/24/07	335.45	2693.01
						4/18/07	337.80	2690.66
						7/17/07	339.82	2688.64
						10/4/07	340.75	2687.71
						1/4/08	340.42	2688.04
						4/29/08	341.55	2686.91
						7/16/08	343.35	2685.11
						10/20/08	344.57	2683.89
						1/23/09	343.82	2684.64
						4/15/09	343.08	2685.38
						4/21/10	343.86	2684.60
						5/23/11	344.30	2684.16
						6/11/12	348.75	2679.71
						4/3/13	353.62	2674.84
						3/12/14	362.99	2665.47
						4/10/14	365.21	2663.25
						5/14/14	365.22	2663.24
						6/12/14	370.51	2657.95
						7/28/14	373.52	2654.94
						8/7/14	374.46	2654.00
						9/8/14	375.79	2652.67
MH-14	528098	Sierrita	3525269.340	497517.626	3153.46	12/18/06	427.28	2726.18
						2/23/07	426.75	2726.71
						4/23/07	425.58	2727.88
						7/10/07	424.20	2729.26
						10/17/07	422.80	2730.66
						1/18/08	424.87	2728.59
						4/8/08	425.13	2728.33
						7/22/08	423.92	2729.54
						10/6/08	426.03	2727.43
						2/13/09	425.90	2727.56
						4/7/09	424.90	2728.56
						4/15/10	422.91	2730.55
						8/12/10	421.82	2731.64
						4/19/11	418.94	2734.52
						4/25/12	419.83	2733.63
						4/2/13	425.59	2727.87
						10/21/13	426.13	2727.33
						1/3/14	426.45	2727.01
						3/12/14	Dry	NA
						3/25/14	435.04	2718.42
						4/9/14	436.20	2717.26
						5/14/14	436.12	2717.34
						6/24/14	436.09	2717.37
						7/7/14	440.32	2713.14
						8/8/14	441.58	2711.88
						9/9/14	442.76	2710.70

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-15E	528094	Sierrita	3523274.327	497584.800	3111.37	11/10/06	385.25	2726.12
						2/23/07	384.07	2727.30
						4/23/07	385.11	2726.26
						7/21/07	385.80	2725.57
						10/20/07	387.08	2724.29
						1/18/08	386.60	2724.77
						4/21/08	386.18	2725.19
						7/29/08	387.39	2723.98
						10/24/08	388.51	2722.86
						2/17/09	387.46	2723.91
						6/2/09	386.98	2724.39
						4/13/10	386.17	2725.20
						4/18/11	382.69	2728.68
						6/14/12	391.96	2719.41
						4/2/13	407.42	2703.95
						3/12/14	409.49	2701.88
						4/25/14	410.59	2700.78
						5/14/14	410.62	2700.75
						6/24/14	410.60	2700.77
						7/29/14	404.02	2707.35
						8/8/14	404.33	2707.04
						9/9/14	404.56	2706.81
MH-15W	528093	Sierrita	3523275.003	497524.067	3117.07	12/18/06	391.30	2725.77
						2/23/07	390.00	2727.07
						4/23/07	391.18	2725.89
						7/11/07	390.85	2726.22
						10/17/07	393.10	2723.97
						1/18/08	392.90	2724.17
						4/8/08	391.00	2726.07
						7/1/08	392.70	2724.37
						10/6/08	394.00	2723.07
						1/7/09	392.55	2724.52
						5/6/09	390.25	2726.82
						4/15/10	390.58	2726.49
						8/12/10	389.20	2727.87
						5/17/11	388.95	2728.12
						4/25/12	397.62	2719.45
						5/28/13	409.15	2707.92
						12/12/13	414.19	2702.88
						1/3/14	412.60	2704.47
						3/12/14	414.01	2703.06
						4/9/14	412.76	2704.31
						5/14/14	412.77	2704.30
						6/24/14	412.74	2704.33
						7/7/14	413.44	2703.63
						8/8/14	409.65	2707.42
						9/9/14	407.53	2709.54

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-16E	528100	Sierrita	3521870.233	497576.673	3097.72	12/18/06	344.70	2753.02
						2/23/07	349.39	2748.33
						4/23/07	352.85	2744.87
						7/21/07	355.00	2742.72
						10/20/07	355.55	2742.17
						1/19/08	355.30	2742.42
						4/21/08	355.15	2742.57
						7/29/08	356.78	2740.94
						10/24/08	357.62	2740.10
						2/17/09	357.02	2740.70
						6/2/09	354.15	2743.57
						4/13/10	357.71	2740.01
						4/18/11	354.93	2742.79
						4/26/12	362.82	2734.90
						5/23/13	364.82	2732.90
						3/12/14	384.61	2713.11
						4/25/14	382.54	2715.18
						5/14/14	382.56	2715.16
						6/24/14	382.55	2715.17
						7/29/14	380.17	2717.55
						8/8/14	381.30	2716.42
						9/9/14	382.26	2715.46
MH-16W	528099	Sierrita	3521870.818	497516.074	3100.24	12/18/06	346.62	2753.62
						2/23/07	352.18	2748.06
						4/23/07	355.75	2744.49
						7/11/07	357.47	2742.77
						10/17/07	357.75	2742.49
						1/3/08	357.80	2742.44
						4/24/08	357.87	2742.37
						7/22/08	359.24	2741.00
						10/8/08	360.03	2740.21
						3/19/09	358.73	2741.51
						4/7/09	358.60	2741.64
						4/15/10	360.31	2739.93
						8/12/10	360.42	2739.82
						5/17/11	357.55	2742.69
						4/25/12	364.24	2736.00
						4/2/13	377.99	2722.25
						10/21/13	387.88	2712.36
						1/3/14	389.39	2710.85
						3/12/14	385.88	2714.36
						4/9/14	383.83	2716.41
						5/14/14	383.87	2716.37
						6/24/14	383.89	2716.35
						7/7/14	381.43	2718.81
						8/8/14	382.48	2717.76
						9/9/14	383.38	2716.86
MH-24	563799	Sierrita	3523709.046	497390.515	3131.16	11/21/06	397.50	2733.66
						4/20/07	399.35	2731.81
						8/3/07	399.33	2731.83
						11/8/07	400.50	2730.66
						1/30/08	396.90	2734.26
						4/24/08	395.89	2735.27
						8/7/08	396.78	2734.38
						11/14/08	396.88	2734.28
						2/17/09	396.31	2734.85
						6/2/09	396.50	2734.66
						4/13/10	386.43	2744.73
						4/18/11	392.84	2738.32
						4/25/12	396.58	2734.58
						4/2/13	408.56	2722.60
						4/29/14	Obstructed	NA
						5/22/14	407.41	2723.75

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-25A	201528	Sierrita	3526510.175	498880.349	3056.57	11/13/06	454.11	2602.46
						1/10/07	453.10	2603.47
						4/4/07	452.20	2604.37
						7/20/07	454.02	2602.55
						10/3/07	454.69	2601.88
						1/2/08	454.82	2601.75
						4/25/08	454.47	2602.10
						7/2/08	455.68	2600.89
						10/17/08	457.49	2599.08
						1/5/09	457	2599.57
						4/15/09	455.90	2600.67
						4/13/10	458.10	2598.47
						4/27/11	459.25	2597.32
						5/1/12	459.69	2596.88
						4/3/13	461.70	2594.87
						3/12/14	473.95	2582.62
						4/15/14	477.45	2579.12
						5/13/14	477.40	2579.17
						6/9/14	482.36	2574.21
						7/28/14	486.66	2569.91
						8/7/14	488.09	2568.48
						9/8/14	489.49	2567.08
MH-25B	208429	Sierrita	3526515.244	498870.343	3058.22	11/13/06	455.36	2602.86
						1/10/07	454.28	2603.94
						4/4/07	453.20	2605.02
						7/20/07	455.32	2602.90
						10/3/07	456.01	2602.21
						1/2/08	456.05	2602.17
						4/25/08	456.02	2602.20
						7/2/08	457.10	2601.12
						10/17/08	458.39	2599.83
						1/5/09	458.38	2599.84
						4/15/09	457.28	2600.94
						4/13/10	458.27	2599.95
						4/27/11	460.35	2597.87
						6/15/11	460.85	2597.37
						5/1/12	460.90	2597.32
						4/3/13	463.02	2595.20
						3/12/14	475.49	2582.73
						4/15/14	478.92	2579.30
						5/13/14	478.93	2579.29
						6/9/14	483.75	2574.47
						7/28/14	488.06	2570.16
						8/7/14	489.41	2568.81
						9/8/14	490.78	2567.44

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-25C	208426	Sierrita	3526491.132	498874.666	3057.24	11/13/06	454.65	2602.59
						1/10/07	453.57	2603.67
						4/13/07	452.30	2604.94
						7/20/07	454.42	2602.82
						10/3/07	455.19	2602.05
						1/2/08	455.06	2602.18
						4/25/08	454.84	2602.40
						7/2/08	456.23	2601.01
						10/17/08	457.49	2599.75
						1/5/09	457.30	2599.94
						4/15/09	456.41	2600.83
						4/13/10	459.28	2597.96
						4/27/11	459.16	2598.08
						6/15/11	459.52	2597.72
						5/1/12	459.76	2597.48
						4/3/13	461.80	2595.44
						3/12/14	474.31	2582.93
						4/15/14	477.67	2579.57
						5/13/14	477.63	2579.61
						6/9/14	482.63	2574.61
						7/28/14	487.01	2570.23
						8/7/14	488.25	2568.99
						9/8/14	489.69	2567.55
MH-26A	201527	Sierrita	3527818.233	498852.692	3070.89	11/13/06	495.74	2575.15
						1/15/07	495.65	2575.24
						4/4/07	493.75	2577.14
						7/19/07	495.02	2575.87
						10/2/07	496.12	2574.77
						1/2/08	496.28	2574.61
						4/25/08	495.73	2575.16
						7/2/08	496.98	2573.91
						10/17/08	498.23	2572.66
						1/5/09	498.76	2572.13
						4/21/09	497.85	2573.04
						4/13/10	499.68	2571.21
						4/27/11	500.71	2570.18
						5/2/12	501.05	2569.84
						4/4/13	501.96	2568.93
						3/12/14	513.50	2557.39
						4/15/14	513.40	2557.49
						5/13/14	513.36	2557.53
						6/9/14	520.93	2549.96
						7/28/14	524.95	2545.94
						8/7/14	525.55	2545.34
						9/8/14	DRY	NA

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-26B	208427	Sierrita	3527814.016	498839.900	3070.50	11/13/06	493.00	2577.50
						1/15/07	492.85	2577.65
						4/4/07	490.78	2579.72
						7/19/07	492.01	2578.49
						10/2/07	493.18	2577.32
						1/2/08	493.76	2576.74
						4/25/08	492.98	2577.52
						7/2/08	494.10	2576.40
						10/20/08	495.31	2575.19
						1/5/09	495.88	2574.62
						4/21/09	494.90	2575.60
						4/13/10	496.77	2573.73
						5/5/11	497.73	2572.77
						5/1/12	498.00	2572.50
						4/4/13	499.03	2571.47
						3/12/14	510.69	2559.81
						4/15/14	510.67	2559.83
						5/13/14	510.68	2559.82
						6/9/14	517.75	2552.75
						7/28/14	522.14	2548.36
						8/7/14	523.46	2547.04
						9/8/14	524.35	2546.15
MH-26C	208428	Sierrita	3527806.770	498865.240	3069.11	11/13/06	494.45	2574.66
						1/15/07	494.10	2575.01
						4/4/07	492.30	2576.81
						7/19/07	493.62	2575.49
						10/2/07	496.58	2572.53
						1/2/08	495.35	2573.76
						4/25/08	494.37	2574.74
						7/2/08	495.55	2573.56
						10/20/08	496.78	2572.33
						1/5/09	497.21	2571.90
						4/21/09	493.95	2575.16
						4/13/10	498.14	2570.97
						4/27/11	499.14	2569.97
						5/1/12	499.44	2569.67
						4/4/13	500.61	2568.50
						3/12/14	512.31	2556.80
						4/15/14	512.27	2556.84
						5/13/14	512.30	2556.81
						6/9/14	519.21	2549.90
						7/28/14	523.77	2545.34
						8/7/14	525.34	2543.77
						9/8/14	526.04	2543.07

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-28	903548	Sierrita	3524609.980	497471.427	3142.18	11/14/06	401.10	2741.08
						2/19/07	401.10	2741.08
						4/17/07	402.32	2739.86
						7/16/07	403.18	2739.00
						10/11/07	403.00	2739.18
						1/21/08	402.72	2739.46
						4/8/08	401.90	2740.28
						7/1/08	401.48	2740.70
						10/6/08	402.17	2740.01
						1/7/09	402	2740.18
						4/7/09	401.06	2741.12
						10/13/09	401.10	2741.08
						4/15/10	395.65	2746.53
						8/12/10	398.60	2743.58
						10/12/10	399.00	2743.18
						5/17/11	396.89	2745.29
						10/4/11	397.90	2744.28
						5/21/12	398.64	2743.54
						10/9/12	403.77	2738.41
						4/2/13	405.08	2737.10
						10/21/13	407.88	2734.30
						1/3/14	408.01	2734.17
						3/12/14	411.69	2730.49
						4/9/14	412.72	2729.46
						5/14/14	412.74	2729.44
						6/24/14	412.76	2729.42
						7/7/14	414.90	2727.28
						8/8/14	414.60	2727.58
						9/9/14	414.19	2727.99
MH-29	903649	Sierrita	3522805.518	497604.326	3123.15	11/14/06	378.05	2745.10
						2/19/07	376.58	2746.57
						4/17/07	376.75	2746.40
						7/16/07	379.07	2744.08
						10/11/07	381.92	2741.23
						1/18/08	380.41	2742.74
						4/8/08	380.16	2742.99
						7/1/08	380.50	2742.65
						10/7/08	381.52	2741.63
						1/9/09	380.25	2742.90
						4/7/09	379.90	2743.25
						10/13/09	380.52	2742.63
						4/15/10	379.59	2743.56
						8/12/10	378.65	2744.50
						10/12/10	379.31	2743.84
						4/20/11	377.75	2745.40
						5/23/11	377.80	2745.35
						10/4/11	380.25	2742.90
						5/21/12	389.39	2733.76
						10/9/12	365.70	2757.45
						4/2/13	392.00	2731.15
						11/8/13	393.39	2729.76
						12/11/13	394.82	2728.33
						1/3/14	394.63	2728.52
						3/12/14	394.25	2728.90
						4/9/14	393.95	2729.20
						5/14/14	393.92	2729.23
						6/24/14	393.94	2729.21
						7/7/14	392.13	2731.02
						8/8/14	392.28	2730.87
						9/9/14	392.59	2730.56

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MH-30	903884	Sierrita	3525926.812	496682.307	3232.45	11/10/06	422.78	2809.67
						1/9/07	421.65	2810.80
						4/9/07	419.32	2813.13
						7/11/07	416.85	2815.60
						10/2/07	416.95	2815.50
						1/18/08	417.34	2815.11
						4/8/08	418.12	2814.33
						7/1/08	417.71	2814.74
						10/6/08	417.11	2815.34
						1/7/09	416.37	2816.08
						4/7/09	415.10	2817.35
						4/15/10	412.03	2820.42
						5/17/11	412.18	2820.27
						4/26/12	420.61	2811.84
						6/6/13	427.36	2805.09
						3/12/14	429.01	2803.44
						4/8/14	429.46	2802.99
						5/14/14	429.47	2802.98
						6/24/14	429.48	2802.97
						7/29/14	430.12	2802.33
						8/8/14	430.23	2802.22
						9/9/14	430.41	2802.04
MO-2007-1A	907342	Sierrita	3529331.380	500016.947	2967.65	7/30/07	425.87	2541.78
						10/9/07	428.32	2539.33
						1/24/08	426.32	2541.33
						4/9/08	424.72	2542.93
						7/14/08	428.42	2539.23
						10/17/08	431.02	2536.63
						1/16/09	428.90	2538.75
						4/1/09	426.86	2540.79
						7/1/09	426.90	2540.75
						10/22/09	434.05	2533.60
						4/16/10	428.89	2538.76
						10/13/10	434.09	2533.56
						5/5/11	429.31	2538.34
						10/6/11	433.60	2534.05
						6/12/12	431.38	2536.27
						10/24/12	435.12	2532.53
						4/8/13	429.69	2537.96
						10/23/13	435.06	2532.59
						3/12/14	435.92	2531.73
						4/29/14	437.74	2529.91
						5/8/14	437.72	2529.93
						6/9/14	440.59	2527.06
						7/28/14	443.83	2523.82
						8/7/14	444.58	2523.07
						9/8/14	445.78	2521.87

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2007-1B	907210	Sierrita	3529325.119	500021.574	2966.82	7/30/07	425.67	2541.15
						10/9/07	429.20	2537.62
						1/24/08	426.41	2540.41
						4/9/08	425.05	2541.77
						7/14/08	428.98	2537.84
						10/17/08	431.64	2535.18
						1/16/09	429.05	2537.77
						4/1/09	427.23	2539.59
						7/1/09	427.70	2539.12
						10/22/09	434.90	2531.92
						4/16/10	429.13	2537.69
						10/13/10	434.47	2532.35
						5/5/11	429.65	2537.17
						10/6/11	434.10	2532.72
						6/12/12	431.95	2534.87
						10/24/12	435.62	2531.20
						4/8/13	429.03	2537.79
						10/23/13	435.71	2531.11
						3/12/14	436.56	2530.26
						4/29/14	438.64	2528.18
						5/8/14	438.67	2528.15
						6/9/14	441.65	2525.17
						7/28/14	444.85	2521.97
						8/7/14	445.81	2521.01
						9/8/14	446.61	2520.21
MO-2007-1C	907209	Sierrita	3529328.959	500013.405	2968.58	7/30/07	423.87	2544.71
						10/9/07	427.02	2541.56
						1/24/08	424.00	2544.58
						4/9/08	423.30	2545.28
						7/14/08	426.73	2541.85
						10/21/08	429.49	2539.09
						1/16/09	426.75	2541.83
						4/1/09	424.90	2543.68
						7/1/09	428.81	2539.77
						10/22/09	427.60	2540.98
						4/16/10	426.93	2541.65
						10/13/10	431.88	2536.70
						4/20/11	427.32	2541.26
						10/6/11	431.80	2536.78
						6/12/12	429.40	2539.18
						10/24/12	433.08	2535.50
						4/8/13	426.50	2542.08
						10/23/13	433.06	2535.52
						3/12/14	434.69	2533.89
						4/29/14	437.08	2531.50
						5/8/14	436.98	2531.60
						6/9/14	440.40	2528.18
						7/28/14	443.49	2525.09
						8/7/14	444.30	2524.28
						9/8/14	445.02	2523.56

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2007-2	906765	Sierrita	3527621.102	497912.410	3153.83	8/9/07	575.30	2578.53
						10/9/07	576.60	2577.23
						1/22/08	577.22	2576.61
						4/17/08	576.65	2577.18
						7/14/08	577.35	2576.48
						10/17/08	578.54	2575.29
						1/15/09	579.10	2574.73
						4/1/09	578.38	2575.45
						4/13/10	580.50	2573.33
						4/27/11	581.41	2572.42
						5/2/12	581.75	2572.08
						4/8/13	582.45	2571.38
						3/12/14	592.12	2561.71
						4/9/14	591.93	2561.90
						5/8/14	590.86	2562.97
						6/9/14	600.45	2553.38
						7/28/14	604.52	2549.31
						8/7/14	605.29	2548.54
						9/8/14	607.39	2546.44
MO-2007-3B	906816	Sierrita	3528508.801	500522.491	2912.15	9/10/07	359.38	2552.77
						10/9/07	359.55	2552.60
						1/21/08	357.13	2555.02
						4/16/08	357.10	2555.05
						7/14/08	358.71	2553.44
						10/22/08	361.77	2550.38
						1/19/09	358.95	2553.20
						4/1/09	357.70	2554.45
						7/27/09	361.21	2550.94
						10/22/09	365.50	2546.65
						3/11/10	359.36	2552.79
						4/14/10	360.30	2551.85
						7/21/10	362.20	2549.95
						10/26/10	364.82	2547.33
						1/18/11	361.99	2550.16
						5/4/11	361.59	2550.56
						7/6/11	363.80	2548.35
						11/22/11	365.10	2547.05
						1/11/12	363.36	2548.79
						5/8/12	362.09	2550.06
						8/7/12	363.87	2548.28
						1/8/13	362.33	2549.82
						4/9/13	360.13	2552.02
						5/21/13	359.84	2552.31
						8/27/13	365.16	2546.99
						10/24/13	366.19	2545.96
						1/7/14	364.11	2548.04
						3/12/14	368.18	2543.97
						4/16/14	369.34	2542.81
						5/14/14	369.35	2542.80
						6/23/14	369.35	2542.80
						7/8/14	375.64	2536.51
						8/8/14	377.48	2534.67
						9/9/14	378.82	2533.33

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2007-3C	906817	Sierrita	3528508.743	500529.713	2911.90	7/5/07	356.30	2555.60
						10/10/07	359.85	2552.05
						1/21/08	356.74	2555.16
						4/15/08	357.18	2554.72
						7/14/08	359.84	2552.06
						10/21/08	361.99	2549.91
						1/19/09	359.61	2552.29
						4/1/09	358	2553.90
						7/22/09	362	2549.90
						10/22/09	362.80	2549.10
						3/11/10	359.62	2552.28
						4/14/10	360.45	2551.45
						7/21/10	367.50	2544.40
						10/26/10	365.13	2546.77
						1/18/11	361.62	2550.28
						5/4/11	361.61	2550.29
						7/6/11	363.75	2548.15
						10/5/11	365.50	2546.40
						1/11/12	363.36	2548.54
						5/7/12	362.35	2549.55
						8/7/12	364.49	2547.41
						10/10/12	366.50	2545.40
						1/8/13	362.59	2549.31
						4/9/13	360.45	2551.45
						8/27/13	365.47	2546.43
						10/24/13	366.79	2545.11
						1/7/14	364.19	2547.71
						3/12/14	368.09	2543.81
						4/16/14	369.60	2542.30
						5/14/14	369.63	2542.27
						6/23/14	369.65	2542.25
						7/9/14	376.55	2535.35
						8/8/14	377.79	2534.11
						9/9/14	379.28	2532.62
MO-2007-4A	907213	Sierrita	3525634.956	500383.682	2923.63	10/9/07	307.67	2615.96
						1/22/08	303.85	2619.78
						4/16/08	305.46	2618.17
						7/17/08	308.05	2615.58
						10/22/08	309.65	2613.98
						1/19/09	306.28	2617.35
						4/2/09	306.69	2616.94
						7/1/09	307.92	2615.71
						10/26/09	309.10	2614.53
						1/26/10	308.52	2615.11
						4/14/10	308.53	2615.10
						7/21/10	311.05	2612.58
						10/13/10	312.00	2611.63
						1/19/11	308.82	2614.81
						5/4/11	309.68	2613.95
						7/6/11	311.75	2611.88
						10/5/11	312.50	2611.13
						1/17/12	310.05	2613.58
						5/7/12	310.42	2613.21
						8/13/12	313.30	2610.33
						10/23/12	314.17	2609.46
						2/21/13	311.70	2611.93
						4/10/13	312.68	2610.95
						7/10/13	316.31	2607.32
						10/22/13	318.07	2605.56
						1/10/14	316.34	2607.29
						3/12/14	319.78	2603.85
						4/8/14	321.40	2602.23
						5/6/14	321.36	2602.27
						6/23/14	321.33	2602.30
						7/8/14	329.06	2594.57
						8/8/14	331.16	2592.47
						9/9/14	332.77	2590.86

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2007-4B	907212	Sierrita	3525613.952	500380.947	2923.57	10/11/07	308.72	2614.85
						1/7/08	304.22	2619.35
						4/16/08	306.48	2617.09
						7/18/08	308.95	2614.62
						10/22/08	310.77	2612.80
						1/21/09	306	2617.57
						4/2/09	306.72	2616.85
						7/1/09	309.1	2614.47
						10/26/09	313.00	2610.57
						1/26/10	308.29	2615.28
						4/14/10	308.79	2614.78
						7/21/10	311.22	2612.35
						10/13/10	312.39	2611.18
						1/19/11	308.84	2614.73
						5/4/11	310.40	2613.17
						7/6/11	312.85	2610.72
						10/5/11	313.50	2610.07
						1/17/12	309.81	2613.76
						5/7/12	311.47	2612.10
						8/13/12	314.42	2609.15
						10/23/12	315.28	2608.29
						2/21/13	311.79	2611.78
						4/10/13	313.17	2610.40
						7/10/13	317.96	2605.61
						10/22/13	319.56	2604.01
						1/10/14	316.92	2606.65
						3/12/14	322.35	2601.22
						4/8/14	324.09	2599.48
						5/6/14	324.03	2599.54
						6/23/14	324.00	2599.57
						7/8/14	333.65	2589.92
						8/8/14	335.20	2588.37
						9/9/14	336.99	2586.58
MO-2007-4C	907211	Sierrita	3525624.484	500382.217	2923.66	8/12/07	307.13	2616.53
						10/12/07	308.78	2614.88
						1/22/08	304.90	2618.76
						4/16/08	306.75	2616.91
						7/18/08	309.10	2614.56
						10/22/08	311.41	2612.25
						1/21/09	306.80	2616.86
						4/2/09	311.49	2612.17
						7/1/09	311.68	2611.98
						10/26/09	311.30	2612.36
						1/26/10	309.53	2614.13
						4/14/10	309.58	2614.08
						7/21/10	312.75	2610.91
						10/13/10	313.49	2610.17
						1/19/11	309.94	2613.72
						5/4/11	311.53	2612.13
						7/6/11	314.05	2609.61
						10/5/11	314.80	2608.86
						1/12/12	311.00	2612.66
						5/7/12	312.37	2611.29
						8/13/12	315.55	2608.11
						10/23/12	316.47	2607.19
						2/21/13	312.89	2610.77
						4/10/13	314.14	2609.52
						7/10/13	318.94	2604.72
						10/22/13	320.63	2603.03
						1/10/14	318.02	2605.64
						3/12/14	323.88	2599.78
						4/8/14	325.83	2597.83
						5/6/14	325.81	2597.85
						6/23/14	325.84	2597.82
						7/8/14	335.70	2587.96
						8/8/14	336.88	2586.78
						9/9/14	338.81	2584.85

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2007-5B	907456	Sierrita	3523743.376	500013.850	2944.35	10/12/07	268.27	2676.08
						1/7/08	262.09	2682.26
						4/17/08	266.22	2678.13
						7/24/08	268.61	2675.74
						10/23/08	272.16	2672.19
						1/21/09	265.83	2678.52
						4/2/09	269.20	2675.15
						1/25/10	268.30	2676.05
						4/27/10	268.02	2676.33
						12/10/10	272.31	2672.04
						6/24/11	275.70	2668.65
						11/21/11	273.28	2671.07
						6/20/12	277.46	2666.89
						11/6/12	280.33	2664.02
						6/12/13	288.32	2656.03
						10/24/13	287.84	2656.51
						3/12/14	287.24	2657.11
						4/29/14	294.80	2649.55
						5/14/14	294.78	2649.57
						6/23/14	294.76	2649.59
						7/28/14	299.29	2645.06
						8/7/14	301.38	2642.97
						9/8/14	302.31	2642.04
MO-2007-5C	907457	Sierrita	3523736.459	500014.152	2944.91	8/23/07	294.04	2650.87
						10/13/07	289.70	2655.21
						1/7/08	285.09	2659.82
						4/17/08	281.52	2663.39
						7/24/08	282.42	2662.49
						10/23/08	285.03	2659.88
						1/22/09	281.38	2663.53
						5/13/09	282.35	2662.56
						10/27/09	284.70	2660.21
						4/27/10	276.49	2668.42
						12/10/10	278.31	2666.60
						5/24/11	278.21	2666.70
						11/21/11	280.98	2663.93
						6/18/12	281.66	2663.25
						11/6/12	286.84	2658.07
						6/13/13	292.47	2652.44
						11/12/13	292.49	2652.42
						3/12/14	291.79	2653.12
						5/6/14	298.74	2646.17
						5/6/14	298.74	2646.17
						6/23/14	298.76	2646.15
						7/28/14	304.81	2640.10
						8/7/14	305.34	2639.57
						9/8/14	305.94	2638.97

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2007-6A	907607	Sierrita	3521842.050	498367.161	3043.37	10/2/07	303.60	2739.77
						1/22/08	303.27	2740.10
						4/18/08	304.02	2739.35
						7/24/08	305.81	2737.56
						10/23/08	307.85	2735.52
						1/22/09	305.87	2737.50
						4/2/09	304.87	2738.50
						7/22/09	307.15	2736.22
						10/26/09	307.00	2736.37
						3/11/10	306.15	2737.22
						4/21/10	306.44	2736.93
						8/10/10	309.12	2734.25
						10/26/10	308.95	2734.42
						1/18/11	307.78	2735.59
						5/5/11	308.13	2735.24
						7/7/11	309.90	2733.47
						10/6/11	311.10	2732.27
						1/11/12	311.24	2732.13
						6/12/12	314.95	2728.42
						8/13/12	317.93	2725.44
						10/18/12	316.94	2726.43
						1/8/13	321.98	2721.39
						4/9/13	323.05	2720.32
						7/10/13	326.23	2717.14
						10/22/13	329.74	2713.63
						1/6/14	329.94	2713.43
						3/12/14	329.85	2713.52
						4/9/14	330.14	2713.23
						5/14/14	330.12	2713.25
						6/23/14	330.08	2713.29
						7/8/14	331.19	2712.18
						8/7/14	331.41	2711.96
						9/8/14	331.78	2711.59
MO-2007-6B	907606	Sierrita	3521849.495	498367.887	3043.05	10/4/07	319.17	2723.88
						1/21/08	314.78	2728.27
						4/17/08	314.75	2728.30
						7/24/08	317.04	2726.01
						10/23/08	318.17	2724.88
						1/22/09	316.58	2726.47
						4/2/09	316.05	2727.00
						7/22/09	317.49	2725.56
						10/26/09	319.37	2723.68
						3/11/10	316.58	2726.47
						4/21/10	316.64	2726.41
						8/10/10	318.40	2724.65
						10/26/10	318.66	2724.39
						1/18/11	317.52	2725.53
						5/5/11	317.00	2726.05
						7/7/11	318.58	2724.47
						10/6/11	319.92	2723.13
						1/11/12	320.03	2723.02
						6/12/12	325.69	2717.36
						8/13/12	329.12	2713.93
						10/18/12	332.52	2710.53
						1/8/13	333.92	2709.13
						4/9/13	335.80	2707.25
						7/10/13	337.52	2705.53
						10/22/13	340.62	2702.43
						1/6/14	340.62	2702.43
						3/12/14	340.61	2702.44
						4/9/14	340.98	2702.07
						5/14/14	341.00	2702.05
						6/23/14	341.04	2702.01
						7/8/14	341.95	2701.10
						8/7/14	342.50	2700.55
						9/8/14	342.88	2700.17

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MO-2009-1	910458	Sierrita	3523369.438	500534.089	2890.78	6/2/09	226.35	2664.43
						7/29/09	222.46	2668.32
						11/3/09	225.90	2664.88
						1/25/10	212.26	2678.52
						4/20/10	219.94	2670.84
						8/10/10	227.88	2662.90
						12/15/10	215.16	2675.62
						2/2/11	214.99	2675.79
						6/16/11	226.45	2664.33
						8/31/11	223.97	2666.81
						12/1/11	219.96	2670.82
						1/11/12	222.55	2668.23
						5/9/12	225.63	2665.15
						8/15/12	234.23	2656.55
						11/29/12	229.30	2661.48
						1/8/13	229.63	2661.15
						4/10/13	233.98	2656.80
						7/11/13	238.53	2652.25
						10/16/13	237.57	2653.21
						1/6/14	236.58	2654.20
						3/12/14	237.34	2653.44
						4/24/14	248.16	2642.62
						5/6/14	248.19	2642.59
						6/23/14	248.22	2642.56
						7/8/14	252.36	2638.42
						8/7/14	254.35	2636.43
						9/8/14	256.45	2634.33
NP-2	605898	HGC	3528517.116	500582.904	2906.56	11/6/07	355.10	2551.46
						1/11/08	353.67	2552.89
						4/17/08	352.20	2554.36
						7/11/08	355.10	2551.46
						10/9/08	356.24	2550.32
						2/9/09	355.00	2551.56
						4/24/09	354.80	2551.76
						9/22/09	358.90	2547.66
						12/31/09	358.57	2547.99
						2/17/10	357.20	2549.36
						4/22/10	356.38	2550.18
						8/5/10	357.93	2548.63
						10/25/10	360.80	2545.76
						1/19/11	358.68	2547.88
						5/3/11	358.30	2548.26
						7/18/11	359.72	2546.84
						12/5/11	360.27	2546.29
						3/21/12	358.10	2548.46
						6/18/12	359.28	2547.28
						8/15/12	360.45	2546.11
						11/29/12	360.79	2545.77
						2/20/13	356.92	2549.64
						6/17/13	358.19	2548.37
						8/27/13	360.56	2546.00
						10/30/13	362.56	2544.00
						1/7/14	361.24	2545.32
						3/12/14	363.18	2543.38
						4/23/14	364.29	2542.27
						5/14/14	364.22	2542.34
						6/23/14	364.24	2542.32
						7/1/14	368.67	2537.89
						8/8/14	370.36	2536.20
						9/9/14	372.75	2533.81

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
PS-1	220862	Sierrita	3529128.00	499148.00	3040.665	5/8/14	516.79	2523.88
						5/15/14	516.79	2523.88
						5/22/14	525.44	2515.23
						6/5/14	525.25	2515.42
						7/31/14	527.40	2513.27
						8/27/14	527.40	2513.27
						1/15/14	507.18	2520.49
PS-2	220862	Sierrita	3529357.00	499318.00	3027.673	1/22/14	494.54	2533.13
						3/13/14	510.78	2516.89
						5/8/14	514.76	2512.91
						6/5/14	514.95	2512.72
						7/31/14	518.30	2509.37
						8/27/14	519.40	2508.27
						1/15/14	488.84	2517.51
PS-3	220863	Sierrita	3529350.00	499570.00	3006.351	1/22/14	488.23	2518.12
						3/13/14	491.86	2514.49
						5/8/14	495.82	2510.53
						6/5/14	495.90	2510.45
						7/31/14	498.90	2507.45
						8/27/14	500.25	2506.10
						1/15/14	513.92	2531.82
PS-4	220864	Sierrita	3528830.00	499153.00	3045.74	1/22/14	514.38	2531.36
						3/13/14	508.14	2537.60
						5/8/14	522.58	2523.16
						6/5/14	523.05	2522.69
						7/31/14	526.30	2519.44
						8/27/14	527.50	2518.24
						11/16/06	139.55	3409.62
PZ-7	561870	Sierrita	3526357.485	492533.171	3549.17	1/12/07	139.50	3409.67
						4/9/07	139.65	3409.52
						7/24/07	139.76	3409.41
						10/16/07	139.49	3409.68
						1/7/08	139.25	3409.92
						4/28/08	139.59	3409.58
						7/11/08	139.71	3409.46
						10/14/08	139.73	3409.44
						2/9/09	139.79	3409.38
						4/6/09	139.80	3409.37
						4/23/10	140.22	3408.95
						5/18/11	140.62	3408.55
						6/6/12	136.67	3412.50
						6/10/13	136.91	3412.26
						4/8/14	135.75	3413.42

**TABLE 3**  
**Compilation of Groundwater Elevation Data**

Well Name	ADWR 55 Registry No.	Survey Source	UTM North (m)	UTM East (m)	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)
PZ-8	561866	Sierrita	3524196.243	492972.681	3480.36	11/14/06	206.30	3274.06
						1/10/07	207.42	3272.94
						4/17/07	198.52	3281.84
						7/12/07	209.46	3270.90
						10/5/07	205.30	3275.06
						1/3/08	212.94	3267.42
						4/8/08	217.43	3262.93
						7/1/08	221.70	3258.66
						10/8/08	222.49	3257.87
						1/8/09	223.63	3256.73
						4/8/09	224.72	3255.64
						4/20/10	227.87	3252.49
						4/19/11	228.73	3251.63
						4/25/12	229.66	3250.70
						6/10/13	230.86	3249.50
						4/23/14	232.32	3248.04
						4/24/14	232.59	3247.77
TMM-1	616156	HGC	3529736.231	500018.323	2967.08	6/18/07	432.50	2534.58
						6/19/07	432.00	2535.08
						10/4/07	437.58	2529.50
						1/10/08	435.75	2531.33
						4/18/08	433.30	2533.78
						7/9/08	437.37	2529.71
						10/9/08	439.80	2527.28
						2/4/09	436.62	2530.46
						4/21/09	433.35	2533.73
						10/14/09	444.00	2523.08
						4/20/10	436.99	2530.09
						10/6/10	442.98	2524.10
						4/21/11	437.13	2529.95
						12/21/11	435.50	2531.58
						5/15/12	438.57	2528.51
						11/23/12	443.30	2523.78
						6/19/13	439.14	2527.94
						10/29/13	443.13	2523.95
						4/23/14	442.13	2524.95

Notes:

ADWR = Arizona Department of Water Resources

CWC = Community Water Company of Green Valley

ft amsl = feet above mean sea level

GVDWID = Green Valley Domestic Water Improvement District

HGC = Hydro Geo Chem, Inc.

m = meters

ND = No elevation data

NR = No record

NA = Not applicable

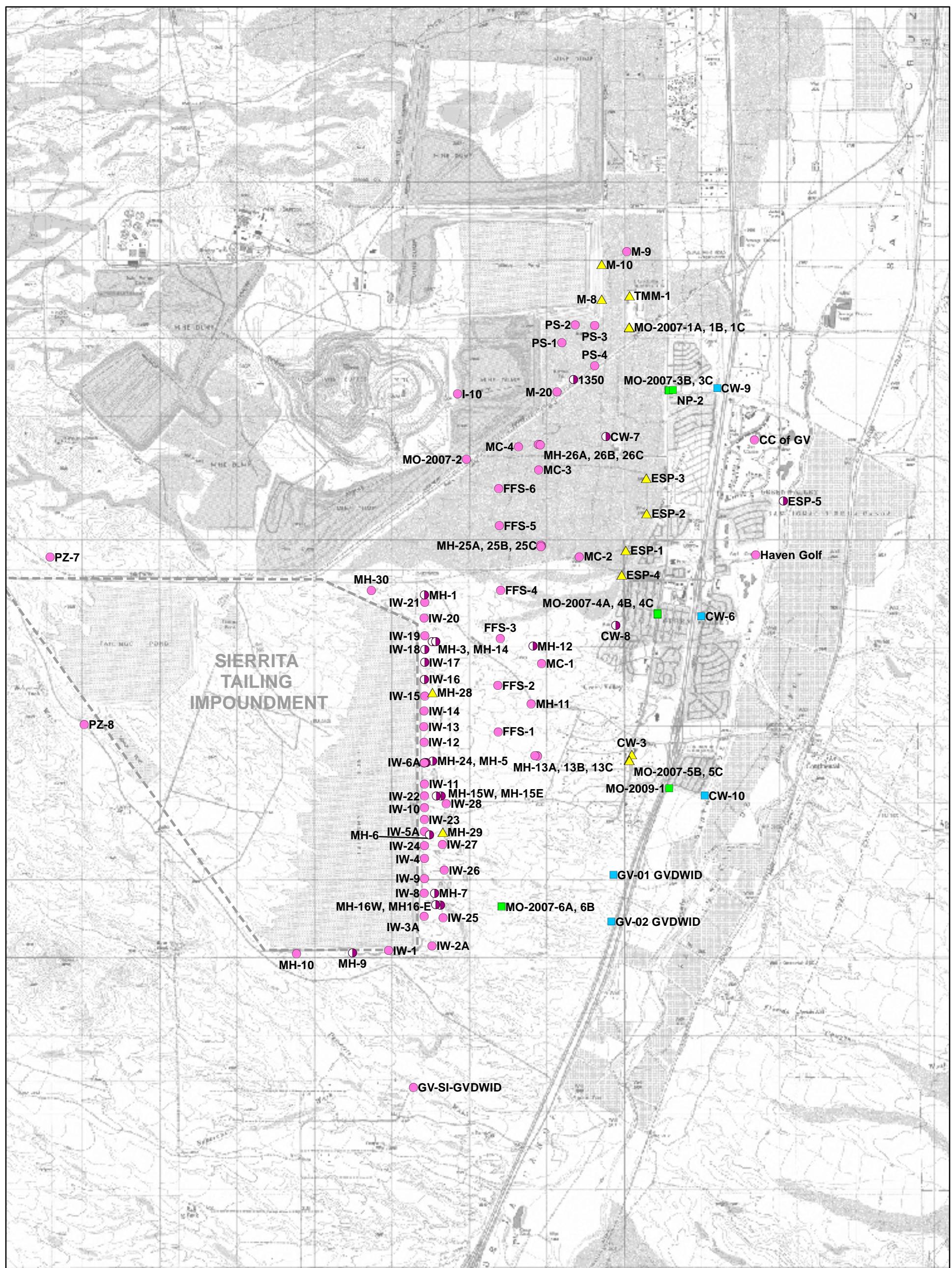
Sierrita = Freeport-McMoRan Sierrita Inc.

TBPI = Twin Buttes Properties, Inc.

UTM = Universal Transverse Mercator, Zone 12 North American Datum 1983 (NAD83)

Anomalous data removed for NP-2 (6/7/07; 8/13/07), MO-2007-3B (10/10/12), and MO-2009-1 (8/27/13)

## **FIGURES**



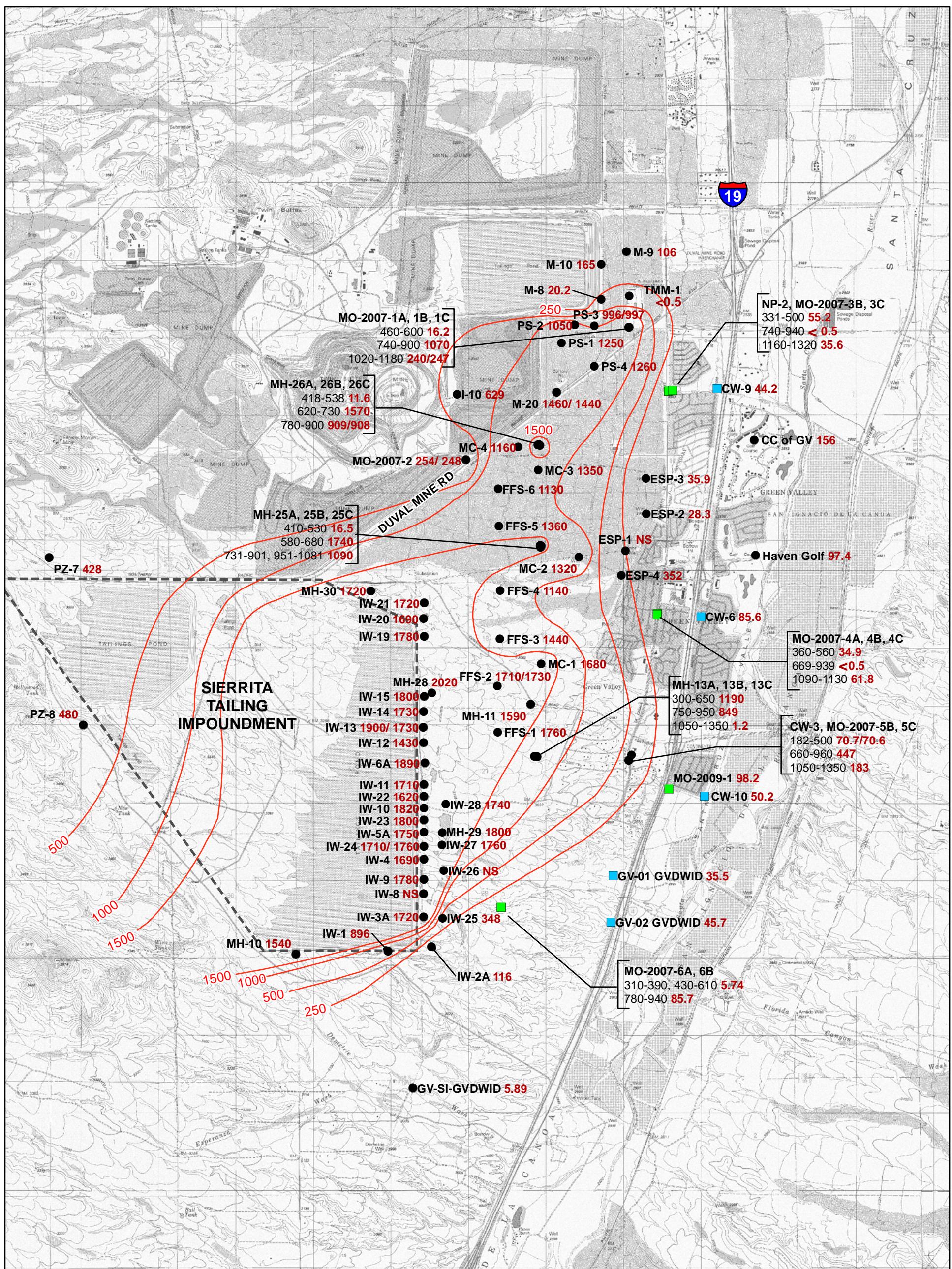
#### Legend

- Annual Sampling (Second Quarter)
- Annual Water Level Only (Second Quarter)
- ▲ Semi-Annual Sampling (Second and Fourth Quarters)
- Quarterly Sampling - Sentinel Well
- Quarterly Sampling - Drinking Water Supply Well

Scale  
0 2,000 4,000 8,000  
Feet

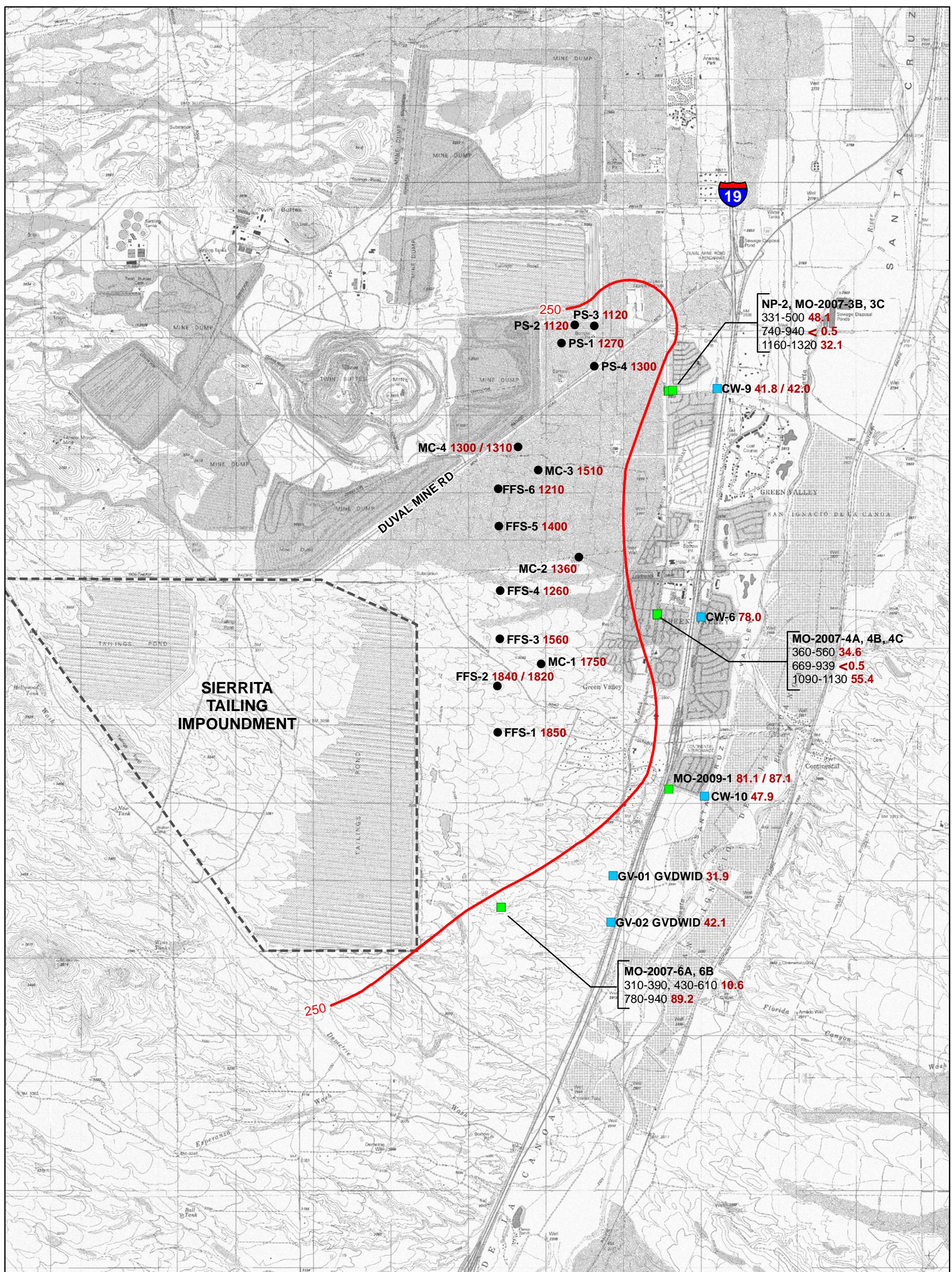
Date 3/20/14	File ID 055039-006C
	CLEAR CREEK ASSOCIATES

FIGURE 1  
Sampling Locations for Post-Implementation Groundwater Monitoring



NOTE:  
Projection: UTM NAD83 Zone 12N

**FIGURE 2**  
**Sulfate Concentrations**  
**in Groundwater**  
**Second Quarter 2014**



#### Legend

— 250 mg/L Sulfate Concentration Contour

● FFS-1 Well ID  
1850 Sulfate Concentration (mg/L)  
Duplicate results separated by "/"

Co-Located Wells

— Screened Interval (ft bbls): Sulfate Concentration (mg/L)

Scale  
0 2,000 4,000 8,000  
Feet

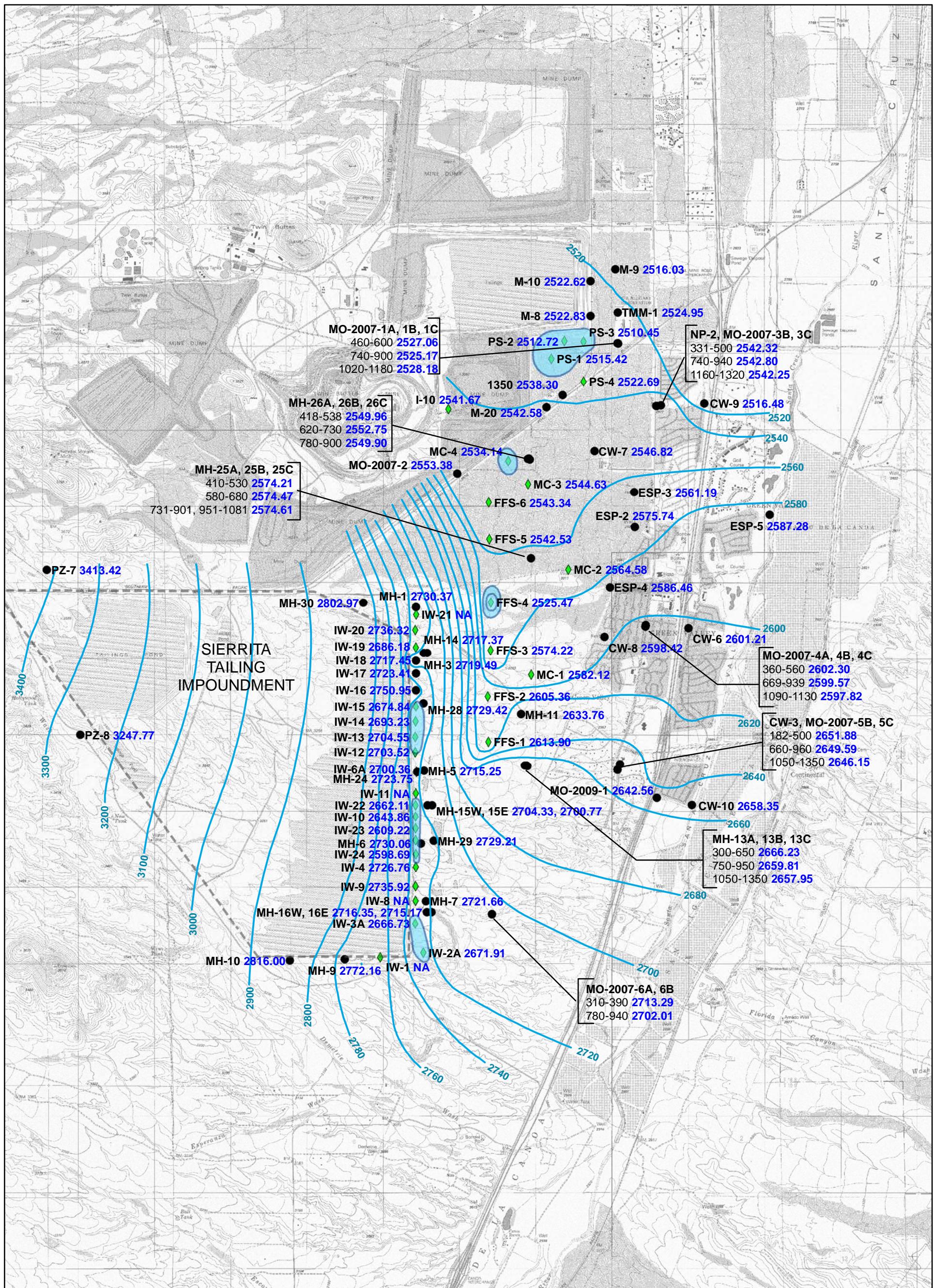
Date 7/7/2014 File ID 055039-116



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CREEK  
ASSOCIATES**

NOTE:  
Projection: UTM NAD83 Zone 12N

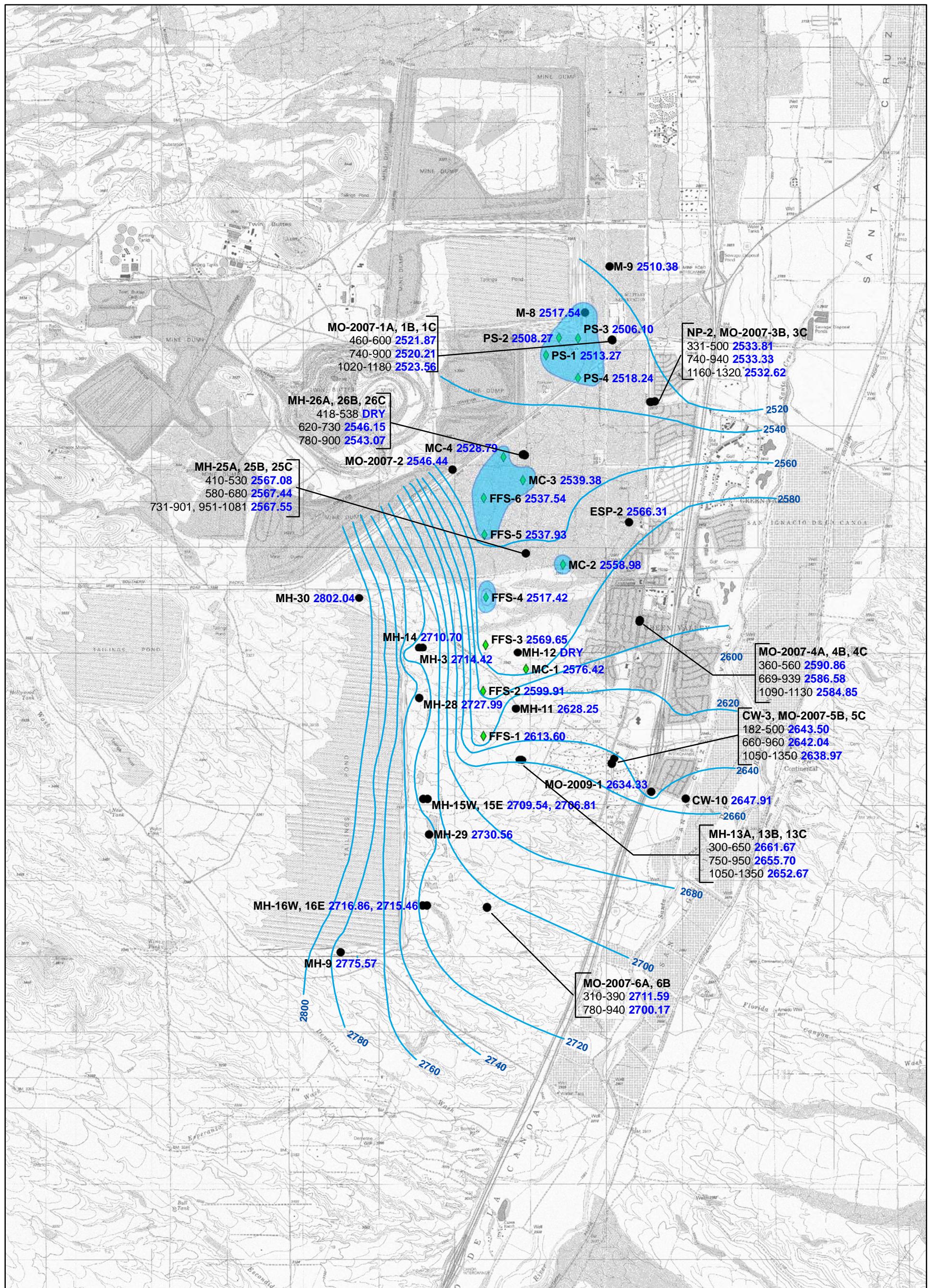
**FIGURE 3**  
**Sulfate Concentrations**  
**in Groundwater**  
**Third Quarter 2014**



#### Well Symbols

- Well with Static Water Level
- ◆ Well with Dynamic Water Level

**FIGURE 4**  
Groundwater Elevations  
Second Quarter 2014



**Legend**

- CW-3**: Groundwater Elevation Contour (ft amsl)
- : Wells with Static Water Levels
- : Groundwater Depression

Co-Located Wells

— [Screened Interval (ft bbls): **Groundwater Elevation (ft amsl)**]

NOTE:  
The groundwater elevation contour intervals are irregular.

0 2,000 4,000 8,000  
Feet

**Well labels**

- : Wells with Static Water Levels
- ◆**: Wells with Dynamic Water Levels



**CLEAR CREEK ASSOCIATES**

File ID  
055039-117

Date  
9/24/14

**FIGURE 5**  
Groundwater Elevations  
Third Quarter 2014

**APPENDIX A**

**DATA VERIFICATION REPORT**

**APPENDIX A**

**DATA VERIFICATION REPORT**

Prepared for:

**FREEPORT-MCMORAN SIERRITA INC.**  
6200 West Duval Mine Road  
Green Valley, Arizona 85614

Prepared by:

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October 27, 2014

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## 1. INTRODUCTION

This report summarizes the data verification review of groundwater samples collected and analyzed during the second and third quarters 2014 by Freeport-McMoRan Sierrita Inc. (Sierrita) pursuant to the Mitigation Order on Consent Docket No. P-50-06. All analytical results for groundwater samples collected during this reporting period were provided to Sierrita by ACZ Laboratories, Inc. (ACZ). Sierrita provided the water quality data to Clear Creek Associates for preparation of the Semiannual Groundwater Monitoring Report.

This report does not review field sampling or sample handling procedures for Sierrita. Sierrita collected samples following the methods in the *Quality Assurance/Quality Control (QA/QC) Plan for Water Monitoring, Phelps Dodge Sierrita, Inc.* (PDSI, 2005) in Appendix E of the Work Plan (Hydro Geo Chem, Inc. [HGC], 2006). Laboratory QA/QC data are evaluated according to the data quality indicators (DQIs) given in the Quality Assurance Project Plan (QAPP) (HGC, 2006).

Appendix B of the main text of this report contains laboratory reports for samples collected by Sierrita, including Chain of Custody (COC) forms, laboratory correspondence, QC summaries, data qualifiers, and any case narratives. The analytical results for all 127 samples collected are contained in 19 reports with the ACZ Project numbers in the following table.

The results of the internal QA/QC tests performed by ACZ are presented with the laboratory reports included in Appendix B. Based on the results of surrogate spike recoveries, matrix spike recovery, and matrix spike duplicate tests, ACZ did not advise any modifications to be made regarding the usability and data validation status of the laboratory test results.

ACZ Project ID	Wells Reported
Second Quarter 2014	
Number of wells sampled: 85	
Number of well samples collected (including duplicates and multiple samples from one well): 95	
Number of duplicate samples collected: 9	
Number of reanalyzed samples: 0	
Total number of analyses: 94	
L17740	MH-28, MH-29
L17741	MH-13A, MH-13B, MH-13C
L17742	PZ-7, MO-2007-4C, MO-2007-4B, MO-2007-4A, MH-30, MO-2007-6A, MO-2007-6B, MO-2007-2, DUP20140409B
L17871	IW-3A, IW-2A, IW-1, MH-25B, MH-25A, MH-25C, MH-26B, MH-26C, MH-26A, DUP20140415A
L17872	FFS-1, FFS-2, CW-10, CW-6, CW-9, MO2007-3B, MO-2007-3C, DUP20140415B
L17873	IW-28, IW-10, IW-23, IW-27, IW-5A, IW-24, IW-4, IW-9, IW-25, DUP20140414B
L17874	FFS-3, FFS-4, FFS-5, FFS-6, MC-1, MC-2, MC-3, MC-4
L17875	IW-21, IW-20, IW-19, IW-15, IW-14, IW-13, IW-12, IW-6A, IW-11, IW-22, DUP20140414A
L17876	PS-4, PS-1, PS-2, PS-3, GV-1, GV-2, SI WELL, DUP20140414C
L17969	MH-10
L17970	HAVENGOLF, M-9, M-10, M-8, M-20, TMM-1, CCGV, NP-2, PZ-8, MO-2009-1, DUP20140422A
L18034	ESP-4, ESP-2, ESP-3, MO-2007-1C, MO-2007-1B, MO-2007-1A, MH-11, MO-2007-5B, I-10, DUP20140429A
L18145	CW-3, MO-2007-5C, DUP20140506A
L18214	IW-29
Third Quarter 2014	
Number of wells sampled: 28	
Number of well samples collected (including duplicates and multiple samples from one well): 32	
Number of duplicate samples collected: 4	
Number of reanalyzed samples: 1	
Total number of analyses: 33	
L19234	NP-2, MO-2007-3B, MO-2007-3C
L19392	MO-2007-4A, MO-2007-4B, MO-2007-4C, MO-2007-6A, MO-2007-6B, MO-2009-1,
L19393	PS-1, PS-2, PS-3, PS-4, MC-4, MC-3, FFS-5, MC-2, FFS-4, FFS-6, FFS-3, MC-1, FFS-1, FFS-2, DUP20140708A, DUP20140709A, DUP20140709B
L19562	GV-1, GV-2
L19605	CW-6, CW-9, CW-10, DUP20140722A

## **2. LABORATORY QUALITY CONTROL**

As specified in the QAPP, laboratory QC was maintained for all analyses through proper licensure, the use of approved analytical methods, QC measurements, appropriate turnaround time for analysis (timeliness), method detection limits (MDLs), and practical quantitation limits (PQLs). Each of these controls is discussed in the following subsections.

The review of laboratory QC included a review to identify any qualified data and an assessment of their significance. Additionally, the laboratory QC summaries were reviewed to verify that results met QA criteria.

### **2.1 Licensure**

ACZ is licensed with the Arizona Department of Health Services (license number AZ0102) and is accredited in accordance with the National Environmental Laboratory Accreditation Conference.

### **2.2 Analytical Methods**

The following methods were used for sulfate analysis during this monitoring period:

- U.S. Environmental Protection Agency (EPA) 300.0 (Ion-Chromatography)
- ASTM International Method D516-02 (Turbidimetric)

### **2.3 Method Detection Limits (MDLs) and Practical Quantification Limits (PQLs)**

The MDLs and PQLs of the analytical methods used by ACZ are shown in the following table. The MDLs for analyses of samples were equal to, or less than, the target MDLs identified in the QAPP.

Method	MDL (mg/L)	PQL (mg/L)	Target MDL <sup>1</sup> (mg/L)
EPA 300.0	0.5	3	10
D516-02	5	30	10

*mg/L = milligrams per liter*

<sup>1</sup> Target MDL from Table E.2 of QAPP

## 2.4 Timeliness

Holding time was derived from the EPA methods utilized and was calculated beginning from the time of sample collection in the field. All samples submitted for sulfate analysis were analyzed within the twenty-eight day holding time specified by each of the methods used for analysis.

## 2.5 Quality Control Measurements

The following laboratory QC samples were prepared and analyzed:

- Preparation blanks, calibration blanks, and calibration verification standards
- Analytical spikes and analytical spike duplicates
- Laboratory control samples
- Laboratory duplicate samples

### 2.5.1 Preparation Blanks, Calibration Blanks, and Calibration Verification Standards

Preparation blanks were run with each group of samples submitted for sulfate analysis. Preparation blanks were prepared from analyte-free water and treated as routine samples. Analytical results of the preparation blanks showed that no target analytes were detected at the indicated MDL.

Initial calibration blanks and initial calibration verification standards were analyzed prior to each group of samples. The results for each initial calibration blank analyzed showed no detections of the target analyte. Analytical results for the initial calibration verification standards and laboratory-fortified blanks showed percent recoveries that were within the acceptance criteria specified by the ACZ QA plan and the QAPP.

## 2.5.2 Analytical Spikes and Analytical Spike Duplicates

Analytical spike and spike duplicate samples were analyzed for 10 percent of the samples analyzed. The spike samples were prepared by adding a sulfate spike to one randomly chosen sample out of every ten samples analyzed. Spike recoveries for most analyses were between 90 and 110 percent. Instances in which analytical spike recoveries were high, low or unusable are qualified with an “M1”, “M2”, or “M3” flag, respectively. The “M2” qualifier was used in report L17875. The “M3” qualifier was used in the L17740, L17741, L17873, L17875, and L17969 reports. In all cases where an “M2” or “M3” qualifier was used, the method control sample recovery was checked to ensure that it was acceptable. The method control samples were prepared by adding a sulfate spike to de-ionized water.

## 2.5.3 Laboratory Control Samples

Laboratory control samples were run for each group of samples submitted for sulfate analysis following the analytical method. Recoveries for all laboratory control samples were within the acceptance criteria specified by ACZ.

## 2.5.4 Laboratory Duplicate Samples

Analyses of laboratory duplicate samples were also reviewed as part of this data verification report. Field duplicate samples are discussed in Section 3.1. The relative percent difference (RPD) for all laboratory duplicate samples were within 20 percent, which is the tolerance range set by the laboratory. The RPD was not used for data validation if the sample concentration was less than ten times the method detection limit. In cases where the RPD was used for data validation based on laboratory standard operating procedure, the results met QA criteria and demonstrated appropriate levels of precision for laboratory analysis of these samples.

## 2.5.5 Sample Re-Analysis

During the second and third quarters 2014, one field sample collected at MO-2007-6B was re-analyzed by ACZ at the request of Sierrita. The re-analysis was conducted because the initial analytical result was outside the historical concentration range for the well. Re-analysis was completed by conducting additional analyses on an existing sample using the same sample preparation and method for analysis. The sample was analyzed twice to confirm the re-analysis. The results of the re-analysis are in the table below.

Project No.	Well ID	Original Result (mg/L)	Re-Analysis (mg/L)	RPD
L17742	MO-2007-6B	10.8	89.2	156.80%
L17742	MO-2007-6B	10.8	94.0	158.78%

*mg/L = milligrams per liter*

*RPD = Relative percent difference*

*\*Re-analysis was performed twice to confirm new results*

The re-analysis shows that the original result was anomalous and due to a laboratory error. The new results are similar to historic results and will be confirmed with future samples.

### **3. DATA QUALITY INDICATORS**

The QAPP provides several DQIs for assessing the overall quality of the data. The DQIs include the following:

- Precision
- Bias
- Accuracy
- Representativeness
- Comparability
- Completeness
- Sensitivity

Each DQI is discussed below in relation to groundwater sampling and analysis conducted by Sierrita.

#### **3.1 Precision**

Precision indicates how well a measurement can be reproduced. Precision of the analytical results is quantified by calculating the RPD between duplicate samples. For the purposes of QA/QC, precision was quantified by calculating the RPDs between duplicates among the following groups of duplicate samples:

- Laboratory duplicate samples
- Field duplicate samples

As discussed in Sections 2.5.2 and 2.5.4, there were no exceedances of RPD QA criteria based on laboratory standard operating procedures for any laboratory duplicates. During this monitoring period, 13 field duplicate samples were collected by Sierrita for filtered sulfate analysis. Nine were collected in the second quarter 2014 (DUP20140409B, DUP20140415A, DUP20140415B, DUP20140414B, DUP20140414A, DUP20140414C, DUP20140422A, DUP20140429A, and DUP20140506A) and four were collected in the third quarter 2014 (DUP20140709A, DUP20140709B, DUP20140708A and DUP20140722A). The collection of nine field duplicate samples in the second quarter 2014 and four field duplicate samples in third quarter 2014 meets the QA/QC goal of collecting one duplicate sample for every ten

groundwater samples collected, as stated in Section 6 of Sierrita's quality assurance quality control plan.

Results of the field duplicate samples are provided in the table below. The range of RPD values was 0.10 to 9.37 percent, all within the 20 percent acceptance criteria for field duplicates, as stated in Section 3.3.1 of the QAPP. Overall, the DQI for precision is met.

ACZ Project No.	Well ID	Duplicate ID	Sample (mg/l)	Duplicate (mg/l)	RPD
L17742	MO-2007-2	DUP20140409B	254	248	2.39%
L17871	MH-26C	DUP20140415A	909	908	0.11%
L17873	IW-24	DUP20140414B	1710	1760	2.88%
L17872	FFS-2	DUP20140415B	1710	1730	1.16%
L17875	IW-13	DUP20140414A	1900	1730	9.37%
L17876	PS-3	DUP20140414C	996	997	0.10%
L17970	M-20	DUP20140422A	1460	1440	1.38%
L18034	MO-2007-1C	DUP20140429A	240	247	2.87%
L18145	CW-3	DUP20140506A	70.7	70.6	0.14%
L19393	MC-4	DUP20140709A	1300	1310	0.77%
L19393	FFS-2	DUP20140709B	1840	1820	1.09%
L19393	MO-2009-1	DUP20140708A	81.1	87.1	7.13%
L19605	CW-9	DUP20140722A	41.8	42.0	0.48%

mg/L = milligrams per liter

RPD = Relative Percent Difference

## 3.2 Bias

Bias is a systematic distortion of measurements causing consistent errors in one direction. Bias was managed in this dataset through consistent application of standardized sample collection and analysis procedures. Eleven samples analyzed for report L17970 were received by the laboratory over the recommended preservation temperature. The receipt temperature was 6.4 degrees Celsius (deg C) and the recommended temperature is 6 deg C. Based on comparison to historical results, the small difference between the recommended and actual temperatures, and the short time that the samples were likely over the recommended temperature, no corrective action will be taken.

### **3.3 Accuracy**

Accuracy is a measure of the agreement of a measurement to a known value and is determined using the recoveries from laboratory control samples. As discussed in Sections 2.5.1, 2.5.2, and 2.5.3 respectively, there were no significant exceedances of the recovery QA criteria for any of the calibration standards, analytical spikes, or laboratory control standards. Based on this information, the overall accuracy of the data is sufficient for the purpose of aquifer characterization.

### **3.4 Representativeness**

All well samples were taken from locations specified in the Post-Implementation Groundwater Monitoring Plan (Clear Creek Associates, 2013) using sampling procedures specified in the QAPP. Therefore, the samples provide a good representation of groundwater quality at the locations. The analytical data are representative of groundwater conditions because the analyses were conducted using standard procedures and methods that met QA/QC guidelines of the QAPP.

### **3.5 Comparability**

All samples were collected using standardized procedures (PDSI, 2005) and were analyzed by ACZ using standardized methods. Insofar as standardized sample collection and analytical methods are adhered to, the sample results should be comparable.

### **3.6 Completeness**

All samples collected by Sierrita were subsequently analyzed and reported by ACZ. All samples analyzed by ACZ satisfy the QA/QC criteria for this project and are usable for aquifer characterization. Thus, the completeness of analytical results is 100 percent.

### **3.7 Sensitivity**

The analytical methods used to analyze the samples meet the MDL requirements specified in Table E.2 of the QAPP. Therefore, the analytical sensitivity is considered acceptable for use in aquifer characterization.

#### **4. REFERENCES**

Clear Creek Associates. 2013. Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06. December 18, 2013.

Hydro Geo Chem, Inc. (HGC). 2006. Work Plan to Characterize and Mitigate Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Phelps Dodge Sierrita Tailing Impoundment, Pima County, Arizona. August 11, 2006, revised October 31, 2006.

Phelps Dodge Sierrita, Inc. (PDSI). 2005. Quality Assurance/Quality Control Plan for Water Monitoring, Phelps Dodge Sierrita, Inc. June 2005.

**APPENDIX B**

**ANALYTICAL DATA REPORTS**

September 08, 2014

## Report to:

Jon Anderson  
FMI Gold & Copper - Sierrita  
6200 West Duval Mine Rd.  
Green Valley, AZ 85614

cc: Ben Daigneau

## Bill to:

Accounts Payable  
FMI Gold & Copper - Sierrita  
P.O. Box 2671  
Phoenix, AZ 85002-2671

Project ID: ZS000005L5

ACZ Project ID: L20290

## Jon Anderson:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 03, 2014. This project has been assigned to ACZ's project number, L20290. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L20290. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after October 08, 2014. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: ZS000005L5

Sample ID: MO-2007-6A

ACZ Sample ID: **L20290-01**

Date Sampled: 07/08/14 13:05

Date Received: 09/03/14

Sample Matrix: *Ground Water*

## Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Sulfate	D516-02-07 - Turbidimetric	1	10.5	H	*	mg/L	1	5	09/04/14 11:17	jlf
Sulfate	M300.0 - Ion Chromatography	1	10.1	H	*	mg/L	0.5	2.5	09/05/14 6:07	tcd

**This report is for the re-analysis of the sample previously reported as ACZ project L19392-04.****Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: ZS000005L5

Sample ID: MO-2007-6B

ACZ Sample ID: **L20290-02**

Date Sampled: 07/08/14 13:51

Date Received: 09/03/14

Sample Matrix: *Ground Water*

## Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Sulfate	D516-02-07 - Turbidimetric	5	94.0	H	*	mg/L	5	25	09/04/14 11:24	jlf
Sulfate	M300.0 - Ion Chromatography	1	89.2	H	*	mg/L	0.5	2.5	09/05/14 6:25	tcd

**This report is for the re-analysis of the sample previously reported as ACZ project L19392-05.****Arizona license number: AZ0102**

**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

AS	Analytical Spike (Post Digestion)	LCSWD	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	LFB	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	LFM	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	LFMD	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	LRB	Laboratory Reagent Blank
ICB	Initial Calibration Blank	MS	Matrix Spike
ICV	Initial Calibration Verification standard	MSD	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	PBS	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	PBW	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	PQV	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	SDL	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste.
- (5) Standard Methods for the Examination of Water and Wastewater.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<http://www.acz.com/public/extquallist.pdf>

**FMI Gold & Copper - Sierrita**

 ACZ Project ID: **L20290**
**Sulfate**
**D516-02/-07 - Turbidimetric**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG370538</b>													
WG370538ICB	ICB	09/04/14 9:08				U	mg/L		-3	3			
WG370538ICV	ICV	09/04/14 9:08	WI140826-2	20		20.3	mg/L	101.5	90	110			
WG370538LFB	LFB	09/04/14 11:11	WI140327-1	10.01		9.9	mg/L	98.9	90	110			
L20143-07DUP	DUP	09/04/14 11:17			34.9	34.4	mg/L				1.4	20	
L20197-01AS	AS	09/04/14 11:30	SO4TURB20	10	269	281	mg/L	120	90	110			M3

**Sulfate**
**M300.0 - Ion Chromatography**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG368886</b>													
WG368886ICV	ICV	08/04/14 22:23	WI140722-1	50.05		46.7	mg/L	93.3	90	110			
WG368886ICB	ICB	08/04/14 22:40				U	mg/L		-1.5	1.5			
<b>WG370576</b>													
WG370576LFB2	LFB	09/05/14 2:14	WI140610-6	30		31.4	mg/L	104.7	90	110			
L20227-01DUP	DUP	09/05/14 4:20			187	188	mg/L				0.5	20	
L20227-02AS	AS	09/05/14 4:56	WI140610-6	150	122	282	mg/L	106.7	90	110			
WG370576LFB1	LFB	09/05/14 13:54	WI140610-6	30		32.1	mg/L	107	90	110			

FMI Gold & Copper - Sierrita

ACZ Project ID: **L20290**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
<b>L20290-01</b>	WG370538	Sulfate	D516-02/-07 - Turbidimetric	H3	Sample was received and analyzed past holding time.
			D516-02/-07 - Turbidimetric	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
<b>L20290-02</b>	WG370538	Sulfate	M300.0 - Ion Chromatography	H3	Sample was received and analyzed past holding time.
			D516-02/-07 - Turbidimetric	H3	Sample was received and analyzed past holding time.
	WG370576		D516-02/-07 - Turbidimetric	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	H3	Sample was received and analyzed past holding time.

FMI Gold & Copper - Sierrita

ACZ Project ID: L20290

No certification qualifiers associated with this analysis

**FMI Gold & Copper - Sierrita**  
ZS000005L5

ACZ Project ID: L20290  
Date Received: 09/03/2014 15:01  
Received By: mtb  
Date Printed: 9/4/2014

**Receipt Verification**

- 1) Is a foreign soil permit included for applicable samples?
- 2) Is the Chain of Custody or other directive shipping papers present?
- 3) Does this project require special handling procedures such as CLP protocol?
- 4) Are any samples NRC licensable material?
- 5) If samples are received past hold time, proceed with requested short hold time analyses?
- 6) Is the Chain of Custody complete and accurate?
- 7) Were any changes made to the Chain of Custody prior to ACZ receiving the samples?

YES	NO	NA
		X
X		
		X
		X
X		
X		
	X	

**Samples/Containers**

- 8) Are all containers intact and with no leaks?
- 9) Are all labels on containers and are they intact and legible?
- 10) Do the sample labels and Chain of Custody match for Sample ID, Date, and Time?
- 11) For preserved bottle types, was the pH checked and within limits?
- 12) Is there sufficient sample volume to perform all requested work?
- 13) Is the custody seal intact on all containers?
- 14) Are samples that require zero headspace acceptable?
- 15) Are all sample containers appropriate for analytical requirements?
- 16) Is there an Hg-1631 trip blank present?
- 17) Is there a VOA trip blank present?
- 18) Were all samples received within hold time?

YES	NO	NA
X		
X		
X		
		X
X		
		X
		X
		X
X		
		X
		X
		X
	X	

Some parameters were received past hold time.

**Chain of Custody Related Remarks**

**Client Contact Remarks**

**Shipping Containers**

Cooler Id	Temp (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----
UNKNOWN			

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

K Re-log KL20290



ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

19393  
CPT 7/14

CHAIN of CUSTODY

Report to:

Name: Jon Anderson
Company: Freeport-McMoRan Sierrita Inc.
E-mail: jonathan_anderson@fmi.com

Address: 6200 W. Duval Mine Road
Green Valley, AZ 85614
Telephone: 520-393-2714

Copy of Report to:

Name: Ben Daigneau
Company: Clear Creek Associates

E-mail: bdaigneau@clearcreekassociates.com
Telephone: 520-622-3222

Invoice to:

Name:
Company:
E-mail:

Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES   
NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for CO DW Compliance Monitoring?

YES   
NO

If yes, please include state forms. Results will be reported to PQL.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:		# of Containers	SOD by EPA 300 or EPA 375													
Project/PO #: ZS000005LS																
Reporting state for compliance testing:																
Sampler's Name: Jeff Joy																
Are any samples NRC licensable material? Yes No																
SAMPLE IDENTIFICATION	DATE:TIME	Matrix														
MO-2007-4B	7/8/14 : 1117	GW								1	<input checked="" type="checkbox"/>					
MO-2007-4C	7/8/14 : 1141	GW								1	<input checked="" type="checkbox"/>					
MO-2007-4A	7/8/14 : 1155	GW								1	<input checked="" type="checkbox"/>					
MO-2007-6A	7/8/14 : 1305	GW								1	<input checked="" type="checkbox"/>					
MO-2007-6B	7/8/14 : 1351	GW								1	<input checked="" type="checkbox"/>					
MO-2009-1	7/8/14 : 1540	GW								1	<input checked="" type="checkbox"/>					

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

PAGE 1 OF 3

PLEASE COPY BEN DAIGNEAU ON SULFATE RESULTS

UPS Tracking # 1Z 867 7E4 23 1001 151 2

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

Jeff Joy

7/10/14 : 1530

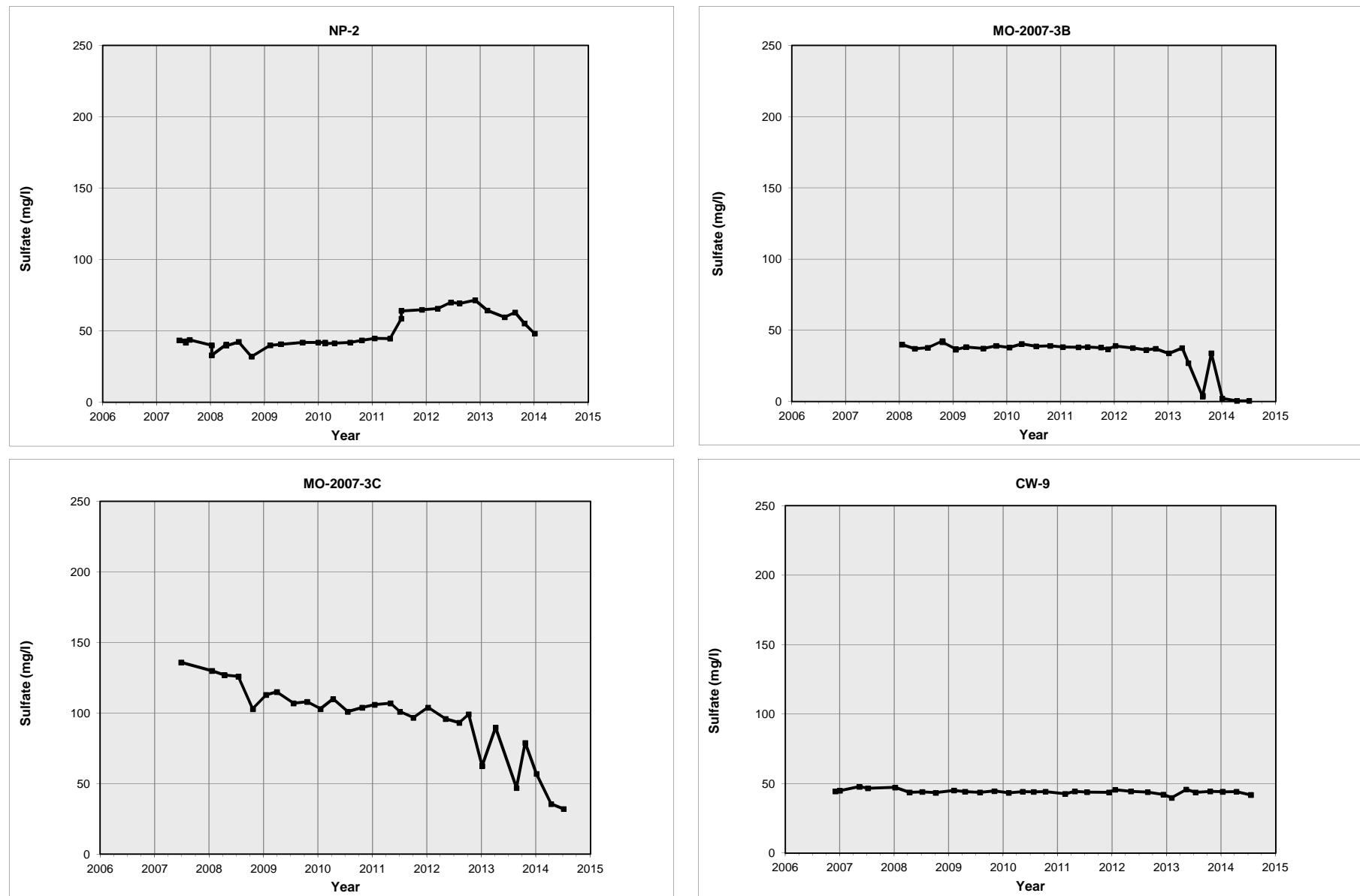
LSD

7-11-14 8:55

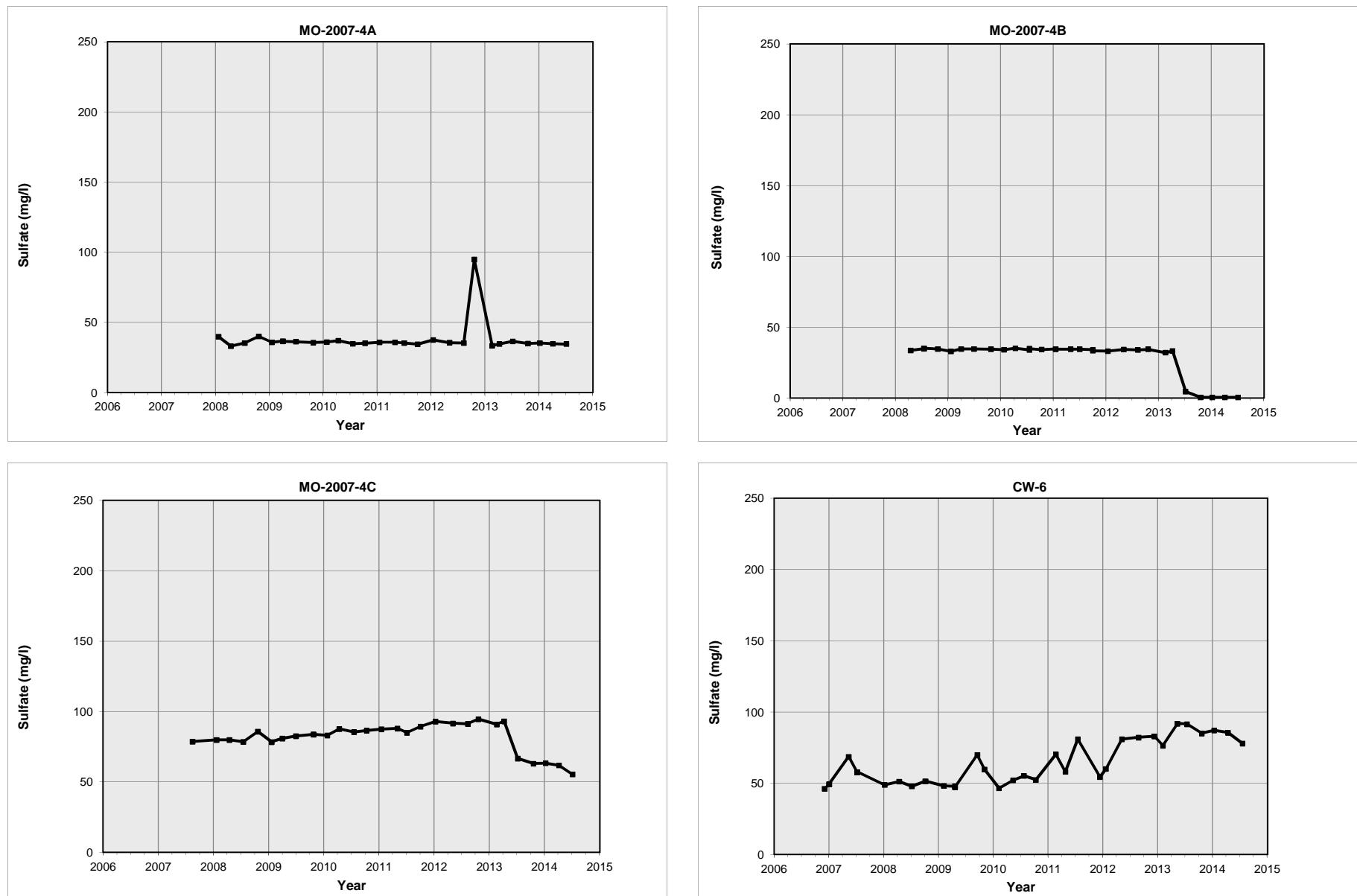
**APPENDIX C**

**TIME SERIES GRAPHS OF SULFATE CONCENTRATION**

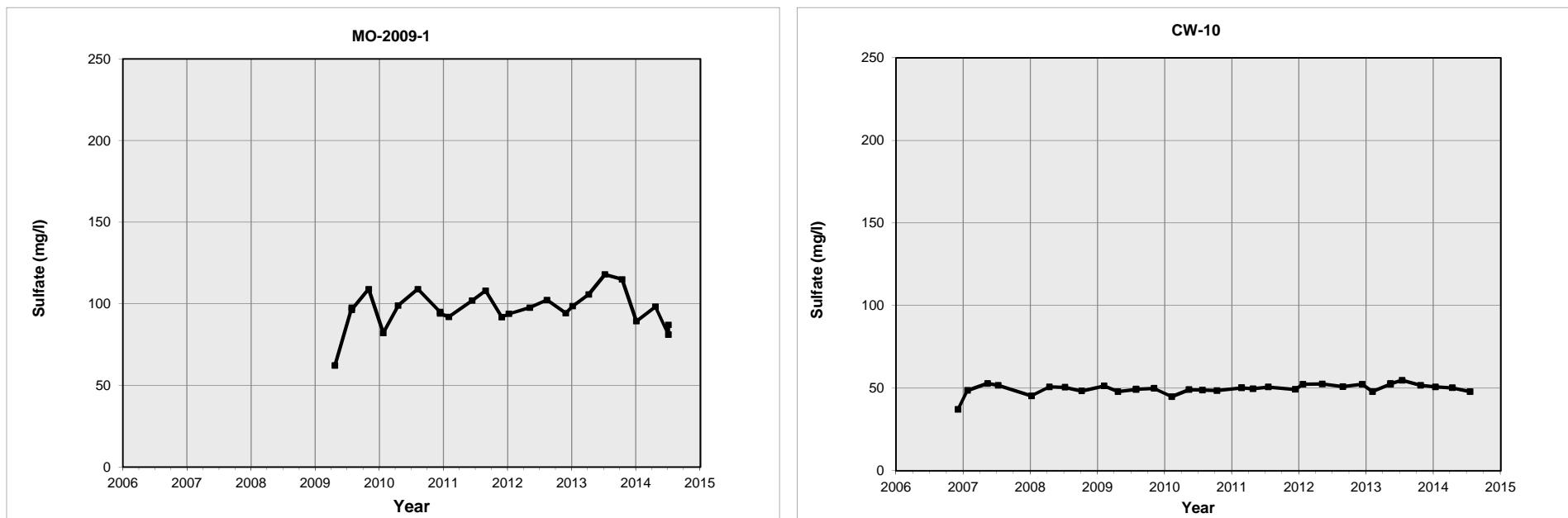
**FIGURE C.1**  
**SULFATE CONCENTRATION OVER TIME FOR WELLS**  
**NP-2, MO-2007-3B, MO-2007-3C, AND CW-9**



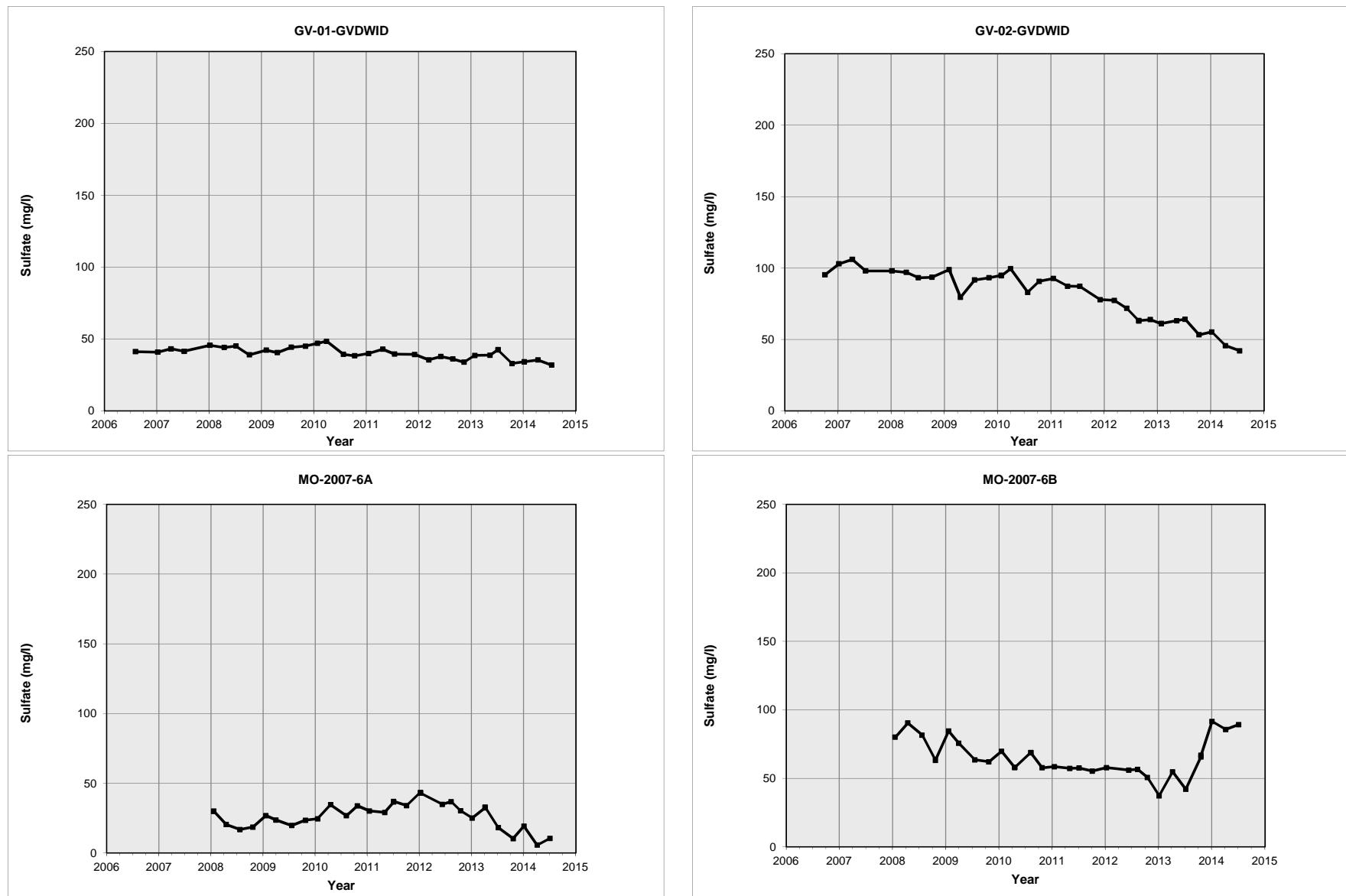
**FIGURE C.2**  
**SULFATE CONCENTRATION OVER TIME FOR WELLS**  
**MO-2007-4A, MO-2007-4B, MO-2007-4C, AND CW-6**



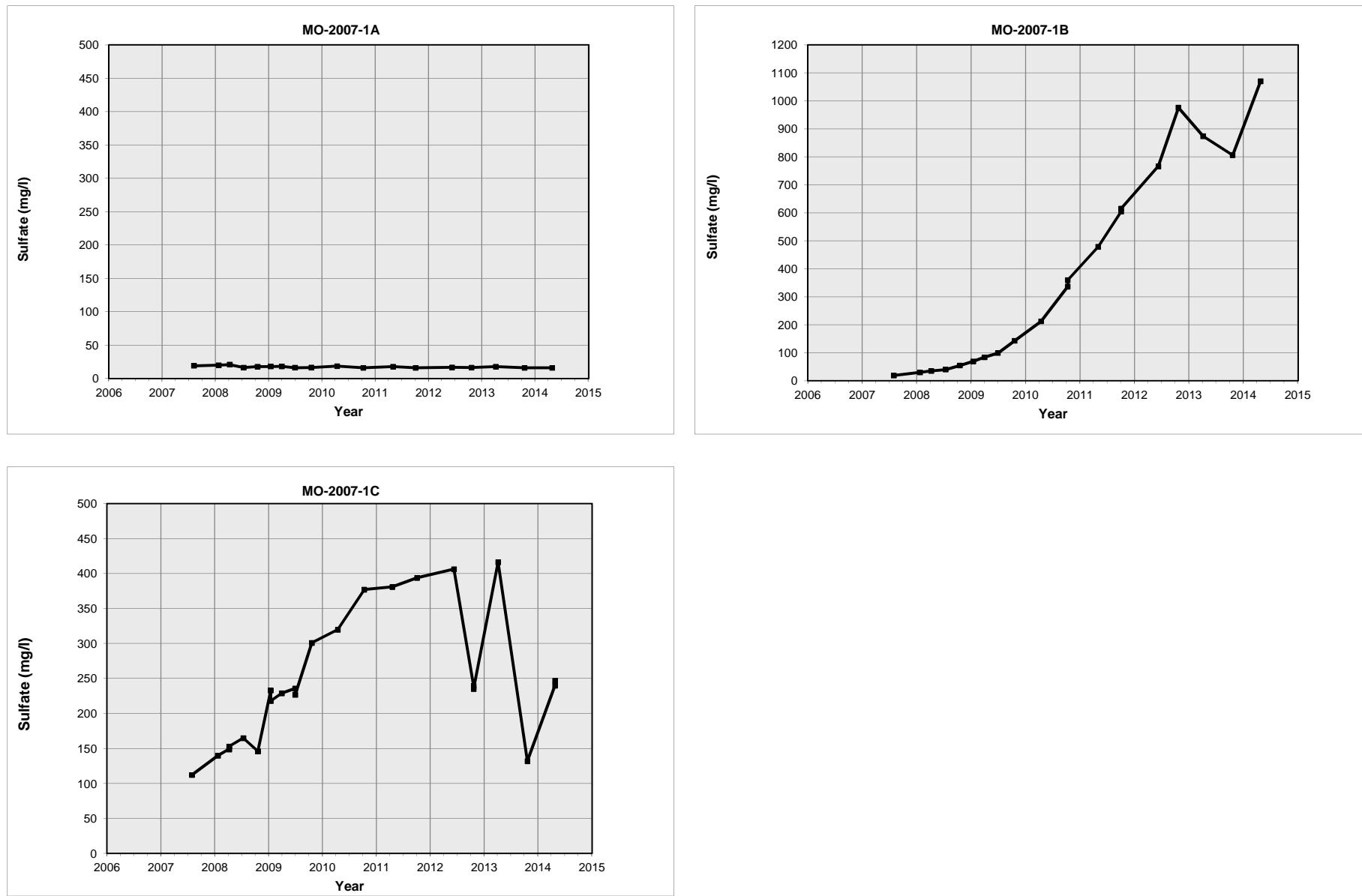
**FIGURE C.3**  
**SULFATE CONCENTRATION OVER TIME FOR WELLS MO-2009-1 AND CW-10**



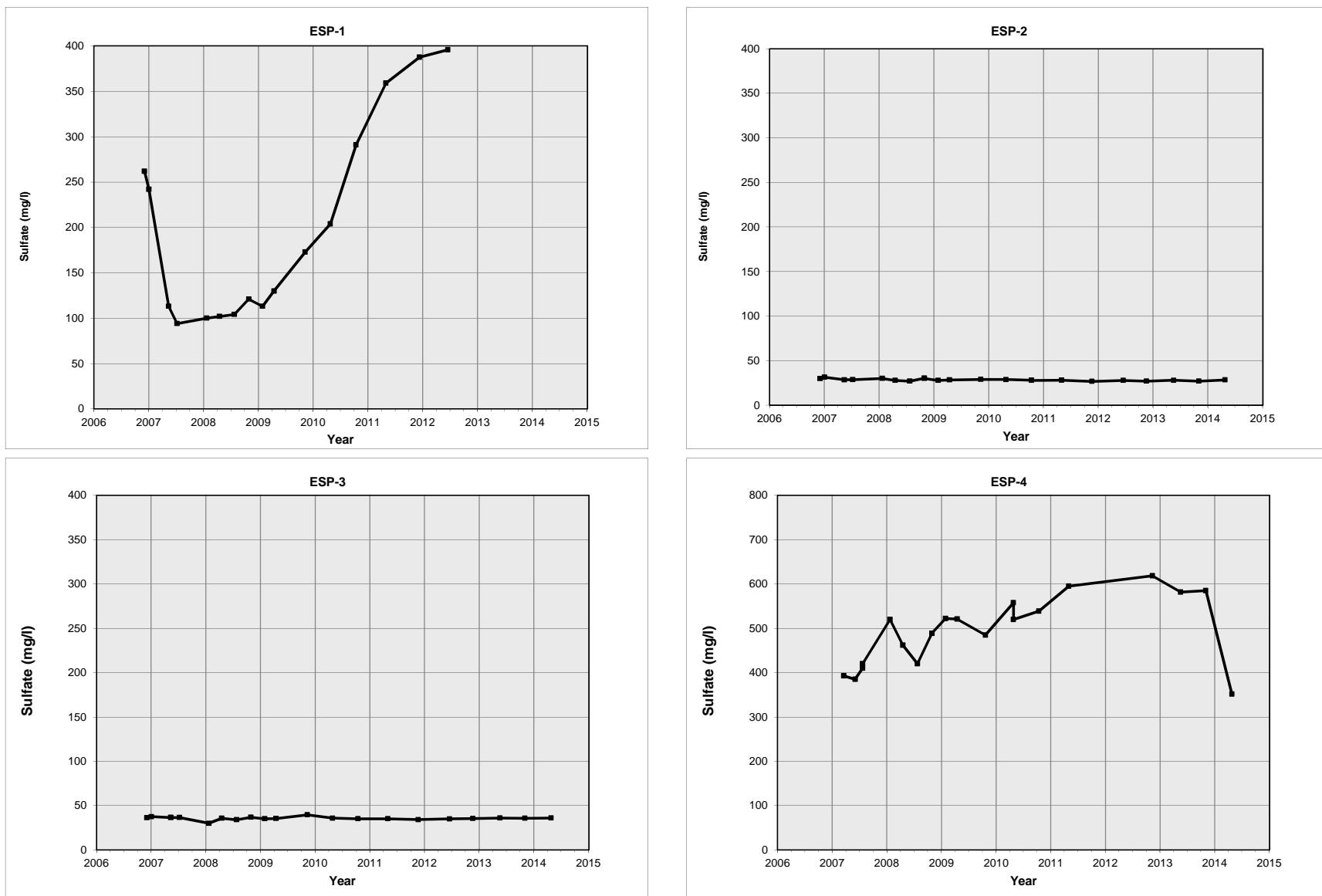
**FIGURE C.4**  
**SULFATE CONCENTRATION OVER TIME FOR WELLS**  
**GV-01-GVDWID, GV-02-GVDWID, MO-2007-6A, AND MO-2007-6B**



**FIGURE C.5**  
**SULFATE CONCENTRATION OVER TIME FOR WELLS**  
**MO-2007-1A, MO-2007-1B, AND MO-2007-1C**



**FIGURE C.6**  
**SULFATE CONCENTRATION OVER TIME FOR WELLS**  
**ESP-1, ESP-2, ESP-3, AND ESP-4**



**APPENDIX D**

**TIME SERIES GRAPHS OF GROUNDWATER ELEVATION**

