



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

April 20, 2017

**Via Certified Mail # 7015 1520 0002 5365 8321**  
**Return Receipt Requested**

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

**Re:     Mitigation Order on Consent Docket No. P-50-06**  
**Reporting Year 2016 Mitigation Performance Review Report**

Dear Ms. Bhatia:

In accordance with Section 5.2 of the Mitigation Plan<sup>1</sup>, Freeport-McMoRan Sierrita Inc. submits the enclosed *Mitigation Performance Review* for reporting year 2016.

Please do not hesitate to contact me at (520) 393-2347 if you have any questions regarding this submittal.

Sincerely,

A handwritten signature in cursive ink that appears to read "Deborah Chismar".

Deborah Chismar  
Sr. Environmental Specialist  
Freeport-McMoRan Sierrita Inc.

DTN: 20170420\_001

---

<sup>1</sup> Clear Creek Associates. 2013. Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06. December 18, 2013.

**MITIGATION PERFORMANCE REVIEW FOR 2016**

**MITIGATION ORDER ON CONSENT DOCKET NO. P-50-06**



*Prepared for:*

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

*Prepared by:*

**CLEAR CREEK ASSOCIATES, L.L.C.**  
221 North Court Avenue, Suite 101  
Tucson, Arizona 85701

April 13, 2017

**MITIGATION PERFORMANCE REVIEW FOR 2016  
MITIGATION ORDER ON CONSENT DOCKET NO. P-50-06**

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

April 13, 2017

## TABLE OF CONTENTS

1.0	INTRODUCTION .....	1
1.1	Background .....	1
1.2	Mitigation Action Objective .....	2
1.3	Role and Scope of the Mitigation Performance Review .....	2
2.0	GROUNDWATER PUMPING AND WATER MANAGEMENT FOR THE MITIGATION ACTION .....	4
2.1	Groundwater Pumping .....	4
2.1.1	Target Pumping Rates .....	5
2.1.2	Performance Goal Pumping Rates.....	5
2.1.3	Considerations for Target and Performance Goal Pumping Rates.....	5
2.2	Water Management.....	6
3.0	MITIGATION FACILITIES OPERATION AND GROUNDWATER MONITORING RESULTS FOR 2016 .....	7
3.1	Mitigation Facilities Operation .....	7
3.2	Results of Groundwater Monitoring .....	8
3.2.1	Sulfate Concentration Data.....	9
3.2.1.1	Plume Extent.....	9
3.2.1.2	Drinking Water Supply and Sentinel Wells.....	10
3.2.1.3	Sulfate Concentrations in Mitigation Extraction Wells .....	10
3.2.1.4	Sulfate Concentrations in Monitoring Wells Marginal to the Plume .....	11
3.2.2	Water Level Data.....	11
3.2.2.1	Water Elevation Maps .....	12
3.2.2.2	Hydrographs.....	13
4.0	CAPTURE ZONE ANALYSIS .....	15
4.1	Site Data Review, Site Conceptual Model, and Mitigation Action Objective.....	15
4.2	Target Capture Zone .....	16
4.3	Capture Zone Indicated by Water Elevation Mapping .....	16
4.4	Capture Zone Indicated by Numerical Modeling .....	18
4.5	Evaluation of Sulfate Concentration Trends .....	18
4.6	Comparison of Wellfield Capture Zone to Target Capture Zone .....	19
4.7	Uncertainties .....	20
5.0	NUMERICAL SIMULATION OF FUTURE PLUME MIGRATION .....	22
6.0	ASSESSMENT OF MITIGATION ACTION .....	23
6.1	Assessment of Mitigation Action Performance .....	23
6.2	Mitigation Pumping Program .....	23
6.3	Wellfield Operating and Monitoring Program.....	23
6.4	Groundwater Monitoring Program.....	23
7.0	REFERENCES .....	25

## **TABLES**

- 1 Target Pumping Rates for Mitigation Action
- 2 Performance Goal Pumping Rates
- 3 2016 Groundwater Pumping Compared to Target and Performance Goal Pumping Rates
- 4 Post-Implementation Groundwater Monitoring for 2016
- 5 Updated Sampling Schedule for Post-Implementation Groundwater Monitoring

## **FIGURES**

- 1 Project Location Map
- 2 Mitigation Action Extraction Wells and Pumping Facilities
- 3 Simulated Sulfate Concentration from 2020 to 2100 for Mitigation Plan Target Pumping Rates
- 4 Post-Implementation Groundwater Monitoring Locations
- 5 Sulfate Concentrations in Groundwater, Second Quarter 2016
- 6 Sulfate Concentrations in Groundwater, Fourth Quarter 2016
- 7 Sulfate Concentrations at MO-2007-1
- 8 Sulfate Concentrations at Drinking Water Supply Wells
- 9 Sulfate Concentrations at Sentinel Wells
- 10 Sulfate Concentrations at ESP-2, ESP-3, and ESP-4
- 11 Groundwater Elevations, Second Quarter 2013
- 12 Groundwater Elevations, Second Quarter 2016
- 13 Groundwater Elevations, Fourth Quarter 2016
- 14 Groundwater Elevations at Sentinel Wells
- 15 Location of Hydrographs
- 16 Capture Zone Analysis, Second Quarter 2013
- 17 Capture Zone Analysis, Second Quarter 2016
- 18 Capture Zone Analysis, Fourth Quarter 2016
- 19 Capture Zone Analysis, Kriged Water Elevations for Fourth Quarter 2016
- 20 Simulated Sulfate Concentrations for 2016
- 21 Simulated 2016 Groundwater Elevations and Capture Zone
- 22 Interpreted and Target Capture Zones, Fourth Quarter 2016
- 23 Simulated and Target Capture Zones for 2016

## **APPENDICES**

- A Sulfate Concentration Data
- B Graphs of Sulfate over Time in Extraction Wells
- C Water Elevation Data
- D Hydrographs

## **1.0 INTRODUCTION**

This mitigation performance review evaluates the effectiveness of the mitigation action conducted by Freeport-McMoRan Sierrita Inc. (Sierrita) to address a groundwater plume of sulfate in the vicinity of the Sierrita Tailing Impoundment (STI) near Green Valley, Arizona (Figure 1). The mitigation action is conducted pursuant to Mitigation Order on Consent No. P-50-06 between Arizona Department of Environmental Quality (ADEQ) and Sierrita (ADEQ, 2006).

The mitigation action is described in the Mitigation Plan submitted to ADEQ in 2013 (Clear Creek Associates, 2013). The mitigation action consists of the operation of a groundwater pumping and water reuse system to control the migration of the sulfate plume and prevent sulfate concentrations at drinking water supply wells near the plume from exceeding 250 milligrams per liter (mg/L) at the point of use. Groundwater monitoring for the mitigation action is conducted to track plume migration, monitor sulfate in drinking water supplies, and collect information relevant to wellfield operation. The objective of this mitigation performance review is to assess the effectiveness of the mitigation action based on operational and monitoring data collected during 2016, the third year of operation under the Mitigation Plan.

### **1.1 Background**

Mitigation Order on Consent No. P-50-06 was established in 2006 to provide for the mitigation of drinking water supplies if they are affected by sulfate at concentrations greater than 250 mg/L due to the STI. The Mitigation Order required Sierrita to characterize the extent of sulfate in groundwater and to develop a mitigation plan to practically and cost effectively provide a drinking water supply to the owner/operator of an existing drinking water supply impacted by sulfate attributable to the STI.

Existing drinking water supplies in the vicinity of the STI are currently not affected by sulfate in excess of 250 mg/L. The objective of the mitigation action is to protect existing drinking water supplies by controlling future plume migration so that the plume does not affect the supplies.

In October 2008, Sierrita submitted a Feasibility Study to ADEQ that recommended a mitigation action of pumping sulfate-affected groundwater in the vicinity of the STI to control additional downgradient movement of the plume and, over time, to reduce the extent of the plume (Hydro Geo Chem, Inc., 2008). The Feasibility Study reported a conceptual design for the mitigation action based on simulations using a numerical model for groundwater flow and sulfate transport to predict the future migration of the plume under the groundwater pumping assumed for the mitigation action.

ADEQ approved the recommended mitigation action in March 2009 and requested a mitigation plan (ADEQ, 2009). Sierrita submitted the Mitigation Plan in May 2009, but ADEQ deferred its

finalization because it contained contingencies related to the outcomes of land acquisition, construction permitting, and other activities required to implement the mitigation action (Sierrita, 2010). Sierrita began implementing the mitigation action in 2009 and completed the land acquisition, permitting, design, and construction of the required pumping and pipeline facilities at the end of 2013. The Mitigation Plan was revised based on the constructed wellfield and submitted to ADEQ in December 2013.

The Mitigation Plan describes the process Sierrita is following to implement the mitigation action; including its operation, monitoring, evaluation, adaptation, termination, and reporting. Groundwater pumping under the specifications of the Mitigation Plan began in January 2014. Also in 2014, ADEQ provided Sierrita with recommendations for the Mitigation Plan (ADEQ 2014). Sierrita responded to ADEQ's recommendations (Sierrita, 2015a) and ADEQ approved the Mitigation Plan in 2015 (ADEQ, 2015).

## **1.2 Mitigation Action Objective**

The mitigation action objective defined in the Mitigation Order is to “practically and cost effectively provide a drinking water supply that meets applicable standards and with sulfate concentrations less than 250 mg/L to the owner/operator of an existing drinking water supply determined...to have an average sulfate concentration in excess of 250 mg/L...as a result of the sulfate plume”. The Feasibility Study defines the sulfate plume as consisting of the horizontal and vertical extent of groundwater with sulfate concentrations greater than 250 mg/L originating from the STI. The mitigation action is designed to accomplish the mitigation action objective through the use of groundwater pumping to prevent the plume from migrating to existing drinking water supply wells. The spatial extent of the plume and the concentration of sulfate in drinking water supply wells are discussed in Section 3.2.1.

## **1.3 Role and Scope of the Mitigation Performance Review**

The Mitigation Plan identifies the role of the mitigation performance reviews as the assessment of whether the mitigation action is performing as expected with respect to the mitigation action objective and numerical model predictions. The purpose of the mitigation performance review is to critically evaluate the operational and groundwater monitoring data collected for the mitigation action with respect to the observed plume behavior, mitigation action objective, and predicted plume migration. The mitigation performance review may recommend modification of the mitigation action (i.e., increase, decrease, or relocation of groundwater pumping, or termination of pumping) if it is determined through analysis of the operational and monitoring data that a modification is needed to meet the mitigation action objective.

The mitigation performance review for 2016 uses mitigation facilities operation and groundwater monitoring data collected by Sierrita. The operations and groundwater monitoring data include:

- Pumping data for individual wells and the entire wellfield system
- Water quality data for drinking water supply wells and sentinel wells located between the plume and the drinking supply wells
- Water quality data from monitoring wells located within and downgradient of the plume
- Water level data from wells positioned to monitor drawdown in the vicinity of mitigation wellfields and regionally.

Mitigation facilities operation monitoring data are used to plan wellfield operation and maintenance (O&M) activities, and document groundwater pumping activities. The wellfield pumping data are compared to the pumping targets specified in the Mitigation Plan and used to update the numerical model. Water quality monitoring data are used to determine the extent of the plume, show the time trends of sulfate concentrations at various wells due to the mitigation action, and document sulfate concentrations in drinking water supply wells. Water level monitoring data are used to delineate groundwater potentiometric conditions in the vicinity of the plume and mitigation facilities, identify the capture zone created by mitigation pumping, and calibrate the numerical model.

The numerical model was updated with groundwater pumping information through 2016 for this mitigation performance review. The updated model incorporates the mitigation pumping for 2016, and the most recent available agricultural and water supply pumping. The updated model was used to simulate the 2016 capture zone of the mitigation wellfield, as discussed in Section 4.4.

The Mitigation Plan specifies that mitigation performance reviews are to be conducted and submitted to ADEQ annually for the first five years after full commissioning of the mitigation facilities and every five years thereafter. Under the Mitigation Plan schedule, a performance review report would be prepared for 2014, 2015, 2016, 2017, and 2018, and every five years thereafter. The adaptive management process described in Section 4.1 of the Mitigation Plan would be used in the event that the mitigation performance review indicates that the mitigation action objective is not being met or a significant modification of the mitigation action is needed.

## **2.0 GROUNDWATER PUMPING AND WATER MANAGEMENT FOR THE MITIGATION ACTION**

### **2.1 Groundwater Pumping**

The Mitigation Plan specifies groundwater pumping rates at four groups of wells: interceptor wells (IW), focused feasibility study (FFS) wells, plume stabilization (PS) wells, and mass capture (MC) wells. Figure 2 shows the locations of the groundwater extraction wells, pipelines, and pumping facilities for the mitigation action.

As described in the Feasibility Study and Mitigation Plan, there are different pumping objectives for groundwater extraction at the various well groups. The IW and FFS wells are pumped primarily for source control to capture seepage from the STI before it migrates to the regional aquifer. The PS wells at the northern edge of the plume are pumped in conjunction with the IW and FFS wells for the purpose of plume stabilization to control downgradient movement of the plume. The MC wells are pumped primarily to reduce the plume extent by extracting sulfate mass, although pumping the MC wells also contributes to plume stabilization.

The Mitigation Plan identifies two sets of pumping rates for the mitigation action: groundwater pumping rates for Alternative 3, the recommended alternative (Table 1 of the Mitigation Plan and hereafter called “target” pumping rates) (Section 2.1.1) and performance goal pumping rates (Table 2 of the Mitigation Plan) (Section 2.1.2). The target pumping rates are meant to accomplish the source control, plume stabilization, and plume reduction objectives of Alternative 3 of the Feasibility Study. Performance goal pumping rates are meant to accomplish the source control and plume stabilization objectives only.

A condition potentially influencing groundwater pumping for the mitigation action occurred in 2015 and early 2016 when Sierrita determined that mitigation pumping in the next several years may need to be reduced due to a potential curtailment of mining<sup>1</sup>. Pursuant to provisions in the Mitigation Plan, Sierrita provided Contingency Plan to ADEQ in February 2016 (Clear Creek Associates, 2016a). ADEQ found the Contingency Plan to be acceptable in March 2016 (ADEQ, 2016b). The Contingency Plan identifies mitigation action pumping rates for use during a curtailment in lieu of the pumping rates in the Mitigation Plan (Section 2.1.4). Contingency Plan pumping was not

---

<sup>1</sup> In late 2015 and early 2016, Freeport-McMoRan Inc. announced that it would temporarily curtail production at Sierrita by 50% to 100% because of low commodity prices (Freeport-McMoRan Inc., 2015 and 2016). The expectation is that mitigation action pumping could be reduced during either a 50% or 100% curtailment because mine processes would use less water.

implemented in 2016, although the groundwater monitoring and PS well pumping provisions of the plan<sup>2</sup> were initiated.

### **2.1.1 Target Pumping Rates**

In 2013, the groundwater flow and sulfate transport model was used to identify the target pumping rates to meet the source control, plume stabilization, and plume reduction pumping objectives of the mitigation action as reported by Clear Creek Associates (2014). The target pumping rates are listed in Table 1. To accomplish plume reduction, the target pumping rates at the FFS and MC wells are greater than the rates needed for the source control and plume stabilization objectives only.

The numerical model was used to simulate future plume migration under the target pumping rates. The results of the simulation were included in the Mitigation Plan and are shown on Figure 3. The simulation results predict that the areal extent of the plume would decrease over time and that the sulfate plume would not reach public or private drinking water supply wells.

### **2.1.2 Performance Goal Pumping Rates**

Table 2 lists performance goal pumping rates in the Mitigation Plan. Performance goal pumping rates accomplish the source control and plume stabilization objectives, but not the plume reduction objective. The performance goal pumping rates would accomplish the mitigation action objective by preventing the plume from migrating to drinking water supplies, but would not reduce the extent of the plume over time. The performance goal pumping rates were determined using the numerical model to iteratively simulate various groundwater pumping schemes and identify the minimum extraction rates needed for source control and plume stabilization (Hydro Geo Chem, Inc. and Clear Creek Associates, 2010, Clear Creek Associates, 2014).

### **2.1.3 Considerations for Target and Performance Goal Pumping Rates**

The target and performance goal pumping rates are initial estimates that were made prior to the start of Mitigation Plan pumping. It is important to understand that the target and performance goal pumping rates are not unique in that there can be different combinations of pumping locations and rates that accomplish the mitigation action objective.

Periodic assessment of the target and performance goal pumping rates is needed for several reasons. First, it is expected that additional calibration of the hydraulic properties in the numerical model will

---

<sup>2</sup> In addition to reduced pumping rates at the IW, FFS, and MC wells, the Contingency Plan identified the following modifications to groundwater monitoring and pumping: a) installation of additional monitoring wells at the north end of the plume, b) quarterly monitoring at ESP-2, ESP-3, M-8, M-9, and M-10, and c) increased pumping rates at the PS wells.

be needed as monitoring documents the water level response of the aquifer to mitigation pumping. Pumping may be found to be more or less effective than predicted as the aquifer response develops and the model is refined over time through recalibration. Changes to the model as part of ongoing calibration efforts may influence the degree to which the pumping specifications are determined to be appropriate or necessary to accomplish the mitigation action objective. Second, the extraction wells will change over time. For example, well IW-29 is a mitigation extraction well installed after the pumping rates in the Mitigation Plan were developed. Thus, the Mitigation Plan has no pumping specification for IW-29 although the well has been pumping since September 2014.

Additionally, well maintenance factors may require changes in the locations of extraction wells over time as new wells are installed or the pumping rates at existing wells decline due to inefficiency as wells age. Changes in the location and pumping rate of wells over time can influence wellfield capture and need to be accounted for in setting target and performance goal pumping rates. Hence, the target and performance goal pumping rates are expected to vary over time as the mitigation action progresses.

## 2.2 Water Management

The sulfate-affected groundwater pumped under the Mitigation Plan is used for mining processes. The use of sulfate-affected groundwater allows Sierrita to reduce the amount of fresh groundwater pumped at the Canoa wellfield south of Green Valley. After mine closure, Sierrita may be able to manage sulfate-affected groundwater through discharge to an inactive open pit excavation or through treatment of some or all of the groundwater, as described by the Feasibility Study (Hydro Geo Chem, Inc., 2008).

## **3.0 MITIGATION FACILITIES OPERATION AND GROUNDWATER MONITORING RESULTS FOR 2016**

This section describes the groundwater pumping and groundwater monitoring during 2016.

### **3.1 Mitigation Facilities Operation**

Groundwater pumping under the Mitigation Plan is a continuous operation. Sierrita uses mine personnel and contractors to operate, monitor, and maintain the wells, pumps, pipelines, and other facilities needed for the Mitigation Plan. Wellfield O&M is conducted pursuant to the Sulfate Mitigation Action Well Field Operation and Maintenance Plan submitted to ADEQ (BasinWells Associates, 2013).

Groundwater pumping under the Mitigation Plan began in January 2014 with the startup of the FFS, PS, and MC extraction wells. Wellfield operation and groundwater pumping for 2016 are summarized in an annual report prepared by BasinWells Associates and submitted to ADEQ (BasinWells Associates, 2017). The total groundwater withdrawal under the Mitigation Plan in 2016 was approximately 17,096 acre feet, pumped from 33 wells. Table 3 lists the total gallons pumped and average groundwater pumping rate for extraction wells during 2016, and compares the 2016 rates to the target and performance goal pumping rates of the Mitigation Plan.

The 2016 average wellfield pumping rate was 10,599 gpm, which is 74% of the target pumping rate of 14,330 gpm and 100% of the performance goal rate of 10,643 gpm. The IW, FFS, PS, and MC wells pumped at 54%, 89%, 72%, and 88%, respectively, of their target pumping rates, and 54%, 226%, 72%, and 183%, respectively, of their performance goal pumping rates.

BasinWells Associates (2017) reported run time percentages for the mitigation pumping wells. The mitigation wellfield had an average run time percentage of 63% considering all wells with target pumping rates. Well run time percentages for the IW wells averaged 45% and ranged from 7.1% to 71.4% for wells with pumpage in 2016. The 2016 run time percentages for the FFS, PS, and MC wells averaged 88%, 92%, and 95%, respectively. The wellfield-wide average run time is skewed low by certain IW wells that pump at low rates (less than 100 gpm) and have poor operational efficiency. Considering production in the evaluation of run time indicates a flow-weighted run time of 84%. Another way to characterize the flow-weighted run time is that the wells which produced 92% of the total flow in 2016 had an average run time of 81%. BasinWells Associates (2017) reports that the shutdown of wells occurred due to well and transmission line maintenance, non-pumping monitoring activities, and storage capacity limitations at the Mill Reservoir.

Capture zone analysis and numerical modeling are used to examine the sulfate plume migration under current and future expected conditions, as discussed in Sections 4 and 5. The capture zone analysis uses observed water levels to evaluate the extent of plume control by pumping. The results of the numerical modeling are used to evaluate whether the differences between the actual mitigation pumping rates and the target and performance goal pumping rates are significant with respect to the mitigation action objective and predicted future migration of the plume.

### 3.2 Results of Groundwater Monitoring

Sierrita conducts groundwater monitoring pursuant to the Post-Implementation Groundwater Monitoring Plan in the Mitigation Plan. Table 4 is the schedule for post-implementation groundwater monitoring in 2016. Well locations are shown on Figure 4.

In 2016, Sierrita installed three new groundwater monitoring wells at the north end of the plume: MW-2016-5A, MW-2016-5B, and MW-2016-6. The wells were installed to provide water level and sulfate data to better determine hydraulic gradients, groundwater flow directions, and the extent of the plume at its northern edge. The results of drilling, reconnaissance water quality sampling during drilling, well construction, hydraulic testing, and the initial water quality sampling of the wells are reported by Clear Creek Associates (2017). Construction information for the MW-2016 wells is summarized below.

WELL	ARIZONA DEPARTMENT OF WATER RESOURCES REGISTRATION	DRILLED DEPTH (feet)	SCREENED INTERVAL (feet below land surface)	DEPTH TO BEDROCK (feet below land surface)
MW-2016-5A	55-919635	748	509 - 741	-
MW-2016-5B	55-919472	1,165	820 – 1,073	1,130
MW-2016-6	55-919676	1,221	799 – 1,073	1,216

In 2016, Sierrita also lowered pumps and sounding tubes in wells CW-3, M-8, M-10, MH-25B, MH-25C, MH-26B, MH-26C, MO-2007-5B, MO-2007-5C, MO-2007-6B, and NP-2 because water levels had declined to the point that the monitoring facilities were inoperative or likely to be inoperative.

Post-implementation groundwater monitoring includes quarterly water quality sampling for sulfate at sentinel and drinking water supply wells, an annual site-wide sampling for sulfate in the second quarter of the year, and water level measurements in the fourth quarter of the year to allow

development of water level contour maps for both the second and fourth quarters. Data collected for groundwater monitoring are reported to ADEQ semiannually. The results of groundwater monitoring in the first through third quarters of 2016 are contained in two reports submitted to ADEQ (Clear Creek Associates, 2016c and 2016d). Groundwater monitoring data for the fourth quarter 2016 will be submitted in the semiannual report due May 31, 2017. The methods of groundwater monitoring are described in the semiannual groundwater monitoring reports.

### **3.2.1 Sulfate Concentration Data**

Groundwater samples are collected to measure sulfate concentrations over time. The sulfate concentration data are used to delineate the sulfate plume, document water quality trends in the aquifer, and determine sulfate concentrations at and in the vicinity of drinking water supply wells. The sulfate concentration data are also used to calibrate the sulfate transport model. Sulfate determinations are made on a dissolved basis. Sulfate concentration data collected under the Mitigation Order are compiled in Appendix A.

#### *3.2.1.1 Plume Extent*

The geographic extent of the plume is determined by the extent of sulfate concentrations exceeding 250 mg/L. Figures 5 and 6 are sulfate concentration maps for the second and fourth quarters of 2016, respectively. The second quarter 2016 sulfate concentration map is shown because the second quarter data are greater in number and geographic extent than the fourth quarter data. The fourth quarter map is shown because it contains the results for the new monitoring wells MW-2016-5A, MW-2016-5B, and MW-2016-6.

Comparison of the sulfate concentration data for the second quarter of 2016 with previously collected data indicates that there has been no significant change to the overall plume geometry since 2006, except in the vicinity of the MO-2007-1 wells, where northward migration of the plume occurred prior to implementation of the Mitigation Plan. Figure 7 shows that 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. The sulfate concentration at MO-2007-1B remains greater than 250 mg/L, but the concentration at MO-2007-1C declined below 250 mg/L in 2013 and has remained less than 250 mg/L since 2013. In 2016, the water level in MO-2006-1C declined to the point that the well could not be pumped for sampling. The mitigation plan groundwater pumping initiated in 2014 is designed to limit the northward migration of sulfate concentrations in excess of 250 mg/L.

The sulfate results for sampling at MW-2016-5A, MW-2016-5B, and MW-2016-06 indicate the northern limit of the plume (Figure 6). The results for the MW-2016 wells are discussed further in Section 3.2.1.4.

### *3.2.1.2 Drinking Water Supply and Sentinel Wells*

Groundwater monitoring includes quarterly water quality sampling at drinking water supply wells and sentinel wells positioned laterally between the plume and drinking water supply wells (Figure 4). Figures 8 and 9 show sulfate concentrations from 2006 through 2016 at drinking water supply and sentinel wells, respectively. Sulfate concentrations at drinking water supply wells in 2016 were all less than 95 mg/L. Concentrations in the drinking water supply wells are steady or declining over time, except for CW-6. Sulfate concentrations at CW-6 increased to approximately 92 mg/L between 2010 and mid-2013, and have ranged between 69 mg/L and 95 mg/L since mid-2013.

Sentinel wells are meant to detect the plume before it could migrate to a drinking water supply well. Sulfate concentrations at sentinel wells were all less than 63 mg/L in 2016. Sulfate concentrations in sentinel wells in the fourth quarter of 2016 ranged from non-detect (less than 0.5 mg/L) at MO-2006-4B to approximately 62 mg/L at MO-2009-1.

The sulfate concentrations at drinking water supply and sentinel wells were less than the 250 mg/L mitigation action objective and the 135 mg/L action level set in the Mitigation Plan. If exceeded, the action level triggers written notice to ADEQ and the supply owner/operator, more frequent groundwater monitoring, and, in the case of a drinking water supply well, development of a mitigation plan for the well. The sulfate concentration data for drinking water supply wells and sentinel wells indicate that the mitigation action objective is being met.

### *3.2.1.3 Sulfate Concentrations in Mitigation Extraction Wells*

Sulfate concentration data for the mitigation extraction wells characterize conditions in the plume, which is where most extraction wells are located. Sulfate concentrations at extraction wells are generally greater than 1,000 mg/L (Figures 5 and 6). Sulfate concentrations at the extraction wells vary in magnitude depending on their position relative to the STI; with extraction wells near the STI having higher concentrations than those farther from the STI. Water from well IW-2A at the southeast corner of the STI had sulfate concentrations between 257 mg/L and 270 mg/L in 2016, which are the lowest concentrations observed in the extraction wells. The low sulfate concentrations occur because groundwater pumping at IW-2A draws in unaffected groundwater from south of the STI, which dilutes and displaces the plume.

Appendix B contains graphs of sulfate concentration in mitigation extraction wells since 2006. The graphs show that sulfate concentrations at most extraction wells do not have increasing or decreasing trends over time, although concentrations at an individual well can vary over a range of 400 mg/L in a period of several years. The lack of increasing or decreasing trends in the majority of IW wells at the east edge of the STI indicates that the source concentrations have not increased or decreased over time.

#### *3.2.1.4 Sulfate Concentrations in Monitoring Wells Marginal to the Plume*

Sulfate concentrations in wells outside of and marginal to the sulfate plume can be used to discern plume migration. For example, an increase of sulfate to greater than 250 mg/L at a well outside the plume would be evidence of plume migration, if the sulfate were due to the STI.

The sentinel wells NP2, MO-2007-3B, MO-2007-3C, MO-2007-4A, MO-2007-4B, MO-2007-4C, MO-2009-1, MO-2007-6A, and wells ESP-2 and ESP-3 monitor the east margin of the plume (Figures 5 and 6). Sulfate concentrations in the sentinel wells are not increasing and several sentinel wells have had declining concentrations since 2013, as shown on Figure 9. Sulfate concentrations in ESP-2 and ESP-3 were less than 39 mg/L sulfate in 2016 and have been relatively steady since 2006 (Figure 10), indicating no measurable eastward movement by the sulfate plume at these wells during 2016. Well ESP-4, which is in the plume, is also shown on Figure 10. The sulfate concentration in samples from ESP-4 declined from a high of 619 mg/L to d between 352 mg/L and 423 mg/L since 2014, probably due to the start of pumping under the Mitigation Plan.

Northward movement of the plume prior to the 2014 start of Mitigation Plan pumping is indicated by the increased sulfate concentrations at MO-2007-1A and MO-2007-1B starting in 2010 (Figure 7). The sulfate concentrations at MO-2007-1B have remained elevated, but those at MO-2007-1A declined below 250 mg/L in 2013. Wells MW-2016-5A, MW-2016-5B, and MW-2016-06 were installed to better delineate the northern plume edge. MW-2016-5A and MW-2016-5B have low concentrations of sulfate (less than 65 mg/L) and are outside the plume. The sulfate concentrations in samples collected in August and October 2016 from MW-2016-6 were 490 mg/L and 234 mg/L, respectively. MW-2016-06 appears to be on the edge of the plume based on the sulfate data collected to date from two sampling events (Appendix A). The MW-2016 wells will be sampled for eight consecutive quarters to determine baseline sulfate concentrations in the wells and to monitor the northern plume edge.

### **3.2.2 Water Level Data**

Water level measurements document potentiometric conditions, which determine hydraulic gradients and groundwater flow directions. These data are also used for capture zone analysis, evaluation of capture effectiveness, and calibration of the groundwater flow model. Water level measurements collected for the Mitigation Order are contained in Appendix C.

Two types of water level data are available: static and dynamic. Static water level measurements are collected from non-pumping wells and represent the potentiometric head of the aquifer. Dynamic water level measurements are measurements collected at operating pumping wells. Dynamic water levels can be influenced by water table drawdown due to pumping and additional head losses due to well efficiency. The dynamic water levels reported here have not been corrected for well efficiency or other head losses. Nonetheless, dynamic water level measurements provide localized information

on potentiometric conditions in pumping wells in the active portion of the wellfield where the water level is being lowered to capture the sulfate plume.

Water levels measured at wells that have been pumping a long time, such as the drinking water supply wells, may have a component of residual drawdown even though they were inactive when the water level was measured. Residual drawdown occurs when the water level in a well has not yet returned to its static level after pumping stops. For example, a well pumped for 18 hours and shut down for 4 hours prior to water level measurement may not have attained its full static level. In practice, the degree of water level recovery in a well after pumping is a site-specific characteristic depending on the hydraulic properties of the aquifer and the well. Some degree of residual drawdown may be possible in measurements made at inactive mitigation pumping wells and drinking water supply wells if they were previously pumped for long periods.

### *3.2.2.1 Water Elevation Maps*

Figures 11, 12, and 13 are hand-contoured water elevation maps for the second quarter of 2013 and the second and fourth quarters of 2016, respectively. Both static and dynamic water levels are posted on the maps to show the drawdown associated with the pumping wells. The 2013 map illustrates conditions prior to the start of Mitigation Plan pumping.

Comparison of Figures 11, 12, and 13 shows changes in the water elevation surface since the start of pumping under the Mitigation Plan. In 2013, prior to the start of Mitigation Plan pumping, water elevation depressions were associated with the IW wells pumping along the east end of the STI and groundwater flow was from the east end of the STI northeasterly toward Green Valley. The start of Mitigation Plan pumping in 2014 caused water elevation depressions to develop at the FFS, PS, and MC wells. The water elevation depressions are based on dynamic water level measurements from the pumping wells, but are corroborated by static measurements at nearby monitor wells. The depressions occur due to the constructive interference of overlapping drawdown cones associated with the extraction wells.

The pumping-induced depressions in the vicinity of the FFS, PS, and MC wells caused the orientation of the water elevation contours and the groundwater flow pattern to change from the 2013 pre-Mitigation Plan condition. Groundwater flow is perpendicular to equipotential lines and in the direction of the lowest groundwater elevation. The water elevation data indicate that the groundwater flow direction in the vicinity of the FFS, PS, and MC wells changed from northeasterly in 2013 to being toward the water elevation depressions at the FFS, PS, and MC wells since 2014. The change in flow toward the extraction wells creates a zone of groundwater capture around the extraction wells in which sulfate plume water flows to the extraction wells and is pumped from the aquifer. A capture zone analysis based on the groundwater flow directions indicated by the water elevation maps is discussed in Section 4.3.

### *3.2.2.2 Hydrographs*

Hydrographs for monitoring wells in the vicinity of the plume illustrate the dynamic nature of water levels as the aquifer responds to pumping under the Mitigation Plan. The water level declines in the vicinity of the extraction wells are a consequence of the pumping needed to establish the hydraulic conditions that capture plume water and extract sulfate mass from the aquifer. Water levels at select monitoring wells are used to document the development of hydraulic conditions under the Mitigation Plan pumping.

Figure 14 shows time series graphs of groundwater elevation at the sentinel wells. The time series graphs show that water levels at these wells declined at rates ranging from 0.9 to 3.6 feet per year from 2007 to 2013. The rate of water level decline increased in 2014 at MO-2007-3B, -3C, -4A, -4B, and -4C and NP-2 due to the start of Mitigation Plan pumping, as described below. 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, probably due to seasonal irrigation pumping in the Green Valley area.

Hydrographs for the wells that are tracked to monitor the effects of mitigation pumping, including the sentinel wells, are in Appendix D. The wells cover a large geographic area around the extraction wells as shown on Figure 15. The date range on the hydrographs is from 2006 through 2016 to show conditions before and after the January 2014 start of Mitigation Plan pumping. More frequent water level measurements were conducted at these wells during 2014 and 2015 to document water elevation changes during the start of pumping, when the effects of drawdown due to pumping were expected to occur quickly.

The hydrographs in Appendix D display several patterns. Wells that show the most immediate and sustained effects of the start of Mitigation Plan pumping are in the northern portion of the wellfield: MH-25A, -25B, and -25C; MH-26A, -26B, and -26C; MO-2007-1A, -1B, -1C, -2, -3B, -3C, -4A, -4B, and -4C; ESP-2, M-8, and NP-2. These wells display two line segments: a pre-2014 segment with a negative slope of about 0.9 to 1.8 feet/year and a post-2014 negative slope of approximately 15 to 20 feet/year starting in 2014. These wells are close to the FFS, PS and MC extraction wells and the increase in slope in 2014 is due to drawdown that occurred rapidly at the start of Mitigation Plan pumping. In 2016, the rate of water elevation decline slowed at MH-25A, -25B, and -25C; MH-26B and -26C; M-8, and NP-2.

Wells in the southern portion of the wellfield also show the effects of pumping, but water level patterns are more complicated than in the northern portion. CW-3; MH-3, -11, and -28; MO-2007-5B and -5C; and MO-2009-1 show a steepening of the water level decline in 2012 or 2013, prior to Mitigation Plan pumping, with the rate of decline increasing in 2014 or remaining constant. Wells MH-9, -15E, -15W, -16E, and -16W near the STI show water level increases in 2014 as pumping

shifted to other locations in the wellfield. MH-28, MH-29 and MO-2007-6A and -6B are also near the STI, but didn't display a water level increase until 2016.

Water levels in the vicinity of the wellfield have declined between 20 feet and 45 feet since the start of Mitigation Plan pumping, except at those wells near the tailing impoundment in which the water level increased. The water level hydrographs document the development and maintenance of the potentiometric field around the extraction well system. The various hydrograph patterns are the result of the local hydraulic properties and boundaries of the aquifer, the distance of the monitoring well from the wellfield, pre-existing water level decline patterns, and the superposition of overlapping drawdown cones around pumping wells.

The hydrograph data indicate a high degree of hydraulic connectivity in the aquifer because the response to pumping is evident over a large area that encompasses the extent of the plume. This large area of influence is needed to establish hydraulic control over the migration of the plume.

## **4.0 CAPTURE ZONE ANALYSIS**

The capture zone of the mitigation wellfield is the three dimensional region within which groundwater flows to the extraction well system where it is removed from the aquifer. Capture zone analysis consists of semi-quantitative and quantitative evaluations of field measurements and numerical groundwater flow modeling results to assess the degree of wellfield capture.

The capture zone analysis was conducted using the methods in the 2008 U.S. Environmental Protection Agency guidance document on evaluation of capture zones (Environmental Protection Agency [EPA], 2008), as requested by ADEQ (2009). EPA (2008) outlines the following steps for using multiple lines of evidence to develop a weight of evidence assessment of a capture zone.

- Step 1 - Review of site data, site conceptual model, and remedy objectives
- Step 2 - Define site-specific target capture zone
- Step 3 - Interpret water levels
- Step 4 - Perform calculations
- Step 5 - Evaluate concentration trends
- Step 6 – Interpret actual capture based on Steps 1 to 5, compare to target capture zone, assess uncertainties and data gaps

### **4.1 Site Data Review, Site Conceptual Model, and Mitigation Action Objective**

Site data relevant to Step 1 of the capture zone analysis, including descriptions of the hydrogeology, hydraulic properties, water quality, and site conceptual model, are contained in the Aquifer Characterization Report (Hydro Geo Chem, Inc., 2009) and Feasibility Study (Hydro Geo Chem, Inc., 2008). Section 3 of this report describes the operational, water level, and sulfate concentration data for current conditions.

The site conceptual model described in the Aquifer Characterization Report has not changed over time. The source of sulfate in the plume is considered to be seepage from the STI to the basin fill beneath the tailing impoundment. The sulfate plume is formed as the sulfate-affected seepage mixes with groundwater in the basin fill and migrates east and north from the STI. The plume is contained within the basin fill aquifer, which is underlain by bedrock with a significantly lower hydraulic conductivity than the basin fill. Groundwater pumping to capture the plume is focused in the basin fill aquifer close to the STI and along the axis of the plume (Figure 2). The bedrock aquifer is not targeted for groundwater pumping because its low permeability limits sulfate migration into the bedrock.

The hydraulic properties of the basin fill have been determined through aquifer testing as described in the Aquifer Characterization Report. The water elevation configuration and extent of sulfate-affected groundwater in the basin fill are well documented by the groundwater monitoring conducted since 2007 for the Mitigation Order (Section 3.2). The water elevation configuration over time did not change significantly between the start of Mitigation Order monitoring in 2007 and the start of Mitigation Plan pumping in January 2014, as described in Section 3.2.2.1; indicating that the basin fill aquifer in the vicinity of the plume is not subject to transient phenomena, such as seasonal changes in groundwater flow direction, that can complicate pumping-based plume control actions.

The mitigation action objective is identified in Section 1.2. The Mitigation Plan identifies specific action levels for sulfate concentrations at drinking water supply wells and sentinel wells, in the contingency that the plume migrates in an unexpected way. The drinking water supply and sentinel wells in the vicinity of the plume are monitored quarterly to determine concentrations with respect to action levels.

## **4.2 Target Capture Zone**

The site-specific target capture zone represents the zone of groundwater that must be captured by the mitigation wellfield to prevent substantive downgradient migration of the plume and meet the mitigation action objective. The 250 mg/L sulfate concentration contour for the fourth quarter of 2016, which defines the edge of the plume, is selected as a preliminary target capture zone for Step 2 of the capture zone analysis. The target capture zone extends from the water table to the base of the basin fill aquifer because elevated sulfate within the plume occurs across the entire saturated thickness of the basin fill, although some dilute zones are known to occur at the top of the basin fill aquifer (Hydro Geo Chem, Inc., 2009).

## **4.3 Capture Zone Indicated by Water Elevation Mapping**

The approach used to interpret water level data for Step 3 of the capture zone analysis is to evaluate groundwater flow directions based on the water elevation maps. EPA (2008) identifies water elevation mapping and flow line interpretation as a method of water level interpretation for capture zone assessment. Groundwater flow lines are interpreted as being orthogonal to water elevation contours and in the direction of lower potential (i.e., groundwater flows from higher groundwater elevations to lower elevations). The water elevation depressions that develop around pumping wells are zones of internal flow, or hydraulic sinks, from which groundwater is extracted from the aquifer. Water elevation mapping is used to identify hydraulic sinks and flow line interpretation is used to evaluate the extent of capture developed by the hydraulic sinks created by mitigation pumping.

Figures 16, 17, and 18 show hand-drawn groundwater flow lines and capture zones interpreted for the second quarter of 2013 and the second and fourth quarters of 2016, respectively, based on previously presented water elevation maps. The capture zones are interpreted based on the groundwater flow directions.

Comparison of Figures 16, 17, and 18 indicates a significant change in groundwater flow directions with the start of Mitigation Plan pumping in 2014. In 2013, groundwater flowing from the portion of the aquifer immediately downgradient of the IW wells flowed easterly and then northerly into the regional aquifer (Figure 16). The 2013 capture zones of the IW wells were narrow zones around the northern IW wells and broader zones around the southern IW wells. In 2014, the initiation of groundwater pumping under the Mitigation Plan caused groundwater levels to decline in the vicinity of the FFS, PS, and MC wells, and created depressions that act hydraulic sinks. The hydraulic sinks around the FFS, PS, and MC wells operate in conjunction with the IW wells to create the total capture due to groundwater pumping. The groundwater flow pattern that developed in 2014 was maintained through 2016 by pumping conducted for the Mitigation Plan (Figures 17 and 18). The groundwater flow pattern in 2016 is one in which groundwater that is outside the capture zones of the IW wells flows to and is captured by the hydraulic sinks around the FFS, PS, and MC extraction wells. The capture zones of the IW, FFS, PS, and MC wells coalesce to create a total wellfield capture zone interpreted as extending east from the STI to Green Valley and north to the PS wells near Duval Mine Road.

EPA (2008) points out that because water elevation contour maps require interpolation of water elevations at points between measurements they can be susceptible to bias whether they are hand drawn or drawn based on interpolation algorithms. EPA (2008) recommends creating water elevation maps by multiple methods to check for potential bias. The fourth quarter 2016 water elevation data were analyzed with Kriging software to develop an independent water elevation map for comparison with the hand contoured map. Kriging is a geostatistical interpolation technique commonly applied for spatial analysis of correlated hydrogeologic phenomena (e.g., water level, hydraulic property, and hydrochemistry data).

Figure 19 shows a groundwater elevation map for the fourth quarter of 2016 as estimated by kriging. Also on Figure 19 are inferred groundwater flow lines and the interpreted wellfield capture zone. The kriging analysis omitted data for CCGV2 and CW-10 because these water levels were low due to residual drawdown (CCGV2) and dynamic conditions (CW-10). As these wells are on the east edge of the monitoring network, there are no data to the east to constrain the kriging interpolation and the resulting map showed an unrealistic area of influence for these wells.

The kriged water elevation contours show a similar pattern as the hand drawn contours (Figure 18), although the two interpretations differ in detail, especially near extraction wells with dynamic water levels, where water levels change significantly over short distances. Overall, the groundwater flow

lines and wellfield capture zone inferred from the Kriged and hand-contoured maps are similar. The similarity of the hand-drawn and Kriged maps supports the conclusion that the hand-drawn contours provide an objective interpretation.

#### **4.4 Capture Zone Indicated by Numerical Modeling**

The complicated geometry of the mitigation wellfield precludes the use of simple analytical equations for Step 4 of the capture zone analysis. For this reason, a numerical simulation of the hydraulic head field created by pumping was used for the quantitative assessment of the capture zone. The numerical model for groundwater flow and sulfate transport was updated to simulate the capture zone for mitigation action pumping through 2016.

The numerical model was updated with mitigation action pumping through 2016 for this performance review. Regional (non-Sierrita) pumping, such as municipal and agricultural pumping, was updated through 2015, based on filings with Arizona Department of Water Resources as described in the performance review for 2015 (Clear Creek Associates, 2016b). Recharge sources, such as seepage from the STI and recharge from wastewater treatment facilities, were updated based on information available through 2015 for the STI and through 2013 for other recharge sources.

Figure 20 shows the fourth quarter 2016 sulfate distribution simulated by the updated model. The simulated extent of the sulfate matches the observed extent well, although the model underestimates the eastern extent of the plume at the MO-2007-5 and MW-2016-6 wells. The capture zone indicated by the updated numerical model for groundwater pumping through 2016 is shown on Figure 21. The capture zone is interpreted from gradient vector plots created with the predicted groundwater elevations. Three capture zone outlines are shown on Figure 21 because slightly different capture zones are indicated for layers 1, 2, and 3 of the model.

#### **4.5 Evaluation of Sulfate Concentration Trends**

Step 5 of EPA's approach to capture zone evaluation uses sulfate concentration data from outside the plume as a means of interpreting capture. The use of concentration trend data for wells outside the plume is based on the concept that sulfate concentrations should not increase above the mitigation action objective in wells downgradient of the target capture zone if the plume is not migrating, and that concentrations should decrease in wells with elevated sulfate immediately downgradient of the target capture zone. EPA (2008) states that one potential problem with using concentration data is that it may take years for concentrations to change because groundwater velocities are generally slow. The sulfate data for the drinking water supply and sentinel wells, ESP-2, ESP-3, MW-2016-5A, and MW-2016-5B (Section 3.2) are used to evaluate sulfate concentration trends for Step 5 of the

analysis because these wells are outside the target capture zone of the 250 mg/L sulfate concentration contour (Figure 5).

Drinking water and sentinel well sulfate concentrations are shown on Figures 8 and 9, respectively. Sulfate concentrations at the drinking water supply wells were steady from 2014 to the fourth quarter of 2016 and did not show increasing trends during the period of Mitigation Plan pumping. The sentinel wells do not show increasing trends in sulfate concentration from 2014 to 2016, although the sulfate concentration in MO-2007-3B increased to about 35 mg/L in the fourth quarter of 2016.

Figure 10 shows sulfate over time at wells ESP-2, ESP-3, and ESP-4. These wells lie along the east edge of the plume (Figure 2). Sulfate concentrations at ESP-2 and ESP-3 have been steady at less than 40 mg/L since 2006. ESP-4 has been within the plume since 2006, but is close to the plume edge. ESP-4 declined in sulfate concentrations from a maximum of approximately 619 mg/L in 2012 to 352 mg/L in 2014, and ranged from 362 mg/L to 385 mg/L in 2016.

The drinking water supply, sentinel, and ESP wells do not show increasing sulfate concentrations as would be indicative of an advancing plume. The lack of continuously increasing concentration trends at drinking water supply wells and the decreasing concentrations at the sentinel wells and in ESP-4 since 2013 are interpreted as evidence there is negligible plume migration to the east. The lack of eastward plume migration is consistent with the capture zone interpreted from water elevation maps and numerical modeling results.

Sulfate concentration data for the newly installed MW-2016 wells are currently insufficient to determine trends at the northern edge of the plume. Additional monitoring at the MW-2016 wells will be conducted to develop baseline and time series data for future evaluation.

#### **4.6 Comparison of Wellfield Capture Zone to Target Capture Zone**

Step 6 of the capture analysis is to compare the target capture zone to the wellfield capture zone determined from site monitoring data. The target capture zone is the 250 mg/L sulfate concentration contour that defines the sulfate plume. Figures 22 and 23 compare the fourth quarter 2016 wellfield capture zones determined for the hand contoured water level data and by the numerical model simulation results, respectively, to the target capture zone.

The wellfield capture zone interpreted from fourth quarter 2016 water elevation data (Figure 22) overlaps the entire target capture zone; indicating the sulfate plume is being captured by the mitigation wellfield. The wellfield capture zone indicated by numerical modeling (Figure 23) overlaps a majority of the target capture zone, but, does not overlap approximately 100 acres of the northern-most portion of the target capture zone.

## 4.7 Uncertainties

EPA (2008) recommends identifying uncertainties in the capture zone analysis. Key uncertainties in the current analysis are related to the position of the northern plume edge, the use of the 250 mg/L sulfate concentration contour as the target capture zone, and the different capture zones indicated by water level measurements and numerical modeling results.

Well MW-2016-06 appears to define the northern limit of the plume based on available data. As discussed in Section 3.2.1.4, the initial sample from this well had a sulfate concentration greater than 250 mg/L and a second sample that was less than 250 mg/L. Additional monitoring is being conducted at the MW-2016 wells to determine baseline conditions and the northern limit of the plume.

The target capture zone is the 250 mg/L sulfate concentration contour defining the plume. Use of the plume outline is a conservative estimate of the region requiring capture to meet the mitigation action objective. First, the location of the 250 mg/L contour is estimated based on the highest sulfate concentration measured at co-located wells and may not be representative of the true depth-averaged concentration. Second, it may be possible to meet the mitigation action objective with a target capture zone that is within the plume outline. For example, a small portion of the plume not captured by the wellfield, such as the northern portion of the plume outside the wellfield capture zone, may migrate slowly enough that it is diluted over time by advective and dispersive mixing with low sulfate groundwater.

The capture zone indicated by water level monitoring data (Figure 22) is about 2,000 feet farther north of the capture zone based on numerical modeling results (Figure 23). The capture zone based water level data is larger than the numerical model capture zone, and encompasses the target capture zone whereas the numerical model capture zone omits the northern-most portion of the target capture zone. In general, the measurement data provide a more reliable representation of actual conditions than the numerical model results, which are calculations dependent on many input variables. Examination of the water levels calculated by the model (Figure 21) indicates that the model does not replicate the relative distribution of water elevations and hydraulic gradients measured at the northern front of the plume (Figure 13). Specifically, the model does not replicate the southward directed hydraulic gradient between wells M-5, M-11, and 1225 and wells to the south such as M-9, M-10, MW-2016-5A, MW-2016-5B, and MW-2016-6. The model's poor replication of the detailed distribution of water levels in a square mile area at the northern front of the plume is likely due to the regional scale of the model, which was developed to simulate the groundwater flow system in a 156 square mile model domain. The numerical model is well suited for designing the mitigation action and predicting the large scale behavior of the plume, but it may not be precise enough to predict the exact location of the capture zone. The capture zones defined by water elevation mapping and

numerical simulation are similar at a regional scale, but the capture zone identified by the water level data is considered to best represent actual aquifer conditions in 2016.

Additional uncertainties in the analysis are related to the potential estimation error inherent in the interpretation of groundwater monitoring data. Identification of the wellfield capture zone based on water level interpolation and simulation, and delineation of the plume edge based on groundwater sampling are examples of variables potentially subject to estimation error. The estimation uncertainty in the present analysis is managed through the use of multiple lines of evidence and by having a monitoring data set collected using standardized procedures at a large network of groundwater monitoring wells.

## **5.0 NUMERICAL SIMULATION OF FUTURE PLUME MIGRATION**

The numerical model was not rerun to predict the future plume migration because the 2016 groundwater pumping rate for the mitigation was 10,599 gpm, which is the performance goal pumping rate (Section 2.1.2 and Table 2). Numerical modeling reported in Clear Creek Associates (2014) has previously shown that the performance goal pumping rate controls future plume movement and meets the mitigation action objective.

## **6.0 ASSESSMENT OF MITIGATION ACTION**

### **6.1 Assessment of Mitigation Action Performance**

The mitigation action is meeting the mitigation action objective and is judged to be performing as expected based on the results of groundwater monitoring. Based on the currently available data, there is no need to modify the Mitigation Plan action due to performance. However, if mitigation pumping is reduced in 2017 due to a curtailment of mining operations, pumping would be conducted within the specifications of the Contingency Plan.

### **6.2 Mitigation Pumping Program**

The mitigation pumping program met the performance goal pumping rate of approximately 10,600 gpm (Table 3). The capture zone analysis in Section 4 indicates that the 2016 capture zone generated by the mitigation wellfield encompasses the sulfate plume. Thus, the sulfate plume is controlled under the 2016 pumping condition. In 2017, groundwater pumping was increased at PS-2 and PS-3, and upgrades are underway to increase the pumping rates at PS-1 and PS-4 for hydraulic control at the northern edge of the plume should the Contingency Plan be implemented. As noted in Section 5, a prior simulation of future plume migration assuming the performance goal pumping rate of approximately 10,600 gpm predicts that plume movement is controlled and the mitigation action objective would be met. The mitigation pumping program does not need to be changed based on the current and predicted control of the plume and attainment of the mitigation action objective.

### **6.3 Wellfield Operating and Monitoring Program**

The wellfield O&M program met its operational objective of providing continuous operation of the mitigation wellfield. The mitigation wellfield, which is comprised of 37 extraction wells, several pumping stations and storage tanks, and miles of pipeline, had a wellfield-wide run time percentage of 63%, while critical wells that produced 92% of the total flow in 2016 had an average run time of 81% (Section 3.1). The wellfield O&M program also met the monitoring objective of providing pumping and water level information for use in the performance review. Based on the 2016 results there is no need to modify the wellfield O&M program.

### **6.4 Groundwater Monitoring Program**

The Mitigation Plan identifies the following objectives for the Post-Implementation Groundwater Monitoring Plan.

- Monitor wells along the plume edge to track the location of the plume over time

- Monitor sulfate in sentinel and drinking water supply wells near the plume to verify that sulfate concentrations are less than 250 mg/L
- Document water level and sulfate concentrations in the vicinity of the mitigation wellfield to assess mitigation progress.

The groundwater monitoring program met its objectives of collecting sulfate concentration and water level data needed to determine the extent of the plume, document sulfate concentrations at sentinel and drinking water supply wells, and evaluate wellfield capture. In 2016, Sierrita installed three groundwater monitoring wells at the northern end of the plume to better delineate the location of the plume (Sections 3.2.1.4 and 4.7). Sierrita also conducted activities to deepen pumps and sounding tubes at monitoring wells where water levels had dropped.

Minor changes are recommended to the schedule for Post-Implementation Groundwater Monitoring to reflect current operational and aquifer conditions. It is recommended that monitoring be discontinued at wells ESP-1, MH-12, MH-15W, MH-24, MH-26A, and TMM-1 because the wells are either inoperative (ESP-1) or dry. The MW-2016 series wells are added to the schedule and identified for quarterly monitoring through the second quarter of 2018 and semiannual monitoring thereafter, unless the Contingency Plan is in effect. The MW-2016 wells would be monitored quarterly during the Contingency Plan. Wells ESP-2, ESP-3, M-8, M-9, and M-10 which were monitored quarterly in 2016 in anticipation of the Contingency Plan being implemented should revert back to semi-annual monitoring. Monitoring at ESP-2, ESP-3, M-8, M-9, and M-10 would be conducted quarterly if the Contingency Plan is implemented. Table 5 provides the updated schedule for Post-Implementation Groundwater Monitoring.

## **7.0 REFERENCES**

Arizona Department of Environmental Quality (ADEQ). 2006. Mitigation Order on Consent Docket No. P-50-06. In the Matter of: Phelps Dodge Sierrita Mine located at 6200 West Duval Mine Road, Green Valley, Arizona. July 14, 2006.

ADEQ. 2009. Correspondence from Cynthia S. Campbell, ADEQ Water Quality Compliance Section, to E.L. (Ned) Hall, Sierrita, Re: Mitigation Order on Consent, Docket No. P-50-06 ADEQ's Response to Freeport's Feasibility Report. March 6, 2009.

ADEQ. 2014. Correspondence from Madeline Keller, ADEQ Water Quality Enforcement Unit, to Deborah Chismar, Sierrita, Re: Review of the revised Mitigation Plan (Plan) and the Well Field Operation and Maintenance (O&M) Plan for the Sierrita Mitigation Order, dated December 18, 2013, prepared by Clear Creek Associates, P.L.C. September 29, 2014.

ADEQ. 2015. Correspondence from Madeline Keller, ADEQ, to Deborah Chismar, Sierrita, Re: Review of the Response to ADEQ's Review of the Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06, Pima County, Arizona dated June 23, 2015. November 20, 2015.

ADEQ. 2016a. Correspondence from Mindi Cross, ADEQ, to Deborah Chismar, Sierrita, Re: Notice of Contingency Plan. January 22, 2016.

ADEQ. 2016b. Correspondence from Madeline Keller, ADEQ, to Deborah Chismar, Sierrita, Re: Review of the Response to ADEQ's Review of the Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06, dated February 17, 2016. March 25, 2016.

BasinWells Associates. 2013. Freeport-McMoRan-Sierrita Inc. Mitigation Action Well Field Operation and Maintenance Plan. December 31, 2013.

BasinWells Associates. 2017. 2016 Freeport-McMoRan Sierrita Inc. Sulfate Mitigation Facilities Monitoring Report. March 20, 2017.

Clear Creek Associates. 2013. Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket P-50-06. December 18, 2013.

Clear Creek Associates. 2014. Updated Numerical Simulation of Feasibility Study Alternative 3. July 10, 2014.

Clear Creek Associates. 2015. Contingency Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket P-50-06. November 9, 2015.

Clear Creek Associates. 2016a. Contingency Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket P-50-06. February 17, 2016.

Clear Creek Associates. 2016b. Mitigation Performance Review for 2015, Mitigation Order on Consent Docket P-50-06. April 26, 2016.

Clear Creek Associates. 2016c. Semiannual Groundwater Monitoring Report for Samples Collected during the Fourth Quarter 2015 and First Quarter 2016, Mitigation Order on Consent Docket P-50-06, Pima County, Arizona. May 12, 2016.

Clear Creek Associates. 2016d. Semiannual Groundwater Monitoring Report for Samples Collected during the Second and Third Quarters 2016, Mitigation Order on Consent Docket P-50-06, Pima County, Arizona. November 14, 2016.

Clear Creek Associates. 2017. Well Completion Report, Monitoring Wells MW-2016-5A, MW-2016-5B, and MW-2016-6, Freeport –McMoRan Sierrita, Inc., Mitigation Order on Consent Docket P-50-06. March 2, 2017.

Freeport-McMoRan Inc. 2015. Freeport-McMoRan Reports Third-Quarter and Nine-Month 2015 Results, <http://investors.fcx.com/investor-center/news-releases/news-release-details/2015/Freeport-McMoRan-Reports-Third-Quarter-and-Nine-Month-2015-Results/default.aspx#sthash.4EmbS9RI.dpuf>. October 26, 2015.

Freeport-McMoRan Inc. 2016. Freeport-McMoRan Reports Fourth-Quarter and Year Ended December 31, 2016 Results, <http://investors.fcx.com/investor-center/news-releases/news-release-details/2016/Freeport-McMoRan-Reports-Fourth-Quarter-and-Year-Ended-December31-2015-Results/default.aspx>. January 26, 2016.

Freeport-McMoRan Sierrita Inc. (Sierrita). 2010. Correspondence from Chad D. Fretz, Sierrita, to Cynthia S. Campbell, ADEQ Water Quality Compliance Section, Re: Mitigation Order on Consent Docket No. P-50-06 - Mitigation Plan. March 18, 2010.

Sierrita. 2015a. Correspondence from Deborah Chismar, Sierrita, to Madeline Keller, ADEQ, Re: ADEQ Review of Mitigation Plan, Mitigation Order on Consent Docket No. P-50-06, June 23, 2015.

Sierrita. 2015b. Correspondence from Deborah Chismar, Sierrita, to Madeline Keller, ADEQ, Re: Notice of Contingency Plan, Mitigation Order on Consent Docket No. P-50-06, November 9, 2015.

Hydro Geo Chem, Inc. 2008. Feasibility Study Report for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06. October 22, 2008.

Hydro Geo Chem, Inc. 2009. Revision 1 Aquifer Characterization Report, Task 5 of Aquifer Characterization Plan, Mitigation Order on Consent Docket No. P-50-06. January 30, 2009.

Hydro Geo Chem, Inc. and Clear Creek Associates, P.L.C. 2010. Final Wellfield Conceptual Design, Mitigation Order on Consent Docket No. P-50-06. January 29, 2010.

Upper Santa Cruz Providers and Users Group. 2012. Water Usage Report for Years 2010 – 2035. May 8, 2012.

U.S. Environmental Protection Agency. 2008. A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems, Final Project Report. EPA/600/R-08/003. January 2008.

## **TABLES**

**TABLE 1**  
**Target Pumping Rates for Mitigation Action**

Well Name	ADWR Registry Number									
		2014-2020	2021-2025	2026-2030	2031-2035	2036-2042	2043-2050	2051-2060	2061-2089	2090-2112
IW-01	623129	250	250	250	250	188	80	80	80	80
IW-02A	216464	300	300	300	300	300	200	200	200	200
IW-03A	201732	500	500	500	500	400	400	300	300	300
IW-04	623132	40	40	40	40	40	40	40	40	40
IW-05A	219131	40	40	40	40	40	40	40	40	40
IW-06A	545565	80	80	80	80	40	40	40	40	40
IW-08	508236	350	350	350	350	325	200	200	200	200
IW-09	508238	200	200	200	200	150	150	150	150	150
IW-10	508237	250	250	250	250	250	100	100	100	100
IW-11	508235	325	325	325	250	250	250	150	150	150
IW-12	545555	125	125	125	75	75	50	50	50	50
IW-13	545556	0	0	0	0	0	0	0	0	0
IW-14	545557	60	60	60	60	50	40	40	40	40
IW-15	545558	40	40	40	40	40	40	40	40	40
IW-19	545562	150	150	150	100	100	50	50	50	50
IW-20	545563	0	0	0	0	0	0	0	0	0
IW-21	545564	100	100	100	75	50	50	50	50	50
IW-22	200554	300	300	300	300	300	200	200	200	200
IW-23	200555	120	120	120	120	120	50	50	50	50
IW-24	200556	50	50	50	50	50	40	40	40	40
<b>EXISTING IW WELL TOTAL</b>		<b>3280</b>	<b>3280</b>	<b>3280</b>	<b>3080</b>	<b>2768</b>	<b>2020</b>	<b>1820</b>	<b>1820</b>	<b>1820</b>
IW-25	219596	400	400	350	350	350	300	300	300	300
IW-26	219143	350	350	350	350	350	300	300	300	300
IW-27	219136	100	100	100	100	100	100	100	100	100
IW-28	219137	400	400	400	400	400	350	350	350	350
<b>NEW IW WELL TOTAL</b>		<b>1250</b>	<b>1250</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>	<b>1050</b>	<b>1050</b>	<b>1050</b>	<b>1050</b>
FFS-1	221662	800	800	800	800	800	800	800	800	800
FFS-2	221663	700	700	700	700	700	700	700	700	700
FFS-3	221664	400	400	400	400	400	400	400	400	400
FFS-4	221665	200	200	200	200	200	200	200	200	200
FFS-5	221666	1000	1000	1000	1000	1000	1000	1000	1000	1000
FFS-6	221667	600	600	600	600	600	600	600	600	600
<b>FFS WELL TOTAL</b>		<b>3700</b>								
PS-1	220861	700	700	700	700	700	700	700	700	700
PS-2	220862	800	<b>800</b>	800						
PS-3	220863	800	<b>800</b>	800						
PS-4	220864	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>PS WELL TOTAL</b>		<b>3300</b>								
MC-1	221660	900	900	900	900	900	900	900	<b>900</b>	900
MC-2	221761	700	700	700	700	700	<b>700</b>	<b>700</b>	<b>700</b>	700
MC-3	221661	600	600	600	900	900	<b>900</b>	<b>900</b>	<b>900</b>	900
MC-4	220842	600	600	600	600	600	600	600	<b>600</b>	600
<b>MC WELL TOTAL</b>		<b>2800</b>	<b>2800</b>	<b>2800</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>	<b>3100</b>
<b>TOTAL PUMPING</b>		<b>14,330</b>	<b>14,330</b>	<b>14,280</b>	<b>14,380</b>	<b>14,068</b>	<b>13,170</b>	<b>12,970</b>	<b>12,970</b>	<b>12,970</b>

Notes:

ADWR = Arizona Department of Water Resources

FFS = Focused Feasibility Study

IW = Interceptor Wells

PS = Plume Stabilization

MC = Mass Capture

**TABLE 2**  
**Performance Goal Pumping Rates**

Well Name	ADWR Registry Number	Gallons per Minute				
		2014-2020	2021-2025	2026-2030	2031-2035	2036-2042
IW-01	623129	250	250	250	250	188
IW-02A	216464	300	300	300	300	300
IW-03A	201732	500	500	500	500	400
IW-04	623132	40	40	40	40	40
IW-05A	219131	40	40	40	40	40
IW-06A	545565	80	80	80	80	40
IW-08	508236	350	350	350	350	325
IW-09	508238	200	200	200	200	150
IW-10	508237	250	250	250	250	250
IW-11	508235	325	325	325	250	250
IW-12	545555	125	125	125	75	75
IW-13	545556	0	0	0	0	0
IW-14	545557	60	60	60	60	50
IW-15	545558	40	40	40	40	40
IW-19	545562	150	150	150	100	100
IW-20	545563	0	0	0	0	0
IW-21	545564	100	100	100	75	50
IW-22	200554	300	300	300	300	300
IW-23	200555	120	120	120	120	120
IW-24	200556	50	50	50	50	50
<b>EXISTING IW WELL TOTAL</b>		<b>3280</b>	<b>3280</b>	<b>3280</b>	<b>3080</b>	<b>2768</b>
<hr/>						
IW-25	219596	400	400	350	350	350
IW-26	219143	350	350	350	350	350
IW-27	219136	100	100	100	100	100
IW-28	219137	400	400	400	400	400
<b>NEW IW WELL TOTAL</b>		<b>1250</b>	<b>1250</b>	<b>1200</b>	<b>1200</b>	<b>1200</b>
<hr/>						
FFS-1	221662	338	338	338	338	488
FFS-2	221663	300	300	300	300	450
FFS-3	221664	225	225	225	225	225
FFS-4	221665	150	150	150	150	113
FFS-5	221666	225	225	225	225	225
FFS-6	221667	225	225	225	225	225
<b>FFS WELL TOTAL</b>		<b>1463</b>	<b>1463</b>	<b>1463</b>	<b>1463</b>	<b>1726</b>
<hr/>						
PS-1	220861	700	700	700	700	700
PS-2	220862	800	800	800	800	800
PS-3	220863	800	800	800	800	800
PS-4	220864	1000	1000	1000	1000	1000
<b>PS WELL TOTAL</b>		<b>3300</b>	<b>3300</b>	<b>3300</b>	<b>3300</b>	<b>3300</b>
<hr/>						
MC-1	221660	0	0	0	0	0
MC-2	221761	0	0	0	0	0
MC-3	221661	750	750	750	750	750
MC-4	220842	600	600	600	600	600
<b>MC WELL TOTAL</b>		<b>1350</b>	<b>1350</b>	<b>1350</b>	<b>1350</b>	<b>1350</b>
<hr/>						
<b>TOTAL PUMPING</b>		<b>10,643</b>	<b>10,643</b>	<b>10,593</b>	<b>10,393</b>	<b>10,344</b>

Notes:

ADWR = Arizona Department of Water Resources

FFS = Focused Feasibility Study

IW = Interceptor Wells

PS = Plume Stabilization

MC = Mass Capture

Note: The performance goal rate for PS-1 is corrected to 700 gpm from the 750 gpm reported in the Mitigation Plan.

**TABLE 3**  
**2016 Groundwater Pumping Compared to  
 Target and Performance Goal Pumping Rates**

WELL NAME	ADWR REGISTRY NUMBER	MITIGATION PLAN TARGET PUMPING RATE (gpm)	MITIGATION PLAN PERFORMANCE GOAL RATE (gpm)	2016 TOTAL GALLONS PUMPED	2016 AVERAGE PUMPING RATE (gpm)	2016 AVERAGE RATE MINUS TARGET RATE (gpm)	2016 AVERAGE RATE MINUS PERFORMANCE GOAL RATE (gpm)
IW-01	623129	250	250	107,007,063	204	-46	-46
IW-02A	216464	300	300	77,668,438	148	-152	-152
IW-03A	201732	500	500	15,850,625	30	-470	-470
IW-04	623132	40	40	17,329,867	33	-7	-7
IW-05A	219131	40	40	0	0	-40	-40
IW-06A	545565	80	80	0	0	-80	-80
IW-08	508236	350	350	101,163,969	192	-158	-158
IW-09	508238	200	200	0	0	-200	-200
IW-10	508237	250	250	30,955,719	59	-191	-191
IW-11	508235	325	325	66,664,531	127	-198	-198
IW-12	545555	125	125	45,102,000	86	-39	-39
IW-13	545556	0	0	0.000	0	0	0
IW-14	545557	60	60	7,439,359	14	-46	-46
IW-15	545558	40	40	12,319,696	23	-17	-17
IW-19	545562	150	150	34,097,484	65	-85	-85
IW-20	545563	0	0	0	0	0	0
IW-21	545564	100	100	35,914,141	68	-32	-32
IW-22	200554	300	300	115,097,563	219	-81	-81
IW-23	200555	120	120	0	0	-120	-120
IW-24	200556	50	50	47,211,555	90	40	40
IW-25	219596	400	400	165,014,250	314	-86	-86
IW-26	219143	350	350	90,181,938	172	-178	-178
IW-27	219136	100	100	96,053,031	183	83	83
IW-28	219137	400	400	97,050,250	185	-215	-215
IW-29 <sup>1</sup>	222865	0	0	131,841,438	251	251	251
<b>IW WELL TOTAL</b>		<b>4,530</b>	<b>4,530</b>	<b>1,293,962,915</b>	<b>2,462</b>	<b>-2,068</b>	<b>-2,068</b>
				Percent of Target Pumping Rate	54%		
				Percent of Performance Goal Rate	54%		
<hr/>							
FFS-1	221662	800	338	418,934,250	797	-3	459
FFS-2	221663	700	300	403,369,750	767	67	467
FFS-3	221664	400	225	109,975,742	209	-191	-16
FFS-4	221665	200	150	65,372,750	124	-76	-26
FFS-5	221666	1,000	225	478,286,500	910	-90	685
FFS-6	221667	600	225	260,501,672	496	-104	271
<b>FFS WELL TOTAL</b>		<b>3,700</b>	<b>1,463</b>	<b>1,736,440,664</b>	<b>3,304</b>	<b>-396</b>	<b>1,841</b>
				Percent of Target Pumping Rate	89%		
				Percent of Performance Goal Rate	226%		
<hr/>							
PS-1	220861	700	700	310,816,688	591	-109	-109
PS-2	220862	800	800	293,777,094	559	-241	-241
PS-3	220863	800	800	258,941,250	493	-307	-307
PS-4	220864	1,000	1,000	377,176,250	718	-282	-282
<b>PS WELL TOTAL</b>		<b>3,300</b>	<b>3,300</b>	<b>1,240,711,281</b>	<b>2,361</b>	<b>-939</b>	<b>-939</b>
				Percent of Target Pumping Rate	72%		
				Percent of Performance Goal Rate	72%		
<hr/>							
MC-1	221660	900	0	445,436,938	847	-53	847
MC-2	221761	700	0	311,478,438	593	-107	593
MC-3	221661	600	750	272,113,625	518	-82	-232
MC-4	220842	600	600	270,769,094	515	-85	-85
<b>MC WELL TOTAL</b>		<b>2,800</b>	<b>1,350</b>	<b>1,299,798,094</b>	<b>2,473</b>	<b>-327</b>	<b>1,123</b>
				Percent of Target Pumping Rate	88%		
				Percent of Performance Goal Rate	183%		
<hr/>							
<b>TOTAL PUMPING</b>		<b>14,330</b>	<b>10,643</b>	<b>5,570,912,954</b>	<b>10,599</b>	<b>-3,731</b>	<b>-44</b>
				Percent of Target Pumping Rate	74%		
				Percent of Performance Goal Rate	100%		

ADWR = Arizona Department of Water Resources

IW = Interceptor Wells, FFS = Focused Feasibility Study , PS = Plume Stabilization, MC = Mass Capture

gpm = gallons per minute

Target pumping rates and performance goal rates from Tables 1 and 2, respectively, of the Mitigation Plan. The performance goal for PS-1 is corrected to 700 gpm from the 750 gpm reported in the Mitigation Plan.

<sup>1</sup> No target or performance goal pumping rates were set for IW-29 because its installation post-dates the Mitigation Plan.

**TABLE 4**  
**Post-Implementation Groundwater Monitoring for 2016**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Monthly/Quarterly Water Level Monitoring
CC of GV	501760	Monitor	Sierrita		SO4+WL		WLO	
CW-3	627483	Monitor	CWC		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
CW-6	627485	DWS	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL	
CW-7	502546	Monitor	CWC		WLO		WLO	
CW-8	543600	Monitor	CWC		WLO		WLO	
CW-9	588121	DWS	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL	
CW-10	207982	DWS	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL	
CW-11	608518	DWS	CWC		WLO		WLO	
ESP-1	623102	Monitor	Sierrita		SO4+WL		SO4+WL	
ESP-2	623103	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
ESP-3	623104	Monitor	Sierrita		SO4+WL		SO4+WL	
ESP-4	623105	Monitor	Sierrita		SO4+WL		SO4+WL	
ESP-5	623106	Monitor	Sierrita		WLO		WLO	
FFS-1	221662	Extraction	Sierrita		SO4+WL		WLO	
FFS-2	221663	Extraction	Sierrita		SO4+WL		WLO	
FFS-3	221664	Extraction	Sierrita		SO4+WL		WLO	
FFS-4	221665	Extraction	Sierrita		SO4+WL		WLO	
FFS-5	221666	Extraction	Sierrita		SO4+WL		WLO	
FFS-6	221667	Extraction	Sierrita		SO4+WL		WLO	
FICO C-4	624010	Ag Extraction	FICO		WLO		WLO	
FICO E-6	624013	Ag Extraction	FICO		WLO		WLO	
GV-01-GVDWID	603428	DWS	GVDWID	SO4+WL	SO4+WL	SO4+WL	SO4+WL	
GV-01-PCWW	509603	Monitor	Pima County		WLO		WLO	
GV-02-GVDWID	603429	DWS	GVDWID	SO4+WL	SO4+WL	SO4+WL	SO4+WL	
GV-02-PCWW	509604	Monitor	Pima County		WLO		WLO	
GV-SI-GVDWID	208825	DWS	GVDWID		SO4+WL		WLO	
HAVEN GOLF	515867	Monitor	Haven Golf		SO4+WL		WLO	
I-10	608525	Monitor	Sierrita		SO4+WL		WLO	
IW-1	623129	Extraction	Sierrita		SO4+WL		WLO	
IW-2A	216464	Extraction	Sierrita		SO4+WL		WLO	
IW-3A	201732	Extraction	Sierrita		SO4+WL		WLO	
IW-4	623132	Extraction	Sierrita		SO4+WL		WLO	
IW-5A	219131	Extraction	Sierrita		SO4+WL		WLO	
IW-6A	545565	Extraction	Sierrita		SO4+WL		WLO	
IW-8	508236	Extraction	Sierrita		SO4+WL		WLO	
IW-9	508238	Extraction	Sierrita		SO4+WL		WLO	
IW-10	508237	Extraction	Sierrita		SO4+WL		WLO	
IW-11	508235	Extraction	Sierrita		SO4+WL		WLO	
IW-12	545555	Extraction	Sierrita		SO4+WL		WLO	
IW-13	545556	Extraction	Sierrita		SO4+WL		WLO	
IW-14	545557	Extraction	Sierrita		SO4+WL		WLO	
IW-15	545558	Extraction	Sierrita		SO4+WL		WLO	
IW-16	545559	Monitor	Sierrita		WLO		WLO	
IW-17	545560	Monitor	Sierrita		WLO		WLO	
IW-18	545561	Monitor	Sierrita		WLO		WLO	
IW-19	545562	Extraction	Sierrita		SO4+WL		WLO	
IW-20	545563	Extraction	Sierrita		SO4+WL		WLO	
IW-21	545564	Extraction	Sierrita		SO4+WL		WLO	
IW-22	200554	Extraction	Sierrita		SO4+WL		WLO	
IW-23	200555	Extraction	Sierrita		SO4+WL		WLO	
IW-24	200556	Extraction	Sierrita		SO4+WL		WLO	
IW-25	219596	Extraction	Sierrita		SO4+WL		WLO	
IW-26	219143	Extraction	Sierrita		SO4+WL		WLO	
IW-27	219136	Extraction	Sierrita		SO4+WL		WLO	
IW-28	219137	Extraction	Sierrita		SO4+WL		WLO	
IW-29	222865	Extraction	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016

**TABLE 4**  
**Post-Implementation Groundwater Monitoring for 2016**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Monthly/Quarterly Water Level Monitoring
M-5	87387	Monitor	Sierrita		WLO		WLO	
M-8	87390	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
M-9	501652	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
M-10	501653	Monitor	Sierrita		SO4+WL		SO4+WL	
M-11	501654	Monitor	Sierrita		WLO		WLO	
M-13	508428	Monitor	Sierrita		WLO		WLO	
M-20	906595	Monitor	Sierrita		SO4+WL		WLO	
MC-1	221660	Extraction	Sierrita		SO4+WL		WLO	
MC-2	221761	Extraction	Sierrita		SO4+WL		WLO	
MC-3	221661	Extraction	Sierrita		SO4+WL		WLO	
MC-4	220842	Extraction	Sierrita		SO4+WL		WLO	
MH-1	803629	Monitor	Sierrita		WLO		WLO	
MH-3	803630	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-5	803632	Monitor	Sierrita		WLO		WLO	
MH-6	803633	Monitor	Sierrita		WLO		WLO	
MH-7	803634	Monitor	Sierrita		WLO		WLO	
MH-9	803635	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-10	803636	Monitor	Sierrita		SO4+WL		WLO	
MH-11	803637	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-12	803638	Monitor	Sierrita					Monthly to June 2015, then quarterly to Q1 2016
MH-13A	904071	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-13B	904072	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-13C	904073	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-14	528098	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-15E	528094	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-15W	528093	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-16E	528100	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-16W	528099	Monitor	Sierrita		WLO		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-24	563799	Monitor	Sierrita		WLO		WLO	
MH-25A	201528	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-25B	208429	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-25C	208426	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-26A	201527	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-26B	208427	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-26C	208428	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MH-28	903648	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MH-29	903649	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MH-30	903884	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-1A	907342	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-1B	907210	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-1C	907209	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-2	906765	Monitor	Sierrita		SO4+WL		WLO	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-3B <sup>1</sup>	906816	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-3C <sup>1</sup>	906817	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-4A <sup>2</sup>	907213	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-4B <sup>2</sup>	907212	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-4C <sup>2</sup>	907211	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-5B	907456	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-5C	907457	Monitor	Sierrita		SO4+WL		SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-6A <sup>3</sup>	907607	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2007-6B <sup>3</sup>	907606	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
MO-2009-1 <sup>4</sup>	910458	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
NP-2 <sup>1</sup>	605898	Sentinel	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL	Monthly to June 2015, then quarterly to Q1 2016
PS-1	220861	Extraction	Sierrita		SO4+WL		WLO	
PS-2	220862	Extraction	Sierrita		SO4+WL		WLO	
PS-3	220863	Extraction	Sierrita		SO4+WL		WLO	
PS-4	220864	Extraction	Sierrita		SO4+WL		WLO	

**TABLE 4**  
**Post-Implementation Groundwater Monitoring for 2016**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Monthly/Quarterly Water Level Monitoring
PZ-7	561870	Monitor	Sierrita		SO4+WL		WLO	
PZ-8	561866	Monitor	Sierrita		SO4+WL		WLO	
S-1	623111	Extraction	Sierrita		WLO		WLO	
ST-6	608530	DWS	LQSWC		WLO		WLO	
TMM-1	616156	Monitor	Pima County		SO4+WL		SO4+WL	
1225	634394	Monitor	Sierrita		WLO		WLO	
1350	ND	Monitor	Sierrita		WLO		WLO	
1759	634393	Monitor	Sierrita		WLO		WLO	
2125	514015	Monitor	Sierrita		WLO		WLO	

Notes:

ADWR = Arizona Department of Water Resources

Ag = agricultural

CC OF GV = Country Club of Green Valley

CWC = Community Water Company of Green Valley

DWS = Drinking Water Supply

FICO - Farmers Investment Company

GVDWID = Green Valley Domestic Water Improvement District

GVPCWW = Green Valley Pima County Wastewater Reclamation Facility

LQSWC = Las Quintas Serenas Water Company

ND = No Data

Sierrita = Freeport-McMoRan Sierrita Inc.

SO4 = Water Sample for Sulfate Analysis, WL = Water Level Measurement, WLO = Water Level Measurement 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

**TABLE 5**  
**Updated Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
CC of GV	501760	Monitor	Sierrita		SO4		
CCGV2	627484	Monitor	CWC		WLO		WLO
CW-3	627483	Monitor	CWC		SO4+WL		SO4+WL
CW-6	627485	DWS	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL
CW-7	502546	Monitor	CWC		WLO		WLO
CW-8	543600	Monitor	CWC		WLO		WLO
CW-9	588121	DWS	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL
CW-10	207982	DWS	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL
CW-11	608518	DWS	CWC		WLO		WLO
ESP-2	623103	Monitor	Sierrita	SO4+WL <sup>1</sup>	SO4+WL	SO4+WL <sup>1</sup>	SO4+WL
ESP-3	623104	Monitor	Sierrita	SO4+WL <sup>1</sup>	SO4+WL	SO4+WL <sup>1</sup>	SO4+WL
ESP-4	623105	Monitor	Sierrita		SO4+WL		SO4+WL
ESP-5	623106	Monitor	Sierrita		WLO		WLO
FFS-1	221662	Extraction	Sierrita		SO4+WL		WLO
FFS-2	221663	Extraction	Sierrita		SO4+WL		WLO
FFS-3	221664	Extraction	Sierrita		SO4+WL		WLO
FFS-4	221665	Extraction	Sierrita		SO4+WL		WLO
FFS-5	221666	Extraction	Sierrita		SO4+WL		WLO
FFS-6	221667	Extraction	Sierrita		SO4+WL		WLO
FICO C-4	624010	Ag Extraction	FICO		WLO		WLO
FICO E-6	624013	Ag Extraction	FICO		WLO		WLO
GV-01-GVDWID	603428	DWS	GVDWID	SO4+WL	SO4+WL	SO4+WL	SO4+WL
GV-01-PCWW	509603	Monitor	Pima County		WLO		WLO
GV-02-GVDWID	603429	DWS	GVDWID	SO4+WL	SO4+WL	SO4+WL	SO4+WL
GV-02-PCWW	509604	Monitor	Pima County		WLO		WLO
GV-SI-GVDWID	208825	DWS	GVDWID		SO4+WL		WLO
HAVEN GOLF	515867	Monitor	Haven Golf		SO4		
I-10	608525	Monitor	Sierrita		WLO		WLO
IW-1	623129	Extraction	Sierrita		SO4+WL		WLO
IW-2A	216464	Extraction	Sierrita		SO4+WL		WLO
IW-3A	201732	Extraction	Sierrita		SO4+WL		WLO
IW-4	623132	Extraction	Sierrita		SO4+WL		WLO
IW-5A	219131	Extraction	Sierrita		SO4+WL		WLO
IW-6A	545565	Extraction	Sierrita		SO4+WL		WLO
IW-8	508236	Extraction	Sierrita		SO4+WL		WLO
IW-9	508238	Extraction	Sierrita		SO4+WL		WLO
IW-10	508237	Extraction	Sierrita		SO4+WL		WLO
IW-11	508235	Extraction	Sierrita		SO4+WL		WLO
IW-12	545555	Extraction	Sierrita		SO4+WL		WLO
IW-13	545556	Extraction	Sierrita		SO4+WL		WLO
IW-14	545557	Extraction	Sierrita		SO4+WL		WLO
IW-15	545558	Extraction	Sierrita		SO4+WL		WLO
IW-16	545559	Monitor	Sierrita		WLO		WLO
IW-17	545560	Monitor	Sierrita		WLO		WLO
IW-18	545561	Monitor	Sierrita		WLO		WLO
IW-19	545562	Extraction	Sierrita		SO4+WL		WLO
IW-20	545563	Extraction	Sierrita		SO4+WL		WLO
IW-21	545564	Extraction	Sierrita		SO4+WL		WLO
IW-22	200554	Extraction	Sierrita		SO4+WL		WLO

**TABLE 5**  
**Updated Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
IW-23	200555	Extraction	Sierrita		SO4+WL		WLO
IW-24	200556	Extraction	Sierrita		SO4+WL		WLO
IW-25	219596	Extraction	Sierrita		SO4+WL		WLO
IW-26	219143	Extraction	Sierrita		SO4+WL		WLO
IW-27	219136	Extraction	Sierrita		SO4+WL		WLO
IW-28	219137	Extraction	Sierrita		SO4+WL		WLO
IW-29	222865	Extraction	Sierrita		SO4+WL		WLO
M-5	87387	Monitor	Sierrita		WLO		WLO
M-8	87390	Monitor	Sierrita	SO4+WL <sup>1</sup>	SO4+WL	SO4+WL <sup>1</sup>	SO4+WL
M-9	501652	Monitor	Sierrita	SO4+WL <sup>1</sup>	SO4+WL	SO4+WL <sup>1</sup>	WLO
M-10	501653	Monitor	Sierrita	SO4+WL <sup>1</sup>	SO4+WL	SO4+WL <sup>1</sup>	SO4+WL
M-11	501654	Monitor	Sierrita		WLO		WLO
M-13	508428	Monitor	Sierrita		WLO		WLO
M-20	906595	Monitor	Sierrita		SO4+WL		WLO
MC-1	221660	Extraction	Sierrita		SO4+WL		WLO
MC-2	221761	Extraction	Sierrita		SO4+WL		WLO
MC-3	221661	Extraction	Sierrita		SO4+WL		WLO
MC-4	220842	Extraction	Sierrita		SO4+WL		WLO
MH-1	803629	Monitor	Sierrita		WLO		WLO
MH-3	803630	Monitor	Sierrita		WLO		WLO
MH-5	803632	Monitor	Sierrita		WLO		WLO
MH-6	803633	Monitor	Sierrita		WLO		WLO
MH-7	803634	Monitor	Sierrita		WLO		WLO
MH-9	803635	Monitor	Sierrita		WLO		WLO
MH-10	803636	Monitor	Sierrita		SO4+WL		WLO
MH-11	803637	Monitor	Sierrita		SO4+WL		WLO
MH-13A	904071	Monitor	Sierrita		SO4+WL		WLO
MH-13B	904072	Monitor	Sierrita		SO4+WL		WLO
MH-13C	904073	Monitor	Sierrita		SO4+WL		WLO
MH-14	528098	Monitor	Sierrita		WLO		WLO
MH-15E	528094	Monitor	Sierrita		WLO		WLO
MH-16E	528100	Monitor	Sierrita		WLO		WLO
MH-16W	528099	Monitor	Sierrita		WLO		WLO
MH-25A	201528	Monitor	Sierrita		SO4+WL		WLO
MH-25B	208429	Monitor	Sierrita		SO4+WL		WLO
MH-25C	208426	Monitor	Sierrita		SO4+WL		WLO
MH-26B	208427	Monitor	Sierrita		SO4+WL		WLO
MH-26C	208428	Monitor	Sierrita		SO4+WL		WLO
MH-28	903648	Monitor	Sierrita		SO4+WL		SO4+WL
MH-29	903649	Monitor	Sierrita		SO4+WL		SO4+WL
MH-30	903884	Monitor	Sierrita		SO4+WL		WLO
MO-2007-1A	907342	Monitor	Sierrita		SO4+WL		SO4+WL
MO-2007-1B	907210	Monitor	Sierrita		SO4+WL		SO4+WL
MO-2007-1C	907209	Monitor	Sierrita		SO4+WL		SO4+WL
MO-2007-2	906765	Monitor	Sierrita		SO4+WL		WLO
MO-2007-3B <sup>2</sup>	906816	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MO-2007-3C <sup>2</sup>	906817	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL

**TABLE 5**  
**Updated Sampling Schedule for Post-Implementation Groundwater Monitoring**

Well Name	ADWR 55 Well Registry No.	Well Use	Owner	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MO-2007-4A <sup>3</sup>	907213	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MO-2007-4B <sup>3</sup>	907212	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MO-2007-4C <sup>3</sup>	907211	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MO-2007-5B	907456	Monitor	Sierrita		SO4+WL		SO4+WL
MO-2007-5C	907457	Monitor	Sierrita		SO4+WL		SO4+WL
MO-2007-6A <sup>4</sup>	907607	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MO-2007-6B <sup>4</sup>	907606	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MO-2009-1 <sup>5</sup>	910458	Sentinel	Sierrita	SO4+WL	SO4+WL	SO4+WL	SO4+WL
MW-2016-5A	919635	Monitor	Sierrita	SO4+WL <sup>6</sup>	SO4+WL	SO4+WL <sup>6</sup>	SO4+WL
MW-2016-5B	919472	Monitor	Sierrita	SO4+WL <sup>6</sup>	SO4+WL	SO4+WL <sup>6</sup>	SO4+WL
MW-2016-6	919676	Monitor	Sierrita	SO4+WL <sup>6</sup>	SO4+WL	SO4+WL <sup>6</sup>	SO4+WL
NP-2 <sup>2</sup>	605898	Sentinel	CWC	SO4+WL	SO4+WL	SO4+WL	SO4+WL
PS-1	220861	Extraction	Sierrita		SO4+WL		WLO
PS-2	220862	Extraction	Sierrita		SO4+WL		WLO
PS-3	220863	Extraction	Sierrita		SO4+WL		WLO
PS-4	220864	Extraction	Sierrita		SO4+WL		WLO
PZ-7	561870	Monitor	Sierrita		SO4+WL		WLO
PZ-8	561866	Monitor	Sierrita		SO4+WL		WLO
S-1	623111	Extraction	Sierrita		WLO		WLO
ST-6	608530	DWS	LQSWC		WLO		WLO
1225	634394	Monitor	Sierrita		WLO		WLO
1350	ND	Monitor	Sierrita		WLO		WLO
1759	634393	Monitor	Sierrita		WLO		WLO
2125	514015	Monitor	Sierrita		WLO		WLO

*Notes:*

ADWR = Arizona Department of Water Resources

Ag = agricultural

CC OF GV = Country Club of Green Valley

CWC = Community Water Company of Green Valley

DWS = Drinking Water Supply

FICO - Farmers Investment Company

GVDWID = Green Valley Domestic Water Improvement District

GVPCWW = Green Valley Pima County Wastewater Reclamation Facility

LQSWC = Las Quintas Serenas Water Company

ND = No Data

Sierrita = Freeport-McMoRan Sierrita Inc.

SO4 = Water Sample for Sulfate Analysis, WL = Water Level Measurement, WLO = Water Level Measurement Only

<sup>1</sup> First and third quarter sampling pursuant to Contingency Plan; sampling reverts to second and fourth quarters only after Contingency Plan

<sup>2</sup> Sentinel Well for CW-9

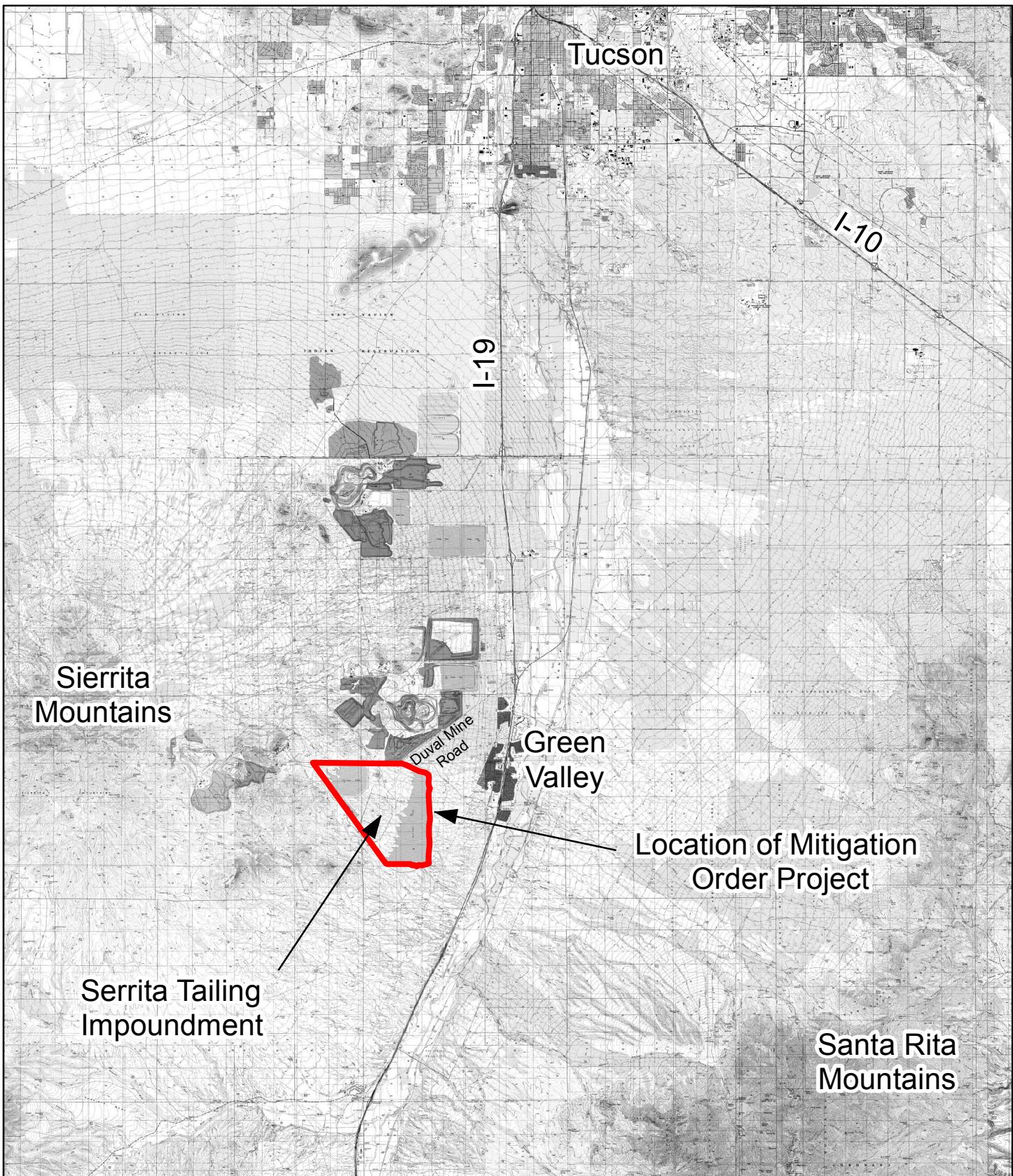
<sup>3</sup> Sentinel Well for CW-6

<sup>4</sup> Sentinel Well for GV-01-GVDWID and GV-02-GVDWID

<sup>5</sup> Sentinel Well for CW-10

<sup>6</sup> Quarterly during Contingency Plan or until second quarter of 2018 if after the Contingency Plan; sampling reverts to second and fourth quarters only after Contingency Plan

## **FIGURES**



0 2 4 8  
Miles

PROJECTION: UTM Zone 12N NAD83

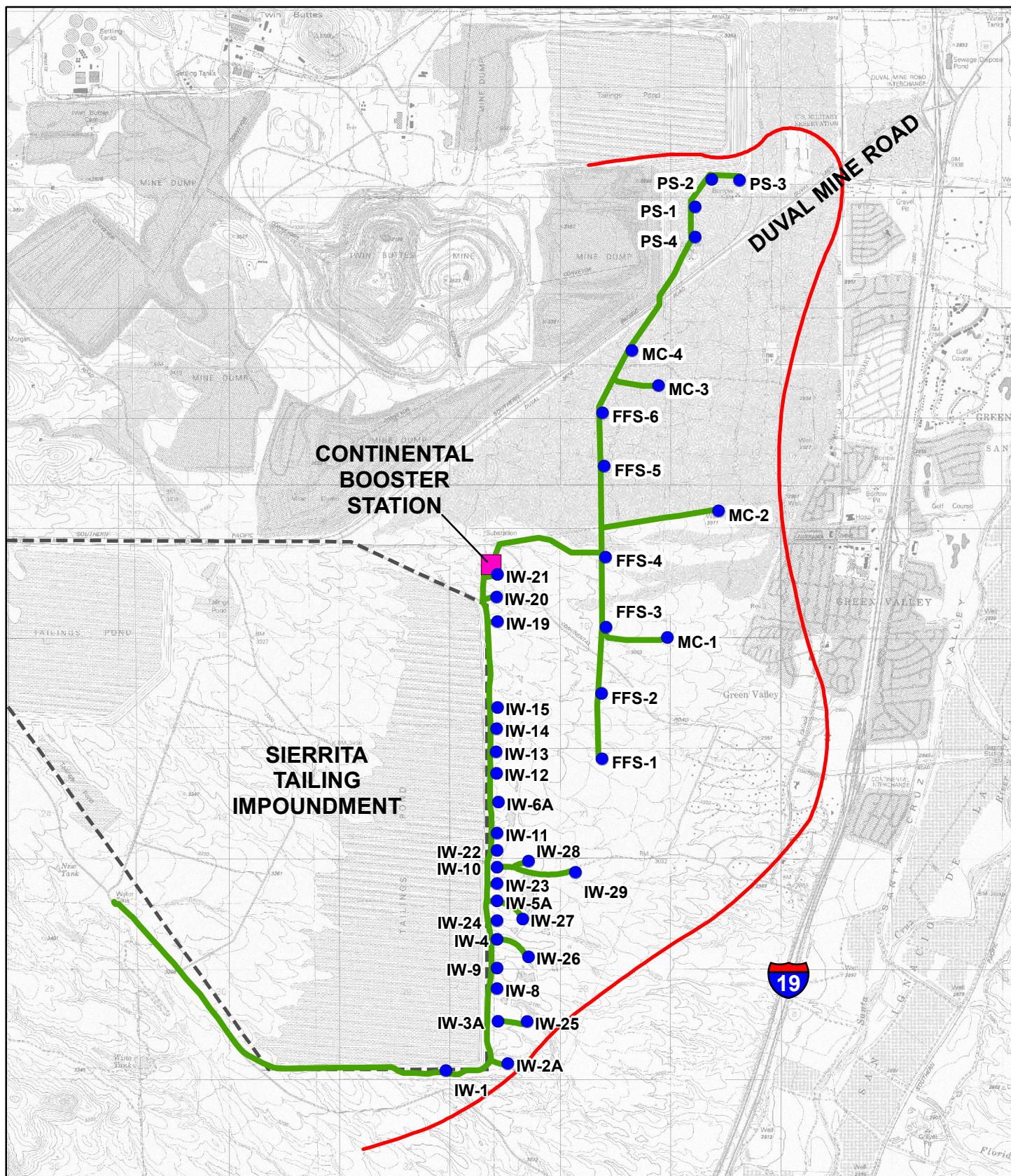


CLEAR CREEK ASSOCIATES

File ID 055039-121

Date 3/12/15

FIGURE 1  
Project Location Map



#### Legend

- Extraction Well
- Booster Station
- Pipeline
- Tailing Impoundment
- Q4 2016 250 mg/L Sulfate Concentration Contour

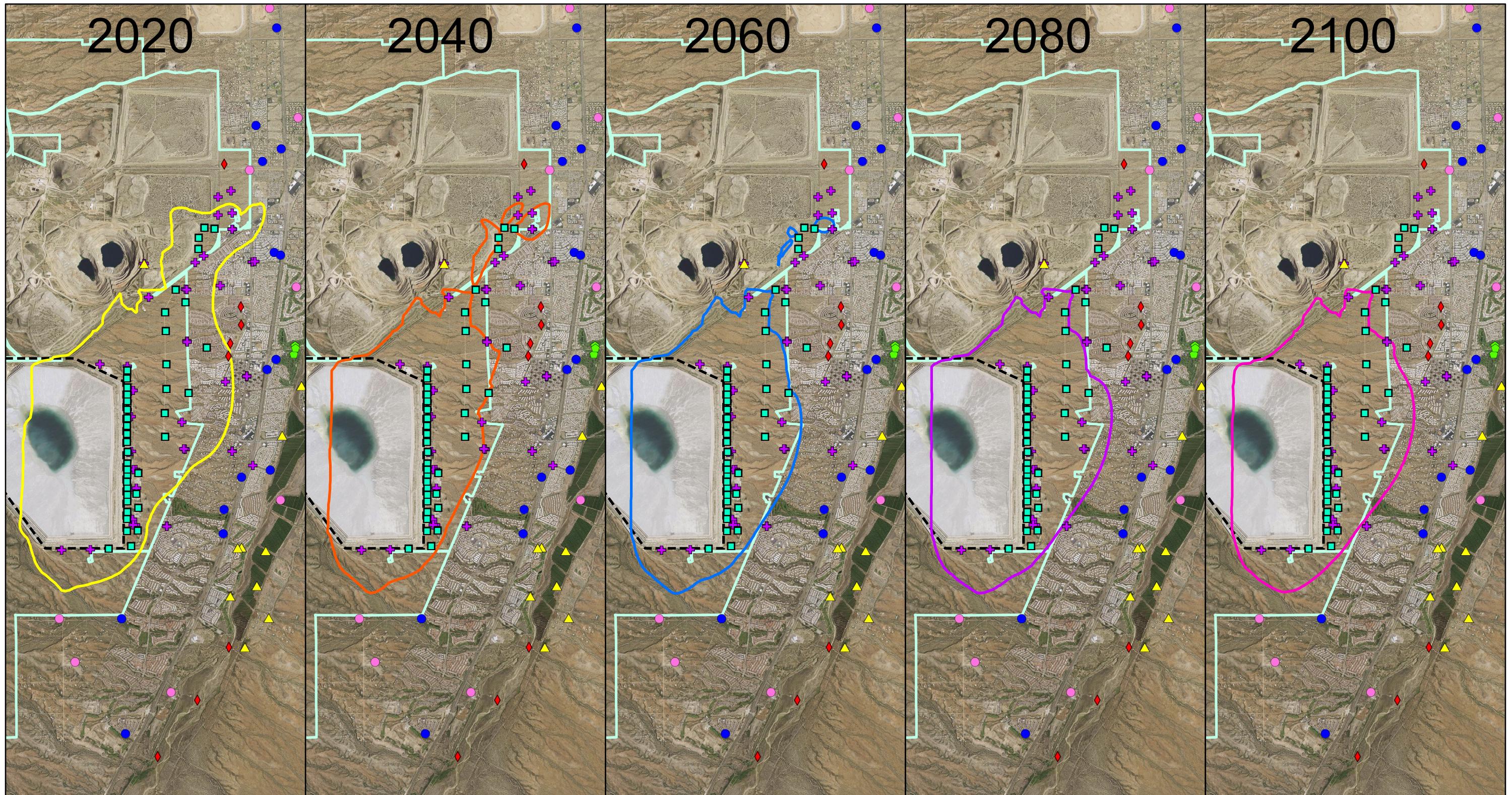
0 2,000 4,000  
Feet

**CLEAR CREEK ASSOCIATES**

File ID 055039-165D

Date 3/3/17

**FIGURE 2**  
Mitigation Action  
Extraction Wells  
and Pumping Facilities


**Legend**

- ▲ Agriculture
  - Golf Course
  - ◆ Mining
  - Mitigation Extraction Wells
  - Municipal Supply
  - Other Users
  - + Post-Implementation Monitoring Well
- 250 mg/L Contour in 2020  
 — 250 mg/L Contour in 2040  
 — 250 mg/L Contour in 2060  
 — 250 mg/L Contour in 2080  
 — 250 mg/L Contour in 2100

Tailing Impoundment  
 Sierra Property Boundary

**Scale (Feet)**

0      8,000      16,000

Notes:

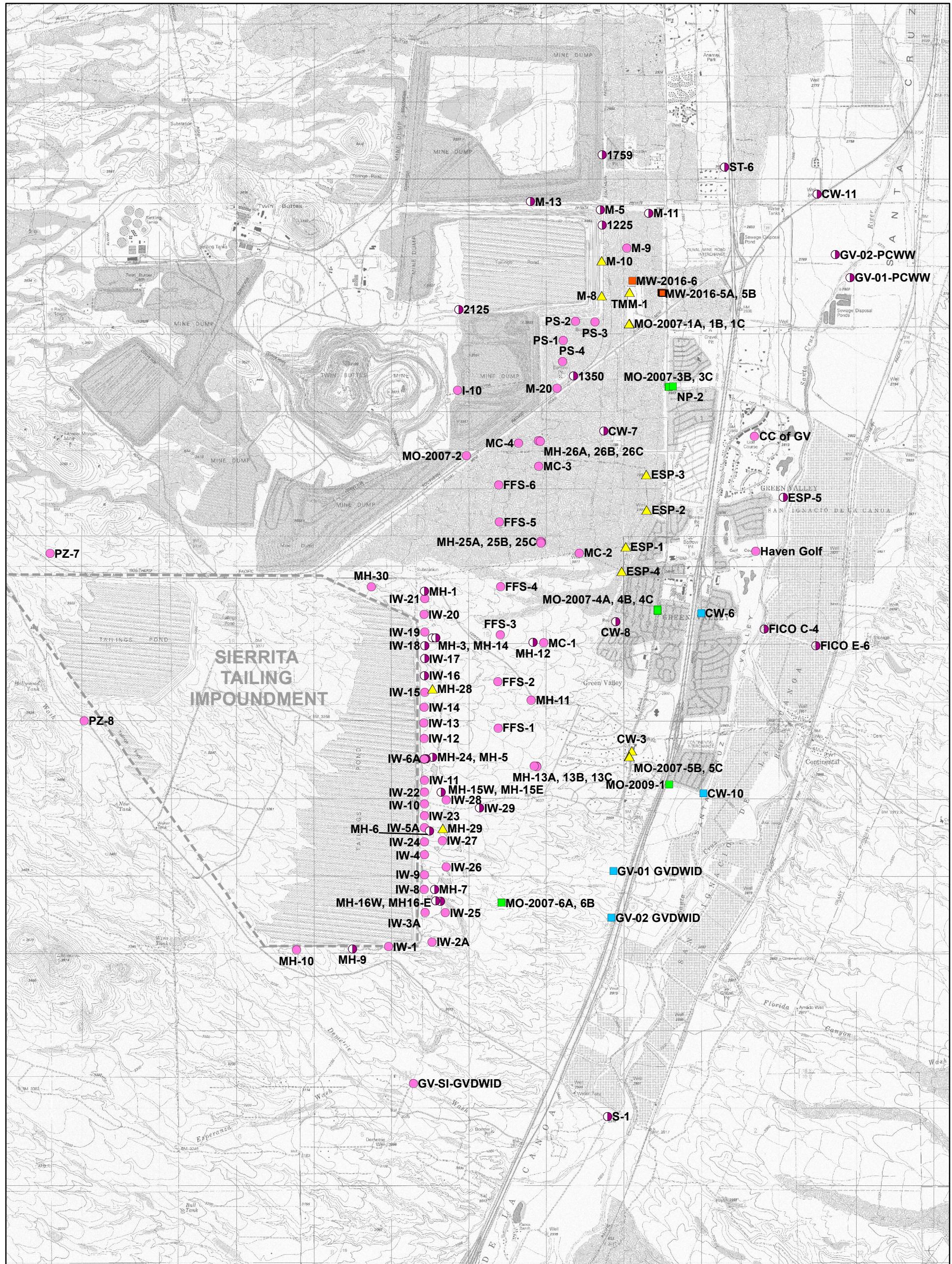
Projection: UTM Zone  
 12N NAD83  
 mg/L = milligrams per liter  
 Simulation Run: 3/30/15

**Date** 2/18/16

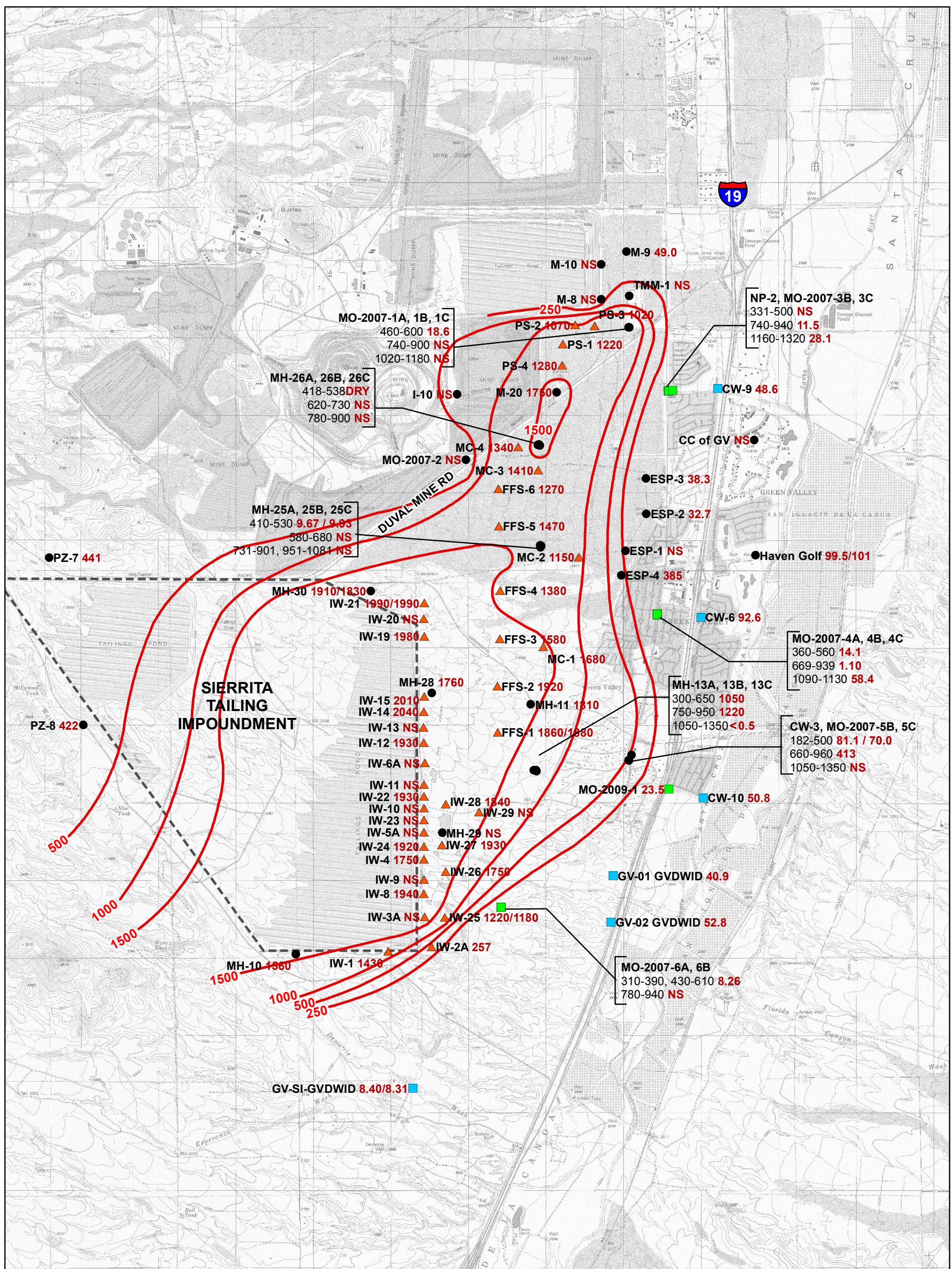
**File ID** 055039-106

**CLEAR CREEK ASSOCIATES**

**FIGURE 3**  
 Simulated Sulfate Concentration  
 from 2020 to 2100  
 for Mitigation Plan  
 Target Pumping Rates



Legend		Scale	Date	File ID
<ul style="list-style-type: none"> <li><span style="color: pink;">●</span> Annual Sampling (Second Quarter)</li> <li><span style="color: purple;">●</span> Annual Water Level Only (Second Quarter)</li> <li><span style="color: yellow;">△</span> Semi-Annual Sampling (Second and Fourth Quarters)</li> <li><span style="color: green;">■</span> Quarterly Sampling - Sentinel Well</li> <li><span style="color: blue;">■</span> Quarterly Sampling - Drinking Water Supply Well</li> <li><span style="color: orange;">■</span> Quarterly Sampling for Baseline Monitoring</li> </ul>	 Feet	3/3/17	055039-006E	
	 <b>CLEAR CREEK ASSOCIATES</b>			
<b>FIGURE 4</b> Post-Implementation Groundwater Monitoring Locations				



### Legend

Sulfate Concentration Contour (mg/L)

IW-22 Well ID  
1930 Sulfate Concentration (mg/L,  
Duplicate results separated by "/")

NS No Sample

Co-Located Wells

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

### Well Symbols

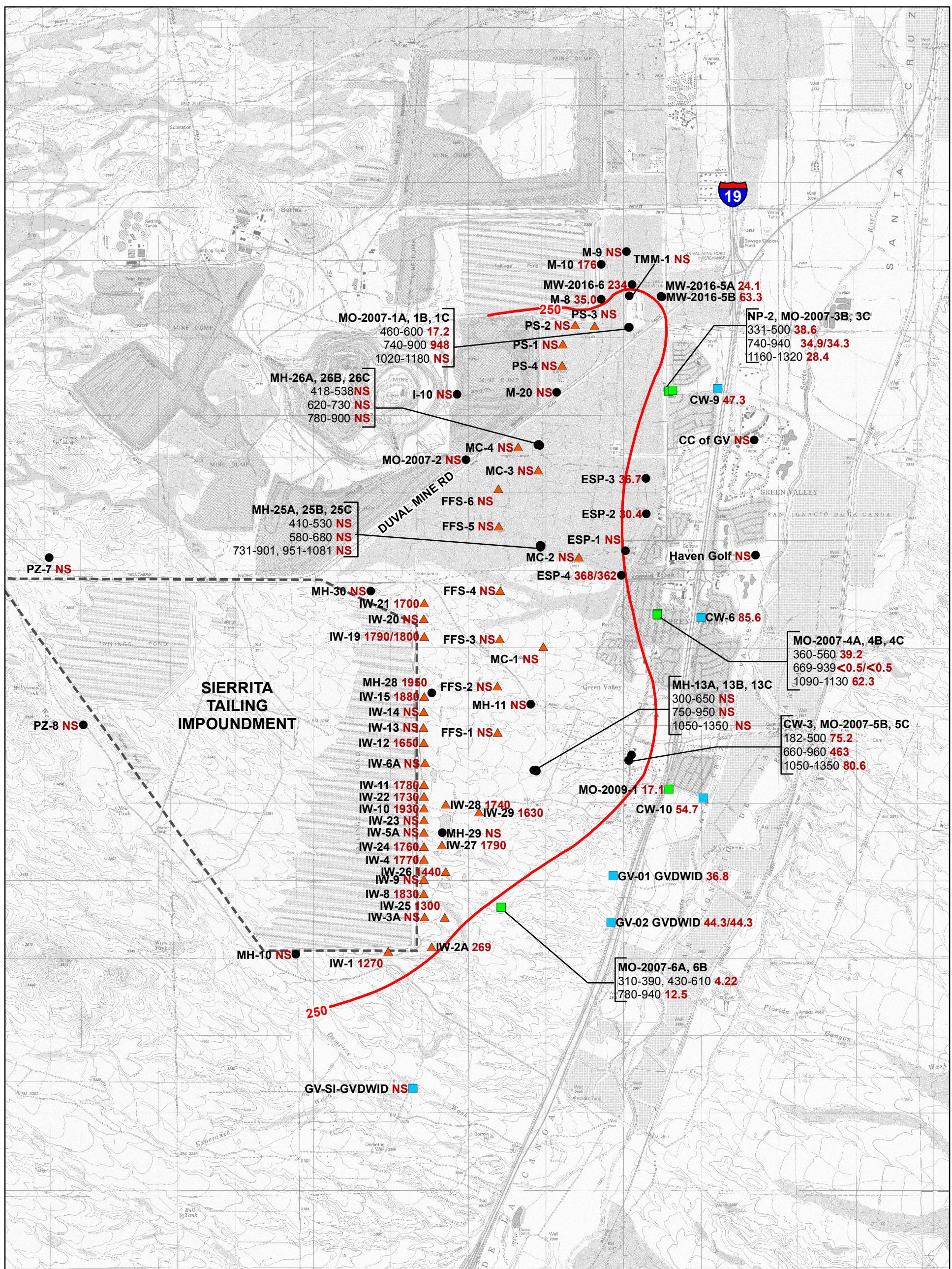
- ▲ Extraction Well
  - Monitor Well
  - Sentinel Well
  - Drinking Water Supply Well
- mg/L = milligrams per liter  
ft bbls = feet below land surface

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

NOTE:  
Projection: UTM NAD83 Zone 12N

Date	File ID
3/3/17	055039-187
	CLEAR CREEK ASSOCIATES

FIGURE 5  
Sulfate Concentrations  
in Groundwater,  
Second Quarter 2016



#### Legend

— 250 mg/L Sulfate Concentration Contour

● IW-2A Well ID  
**269** Sulfate Concentration (mg/L,  
Duplicate results separated by "/")

NS No Sample

[Co-Located Wells  
Screened Interval (ft bbls): **Sulfate Concentration (mg/L)**

**Well Symbols**

- ▲ Extraction Well
- Monitor Well
- Sentinel Well
- Drinking Water Supply Well

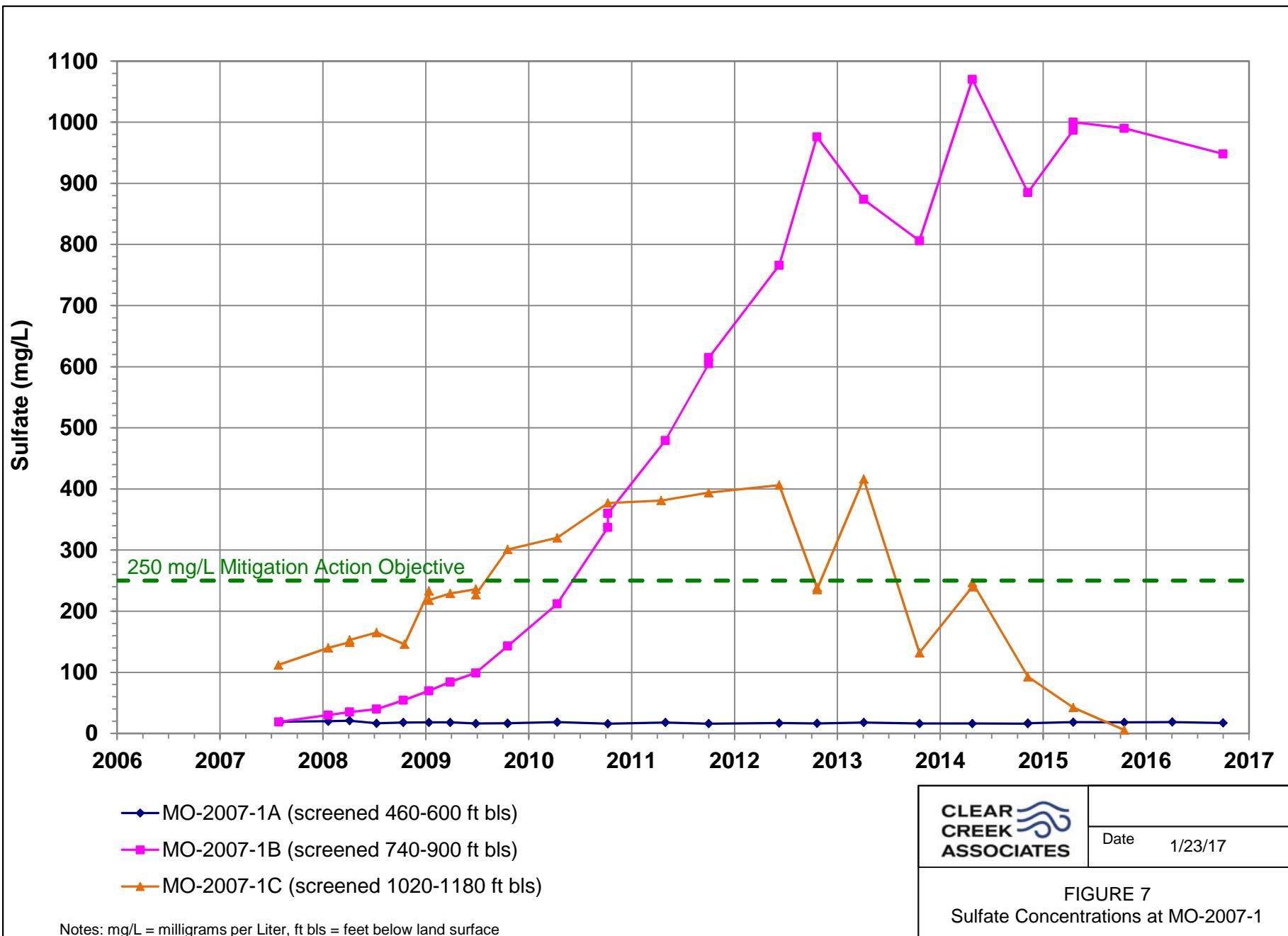
mg/L = milligrams per liter  
ft bbls = feet below land surface

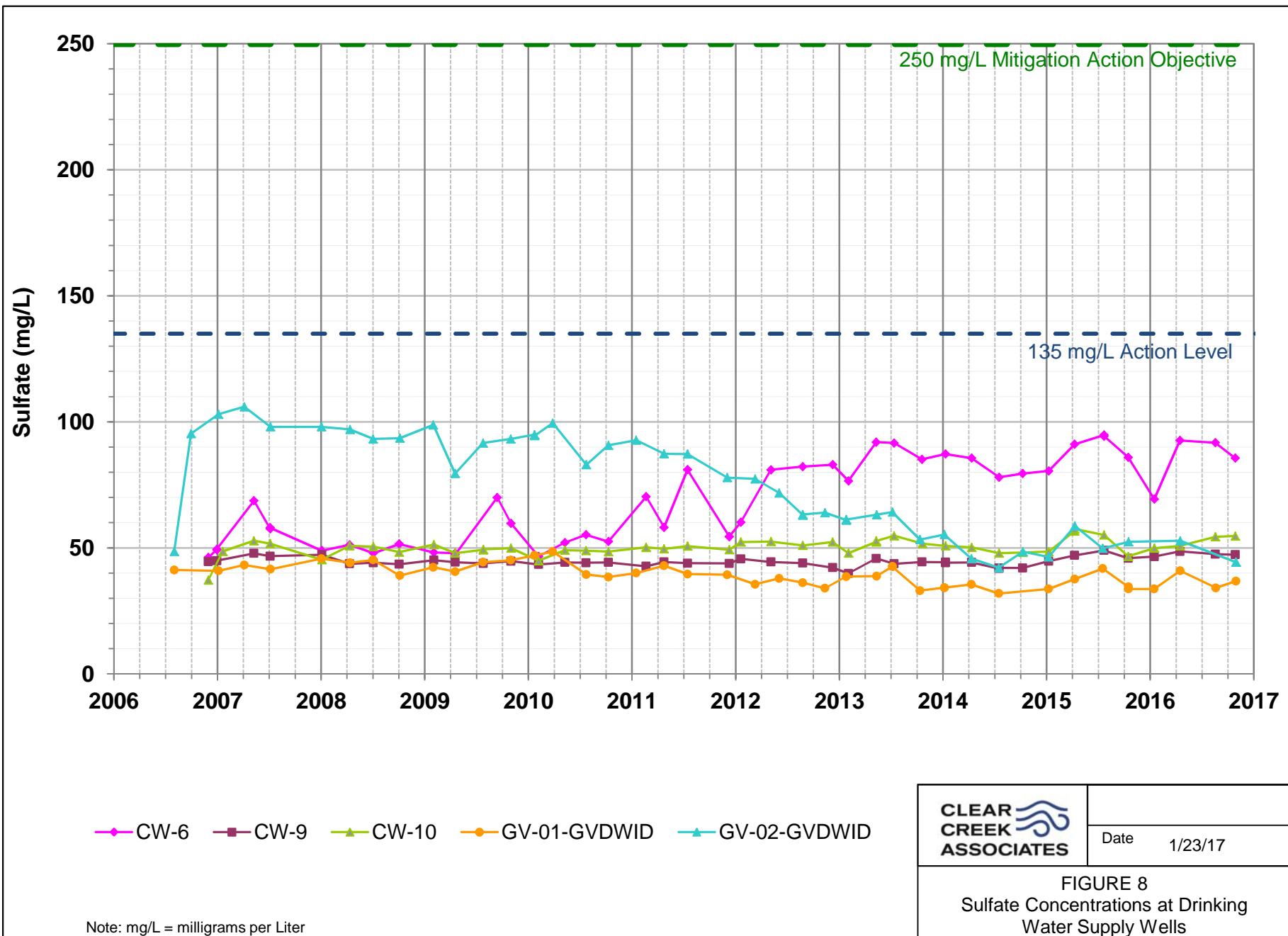
Scale  
0 2,000 4,000 8,000  
Feet

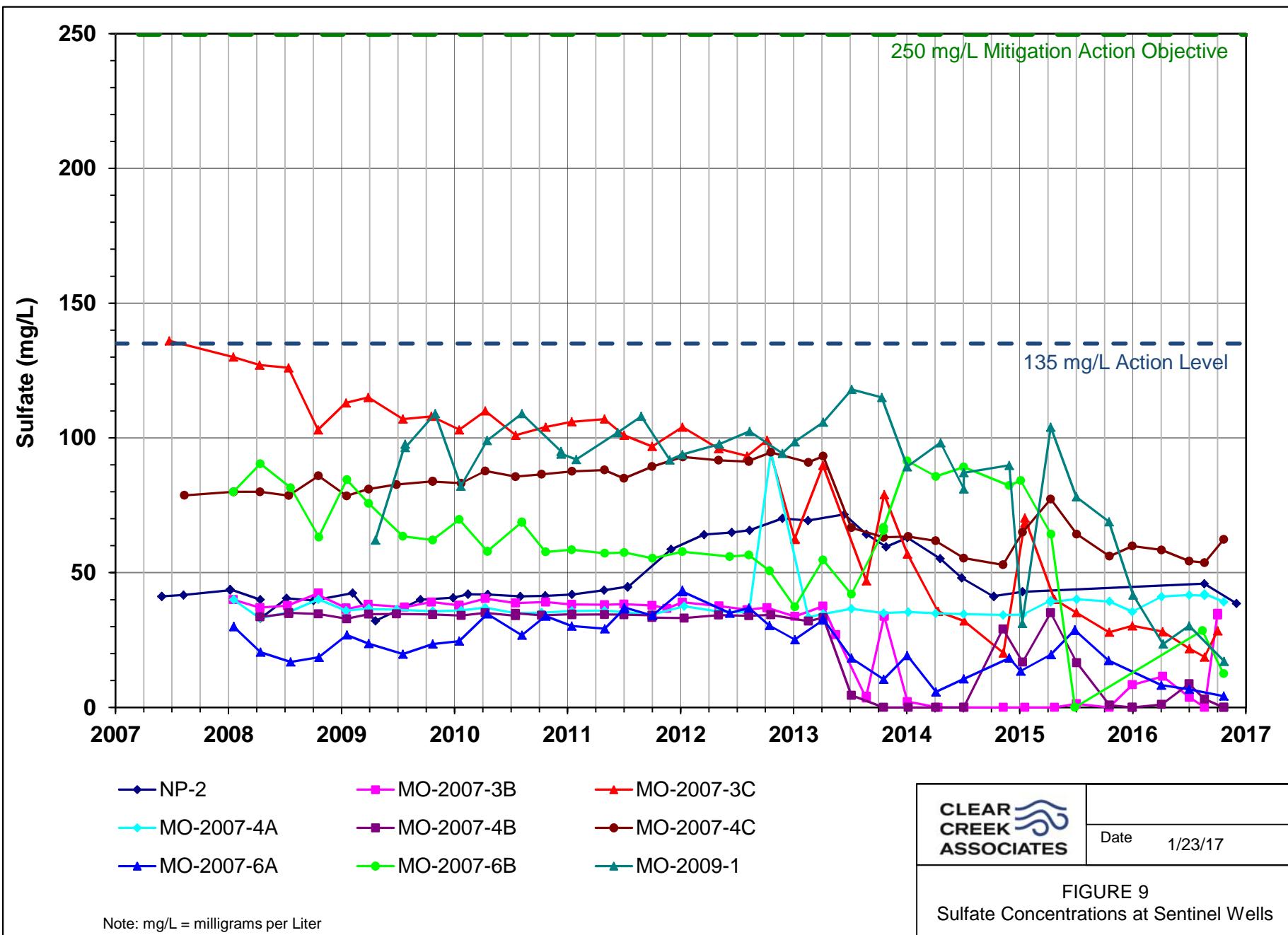
NOTE:  
Projection: UTM NAD83 Zone 12N

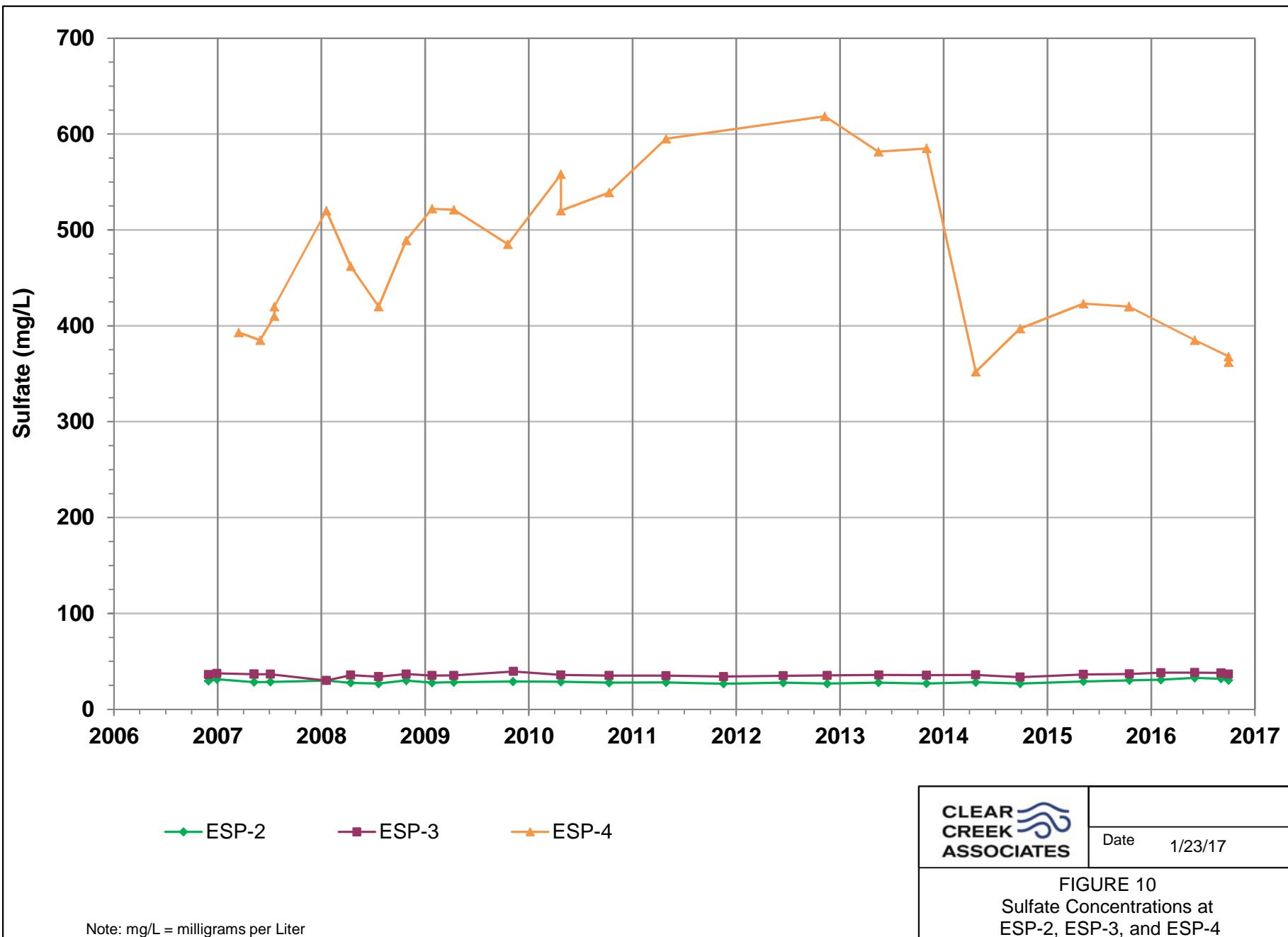


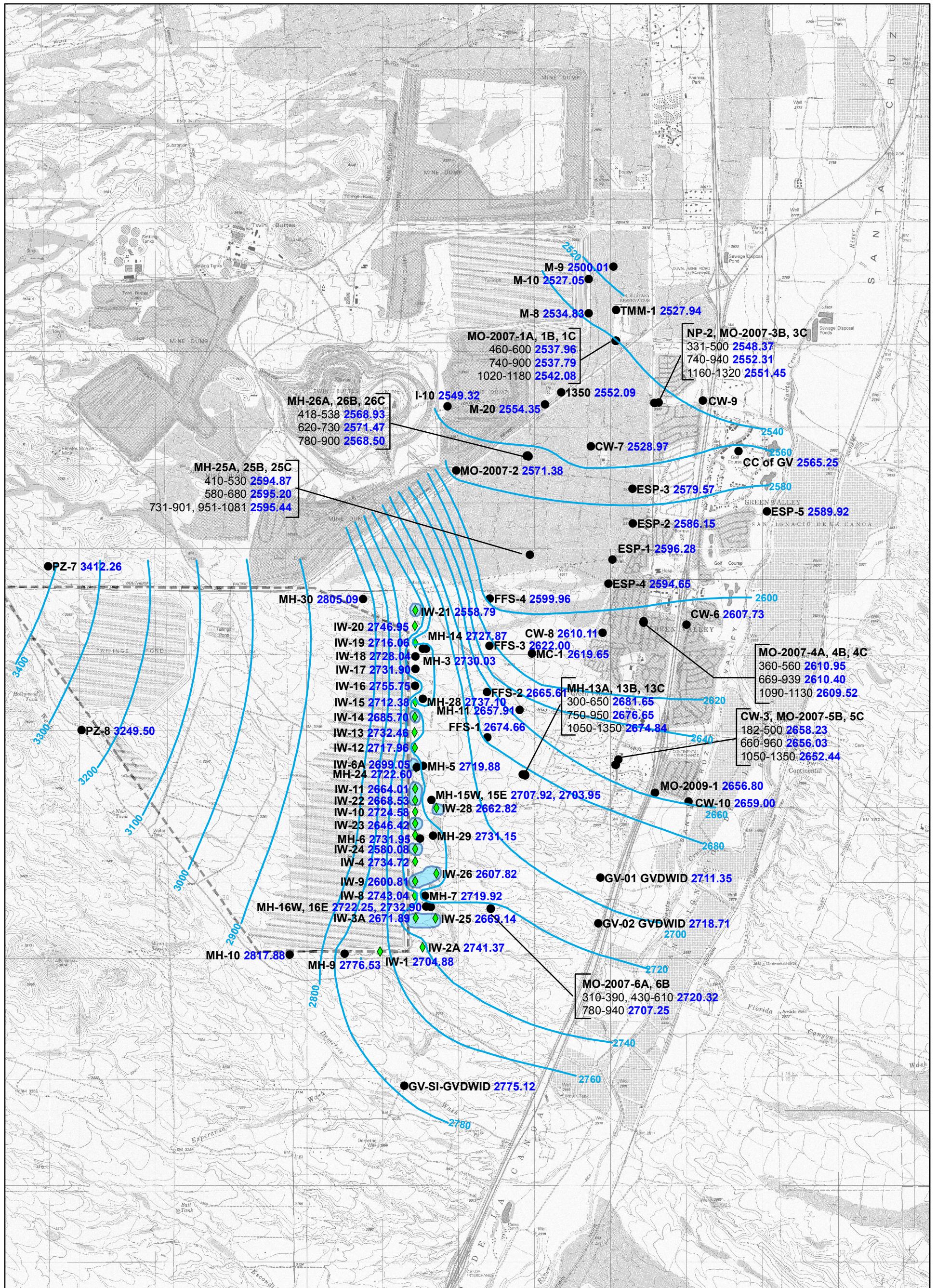
**FIGURE 6**  
Sulfate Concentrations  
in Groundwater,  
Fourth Quarter 2016









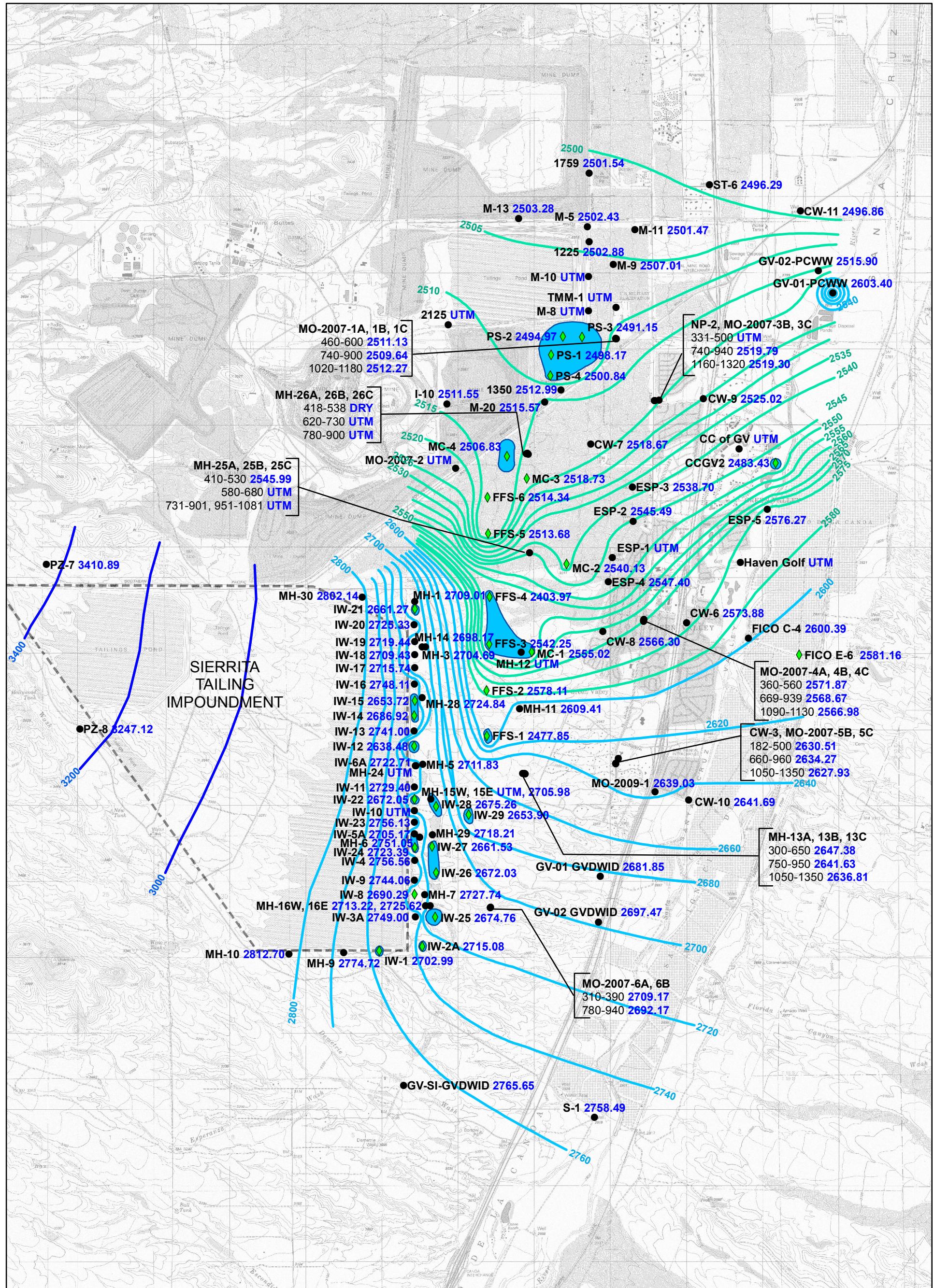


0 2,000 4,000 8,000  
Feet

Date	2/18/16	File ID	055039-136
		CLEAR CREEK ASSOCIATES	

FIGURE 11  
Groundwater Elevations,  
Second Quarter 2013

NOTE:  
The groundwater elevation contour intervals are irregular.



**Legend**

- Groundwater Depression
- 5 ft Groundwater Elevation (ft amsl)
- 20 ft Groundwater Contour (ft amsl)
- 200 ft Groundwater Contour (ft amsl)
- CW-3** Well ID
- 2630.51** Groundwater Elevation (ft amsl)
- UTM** Unable to Measure; designation includes physical limitations, not desaturation
- Co-Located Wells
- Screened Interval (ft bls): **Groundwater Elevation (ft amsl)**

**Well labels**

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

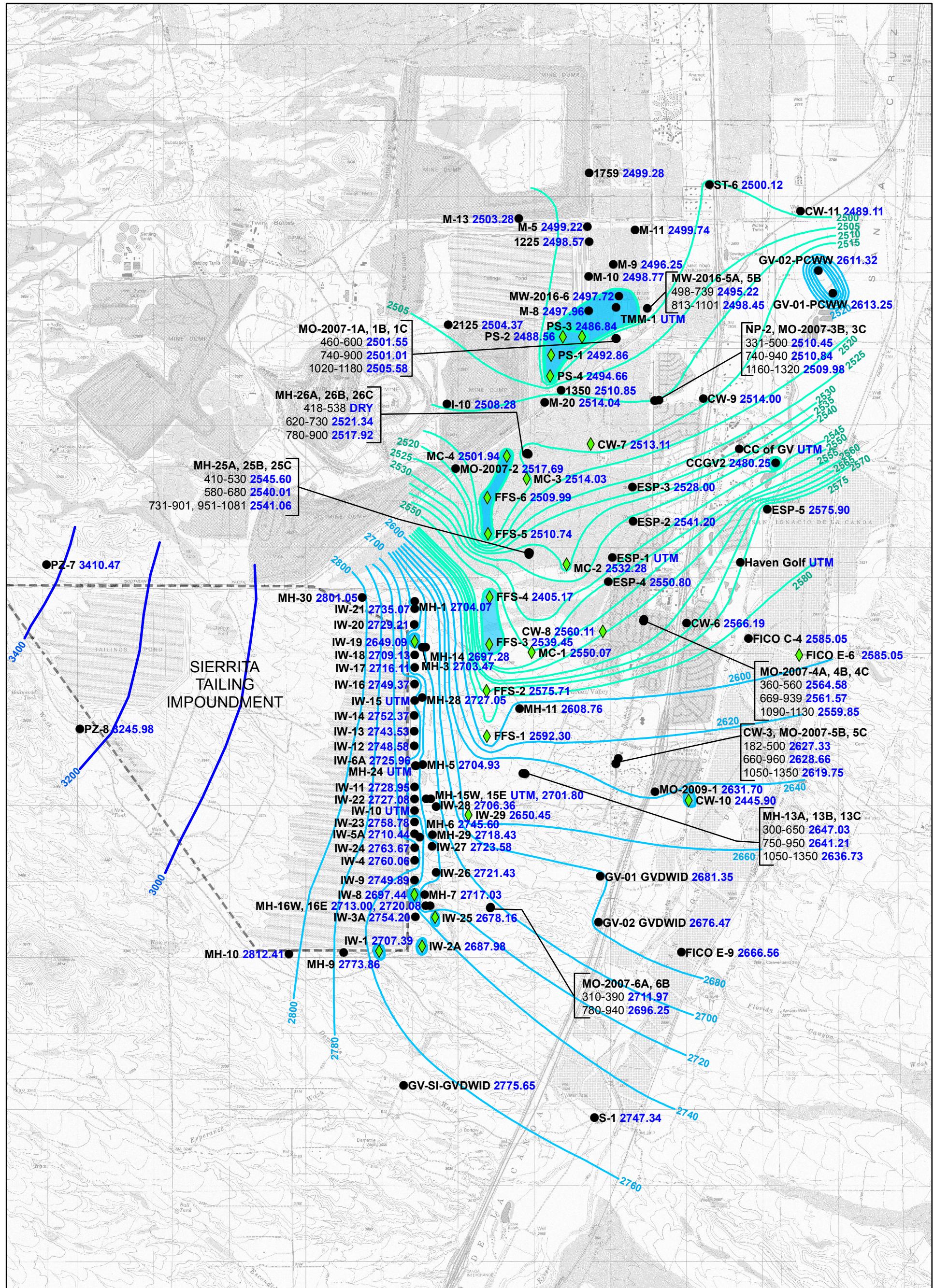
0 2,000 4,000 8,000  
Feet

ft amsl = feet above mean sea level  
ft bls = feet below land surface

**CLEAR CREEK ASSOCIATES**

File ID: 055039-186  
Date: 6/28/16

**FIGURE 12**  
Groundwater Elevations,  
Second Quarter 2016



**Legend**

- Groundwater Depression
- 5 ft Groundwater Elevation (ft amsl)
- 20 ft Groundwater Contour (ft amsl)
- 200 ft Groundwater Contour (ft amsl)
- CW-3**
- 2627.33**
- Well ID
- Groundwater Elevation (ft amsl)
- Unable to Measure; designation includes physical limitations, not desaturation
- Co-Located Wells
- Screened Interval (ft bsl): **Groundwater Elevation (ft amsl)**

**Well labels**

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

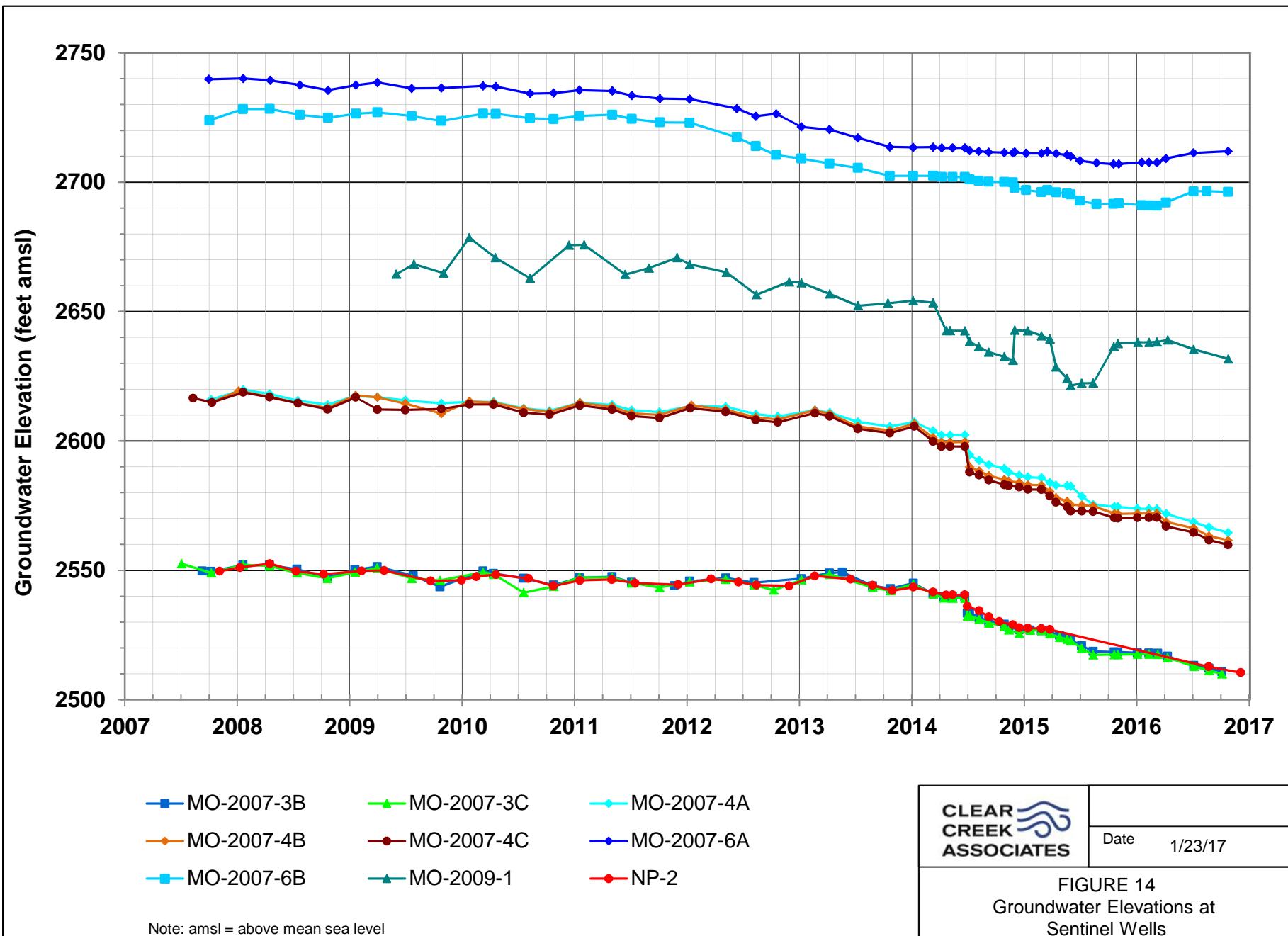
0 2,000 4,000 8,000  
Feet

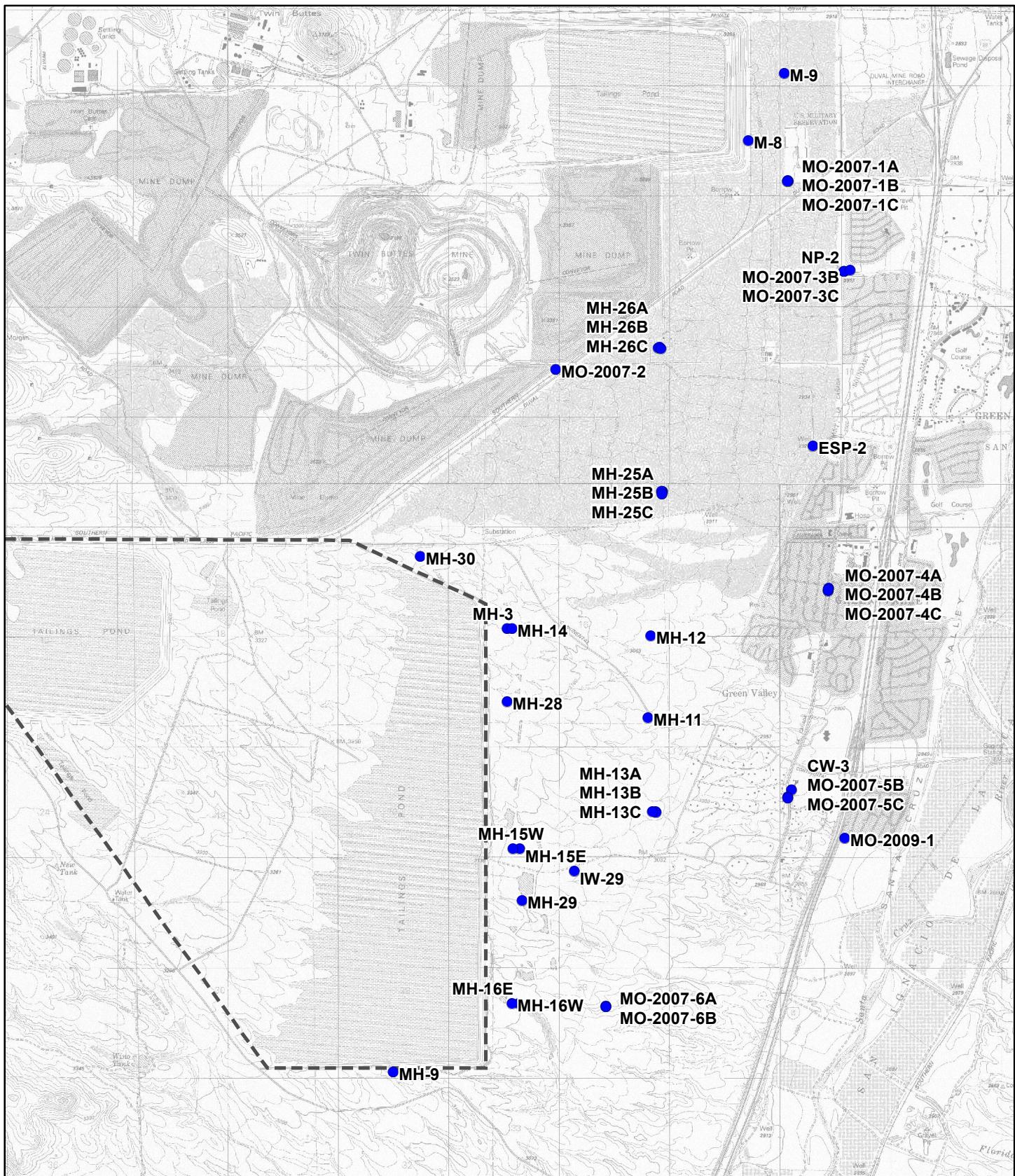
ft amsl = feet above mean sea level  
ft bsl = feet below land surface

**CLEAR CREEK ASSOCIATES**

File ID: 055039-202  
Date: 2/23/17

**FIGURE 13**  
**Groundwater Elevations,**  
**Fourth Quarter 2016**





### Legend

- Well with Hydrograph

0 2,000 4,000  
Feet

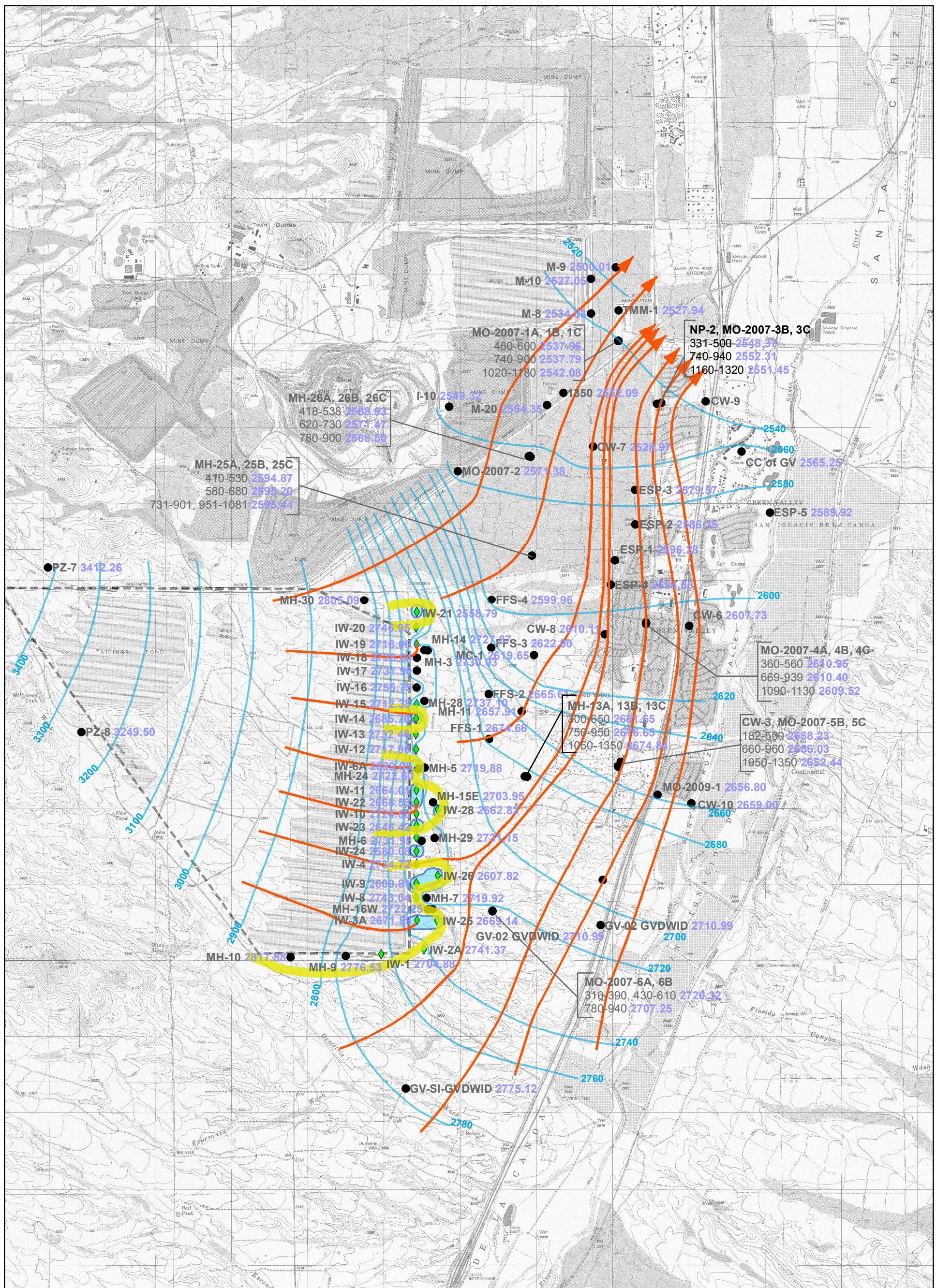
**CLEAR CREEK ASSOCIATES**

File ID 055039-209

Date 3/5/17



**FIGURE 15**  
**Location of Hydrographs**



#### Legend

- CW-9 Well ID
- 2520.51 Groundwater Elevation (ft amsl)
- Groundwater Elevation Contour (ft amsl)
- Groundwater Depression
- Interpreted Groundwater Flow Line
- Interpretive Capture Zones

#### 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 Symbols

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

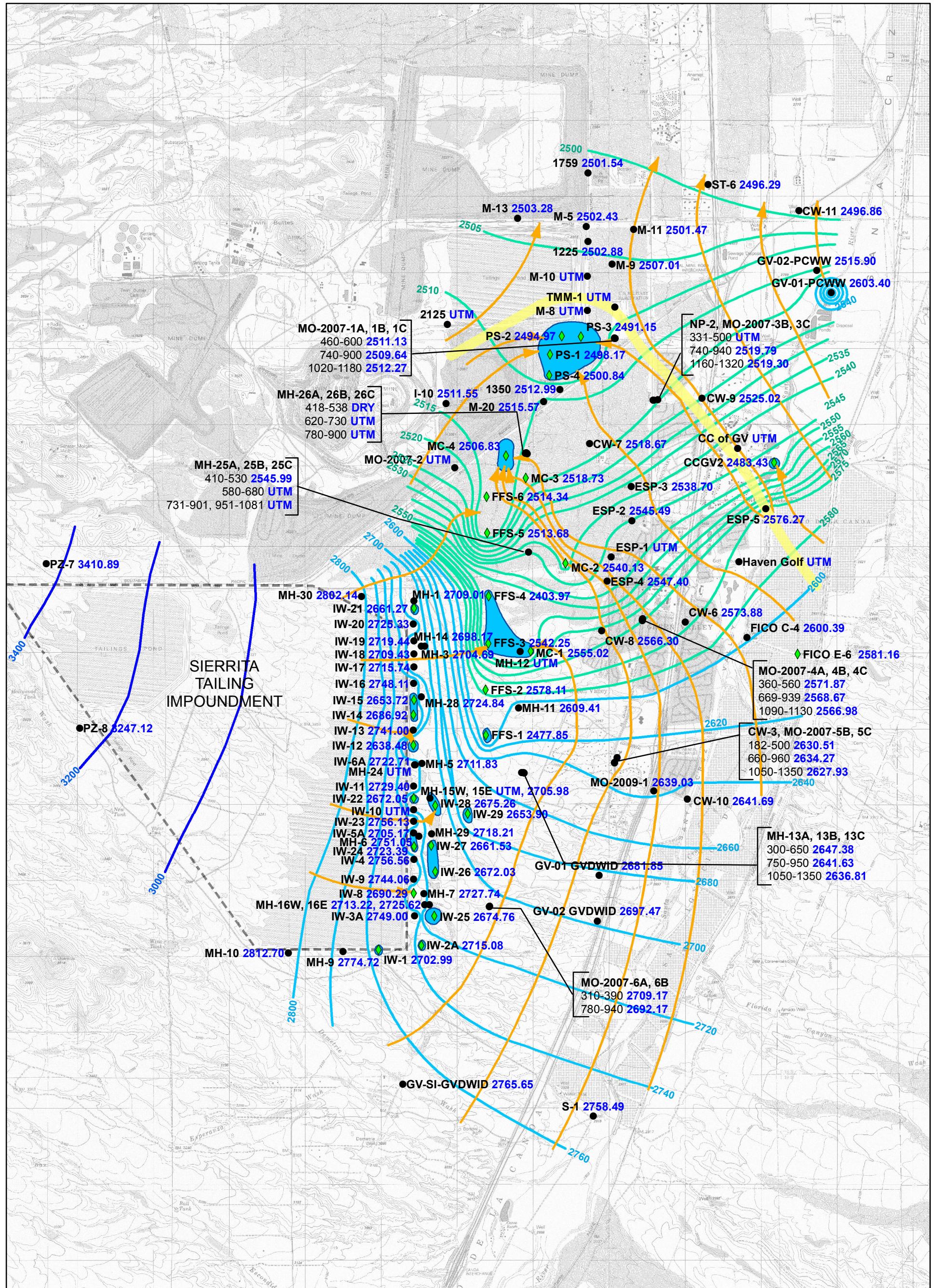
#### Date

2/18/16 File ID 055039-137



CLEAR CREEK ASSOCIATES

FIGURE 16  
Capture Zone Analysis,  
Second Quarter 2013



#### Legend

- Groundwater Depression
- 5 ft Groundwater Contour (ft amsl)
- 20 ft Groundwater Contour (ft amsl)
- 200 ft Groundwater Contour (ft amsl)
- Flowline
- Capture Zone
- Co-Located Wells
- Screened Interval (ft bsl):

#### Well labels

- Wells with Static Water Levels
- ◆ Wells with Dynamic Water Levels
- CW-3 2630.51
- UTM
- Well ID
- Groundwater Elevation (ft amsl)
- Unable to Measure; designation includes physical limitations, not desaturation

ft amsl = feet above mean sea level  
ft bsl = feet below land surface

0 2,000 4,000 8,000  
Feet

**CLEAR CREEK ASSOCIATES**

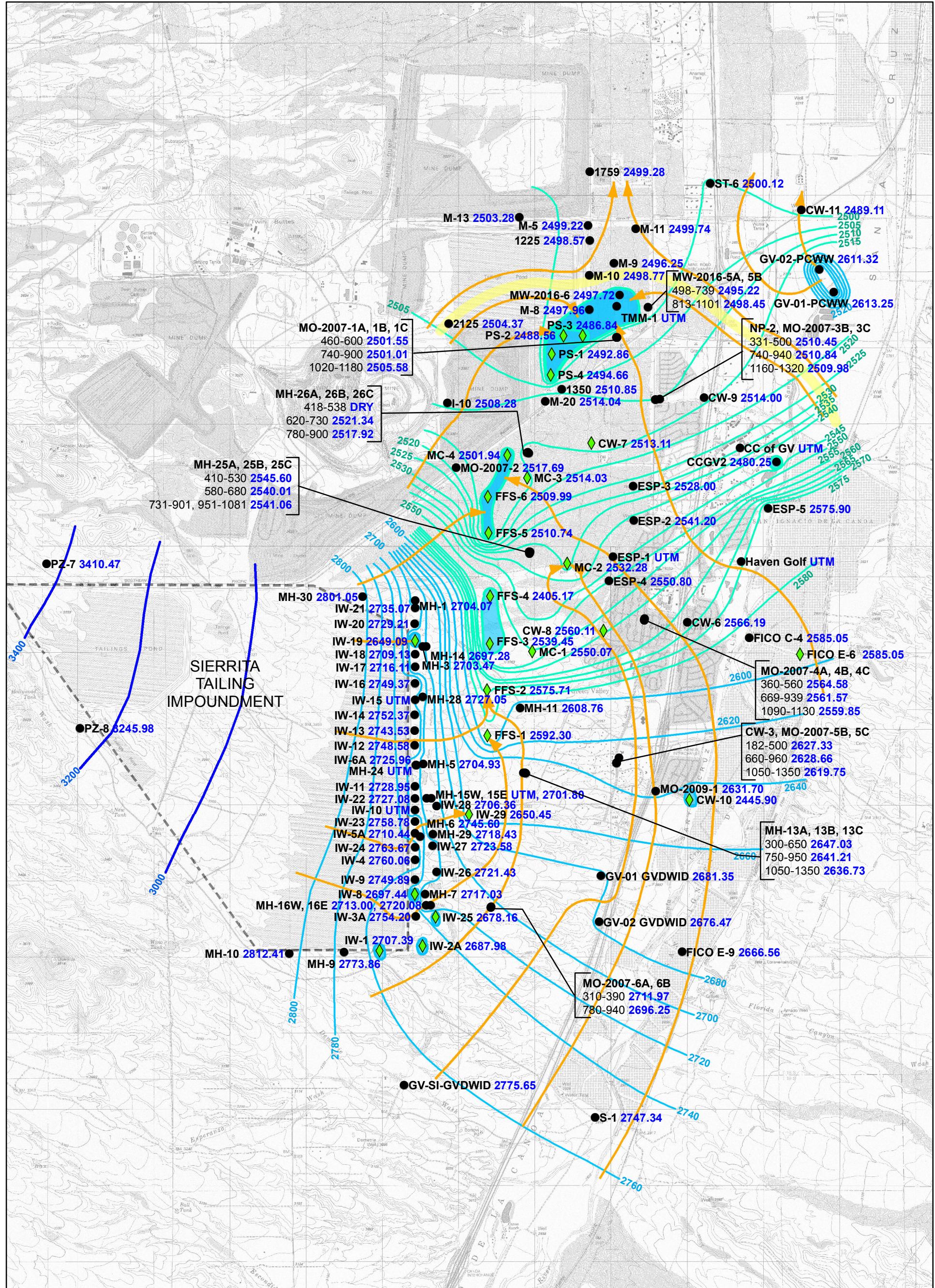
File ID

055039-206

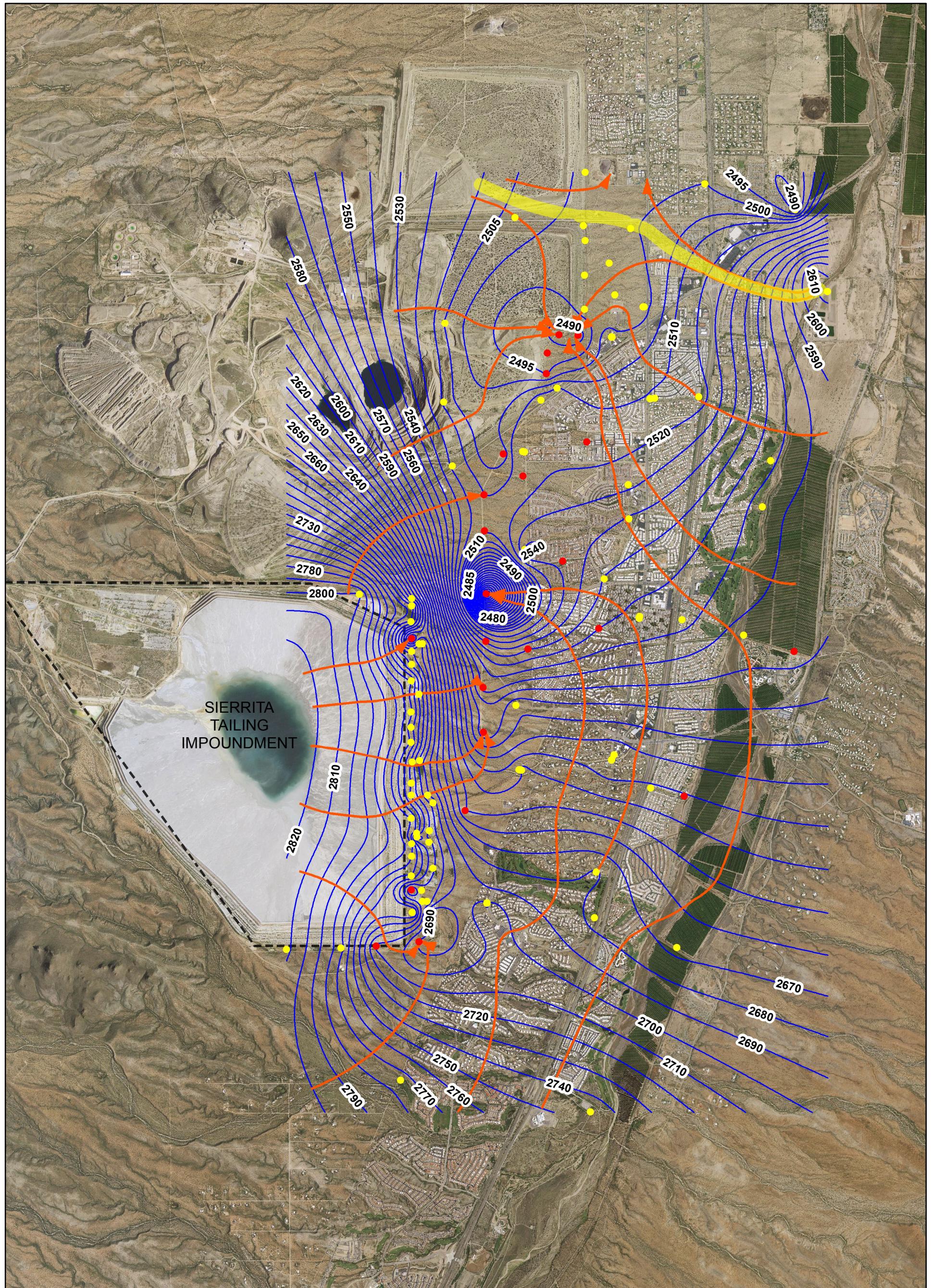
Date

2/24/17

**FIGURE 17**  
Capture Zone Analysis,  
Second Quarter 2016



Legend		Well labels	0 2,000 4,000 8,000 Feet	CLEAR CREEK ASSOCIATES	File ID 055039-207 Date 2/23/17
Groundwater Depression 5 ft Groundwater Contour (ft amsl) 20 ft Groundwater Contour (ft amsl) 200 ft Groundwater Contour (ft amsl) Flowline Capture Zone	Wells with Static Water Levels Wells with Dynamic Water Levels <b>CW-3</b> <b>2627.33</b> <b>UTM</b>				
Co-Located Wells					FIGURE 18 Capture Zone Analysis, Fourth Quarter 2016



#### Legend

- Static Water Level
- Pumping Water Level
- Capture Zone
- Flowline
- Water Level Contours (ft amsl)

0 2,000 4,000 8,000  
Feet

NOTE: 5 foot (ft) contour interval used from 2,410 ft above mean sea level (amsl) to 2,510 ft amsl and 10 ft contour interval used from 2,520 ft amsl to 2,820 ft amsl

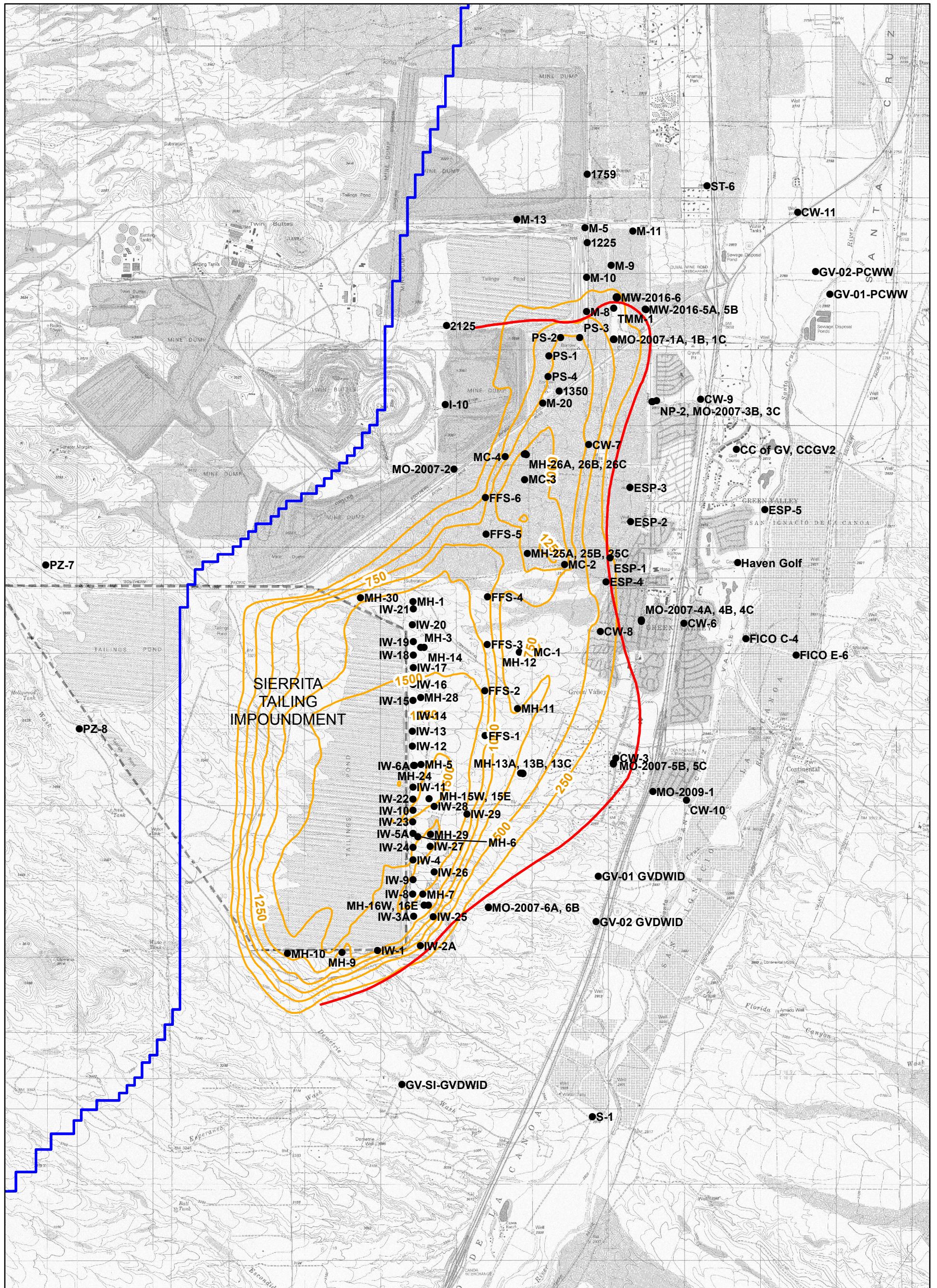
**CLEAR CREEK ASSOCIATES**

File ID  
055039-211

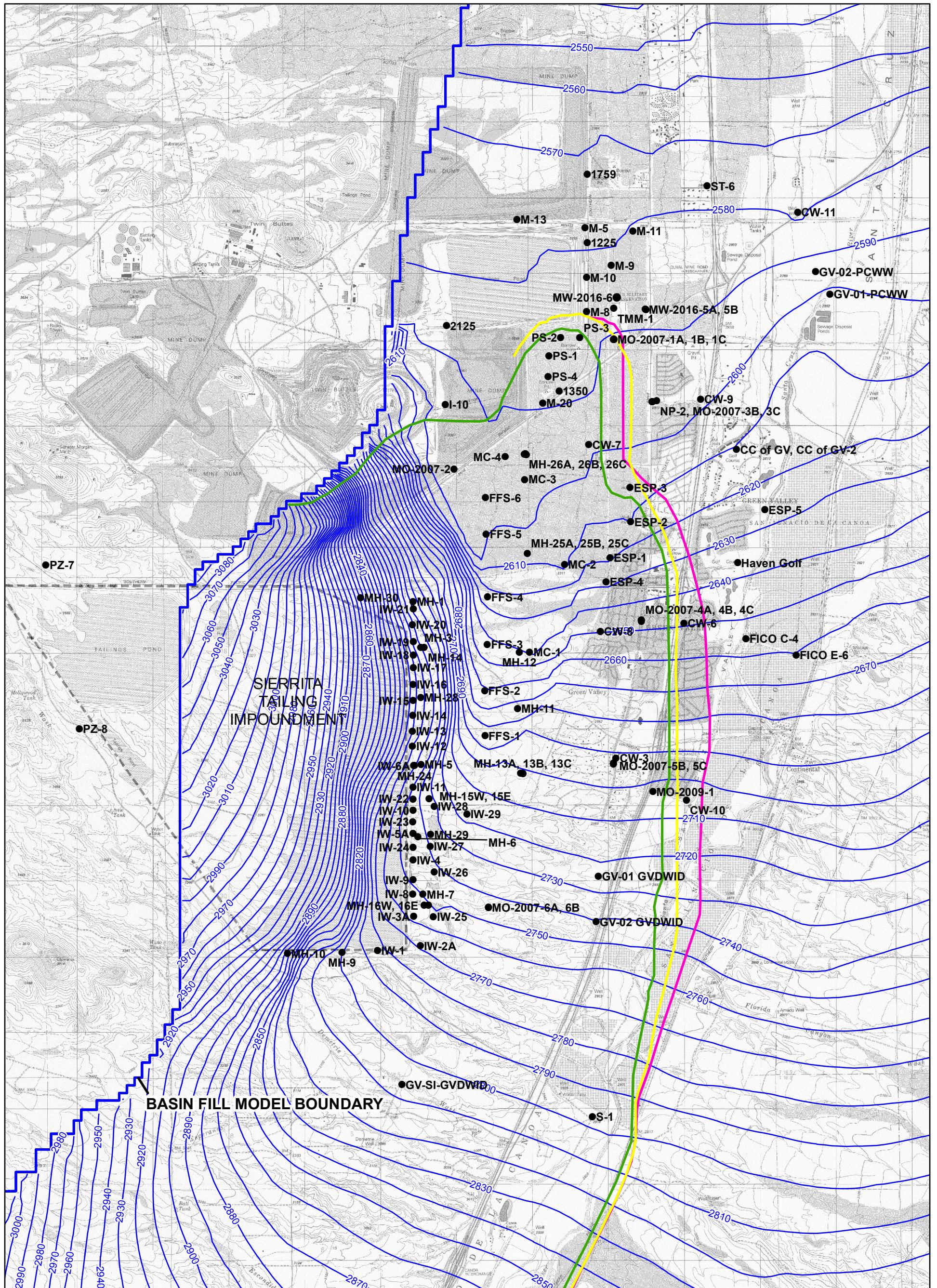
Date  
3/7/17

FIGURE 19  
Capture Zone Analysis  
Kriged Water Elevations  
for Fourth Quarter 2016





<b>Legend</b>	<b>Date</b>	<b>File ID</b>
<ul style="list-style-type: none"> <li>Well with ID</li> <li>Q4 2016 250 mg/L Sulfate Concentration Contour</li> <li>Simulated 2016 Sulfate Concentration (mg/L)</li> <li>Model Extents</li> </ul>	3/17/17	055039-212
		<b>CLEAR CREEK ASSOCIATES</b>
<b>FIGURE 20</b> <b>Simulated Sulfate Concentrations</b> <b>for 2016</b>		



#### Legend

- Well with ID
- Simulated Water Table Elevation (ft amsl)
- 2016 Simulated Capture Zone Layer 1
- 2016 Simulated Capture Zone Layer 2
- 2016 Simulated Capture Zone Layer 3

0 2,000 4,000 8,000  
Feet

Date

3/17/17

File ID

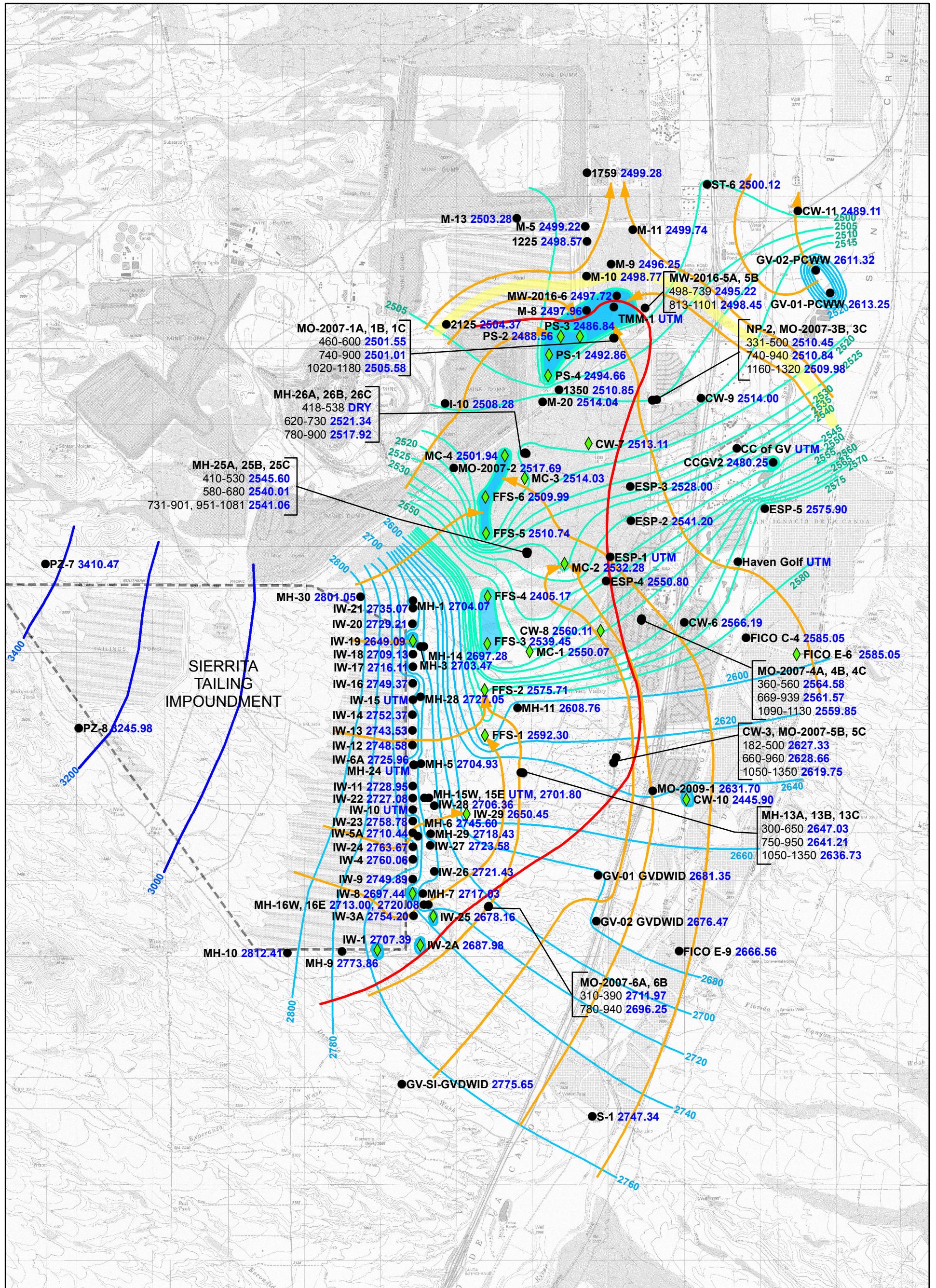
055039-214



CLEAR  
CREEK  
ASSOCIATES

FIGURE 21  
Simulated  
Groundwater Elevations  
and Capture Zone

NOTES:  
Projection: UTM NAD83 Zone 12N.



#### Legend

- Groundwater Depression
- 5 ft Groundwater Contour (ft amsl)
- 20 ft Groundwater Contour (ft amsl)
- 200 ft Groundwater Contour (ft amsl)
- Flowline
- Interpreted Wellfield Capture Zone
- Target Capture Zone (250 mg/L Sulfate)
- Concentration Contour Q4 2016
- Co-Located Wells
- [Screened Interval (ft bls): Groundwater Elevation (ft amsl)

#### Well labels

- Wells with Static Water Levels
- ◆ Wells with Dynamic Water Levels
- Well ID
- CW-3** 2627.33
- UTM**
- Groundwater Elevation (ft amsl)
- Unable to Measure; designation includes physical limitations, not desaturation
- ft amsl = feet above mean sea level
- ft bls = feet below land surface

0 2,000 4,000 8,000  
Feet

**CLEAR CREEK ASSOCIATES**

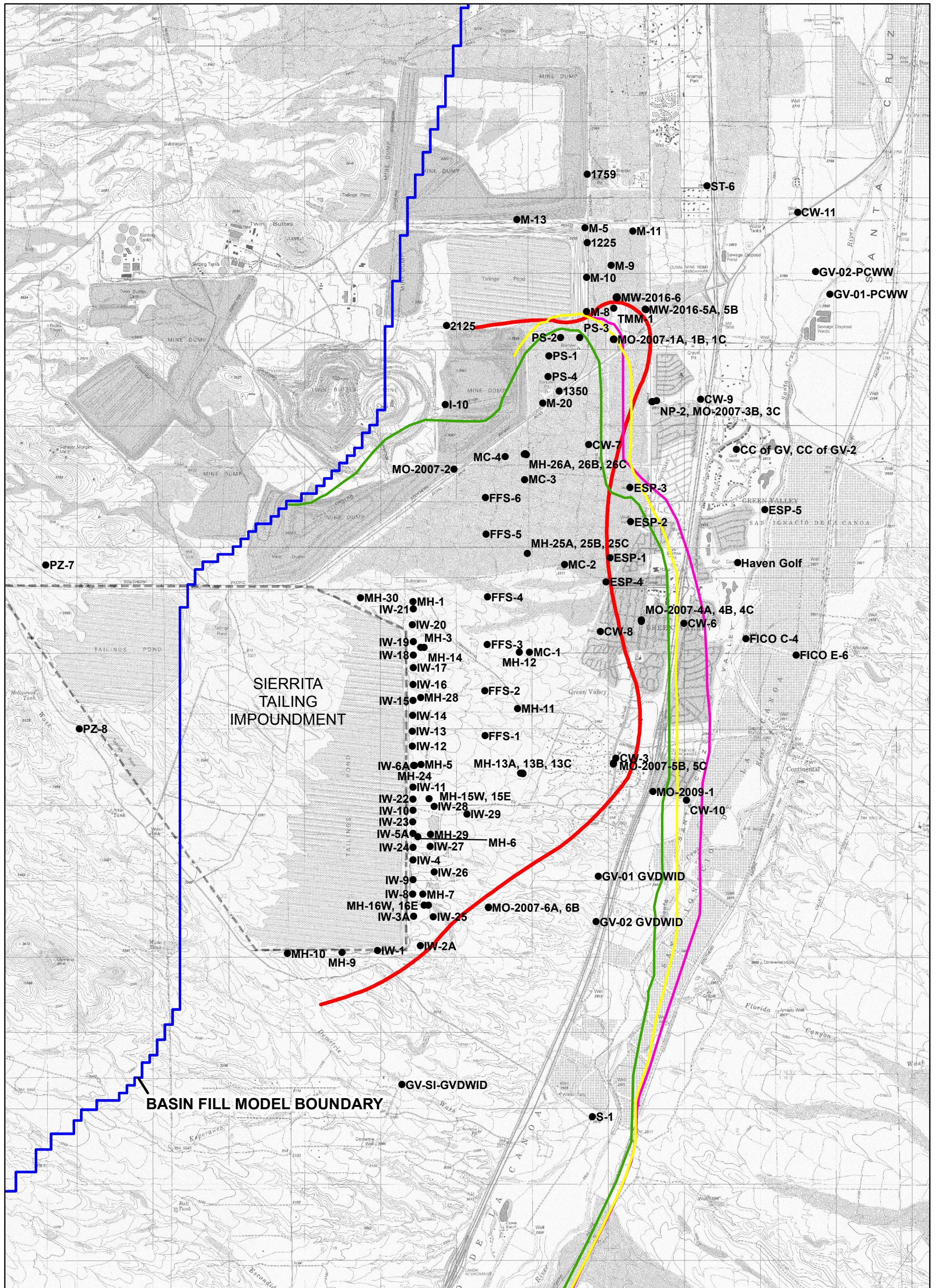
File ID

055039-208

Date

2/24/17

**FIGURE 22**  
Interpreted and Target  
Capture Zones,  
Fourth Quarter 2016



Legend

- Well with ID
- Target Capture Zone (250 mg/L Sulfate Concentration Contour Q4 2016)
- 2016 Simulated Capture Zone Layer 1
- 2016 Simulated Capture Zone Layer 2
- 2016 Simulated Capture Zone Layer 3

NOTES:  
Projection: UTM NAD83 Zone 12N.

0 2,000 4,000 8,000  
Feet

Date  
3/17/17

File ID  
055039-213



CLEAR CREEK  
ASSOCIATES

FIGURE 23  
Simulated and Target Capture Zones for 2016

**APPENDIX A**

**SULFATE CONCENTRATION DATA**

**APPENDIX A**  
**Sulfate Concentration Data**

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	156.00
		5/13/15	6.97	23.2	547	102
CW-3	627483	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
		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
		10/15/14	7.78	24.8	424	67.5
		5/11/15	7.63	25.2	364	71.4
		5/11/15 DUP	7.63	25.2	364	70.0
		10/28/15	7.51	24.9	558	67.1
		6/9/16	7.63	24.9	367	81.1
		12/6/16	7.82	24.8	498	75.2

**APPENDIX A**  
**Sulfate Concentration Data**

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
		10/13/14	7.71	23.9	464	79.5
		1/13/15	7.82	23.6	433	80.5
		4/14/15	7.31	24.4	430	91.1
		7/27/15	7.76	25.9	572	94.8
		7/27/15 DUP	7.76	25.9	572	94.3
		10/20/15	7.65	24.6	563	85.9
		1/20/16	8.06	22.8	499	69.3
		4/19/16	8.03	26.8	409	92.6
		8/22/16	7.71	25.8	601	91.7
		10/31/16	8.06	24.4	606	85.6
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

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		10/13/14	7.97	27.0	329	42.0
		1/13/15	8.05	26.3	309	44.7
		4/14/15	7.52	27.0	311	47.0
		7/27/15	7.82	27.4	412	49.0
		10/20/15	7.87	26.5	432	45.9
		1/20/16	7.94	25.5	413	46.5
		4/19/16	7.89	25.3	419	48.6
		8/22/16	7.87	27.2	439.4	47.5
		10/31/16	8.08	26.9	425.8	47.3

**APPENDIX A**  
**Sulfate Concentration Data**

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
		10/13/14	7.98	30.7	322	48.2
		1/13/15	8.05	29.9	296	48.5
		4/14/15	7.60	29.9	315	56.7
		4/14/15 DUP	7.60	29.9	315	57.5
		7/27/15	7.83	31.2	399	55.1
		10/20/15	7.90	30.2	415	46.6
		1/20/16	8.05	27.4	403	49.9
		4/19/16	7.99	27.0	426	50.8
		8/22/16	7.97	32.1	423.5	54.4
		10/31/16	8.27	29.5	444.6	54.7

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
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
		10/1/14	7.96	28.3	327	26.8
		5/12/15	7.89	27.5	274	29.1
		10/21/15	7.84	27.4	321	30.2
		2/9/16	7.84	26.7	427	30.9
		6/7/16	7.84	27.7	282	32.7
		9/7/16	8.03	26.8	402.3	31.9
		10/4/16	7.99	29.1	406.3	30.4

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		10/1/14	7.99	28.2	324	33.6
		5/12/15	7.90	27.8	269	36.4
		10/21/15	7.94	28.4	312	36.9
		2/9/16	7.84	27.8	396	38.2
		6/7/16	7.85	27.9	270	38.3
		9/7/16	8.08	27.5	393.1	38.0
		9/7/16 DUP	8.08	27.5	393.1	37.8
		10/4/16	7.99	28.7	395.7	36.7
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
		10/1/14	7.69	26.5	993	397
		5/12/15	7.69	26.8	766	423
		10/19/15	7.63	27.3	972	420
		10/19/15 DUP	7.63	27.3	972	420
		6/7/16	7.55	26.9	757	385
		10/4/16	7.86	27.0	1205	368
		10/4/16 DUP	7.86	27.0	1205	362

**APPENDIX A**  
**Sulfate Concentration Data**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
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
		11/11/14	7.44	25.5	3170	1790
		1/12/15	7.57	24.6	3150	1770
		1/12/15 DUP	7.57	24.6	3150	1760
		7/15/15	7.64	27.2	2980	1770
		11/3/15	7.41	24.6	1560	1750
		11/3/15 DUP	7.41	24.6	1560	1690
		1/5/16	6.73	23.5	1854	1850
		5/9/16	7.43	25.7	1310	1860
		5/9/16 DUP	7.43	25.7	1310	1880
		8/18/16	6.91	25.6	3641	1820
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
		11/11/14	7.22	26.4	3100	1800
		1/12/15	7.48	26.3	3050	1760
		4/2/15	7.49	26.5	1570	1800
		4/2/15 DUP	7.49	26.5	1570	1800
		7/15/15	6.45	28.2	2900	1850
		11/3/15	7.35	25.4	1526	1760
		1/5/16	6.88	24.0	1729	1900
		5/16/16	7.36	27.5	1490	1920
		8/18/16	7.23	27.1	3583	1940
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
		11/11/14	7.16	30.3	2670	1570
		1/12/15	7.43	29.6	1840	1500
		4/2/15	7.38	29.3	1433	1490
		7/15/15	6.93	31.6	2550	1560
		11/3/15	7.49	29.1	1511	1480
		1/5/16	7.03	28.6	1604	1590
		5/16/16	7.43	31.4	1461	1580
		8/22/16	7.40	31.9	3027	1580
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
		11/11/14	7.21	30.6	1821	1310
		1/12/15	7.52	30.3	1603	1230
		4/2/15	7.58	30.0	1317	1230
		11/3/15	7.57	30.1	1439	1240
		1/5/16	7.13	30.0	1499	1320
		1/5/16 DUP	7.13	30.0	1499	1330
		5/16/16	7.50	31.9	1360	1380
		8/22/16	7.49	32.9	2666	1380

**APPENDIX A**  
**Sulfate Concentration Data**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
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
		11/11/14	7.13	29.0	2570	1410
		11/11/14 DUP	7.13	29.0	2570	1320
		1/12/15	7.48	28.5	1776	1360
		4/2/15	7.40	28.0	1410	1390
		7/15/15	6.47	30.5	2460	1430
		11/3/15	7.41	28.2	1541	1400
		1/6/16	7.12	25.6	1555	1550
		5/16/16	7.46	29.3	1380	1470
		8/22/16	7.36	30.5	3052	1440
		8/22/16 DUP	7.36	30.5	3052	1520
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
		11/11/14	7.10	28.4	1833	1170
		1/12/15	7.52	29.2	1609	1180
		1/12/15 DUP	7.52	29.2	1609	1190
		4/2/15	7.47	27.2	1323	1210
		7/15/15	7.11	31.5	2190	1220
		7/15/15 DUP	7.11	31.5	2190	1260
		11/4/15	7.16	26.6	1407	1200
		1/6/16	7.18	26.8	1540	1270
		5/16/16	7.53	29.4	1367	1270
		8/22/16	7.36	30.2	2655	1250

**APPENDIX A**  
**Sulfate Concentration Data**

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
		1/10/14 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
		1/12/15	7.74	25.1	325	33.7
		4/15/15	7.56	27.2	347	37.6
		7/22/15	7.65	26.5	446	41.8
		10/21/15	7.22	25.8	345	34.5
		10/21/15 DUP	7.22	25.8	345	33.7
		1/19/16	7.98	24.8	435	33.7
		4/20/16	7.45	26.7	368	40.9
		8/24/16	7.94	27.6	515	34.1
		11/3/16	7.98	25.3	456	36.8

**APPENDIX A**  
**Sulfate Concentration Data**

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
		10/14/14	7.73	23.5	449	48.5
		1/12/15	7.56	22.7	387	46.4
		4/15/15	7.18	23.9	419	58.7
		7/22/15	7.86	24.9	484	49.8
		10/21/15	7.70	24.0	406	52.4
		4/20/16	7.10	24.3	428	52.8
		11/3/16	8.00	24.2	503	44.3
		11/3/16 DUP	8.00	24.2	503	44.3

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		4/15/15	7.18	27.0	321	8.35
		4/20/16	7.02	26.4	374	8.40
		4/20/16 DUP	7.02	26.4	374	8.31
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	97.40
		5/13/15	7.25	23.9	429	112
		6/8/16	7.31	24.2	456	99.5
		6/8/16 DUP	7.31	24.2	456	101
I-10	608525	4/16/07	7.17	28.8	878	533
		7/11/07	7.13	31.3	1013	550
		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

**APPENDIX A**  
**Sulfate Concentration Data**

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-1	623129	11/15/06	NM	NM	NM	490
		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
		4/1/15	7.55	28.7	1302	1140
		5/17/16	7.46	28.2	1330	1430
		8/23/16	7.54	29.2	2735	1290
		10/4/16	7.64	28.6	2805	1270
IW-2	623130	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
IW-2A	216464	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
		4/1/15	7.94	27.8	536	150
		5/17/16	7.67	28.1	574	257
		8/23/16	7.92	29.6	994	270
		10/4/16	7.87	28.3	1016	269
IW-3A	201732	11/15/06	NM	NM	NM	1590
		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
		4/1/15	7.55	26.2	1619	1820

**APPENDIX A**  
**Sulfate Concentration Data**

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-4	623132	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
		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
		5/17/16	7.40	25.1	1744	1750
		8/22/16	7.29	27.7	3593	1830
		10/4/16	7.69	26.3	3542	1770
IW-5	623133	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
IW-5A	219131	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
IW-6A	545565	11/15/06	NM	NM	NM	1760
		1/16/07	7.25	22.5	1562	1800
		4/9/07	6.69	26	1627	1830
		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

**APPENDIX A**  
**Sulfate Concentration Data**

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-8	508236	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
		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
		4/1/15	7.47	24.8	1687	1800
		5/17/16	7.53	24.3	1719	1940
		8/23/16	7.61	26.0	3666	1880
		10/4/16	7.75	24.5	3722	1830
IW-9	508238	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
		4/1/15	7.33	23.1	1894	1870
		8/22/16	7.18	24.8	3769	2010
		8/22/16 DUP	7.18	24.8	3769	1970
		10/3/16	7.42	23.3	3805	1930

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		4/1/15	7.31	23.2	1915	1790
		8/22/16	7.32	25.0	3660	1820
		10/3/16	7.55	24.6	3654	1780
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
		4/1/15	7.39	24.2	1851	1600
		5/17/16	7.43	24.7	1920	1930
		8/22/16	7.51	27.0	3331	1640
		10/3/16	7.67	26.7	3372	1650
IW-13	545556	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
		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
		4/1/15	7.25	24.3	2910	1860
		4/1/15 DUP	7.25	24.3	2910	1930

**APPENDIX A**  
**Sulfate Concentration Data**

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-14	545557	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
		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
		4/1/15	7.24	23.7	1947	1930
		5/17/16	7.21	24.4	1922	2040
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
		4/1/15	6.89	24.7	1927	1860
		5/17/16	7.09	25.3	1830	2010
		8/22/16	7.47	27.7	3735	1950
		10/3/16	7.73	26.1	3781	1880
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

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
IW-18	545561	4/12/10	6.63	26.5	1604	1700
		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
IW-19	545562	4/20/09	6.77	29.9	1337	1700
		4/29/10	6.63	23.7	1455	1600
		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
		4/1/15	7.43	23.6	1945	1910
		5/17/16	7.29	25.6	1866	1980
		10/3/16	7.67	26.0	3666	1790
		10/3/16 DUP	7.67	26.0	3666	1800

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		4/1/15	7.07	26.2	1977	1700
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
		5/17/16	7.11	28.2	1887	1990
		5/17/16 DUP	7.11	28.2	1887	1990
		8/22/16	7.26	29.6	3520	1790
		10/3/16	7.55	29.7	3446	1700

**APPENDIX A**  
**Sulfate Concentration Data**

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
		4/1/15	7.36	23.7	1874	1770
		5/17/16	7.41	24.3	1915	1930
		9/6/16	7.02	24.5	3595	1850
		10/3/16	7.52	24.6	3751	1730
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
		4/1/15	7.35	23.7	1838	1890
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
		4/1/15	7.50	24.1	1732	1760
		5/17/16	7.44	24.1	1814	1920
		8/22/16	7.40	25.9	3672	1770
		10/3/16	7.63	26.1	3684	1760

**APPENDIX A**  
**Sulfate Concentration Data**

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
		5/17/16	7.39	28.1	1740	1220
		5/17/16 DUP	7.39	28.1	1740	1180
		10/4/16	7.60	27.9	2927	1300
IW-26	219143	4/15/13	7.00	25.6	2620	1700
		4/1/15	7.53	27.3	1683	1630
		5/17/16	7.57	26.2	1720	1750
		8/22/16	7.46	27.9	3308	1670
		10/4/16	7.61	29.9	3243	1440
IW-27	219136	4/14/14	7.16	22.4	3210	1760
		4/1/15	7.41	25.6	1683	1670
		4/1/15 DUP	7.41	25.6	1683	1710
		5/17/16	7.46	25.3	1740	1930
		8/22/16	7.33	26.2	3593	1820
		10/3/16	7.45	25.6	3624	1790
IW-28	219137	4/15/13	7.03	24.2	2930	1720
		4/14/14	7.08	25.0	3230	1740
		4/1/15	7.48	25.8	1807	1730
		5/17/16	7.33	25.3	1829	1840
		8/22/16	7.43	26.9	3582	1780
		10/3/16	7.53	26.0	3583	1740
IW-29	222865	5/12/14	NM	NM	NM	1680
		4/1/15	7.28	26.5	1758	1750
		10/3/16	7.53	26.4	3459	1630
M-8	87390	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
		11/4/14	7.85	25.4	445	19.6
		4/6/15	7.96	27.7	293	20.6
		8/25/16	7.81	26.4	439	36.4
		10/25/16	8.12	26.8	453	35.0

**APPENDIX A**  
**Sulfate Concentration Data**

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-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	106.00
		1/20/15	7.92	25.8	490	74.00
		4/6/15	7.83	25.3	346	57.8
		2/9/16	7.73	25.7	374	39.8
		2/9/16 DUP	7.73	25.7	374	39.1
		4/25/16	7.80	25.2	374	49.0
		8/24/16	8.64	25.3	253	10.6
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
		11/4/14	8.34	25.2	472	114
		1/19/15	8.48	25.9	611	151
		1/19/15 DUP	8.48	25.9	611	157
		4/6/15	8.14	28.6	560	166
		12/5/16	8.57	27.9	723	176

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		4/27/15	7.58	27.9	2770	1720
		4/26/16	7.67	28.0	2600	1750
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
		11/11/14	7.10	26.9	2970	1750
		1/12/15	7.46	26.1	2960	1660
		4/2/15	7.45	26.9	1513	1710
		7/15/15	6.51	29.1	2890	1810
		11/3/15	7.53	25.8	1587	1670
		1/5/16	7.09	25.1	1724	1730
		5/16/16	7.40	27.7	1584	1680
		8/22/16	7.38	27.8	3357	1700
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
		11/11/14	7.13	27.5	1922	1260
		1/12/15	7.59	26.8	1697	1200
		4/2/15	7.49	26.5	1368	1200
		7/15/15	7.59	29.4	2220	1290
		11/3/15	7.53	26.5	1497	1110
		11/3/15 DUP	7.53	26.5	1497	1120
		1/5/16	7.17	25.7	1515	1190
		5/16/16	7.56	28.1	1329	1150
		8/22/16	7.51	28.8	2502	1120
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
		11/11/14	7.14	27.2	2610	1440
		1/12/15	7.61	26.8	1794	1350
		4/2/15	7.52	26.7	1338	1390
		7/15/15	7.44	29.8	2400	1410
		11/4/15	7.48	25.0	1507	1370
		1/6/16	7.25	24.5	1590	1420
		5/16/16	7.57	27.9	1353	1410
		8/22/16	7.45	29.1	2831	1410

**APPENDIX A**  
**Sulfate Concentration Data**

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
		11/11/14	7.06	27.9	1926	1280
		1/12/15	7.58	27.9	1665	1220
		4/2/15	7.45	27.6	1310	1230
		7/15/15	7.49	31.0	2280	1220
		11/4/15	7.48	26.3	1490	1240
		1/6/16	7.23	26.5	1547	1350
		5/16/16	7.49	28.4	1330	1340
		8/22/16	7.39	29.9	2756	1320
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
		4/14/15	7.10	28.5	1389	1560
		6/8/16	7.04	28.4	1439	1560
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
		4/16/15	7.14	27.9	2060	1550
		5/18/16	7.17	27.1	2140	1810

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		4/22/15	9.19	24.6	1322	1100
		4/6/16	9.25	25.4	2567	1050
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
		4/22/15	9.54	26.9	1246	903
		4/6/16	9.37	27.0	1924	1220

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		4/22/15	9.14	26.8	211	0.78
		4/6/16	9.23	27.0	241	<0.5
MH-14	528098	4/21/15	7.35	26.6	1459	1650
MH-16W	528099	11/4/14	7.76	23.3	3220	1880
		11/4/14 DUP	7.76	23.3	3220	1800
		4/21/15	7.36	23.6	1372	1830
		11/13/06	NM	NM	NM	190
MH-25A	201528	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	17
		4/7/15	7.82	26.1	268	12.3
		4/11/16	7.87	26.0	350	9.67
		4/11/16 DUP	7.87	26.0	350	9.93

**APPENDIX A**  
**Sulfate Concentration Data**

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
		4/7/15	8.00	27.4	1430	1580
		9/21/16	8.18	27.5	2688	1190
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
		9/21/16	8.02	29.1	2577	1160
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

**APPENDIX A**  
**Sulfate Concentration Data**

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
		4/7/15	8.05	27.6	1433	1650
		9/21/16	8.14	28.1	3510	1720
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
		4/7/15	8.06	28.1	1190	970
		9/21/16	8.06	29.6	2674	1160

**APPENDIX A**  
**Sulfate Concentration Data**

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	903648	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
		11/4/14	7.63	24.3	3270	1940
		1/7/15	7.54	24.9	3385	2020
		4/21/15	7.36	25.2	1571	1820
		10/8/15	7.52	25.3	1610	1900
		1/13/16	7.72	24.2	1491	2130
		4/5/16	7.32	28.1	1660	1760
		8/16/16	7.55	26.3	3742	1920
		8/16/16 DUP	7.55	26.3	3742	1960
		10/26/16	7.60	27.0	3710	1950

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		11/4/14	7.36	23.6	3260	1870
		1/7/15	7.36	23.7	3310	1790
		1/7/15 DUP	7.36	7.0	3310	1940
		4/21/15	7.54	25.6	1368	1700
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
		4/21/15	7.33	28.6	1574	1750
		4/5/16	7.24	28.6	1827	1910
		4/5/16 DUP	7.24	28.6	1827	1830

**APPENDIX A**  
**Sulfate Concentration Data**

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-2007-1A	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
		11/12/14	7.72	25.9	303	16.1
		11/12/14 DUP	7.72	25.9	303	16.8
		4/22/15	7.76	26.7	273	18.5
		10/20/15	7.73	26.1	394	18.2
		4/7/16	7.71	25.9	324	18.6
		10/5/16	7.86	27.2	388	17.2
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
		11/12/14	8.81	26.2	1409	885
		4/22/15	8.88	26.9	1136	987
		4/22/15 DUP	8.88	26.9	1136	1000
		10/20/15	8.91	26.8	1320	990
		10/5/16	8.88	27.5	2067	948

**APPENDIX A**  
**Sulfate Concentration Data**

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-2007-1C	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
		11/12/14	9.18	27.1	284	92.7
		4/22/15	8.89	26.3	229	42.4
		10/20/15	9.88	27.0	319	5.75
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
		4/7/15	7.56	28.1	510	255

**APPENDIX A**  
**Sulfate Concentration Data**

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-2007-3B	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	39.0
		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
		11/13/14	9.40	25.7	167	<0.5
		1/21/15	9.07	25.7	259	<0.5
		4/27/15	8.58	26.3	278	<0.5
		7/7/15	8.46	26.6	274	1.37
		10/21/15	9.10	25.8	207	<0.5
		1/4/16	8.92	24.6	242	8.41
		4/11/16	8.25	26.6	436	11.5
		7/6/16	8.19	26.6	290	3.74
		8/24/16	9.14	26.4	233	<0.5
		10/5/16	8.38	27.3	422	34.9
		10/5/16 DUP	8.38	27.3	422	34.3

**APPENDIX A**  
**Sulfate Concentration Data**

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
		11/13/14	9.33	26.6	277	20.2
		1/21/15	9.12	27.6	446	68.5
		1/21/15 DUP	9.12	27.6	446	70.3
		4/27/15	8.40	26.7	282	40.1
		7/7/15	7.60	27.7	315	35.2
		10/21/15	9.42	26.0	360	27.9
		1/4/16	9.28	25.6	387	30.3
		4/11/16	8.23	26.5	354	28.1
		7/6/16	7.69	27.5	359	21.8
		8/24/16	9.89	26.1	422	18.7
		10/5/16	9.79	27.5	428	28.4

**APPENDIX A**  
**Sulfate Concentration Data**

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-2007-4A	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
		11/12/14	7.71	24.6	404	34.3
		1/14/15	7.71	24.8	404	34.4
		4/15/15	7.59	25.3	374	39.7
		4/15/15 DUP	7.59	25.3	374	39.1
		7/8/15	7.28	25.5	470	40.2
		7/8/15 DUP	7.28	25.5	470	40.1
		10/22/15	7.72	25.2	410	39.3
		1/4/16	7.21	24.6	488	35.5
		4/7/16	7.30	24.7	438	41.1
		7/5/16	7.42	25.7	489	41.7
		8/24/16	7.74	25.3	497	41.5
		8/24/16 DUP	7.74	25.3	497	42.1
		10/25/16	7.75	25.2	453	39.2

**APPENDIX A**  
**Sulfate Concentration Data**

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
		11/12/14	8.72	25.7	405	29.1
		1/14/15	8.30	25.8	256	16.8
		4/15/15	7.88	26.6	337	35.1
		7/8/15	7.64	25.9	297	16.6
		10/22/15	7.87	25.7	266	0.85
		1/4/16	8.13	25.0	259	<0.5
		1/4/16 DUP	8.13	25.0	259	<0.5
		4/7/16	8.25	25.8	241	1.10
		7/5/16	7.69	26.0	380	8.73
		8/24/16	8.80	25.8	244	3.06
		10/25/16	8.75	26.0	221.8	<0.5
		10/25/16 DUP	8.75	26.0	221.8	<0.5

**APPENDIX A**  
**Sulfate Concentration Data**

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-2007-4C	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
		11/12/14	9.36	25.8	357	52.9
		1/14/15	9.79	26.3	448	65.0
		4/15/15	8.15	27.9	388	77.3
		7/8/15	8.10	26.6	439	64.3
		10/22/15	9.64	26.2	446	56.1
		1/4/16	9.20	24.6	479	59.9
		4/7/16	8.97	25.9	433	58.4
		7/5/16	7.92	26.7	489	54.3
		8/24/16	9.83	26.0	462	53.7
		10/25/16	9.71	27.2	512	62.3

**APPENDIX A**  
**Sulfate Concentration Data**

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
		10/15/14	8.90	26.4	924	440
		4/28/15	8.04	27.7	1330	502
		4/12/16	7.73	27.3	1351	413
		9/21/16	8.62	27.2	1454	511
		10/26/16	8.38	26.9	1379	463
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
		10/15/14	9.34	25.5	591	155
		4/29/15	9.25	26.9	710	167
		9/21/16	10.76	27.7	730	74.4
		10/26/16	9.85	27.1	726	80.6

**APPENDIX A**  
**Sulfate Concentration Data**

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
		12/2/14	8.30	27.0	326	18.3
		12/2/14	8.30	27.0	326	18.3
		1/8/15	8.04	26.7	176	13.5
		4/16/15	7.89	27.0	314	19.6
		7/2/15	7.77	29.3	414	28.8
		7/2/15 DUP	7.77	29.3	414	28.6
		10/19/15	8.03	28.3	340	17.4
		4/6/16	7.89	27.9	262	8.26
		7/5/16	8.32	28.8	460	6.74
		10/25/16	8.51	27.8	250	4.22

**APPENDIX A**  
**Sulfate Concentration Data**

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-2007-6B	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
		10/22/13 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
		12/2/14	8.88	26.6	322	82.3
		1/8/15	8.76	27.3	294	84.2
		4/16/15	9.03	26.0	303	64.3
		7/2/15	8.67	26.4	443	NS
		8/17/16	9.39	29.0	370.0	28.5
		10/25/16	9.48	28.8	306	12.5

**APPENDIX A**  
**Sulfate Concentration Data**

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
		12/2/14	8.69	27.3	353	89.8
		1/13/15	8.90	26.7	226	31.2
		4/15/15	8.44	27.3	488	104.0
		7/7/15	8.73	27.6	494	78.1
		10/20/15	9.37	25.6	584	68.9
		1/6/16	8.21	24.3	419	41.7
		4/12/16	8.55	27.1	521	23.5
		7/5/16	8.67	27.4	544	30.3
		10/26/16	9.30	26.0	243	17.1
MW-2016-5A	919635	8/10/16	7.59	26.2	394.4	27
		10/6/16	7.83	26.7	381	24.1
MW-2016-5B	919472	8/4/16	7.82	29.4	373.4	46
		10/6/16	8.18	28.2	438	63.3
MW-2016-6	919676	8/16/16	7.59	28.4	1236	490
		10/6/16	7.85	28.2	714	234

**APPENDIX A**  
**Sulfate Concentration Data**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
NP-2	605898	6/4/07	7.20	25.9	411	41.2
		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
		10/13/14	7.98	25.3	370	41.1
		10/13/14 DUP	7.98	25.3	370	41.3
		1/14/15	8.08	24.8	426	42.9
		8/23/16	7.84	26.0	468	45.9
		12/5/16	7.90	25.3	489	38.6
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
		11/10/14	7.39	26.5	1806	1150
		1/12/15	7.72	26.6	1572	1130
		4/1/15	7.64	27.8	1268	1140
		7/15/15	7.18	26.6	2180	1180
		11/3/15	7.63	26.1	1393	1150
		1/6/16	7.38	24.8	1518	1210
		5/9/16	7.49	26.7	1247	1220
		8/18/16	7.56	27.4	2546	1190

**APPENDIX A**  
**Sulfate Concentration Data**

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-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
		11/10/14	7.09	26.5	1689	1020
		1/12/15	7.71	25.9	1482	1000
		4/1/15	7.62	27.8	1218	1000
		7/15/15	7.51	26.5	1894	1040
		11/3/15	7.70	25.7	1358	1010
		1/6/16	7.40	25.5	1483	1030
		5/9/16	7.57	26.9	1249	1070
		8/18/16	7.53	28.0	2215	1040
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
		11/10/14	7.26	26.5	1658	1090
		1/12/15	7.75	26.0	1457	1010
		4/1/15	7.67	29.1	1184	1010
		7/15/15	7.56	27.2	1854	1040
		11/3/15	7.68	26.6	1337	983
		1/6/16	7.40	24.8	1455	1040
		5/9/16	7.55	27.2	1740	1020
		8/18/16	7.48	27.5	2202	1000
		8/18/16 DUP	7.48	27.5	2202	1020
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
		11/10/14	7.17	26.9	1923	1260
		1/12/15	7.62	26.3	1664	1220
		4/1/15	7.64	28.2	1306	1230
		4/1/15 DUP	7.64	28.2	1306	1240
		7/15/15	6.69	27.2	2280	1240
		11/3/15	7.54	26.6	1412	1230
		1/6/16	7.37	24.2	1560	1290
		1/6/16 DUP	7.37	24.2	1560	1290
		5/9/16	7.52	27.1	1430	1280
		8/18/16	7.53	27.6	2667	1280

**APPENDIX A**  
**Sulfate Concentration Data**

Well Name	ADWR 55 Registry No.	Sample Date	pH (SU)	Temperature (deg C)	Specific Conductance ( $\mu\text{S}/\text{cm}$ )	Sulfate, Dissolved (mg/L)
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
		4/21/15	7.05	22.8	822	434
		4/26/16	7.10	22.6	829	441
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
		4/15/15	6.84	24.6	780	454
		4/26/16	6.98	24.7	833	422

## APPENDIX A

### Sulfate Concentration Data

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

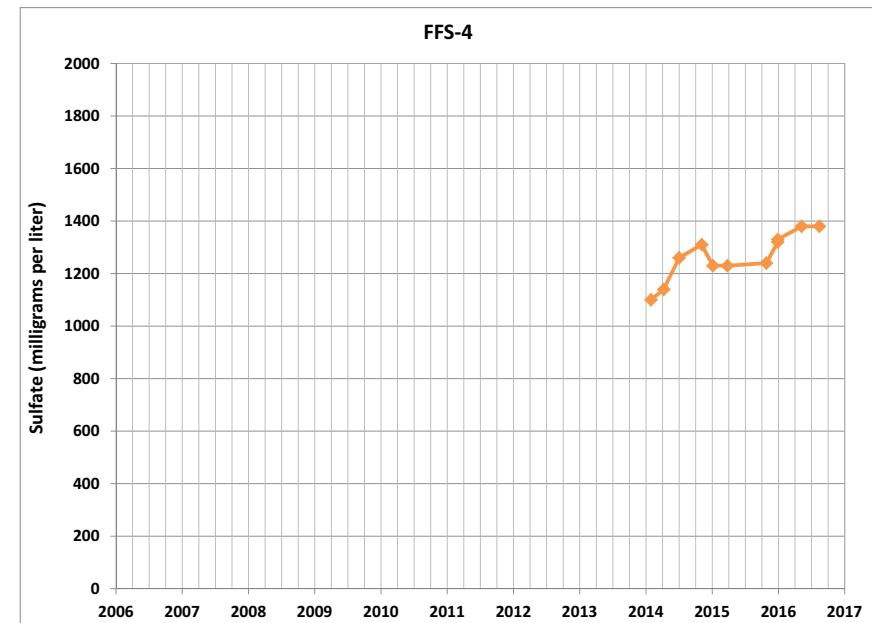
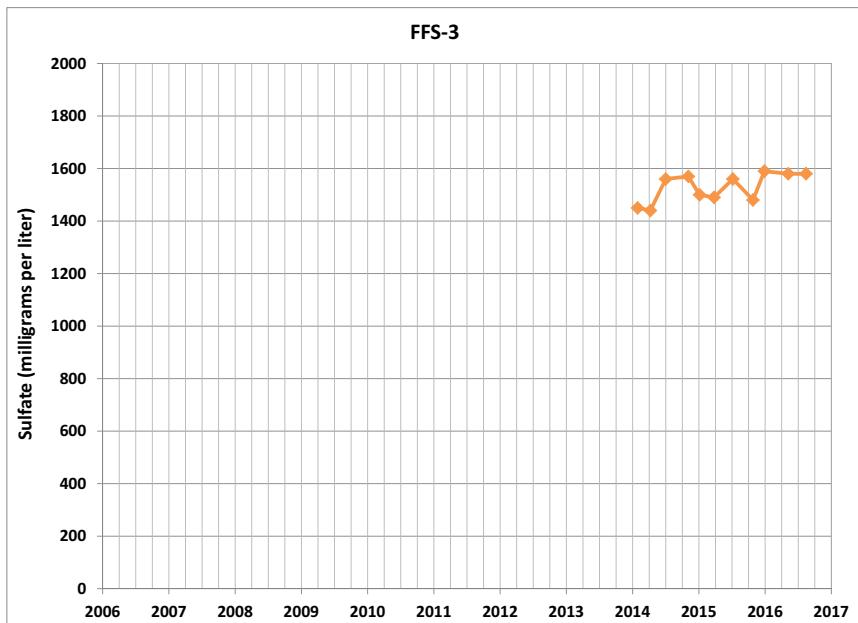
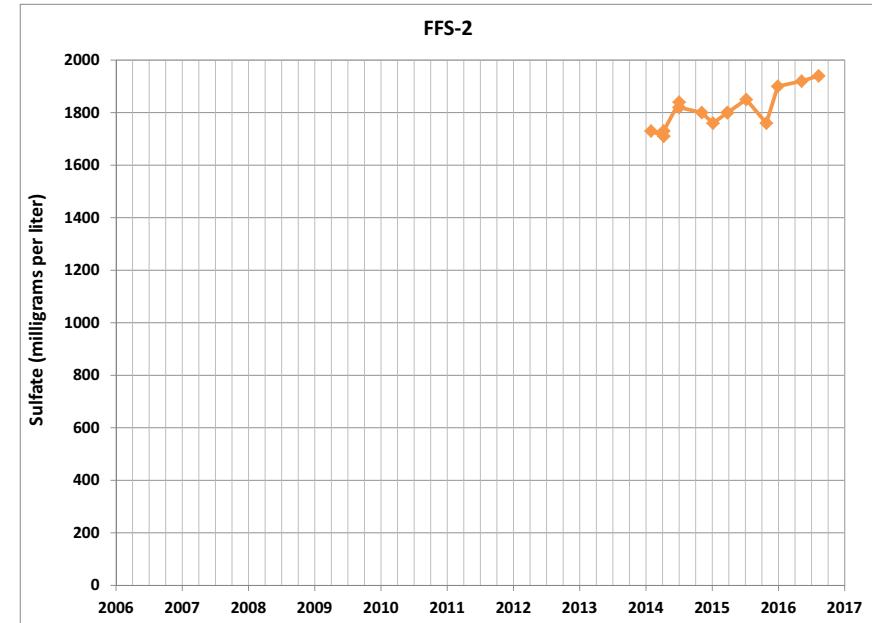
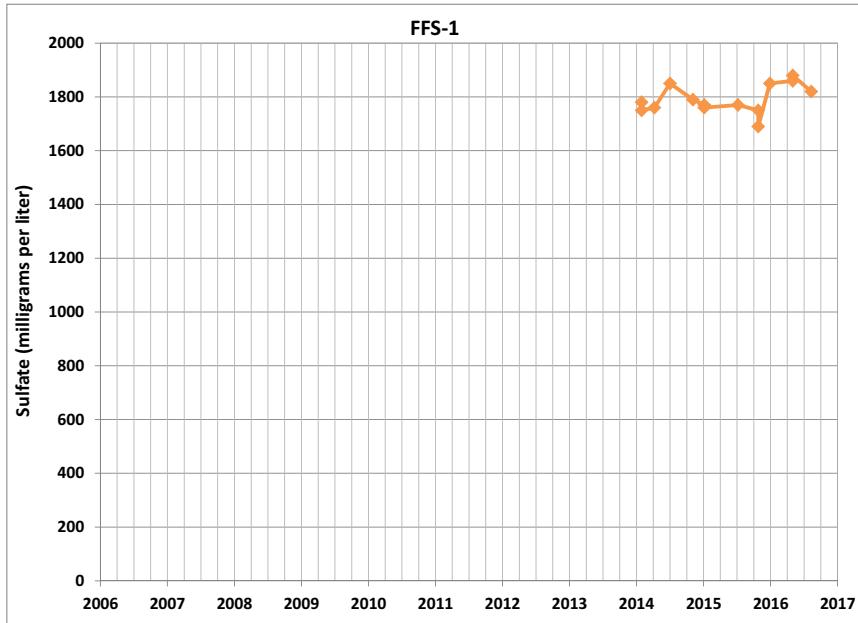
NM = not measured

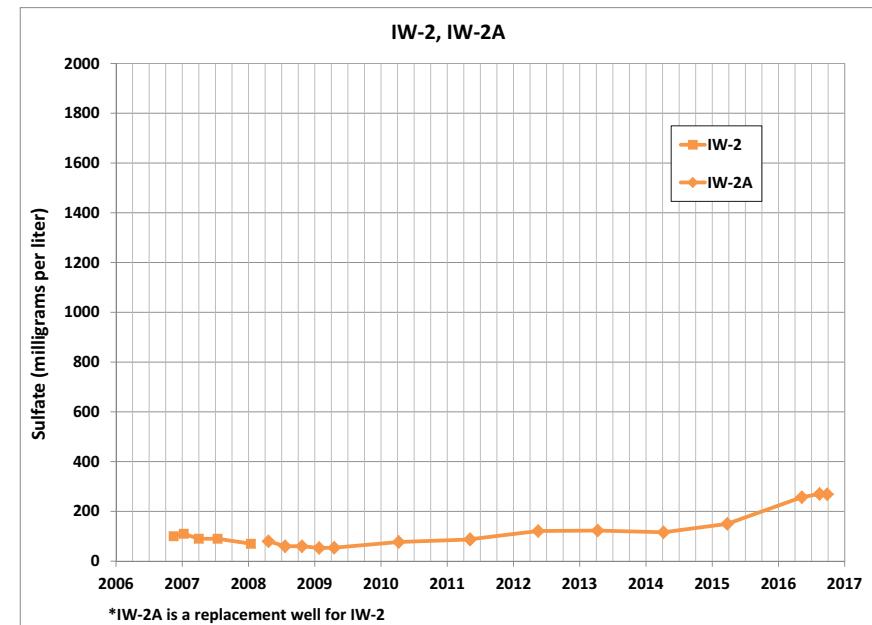
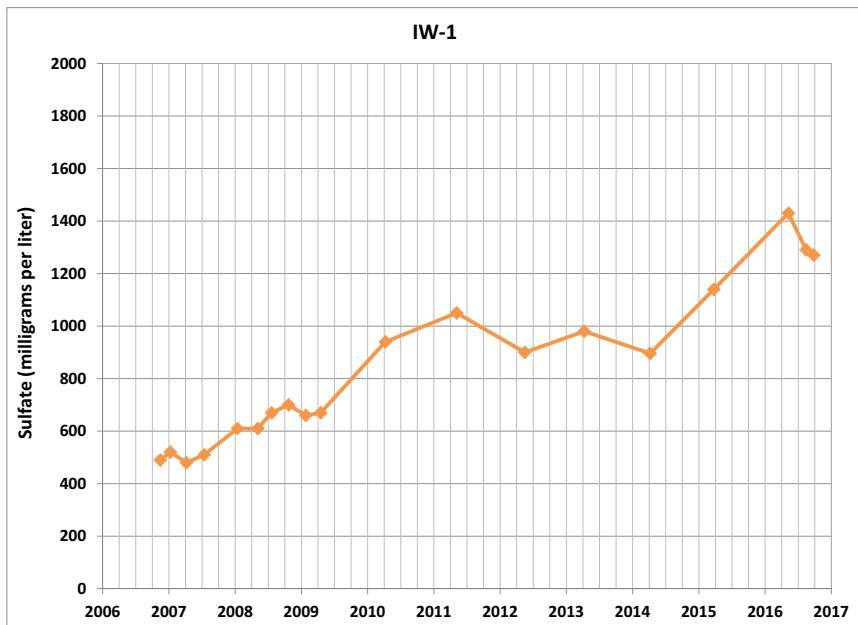
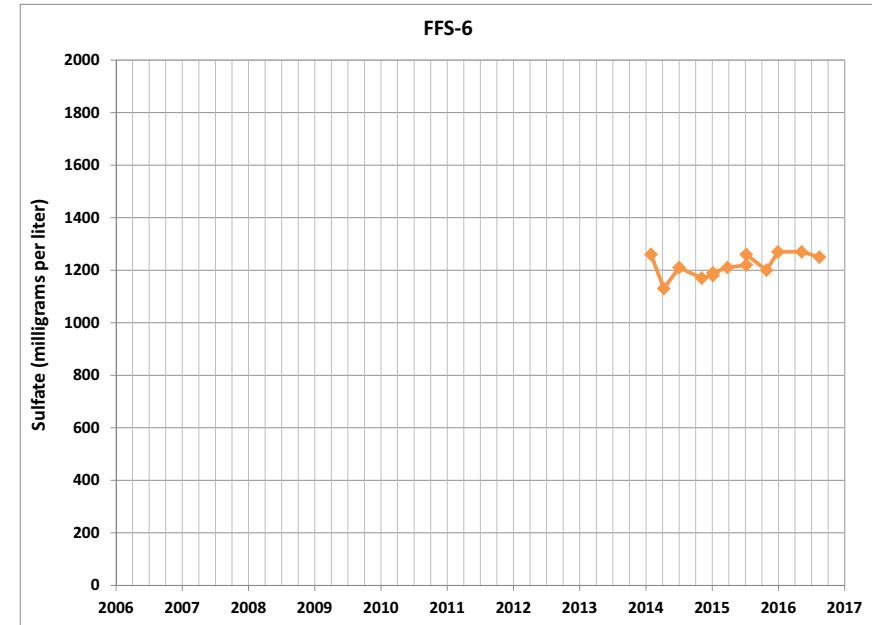
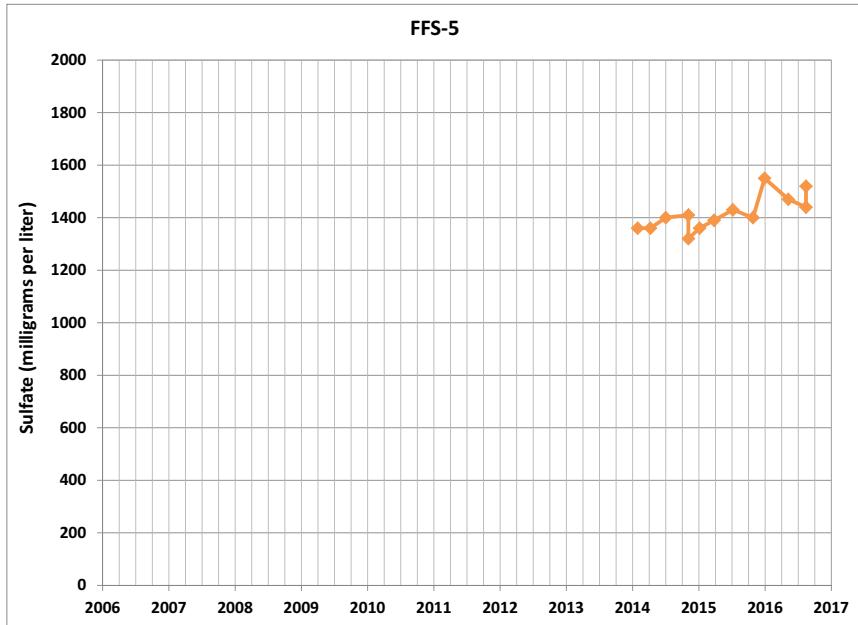
NS = no sample

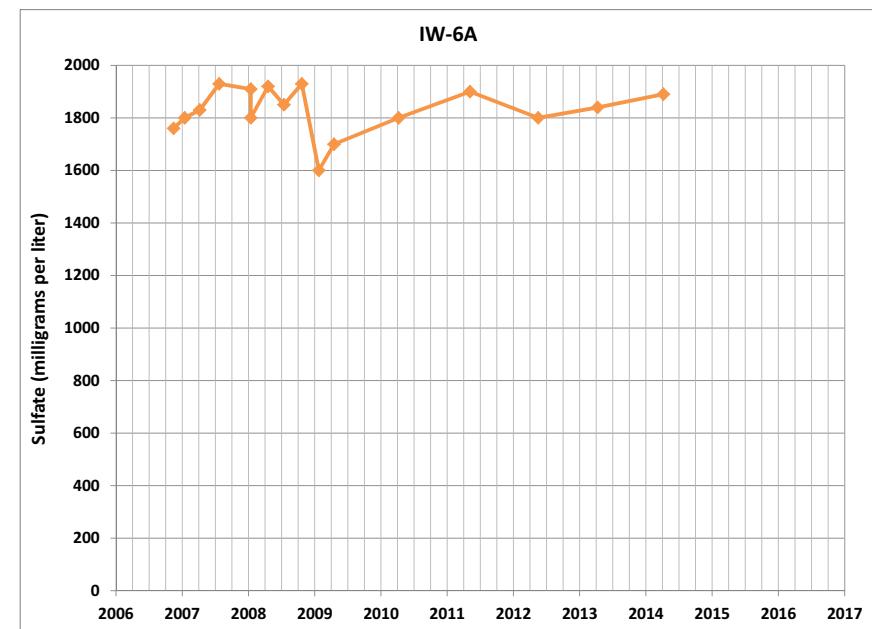
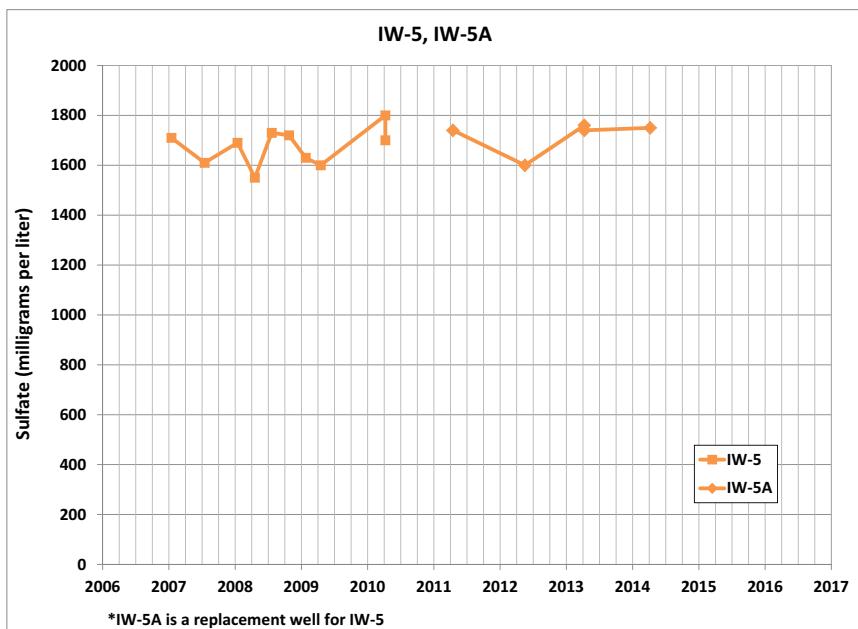
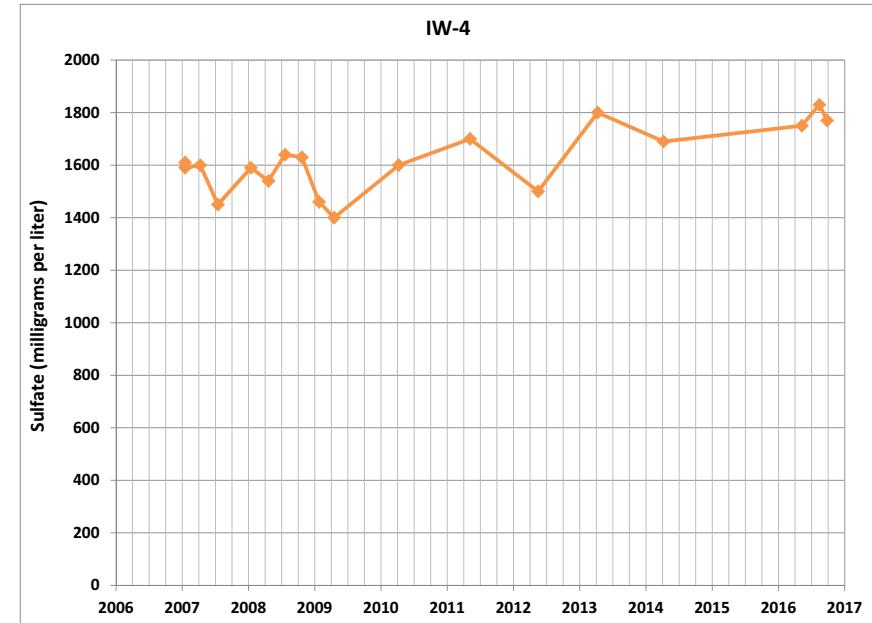
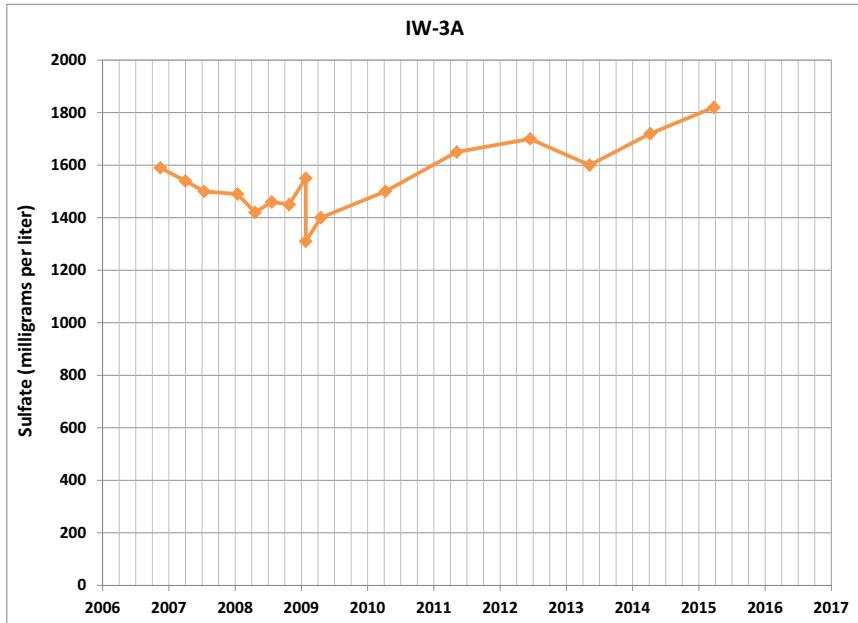
DUP = Duplicate sample

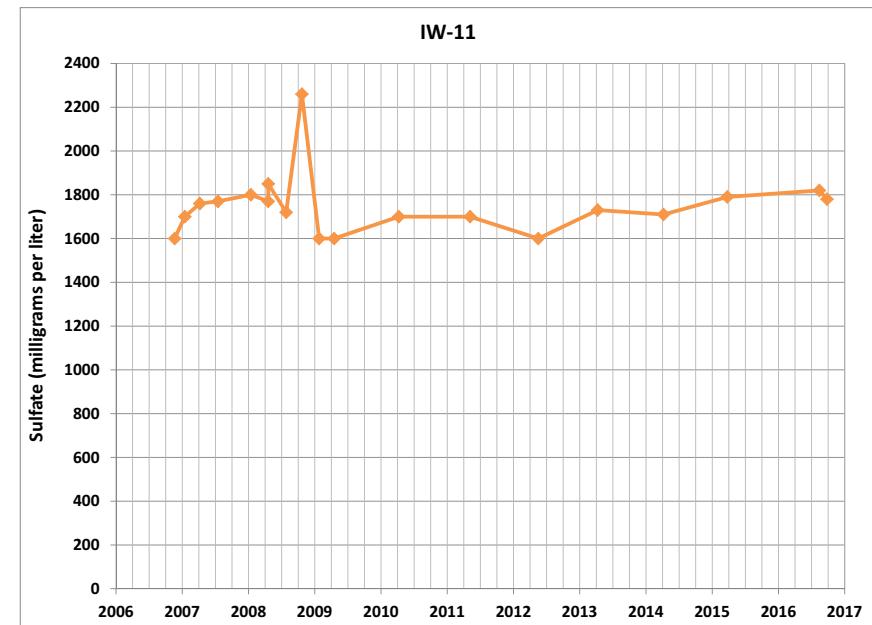
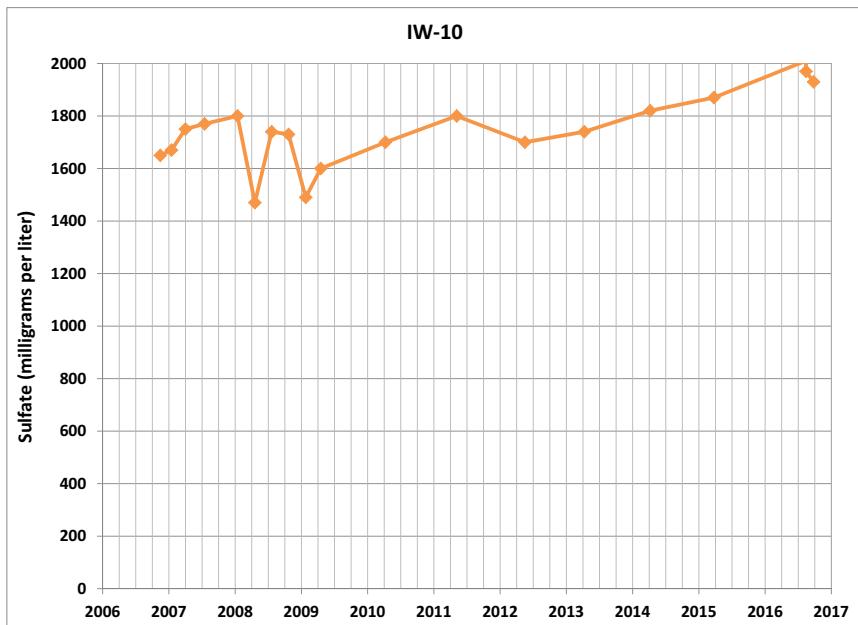
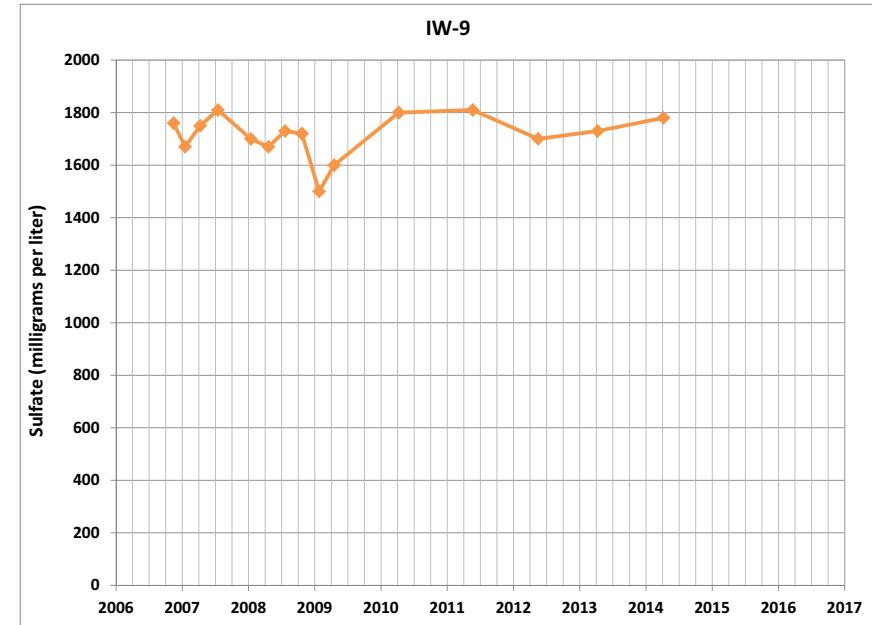
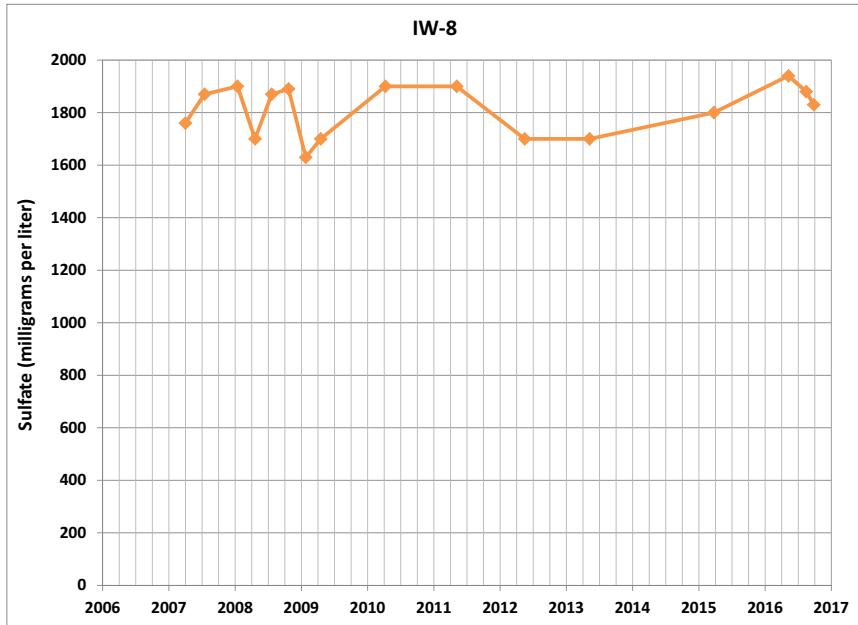
**APPENDIX B**

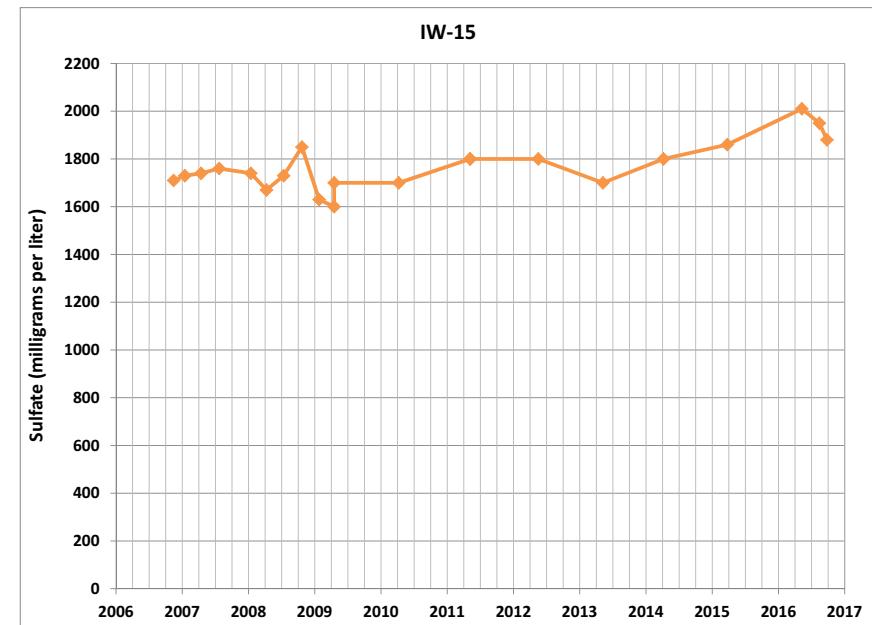
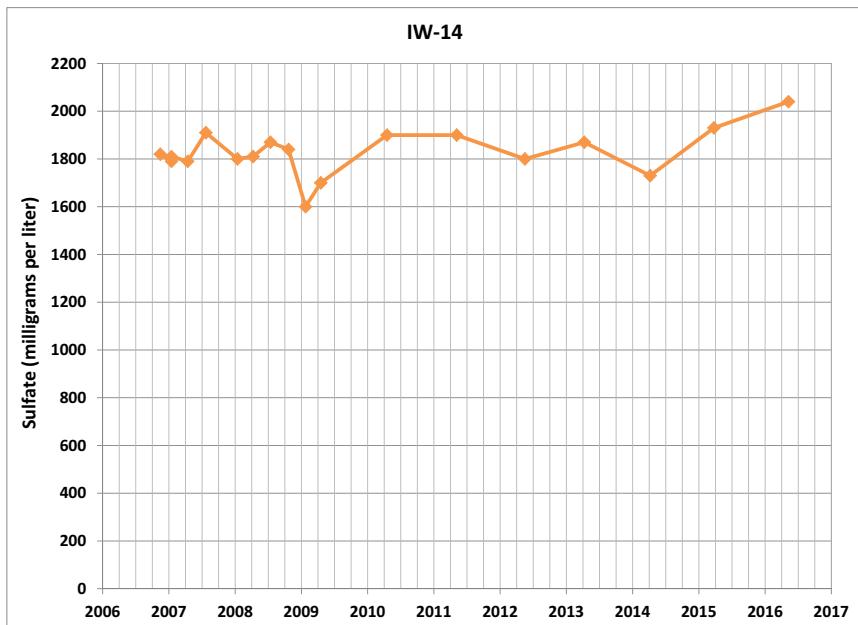
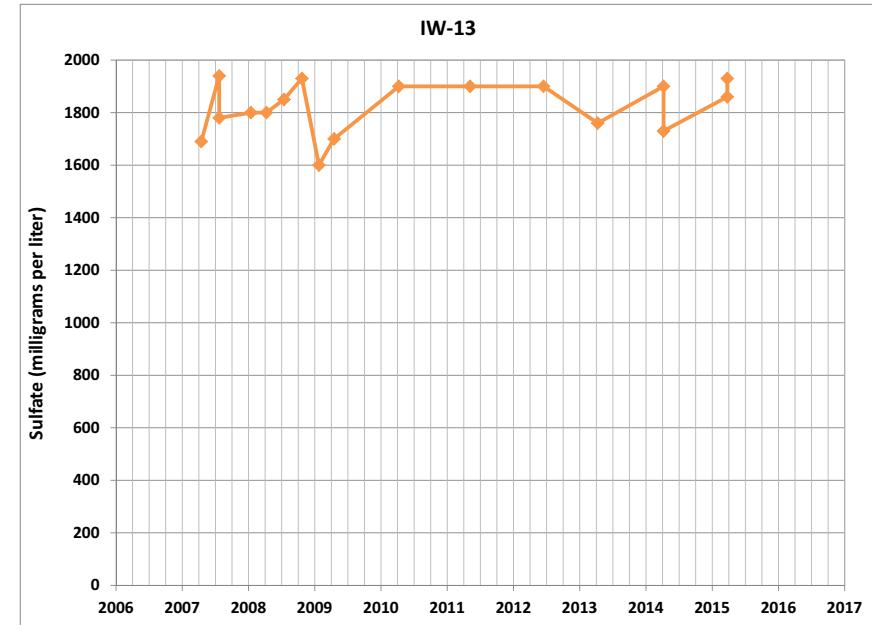
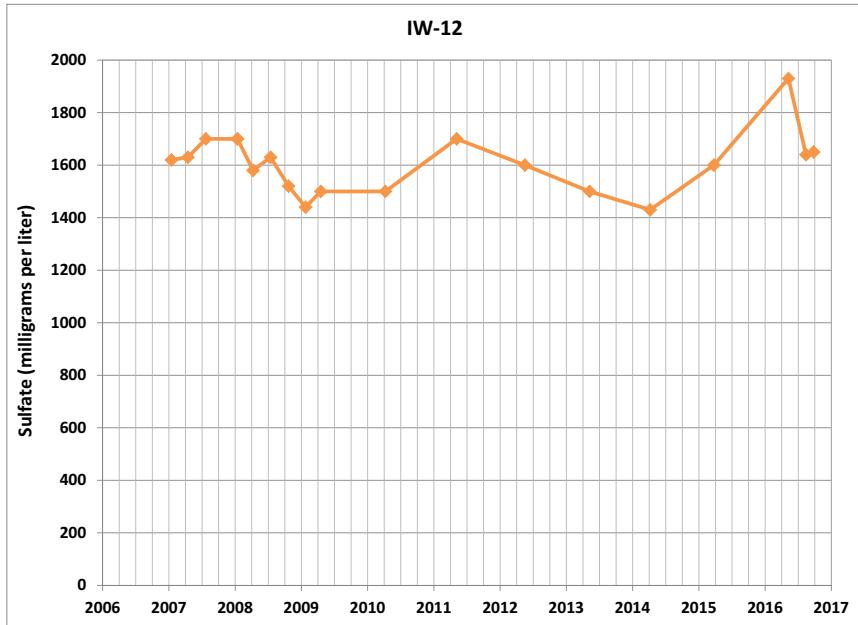
**GRAPHS OF SULFATE OVER TIME IN EXTRACTION WELLS**  
**(ALPHABETIC BY WELL NAME)**

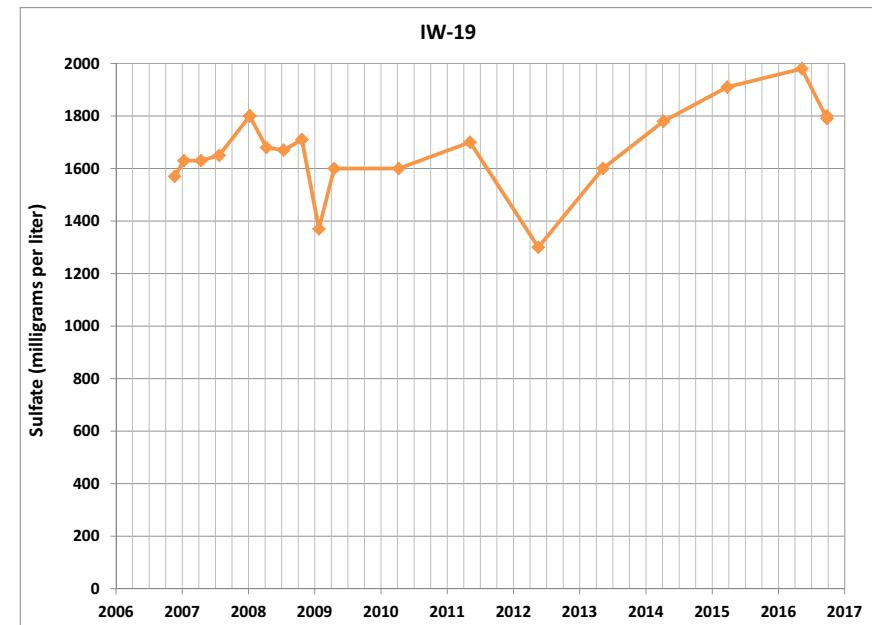
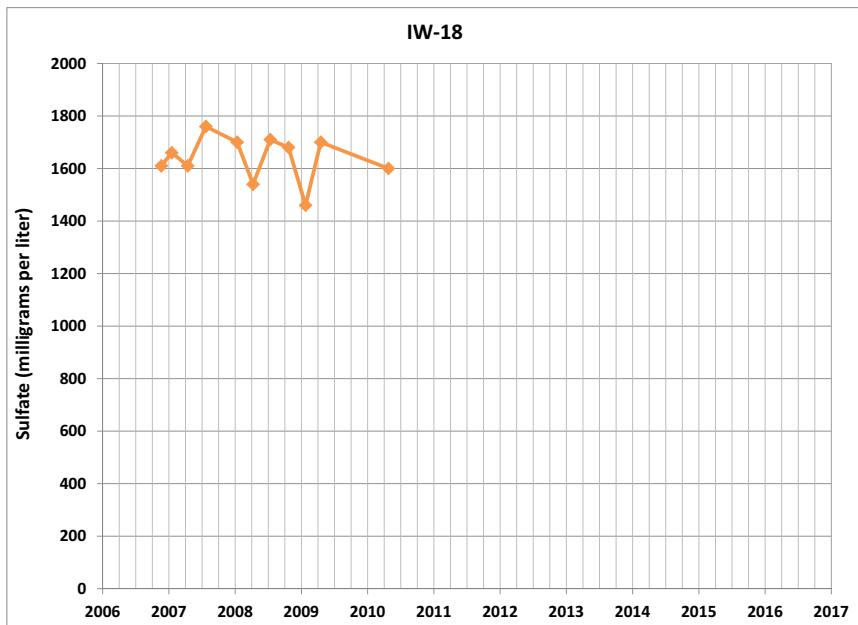
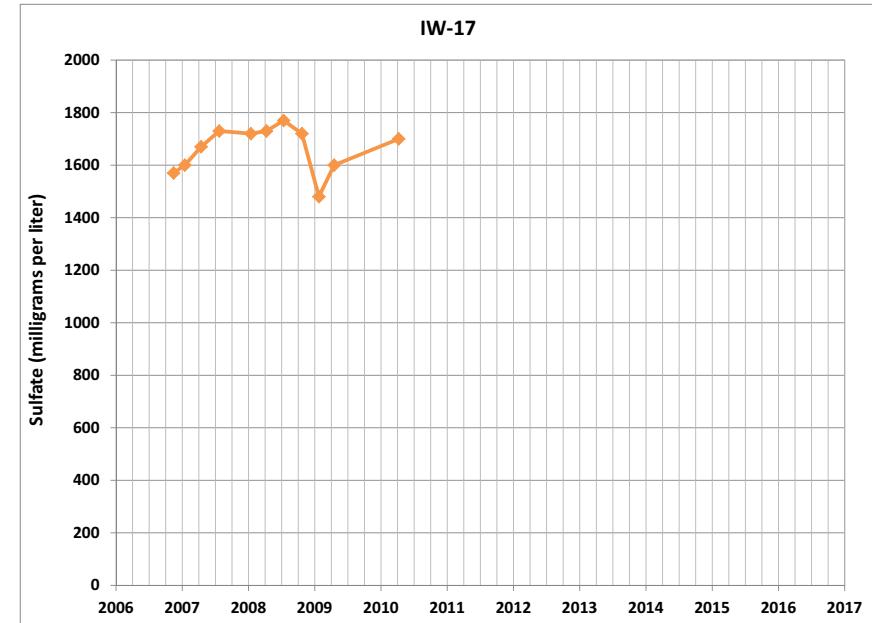
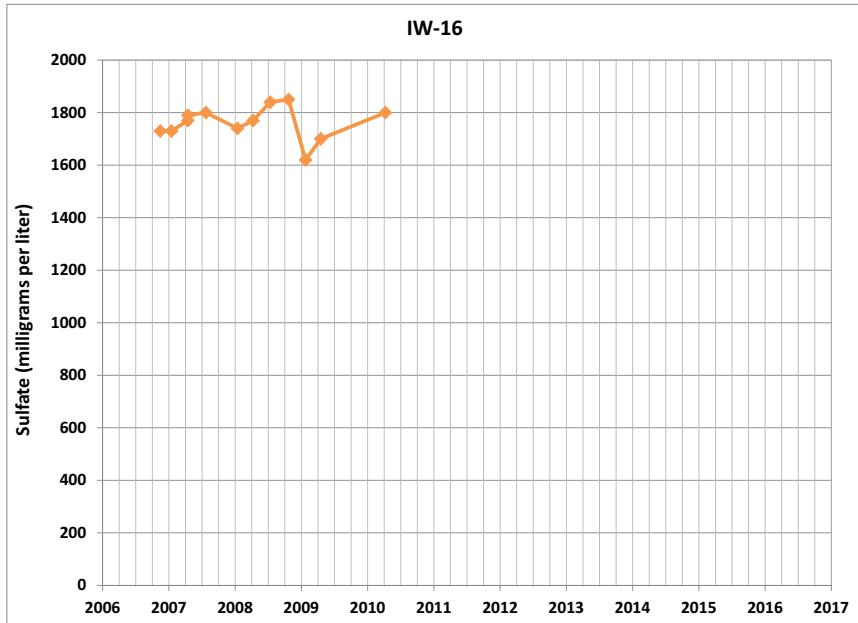


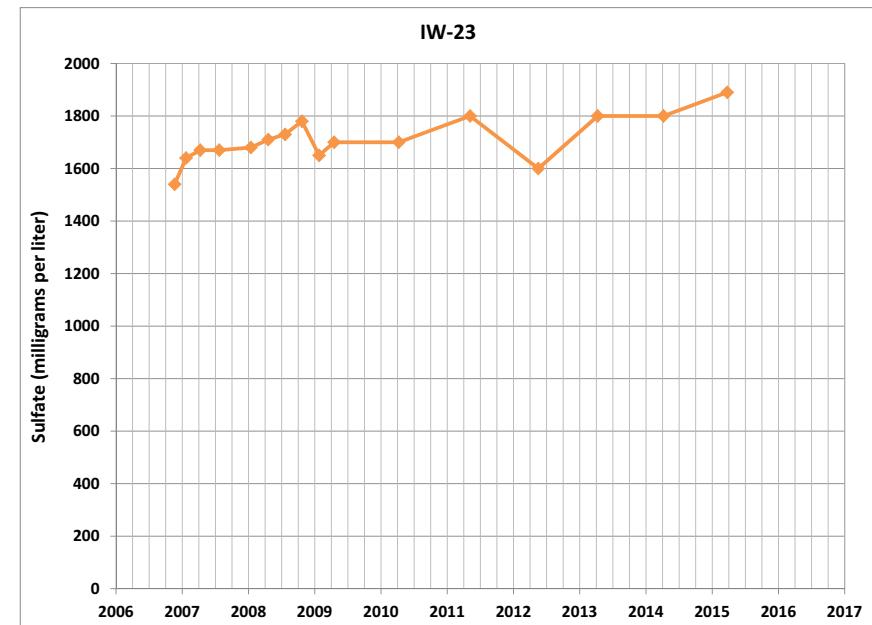
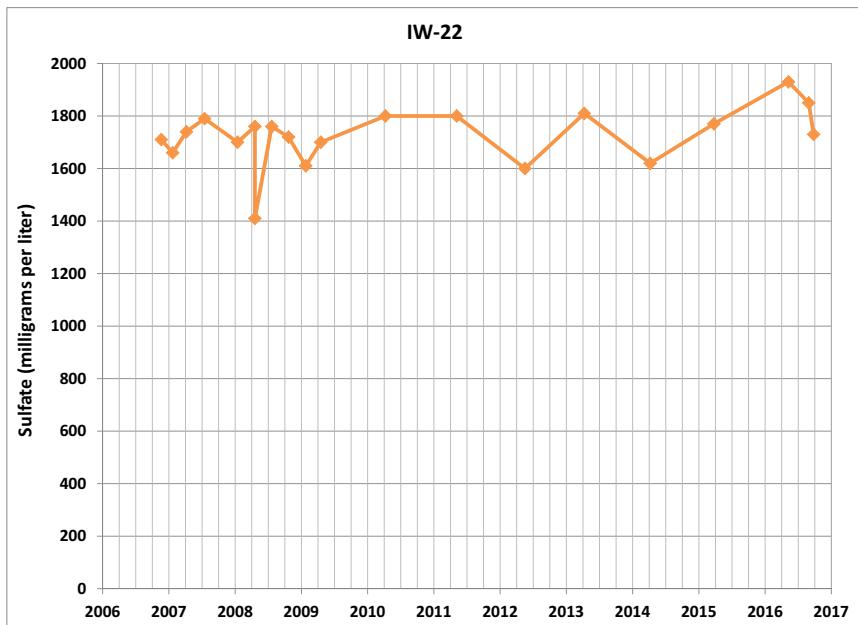
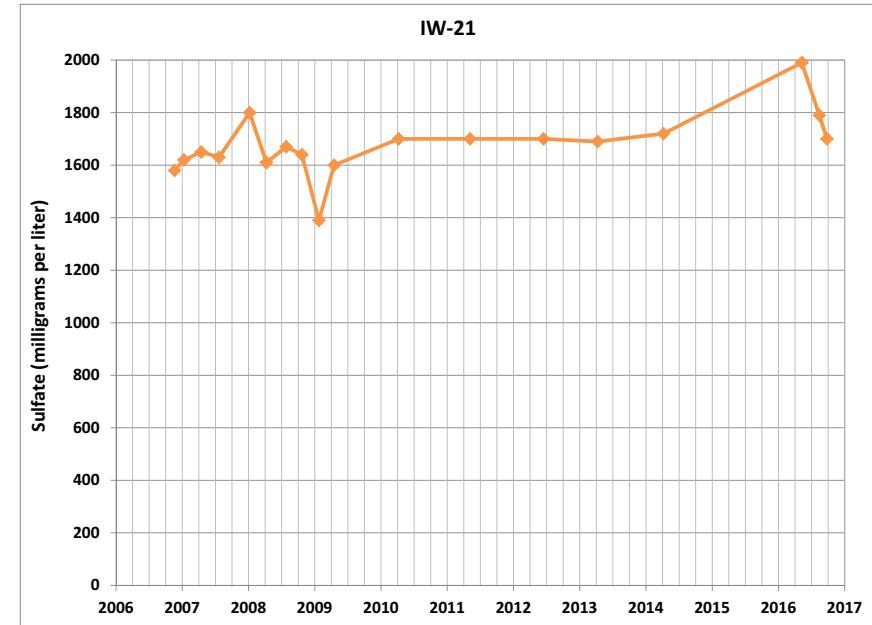
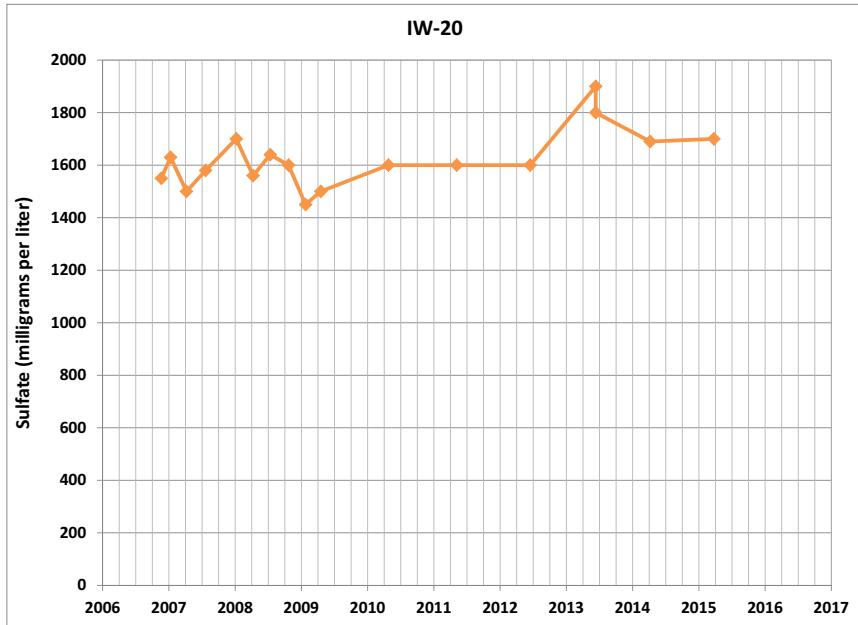


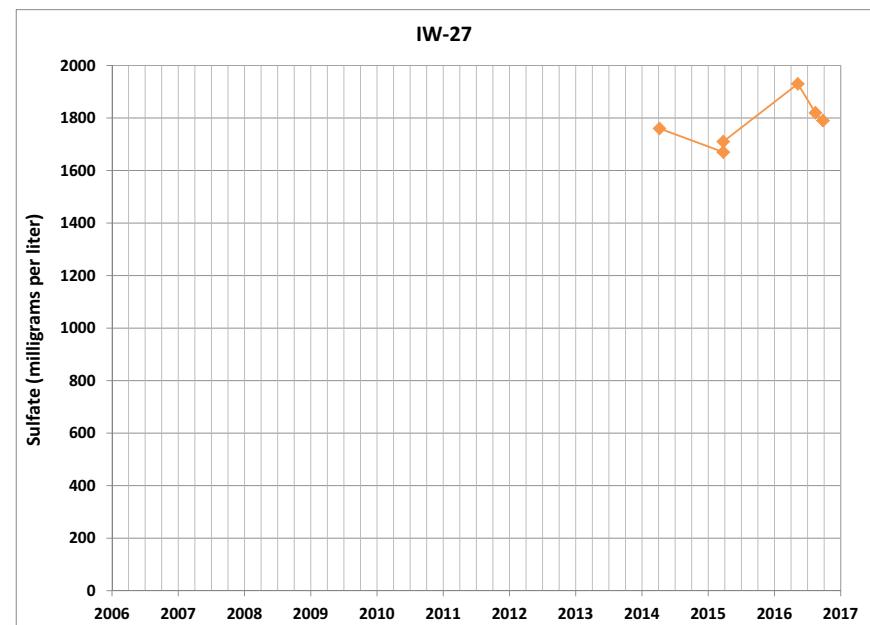
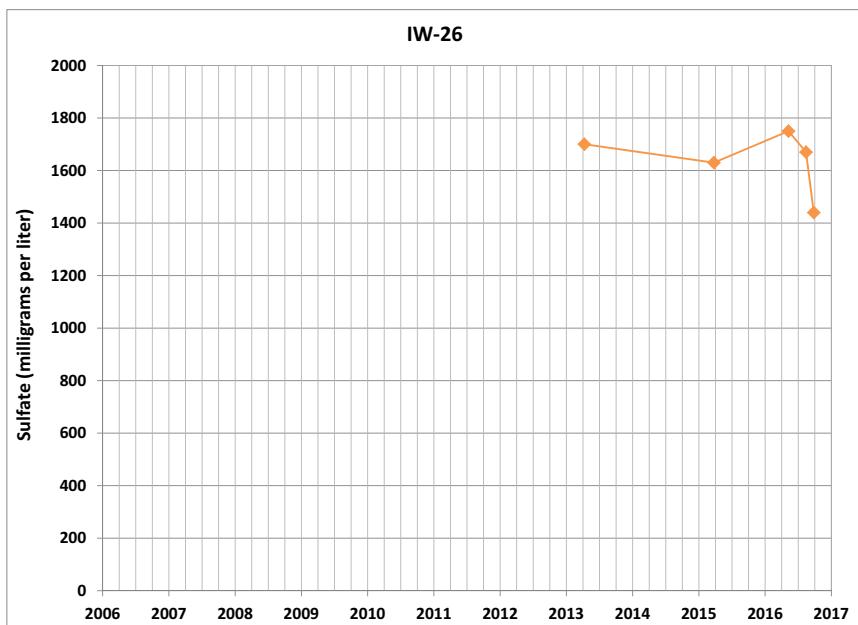
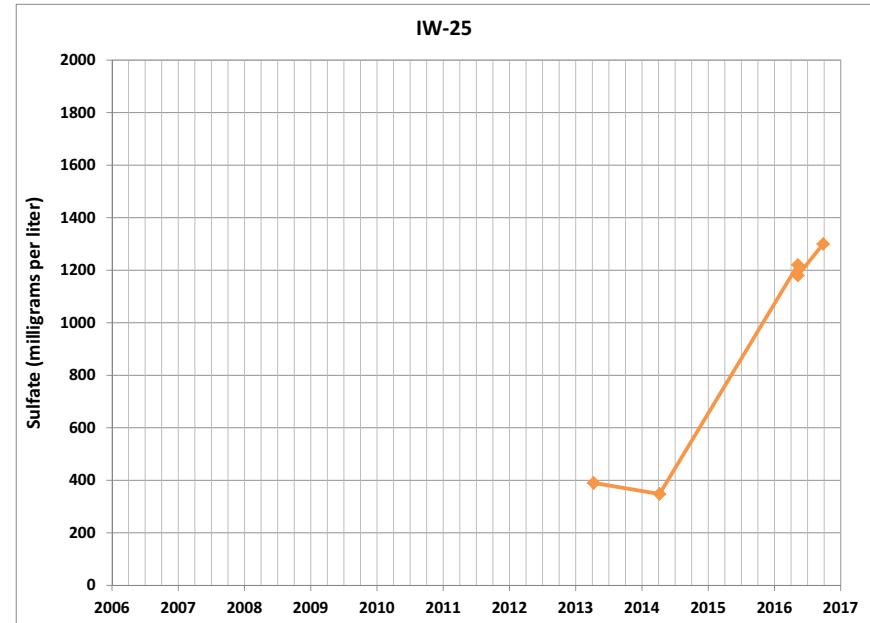
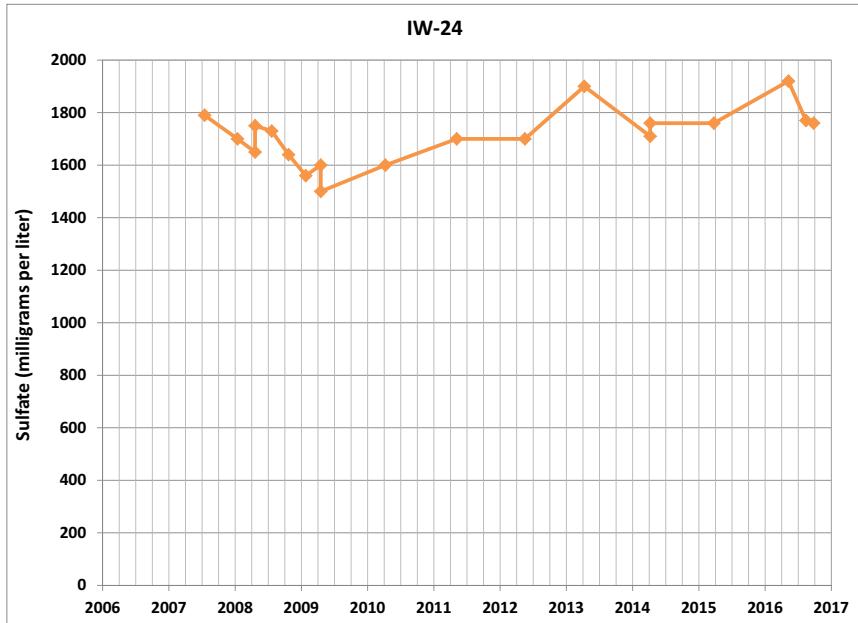


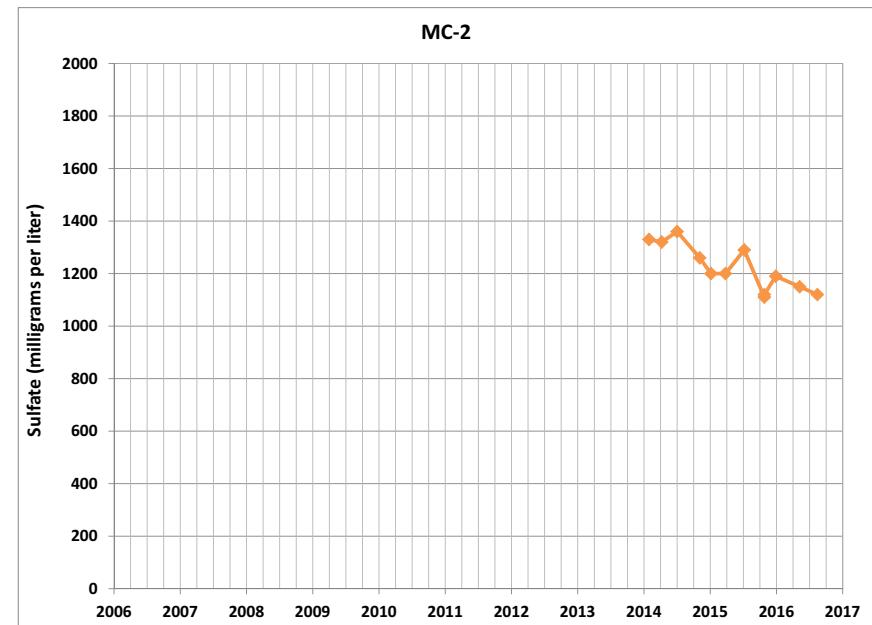
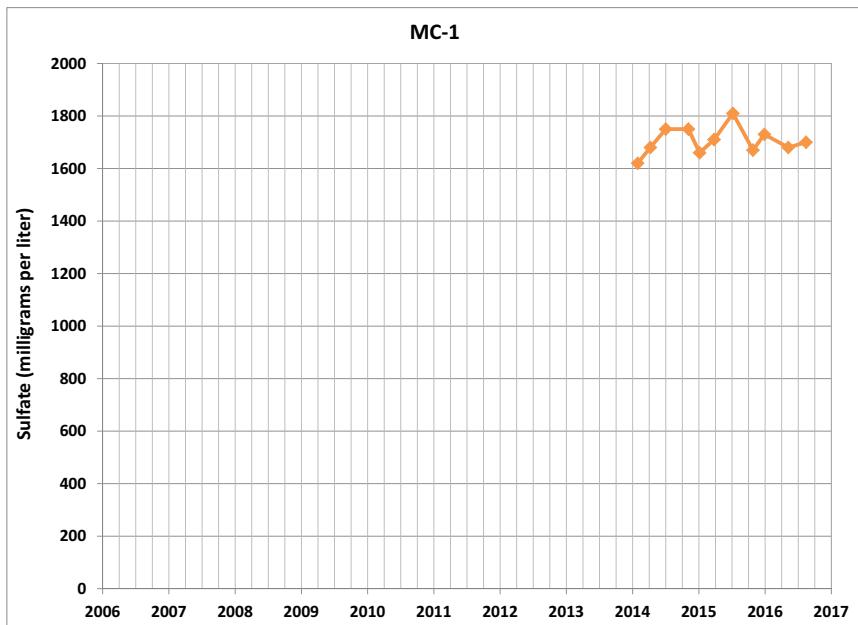
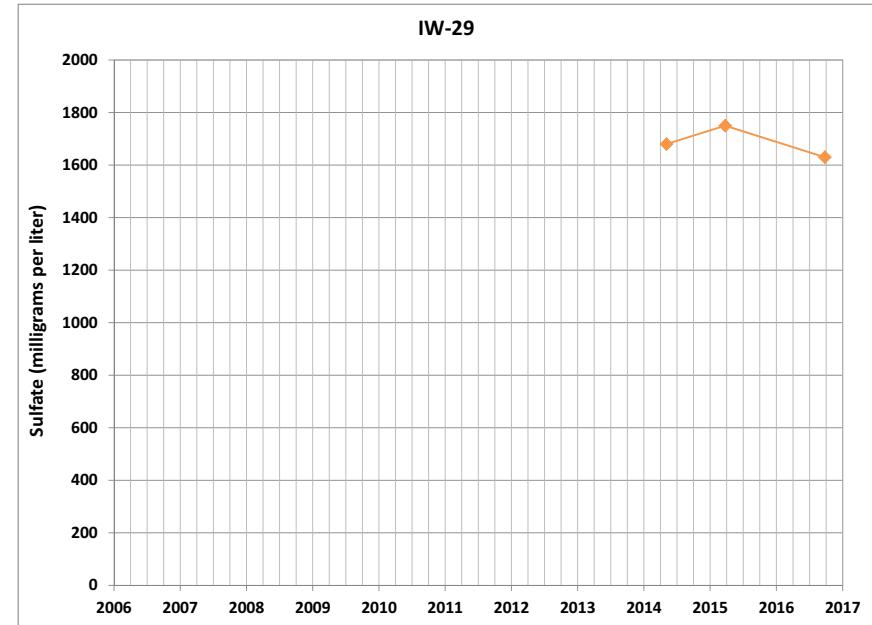
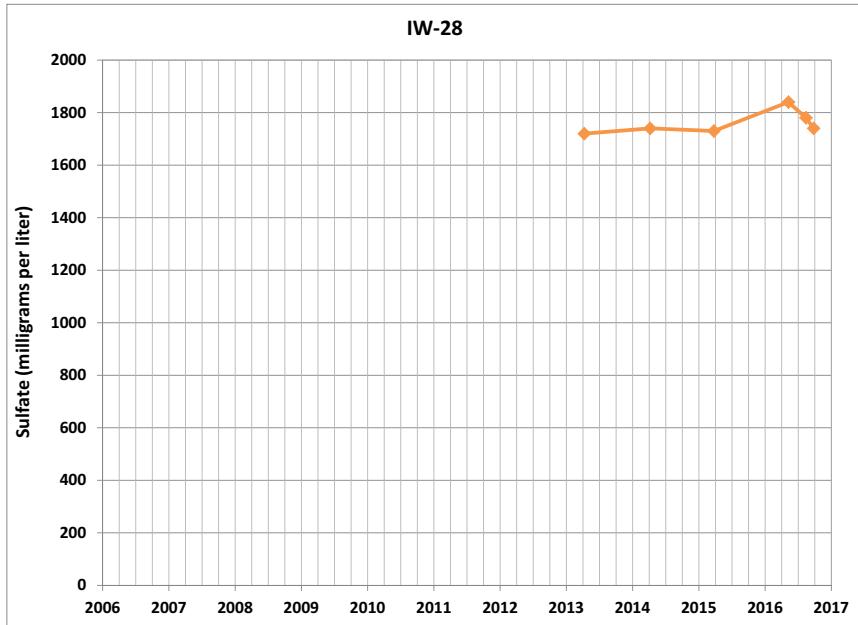


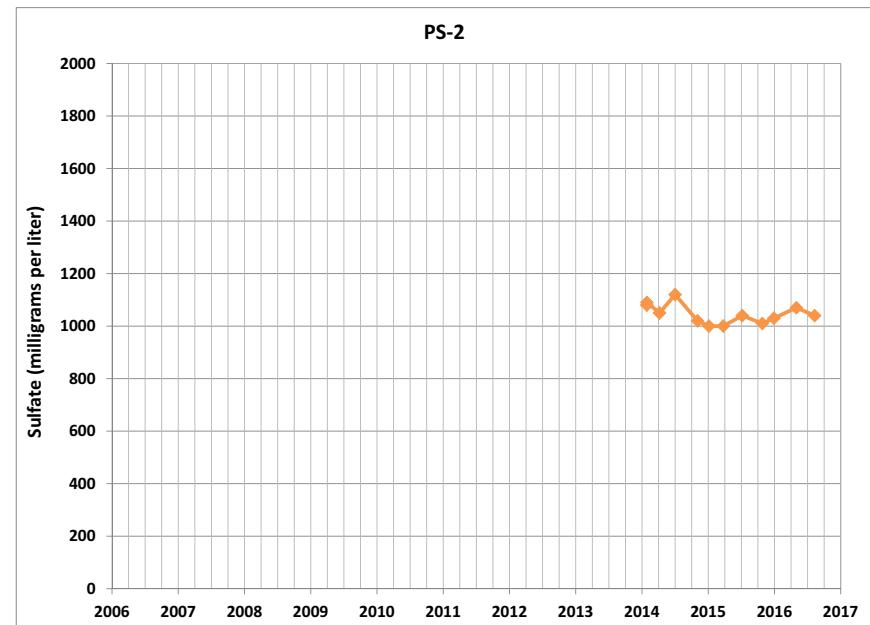
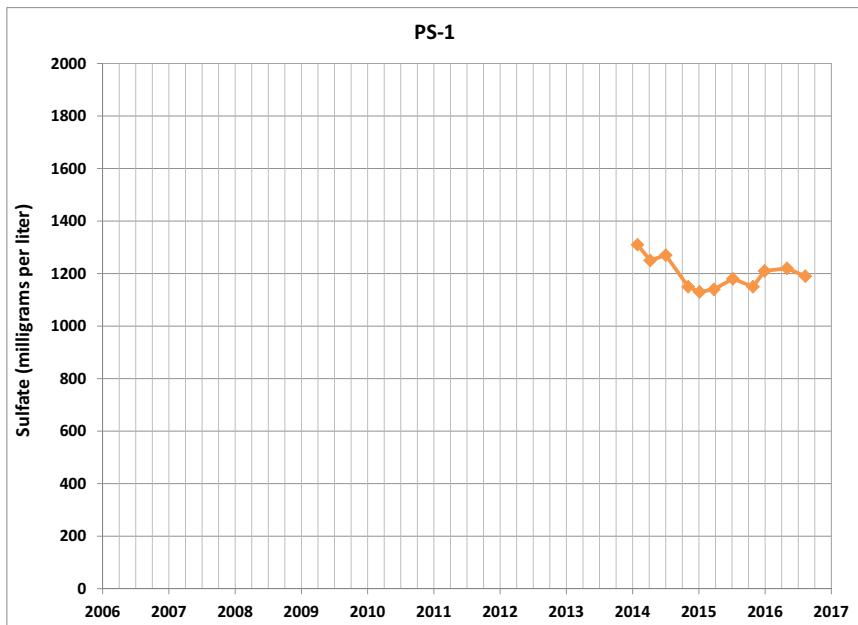
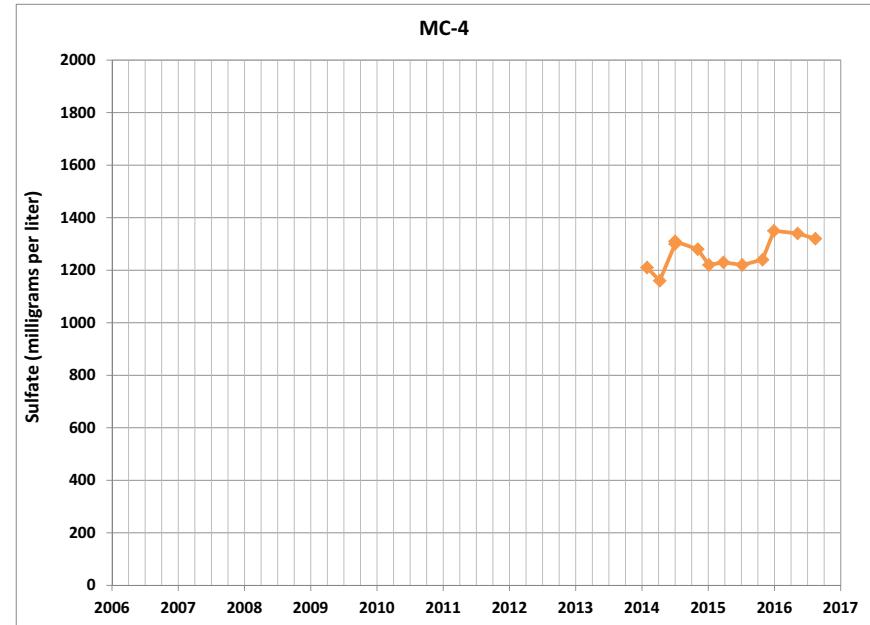
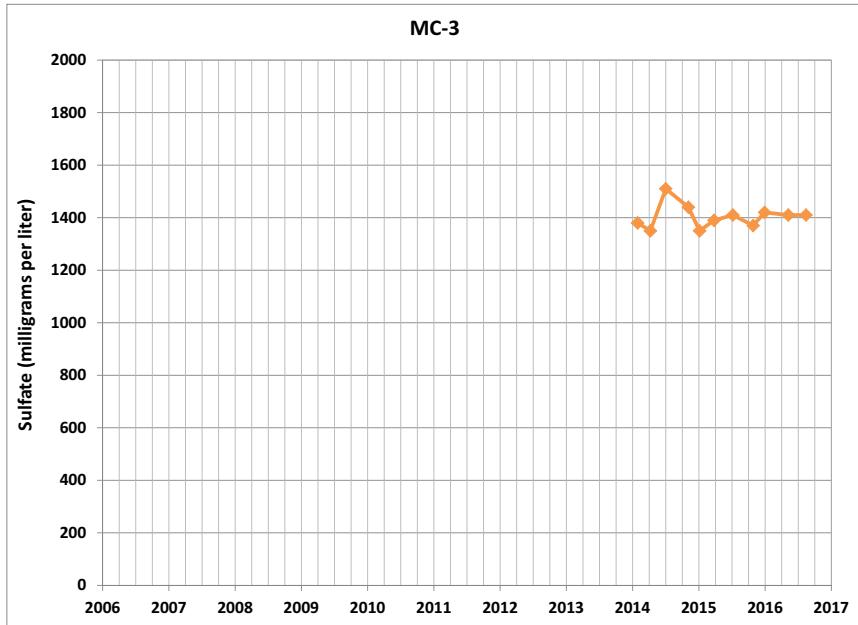


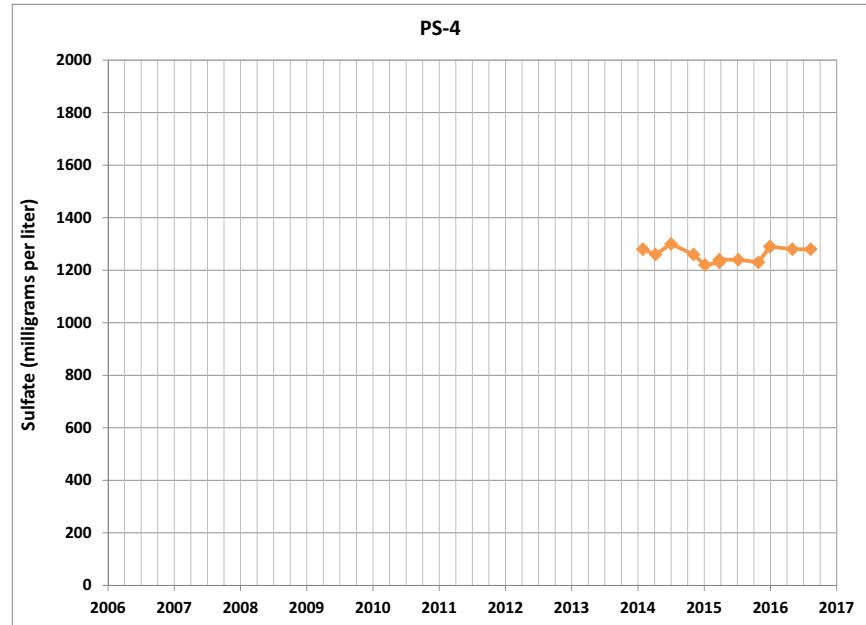
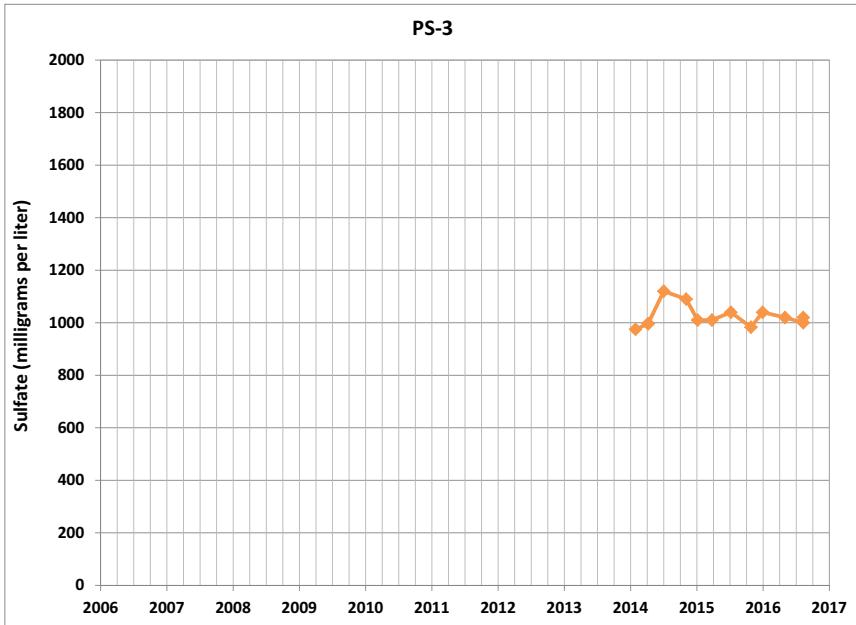












**APPENDIX C**  
**WATER ELEVATION DATA**

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
CC of GV	2823.45	1/15/07		253.15		2570.30	Sierrita
		4/16/07		254.20		2569.25	Sierrita
		7/9/07		259.79		2563.66	Sierrita
		1/10/08		257.26		2566.19	Sierrita
		7/7/08		261.09		2562.36	Sierrita
		11/14/08		263.13		2560.32	Sierrita
		2/4/09		258.48		2564.97	Sierrita
		4/21/09		258.79		2564.66	Sierrita
		4/22/10		259.51		2563.94	Sierrita
		5/14/13		258.20		2565.25	Sierrita
CCGV2	2805.88	6/13/16		322.45	Dynamic	2483.43	Sierrita
		12/8/16		325.63	Static	2480.25	Sierrita
CW-3	2941.71	6/6/07		265.35		2676.36	Sierrita
		8/10/07		267.40		2674.31	Sierrita
		11/6/07		269.98		2671.73	Sierrita
		1/11/08		264.40		2677.31	Sierrita
		4/17/08		266.46		2675.25	Sierrita
		7/11/08		270.95		2670.76	Sierrita
		10/6/08		271.78		2669.93	Sierrita
		2/9/09		267.51		2674.20	Sierrita
		4/24/09		269.06		2672.65	Sierrita
		12/31/09		272.10		2669.61	Sierrita
		4/22/10		271.91		2669.80	Sierrita
		10/25/10		273.54		2668.17	Sierrita
		5/2/11		272.50		2669.21	Sierrita
		12/5/11		274.20		2667.51	Sierrita
		6/26/12		259.51		2682.20	Sierrita
		12/13/12		278.81		2662.90	Sierrita
		6/13/13		283.48		2658.23	Sierrita
		11/12/13		286.51		2655.20	Sierrita
		3/12/14		286.62		2655.09	Sierrita
		4/29/14		289.87		2651.84	Sierrita
		5/6/14		289.87		2651.84	Sierrita
		6/23/14		289.83		2651.88	Sierrita
		7/28/14		296.29		2645.42	Sierrita
		8/7/14		297.18		2644.53	Sierrita
		9/8/14		298.21	Static	2643.50	Sierrita
		10/15/14		299.49		2642.22	Sierrita
		11/26/14		300.17		2641.54	Sierrita
		12/17/14		300.75	Static	2640.96	Sierrita
		1/29/15		301.17	Static <sup>1</sup>	2640.54	Sierrita
		2/27/15		301.40	Static <sup>1</sup>	2640.31	Sierrita
		3/18/15		301.16	Static <sup>1</sup>	2640.55	Sierrita
		4/28/15		304.04	Static <sup>1</sup>	2637.67	Sierrita
		5/11/15		303.79	Static <sup>1</sup>	2637.92	Sierrita
		6/2/15		304.11	Static <sup>1</sup>	2637.60	Sierrita
		7/24/15		307.31	Static <sup>1</sup>	2634.40	Sierrita
		8/25/15		308.58	Static <sup>1</sup>	2633.13	Sierrita
		10/28/15		309.02	Static <sup>1</sup>	2632.69	Sierrita
		11/5/15		308.88	Static <sup>1</sup>	2632.83	Sierrita
		1/7/16		308.56	Static <sup>1</sup>	2633.15	Sierrita
		2/12/16		308.40	Static <sup>1</sup>	2633.31	Sierrita
		3/8/16		308.34	Static <sup>1</sup>	2633.37	Sierrita
		6/9/16		311.20	Static <sup>1</sup>	2630.51	Sierrita
		12/6/16		314.38	Static <sup>1</sup>	2627.33	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
CW-6	2867.00	12/4/06		247.50		2619.50	Sierrita
		1/3/07		245.00		2622.00	Sierrita
		5/24/07		252.25		2614.75	Sierrita
		7/10/07		252.15		2614.85	Sierrita
		10/2/07		253.05		2613.95	Sierrita
		1/8/08		245.81		2621.19	Sierrita
		4/17/08		254.20		2612.80	Sierrita
		7/8/08		253.80		2613.20	Sierrita
		10/7/08		256.30		2610.70	Sierrita
		2/6/09		249.27		2617.73	Sierrita
		4/22/09		253.15		2613.85	Sierrita
		9/22/09		256.80		2610.20	Sierrita
		11/5/09		258.10		2608.90	Sierrita
		2/10/10		250.76		2616.24	Sierrita
		5/14/10		252.78		2614.22	Sierrita
		7/27/10		257.35		2609.65	Sierrita
		10/14/10		257.22		2609.78	Sierrita
		2/24/11		250.38		2616.62	Sierrita
		4/28/11		254.32		2612.68	Sierrita
		7/20/11		257.20		2609.80	Sierrita
		12/14/11		253.57		2613.43	Sierrita
		1/24/12		252.33		2614.67	Sierrita
		5/9/12		255.74		2611.26	Sierrita
		8/29/12		258.30		2608.70	Sierrita
		12/12/12		256.33		2610.67	Sierrita
		2/6/13		254.67		2612.33	Sierrita
		5/15/13		259.27		2607.73	Sierrita
		7/17/13		263.01		2603.99	Sierrita
		10/23/13		264.66		2602.34	Sierrita
		1/14/14		259.78		2607.22	Sierrita
		4/16/14		265.79		2601.21	Sierrita
		10/13/14		279.38	Static <sup>1</sup>	2587.62	Sierrita
		1/13/15		279.20	Static <sup>1</sup>	2587.80	Sierrita
		4/14/15		284.00	Static <sup>1</sup>	2583.00	Sierrita
		7/27/15		290.59	Static <sup>1</sup>	2576.41	Sierrita
		10/20/15		290.71	Static <sup>1</sup>	2576.29	Sierrita
		1/20/16		290.45	Static <sup>1</sup>	2576.55	Sierrita
		4/19/16		293.12	Static <sup>1</sup>	2573.88	Sierrita
		8/22/16		298.70	Dynamic	2568.30	Sierrita
		10/31/16		300.81	Static <sup>1</sup>	2566.19	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
CW-7	2987.50	2/2/07		425.00		2562.50	Sierrita
		5/14/07		424.15		2563.35	Sierrita
		7/10/07		426.50		2561.00	Sierrita
		10/2/07		427.60		2559.90	Sierrita
		1/8/08		427.50		2560.00	Sierrita
		4/17/08		426.40		2561.10	Sierrita
		7/8/08		428.40		2559.10	Sierrita
		10/7/08		429.80		2557.70	Sierrita
		2/6/09		426.62		2560.88	Sierrita
		4/22/09		424.30		2563.20	Sierrita
		5/14/10		438.35		2549.15	Sierrita
		4/28/11		429.50		2558.00	Sierrita
		5/9/12		425.90		2561.60	Sierrita
		5/15/13		458.53		2528.97	Sierrita
		4/16/14		440.68		2546.82	Sierrita
		6/18/15		461.75	Static	2525.75	Sierrita
		10/20/15		465.40	Static	2522.10	Sierrita
		4/19/16		468.83	Static	2518.67	Sierrita
		10/31/16		474.39	Dynamic	2513.11	Sierrita
CW-8	2957.50	1/3/07		336.50		2621.00	Sierrita
		5/24/07		338.14		2619.36	Sierrita
		8/10/07		339.80		2617.70	Sierrita
		10/2/07		340.60		2616.90	Sierrita
		1/8/08		337.97		2619.53	Sierrita
		4/17/08		339.20		2618.30	Sierrita
		7/8/08		341.75		2615.75	Sierrita
		10/7/08		342.75		2614.75	Sierrita
		2/6/09		339.12		2618.38	Sierrita
		4/22/09		341.20		2616.30	Sierrita
		4/12/10		342.00		2615.50	Sierrita
		4/28/11		342.68		2614.82	Sierrita
		5/9/12		340.12		2617.38	Sierrita
		5/15/13		347.39		2610.11	Sierrita
		4/16/14		359.08		2598.42	Sierrita
		6/18/15		384.24	Static	2573.26	Sierrita
		10/20/15		387.56	Static	2569.94	Sierrita
		4/19/16		391.20	Static	2566.30	Sierrita
		10/31/16		397.39	Dynamic	2560.11	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
CW-9 <sup>2</sup>	2863.00	12/4/06		306.00		2557.00	Sierrita
		1/3/07		304.20		2558.80	Sierrita
		5/24/07		309.40		2553.60	Sierrita
		7/10/07		310.20		2552.80	Sierrita
		10/2/07		310.70		2552.30	Sierrita
		1/8/08		308.82		2554.18	Sierrita
		4/17/08		308.00		2555.00	Sierrita
		7/8/08		315.60		2547.40	Sierrita
		10/7/08		316.05		2546.95	Sierrita
		2/6/09		309.80		2553.20	Sierrita
		4/22/09		311.10		2551.90	Sierrita
		7/30/09		316.5		2546.50	Sierrita
		11/5/09		321.60		2541.40	Sierrita
		2/10/10		316.69		2546.31	Sierrita
		5/14/10		316.20		2546.80	Sierrita
		7/27/10		313.63		2549.37	Sierrita
		10/14/10		318.65		2544.35	Sierrita
		2/24/11		309.94		2553.06	Sierrita
		4/28/11		313.41		2549.59	Sierrita
		7/20/11		315.45		2547.55	Sierrita
		12/14/11		314.17		2548.83	Sierrita
		1/24/12		312.56		2550.44	Sierrita
		5/9/12		314.39		2548.61	Sierrita
		8/29/12		318.12		2544.88	Sierrita
		12/12/12		317.48		2545.52	Sierrita
		2/6/13		313.90		2549.10	Sierrita
		5/15/13		313.79		2549.21	Sierrita
		7/17/13		316.52		2546.48	Sierrita
		10/23/13		319.19		2543.81	Sierrita
		1/14/14		319.38		2543.62	Sierrita
		4/16/14		317.82		2545.18	Sierrita
		10/13/14		330.96	Static <sup>1</sup>	2532.04	Sierrita
		1/13/15		328.35	Static <sup>1</sup>	2534.65	Sierrita
		4/14/15		331.47	Static <sup>1</sup>	2531.53	Sierrita
		7/27/15		338.28	Static <sup>1</sup>	2524.72	Sierrita
		10/20/15		342.55	Static <sup>1</sup>	2520.45	Sierrita
		1/20/16		338.6	Static <sup>1</sup>	2524.40	Sierrita
		4/19/16		339.68	Static <sup>1</sup>	2523.32	Sierrita
		4/28/16		337.98	Static <sup>1</sup>	2525.02	Clear Creek
		8/22/16		359.47	Static <sup>1</sup>	2503.53	Sierrita
		10/31/16		349.00	Static <sup>1</sup>	2514.00	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
CW-10	2868.50	12/4/06		178.25		2690.25	Sierrita
		1/3/07		177.20		2691.30	Sierrita
		5/24/07		196.30		2672.20	Sierrita
		7/10/07		198.79		2669.71	Sierrita
		10/2/07		190.85		2677.65	Sierrita
		1/8/08		180.95		2687.55	Sierrita
		4/17/08		187.95		2680.55	Sierrita
		7/8/08		203.25		2665.25	Sierrita
		10/7/08		190.65		2677.85	Sierrita
		2/6/09		184.40		2684.10	Sierrita
		4/22/09		191.12		2677.38	Sierrita
		7/30/09		197.3		2671.20	Sierrita
		11/5/09		199.10		2669.40	Sierrita
		2/10/10		186.00		2682.50	Sierrita
		5/14/10		190.10		2678.40	Sierrita
		7/27/10		198.52		2669.98	Sierrita
		10/14/10		195.31		2673.19	Sierrita
		2/24/11		191.62		2676.88	Sierrita
		4/28/11		196.15		2672.35	Sierrita
		7/20/11		199.75		2668.75	Sierrita
		12/14/11		191.70		2676.80	Sierrita
		1/24/12		189.73		2678.77	Sierrita
		5/9/12		197.20		2671.30	Sierrita
		8/29/12		201.50		2667.00	Sierrita
		12/12/12		199.93		2668.57	Sierrita
		2/6/13		197.87		2670.63	Sierrita
		5/15/13		209.50		2659.00	Sierrita
		7/17/13		212.61		2655.89	Sierrita
		10/23/13		215.14		2653.36	Sierrita
		1/14/14		203.86		2664.64	Sierrita
		4/16/14		210.15		2658.35	Sierrita
		7/22/14		220.59	Static <sup>1</sup>	2647.91	Sierrita
		10/13/14		223.99	Static <sup>1</sup>	2644.51	Sierrita
		1/13/15		216.94	Static <sup>1</sup>	2651.56	Sierrita
		4/14/15		230.95	Static <sup>1</sup>	2637.55	Sierrita
		7/27/15		236.30	Static <sup>1</sup>	2632.20	Sierrita
		10/20/15		224.82	Static <sup>1</sup>	2643.68	Sierrita
		1/20/16		222.82	Static <sup>1</sup>	2645.68	Sierrita
		4/19/16		226.81	Static <sup>1</sup>	2641.69	Sierrita
		8/22/16		239.08	Dynamic	2629.42	Sierrita
		10/31/16		422.60	Dynamic	2445.90	Sierrita
CW-11	2778.61	6/18/15		318.58	Dynamic	2460.03	Sierrita
		10/20/15		286.51	Static <sup>1</sup>	2492.10	Sierrita
		4/19/16		281.75	Static <sup>1</sup>	2496.86	Sierrita
		10/31/16		289.5	Static <sup>1</sup>	2489.11	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
ESP-1	2953.43	11/28/06		352.20		2601.23	Sierrita
		1/3/07		350.10		2603.33	Sierrita
		5/24/07		349.55		2603.88	Sierrita
		7/10/07		351.11		2602.32	Sierrita
		10/12/07		343.00		2610.43	Sierrita
		10/30/08		355.47		2597.96	Sierrita
		1/29/09		354		2599.43	Sierrita
		4/16/09		350.50		2602.93	Sierrita
		11/10/09		355.67		2597.76	Sierrita
		4/28/10		354.10		2599.33	Sierrita
		10/15/10		357.40		2596.03	Sierrita
		5/3/11		355.79		2597.64	Sierrita
		11/22/11		357.82		2595.61	Sierrita
		12/13/11		355.60		2597.83	Sierrita
		6/19/12		357.76		2595.67	Sierrita
		11/21/12		358.70		2594.73	Sierrita
		5/20/13		357.15		2596.28	Sierrita
		4/28/14		Obstructed		NA	Sierrita
ESP-2	2934.60	11/28/06		342.55		2592.05	Sierrita
		1/3/07		343.10		2591.50	Sierrita
		5/14/07		339.90		2594.70	Sierrita
		7/10/07		341.25		2593.35	Sierrita
		10/12/07		342.26		2592.34	Sierrita
		1/23/08		340.40		2594.20	Sierrita
		4/18/08		340.93		2593.67	Sierrita
		7/25/08		342.30		2592.30	Sierrita
		10/30/08		344.82		2589.78	Sierrita
		1/29/09		395.16		2539.44	Sierrita
		4/16/09		341.45		2593.15	Sierrita
		11/10/09		346.50		2588.10	Sierrita
		4/28/10		343.99		2590.61	Sierrita
		10/15/10		347.33		2587.27	Sierrita
		5/3/11		345.44		2589.16	Sierrita
		11/22/11		347.26		2587.34	Sierrita
		6/19/12		346.84		2587.76	Sierrita
		11/21/12		348.11		2586.49	Sierrita
		5/20/13		348.45		2586.15	Sierrita
		11/5/13		362.28		2572.32	Sierrita
		3/12/14		354.98		2579.62	Sierrita
		4/28/14		358.88		2575.72	Sierrita
		5/6/14		358.90		2575.70	Sierrita
		6/23/14		358.86		2575.74	Sierrita
		7/28/14		365.59		2569.01	Sierrita
		8/8/14		367.53		2567.07	Sierrita
		9/9/14		368.29	Static	2566.31	Sierrita
		10/1/14		369.45		2565.15	Sierrita
		11/26/14		369.90		2564.70	Sierrita
		12/17/14		370.22	Static	2564.38	Sierrita
		1/29/15		370.43	Static	2564.17	Sierrita
		2/27/15		370.56	Static	2564.04	Sierrita
		3/26/15		376.27	Static	2558.33	Sierrita
		4/29/15		377.94	Static	2556.66	Sierrita
		5/12/15		378.70	Static	2555.90	Sierrita
		6/21/15		379.41	Static	2555.19	Sierrita
		7/24/15		382.81	Static	2551.79	Sierrita
		8/14/15		384.60	Static	2550.00	Sierrita
		10/21/15		382.96	Static	2551.64	Sierrita
		11/2/15		382.38	Static	2552.22	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
ESP-2	2934.60	1/4/16		384.44	Static	2550.16	Sierrita
		2/9/16		385.29	Static	2549.31	Sierrita
		3/11/16		385.93	Static	2548.67	Sierrita
		6/7/16		389.11	Static	2545.49	Sierrita
		9/7/16		391.55	Static	2543.05	Sierrita
		10/4/16		393.40	Static	2541.20	Sierrita
ESP-3	2935.80	11/28/06		360.40		2575.40	Sierrita
		1/3/07		358.60		2577.20	Sierrita
		5/14/07		355.85		2579.95	Sierrita
		7/1/07		358.05		2577.75	Sierrita
		10/30/08		361.12		2574.68	Sierrita
		1/29/09		410.05		2525.75	Sierrita
		4/16/09		353.20		2582.60	Sierrita
		11/12/09		363.37		2572.43	Sierrita
		4/28/10		361.69		2574.11	Sierrita
		10/15/10		365.00		2570.80	Sierrita
		5/3/11		363.35		2572.45	Sierrita
		11/22/11		364.91		2570.89	Sierrita
		6/19/12		364.50		2571.30	Sierrita
		11/21/12		357.92		2577.88	Sierrita
		5/22/13		356.23		2579.57	Sierrita
		11/5/13		367.84		2567.96	Sierrita
		4/28/14		374.61		2561.19	Sierrita
		10/1/14		375.53	Static	2560.27	Sierrita
		5/12/15		393.85	Static	2541.95	Sierrita
		10/21/15		398.32	Static	2537.48	Sierrita
ESP-4	2958.60	2/9/16		400.51	Static	2535.29	Sierrita
		6/7/16		397.10	Static	2538.70	Sierrita
		9/7/16		406.68	Static	2529.12	Sierrita
		10/4/16		407.80	Static	2528.00	Sierrita
		11/28/06		349.20		2609.40	Sierrita
		1/12/07		348.30		2610.30	Sierrita
		5/4/07		346.90		2611.70	Sierrita
		7/24/07		348.80		2609.80	Sierrita
		10/12/07		352.41		2606.19	Sierrita
		1/23/08		349.65		2608.95	Sierrita
		4/18/08		350.39		2608.21	Sierrita
		7/25/08		352.13		2606.47	Sierrita
		10/30/08		355.42		2603.18	Sierrita
		1/29/09		352.50		2606.10	Sierrita
		4/16/09		356.87		2601.73	Sierrita
		10/23/09		355.64		2602.96	Sierrita
		4/28/10		351.56		2607.04	Sierrita
		10/15/10		358.16		2600.44	Sierrita
		5/3/11		355.65		2602.95	Sierrita
		11/22/11		356.91		2601.69	Sierrita
		11/12/12		358.92		2599.68	Sierrita
		5/20/13		363.95		2594.65	Sierrita
		11/5/13		362.37		2596.23	Sierrita
		4/28/14		372.14		2586.46	Sierrita
		10/1/14		383.76	Static	2574.84	Sierrita
		5/12/15		393.63	Static	2564.97	Sierrita
		10/19/15		399.74	Static	2558.86	Sierrita
		6/7/16		411.20	Static	2547.40	Sierrita
		10/4/16		407.80	Static	2550.80	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
ESP-5	2820.00	2/12/07		219.50		2600.50	Sierrita
		5/4/07		217.75		2602.25	Sierrita
		7/3/07		224.60		2595.40	Sierrita
		11/8/07		228.42		2591.58	Sierrita
		1/28/08		222.00		2598.00	Sierrita
		4/22/08		220.08		2599.92	Sierrita
		8/7/08		225.88		2594.12	Sierrita
		11/3/08		228.92		2591.08	Sierrita
		2/17/09		221.89		2598.11	Sierrita
		6/2/09		224.10		2595.90	Sierrita
		4/28/10		223.28		2596.72	Sierrita
		5/3/11		224.15		2595.85	Sierrita
		6/19/12		229.73		2590.27	Sierrita
		5/20/13		230.08		2589.92	Sierrita
		4/29/14		232.72		2587.28	Sierrita
		6/17/15		241.10	Static	2578.90	Sierrita
		11/24/15		242.02	Static	2577.98	Sierrita
		4/28/16		243.73	Static	2576.27	Sierrita
		12/8/16		244.10	Static	2575.90	Sierrita
FFS-1	3071.40	5/10/13	396.74		Static		BW, 2015a
		5/10/13	427.19		Dynamic		BW, 2015a
		1/15/14		438.94	Dynamic	2632.46	Sierrita
		1/15/14	438.94		Dynamic		BW, 2015a
		1/22/14		439.09	Dynamic	2632.31	Sierrita
		1/22/14	439.09		Dynamic		BW, 2015a
		1/29/14		379.85	Dynamic	2691.55	Sierrita
		2/5/14	436.58		Dynamic		BW, 2015a
		2/12/14	437.02		Dynamic		BW, 2015a
		3/13/14		446.91	Dynamic	2624.49	Sierrita
		5/14/14		453.40	Dynamic	2618.00	Sierrita
		5/30/14	453.40		Dynamic		BW, 2015a
		6/5/14		457.50	Dynamic	2613.90	Sierrita
		6/5/14	457.50		Dynamic		BW, 2015a
		7/6/14		455.90	Dynamic	2615.50	Sierrita
		7/6/14	454.90		Dynamic		BW, 2015a
		7/31/14		457.00	Dynamic	2614.40	Sierrita
		7/31/14	457.00		Dynamic		BW, 2015a
		8/27/14		457.80	Dynamic	2613.60	Sierrita
		8/27/14	457.80		Dynamic		BW, 2015a
		10/1/14		428.40	Static	2643.00	Sierrita
		10/1/14	427.4		Static		BW, 2015a
		11/4/14		462.50	Static	2608.90	Sierrita
		11/4/14	461.50		Dynamic		BW, 2015a
		12/2/14		464.00	Dynamic	2607.40	Sierrita
		12/2/14	463.00		Dynamic		BW, 2015a
		1/4/15		464.60	Dynamic	2606.80	Sierrita
		3/3/15		465.70	Dynamic	2605.70	Sierrita
		4/9/15		432.05	Static	2639.35	Sierrita
		5/2/15		431.60	Static	2639.80	Sierrita
		6/11/15		431.55	Static	2639.85	Sierrita
		7/6/15		467.05	Dynamic	2604.35	Sierrita
		8/18/15		470.50	Dynamic	2600.90	Sierrita
		10/7/15		472.85	Dynamic	2598.55	Sierrita
		11/4/15		473.70	Dynamic	2597.70	Sierrita
		12/9/15		475.32	Dynamic	2596.08	Sierrita
		1/12/16		474.00	Dynamic	2597.40	Sierrita
		2/11/16		475.30	Dynamic	2596.10	BW
		3/4/16		475.80	Dynamic	2595.60	BW
		4/29/16		593.55	Dynamic	2477.85	Sierrita
		10/5/16		479.10	Dynamic	2592.30	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
FFS-2	3082.11	4/29/13	416.50		Static		BW, 2015a
		4/29/13	446.60		Dynamic		BW, 2015a
		1/15/14		459.42	Dynamic	2622.69	Sierrita
		1/15/14	459.42		Dynamic		BW, 2015a
		1/22/14		460.08	Dynamic	2622.03	Sierrita
		1/22/14	460.08		Dynamic		BW, 2015a
		1/28/14	462.21		Dynamic		BW, 2015a
		1/29/14		462.21	Dynamic	2619.90	Sierrita
		2/5/14	463.82		Dynamic		BW, 2015a
		3/13/14		468.92	Dynamic	2613.19	Sierrita
		5/13/14		444.00	Dynamic	2638.11	Sierrita
		5/30/14	474.00		Dynamic		BW, 2015a
		6/5/14		476.75	Dynamic	2605.36	Sierrita
		6/5/14	476.75		Dynamic		BW, 2015a
		7/6/14		479.70	Dynamic	2602.41	Sierrita
		7/6/14	479.03		Dynamic		BW, 2015a
		7/31/14		480.80	Dynamic	2601.31	Sierrita
		7/31/14	480.80		Dynamic		BW, 2015a
		8/27/14		482.20	Dynamic	2599.91	Sierrita
		8/27/14	482.20		Dynamic		BW, 2015a
		10/1/14		453.20	Static	2628.91	Sierrita
		10/1/14	452.53		Static		BW, 2015a
		11/4/14		487.37	Dynamic	2594.74	Sierrita
		11/4/14	486.70		Dynamic		BW, 2015a
		12/2/14		489.05	Dynamic	2593.06	Sierrita
		12/2/14	488.38		Dynamic		BW, 2015a
		1/4/15		489.95	Dynamic	2592.16	Sierrita
		3/3/15		491.92	Dynamic	2590.19	Sierrita
		4/9/15		491.90	Dynamic	2590.21	Sierrita
		5/2/15		492.10	Dynamic	2590.01	Sierrita
		6/11/15		491.50	Dynamic	2590.61	Sierrita
		7/6/15		493.90	Dynamic	2588.21	Sierrita
		8/18/15		496.50	Dynamic	2585.61	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		499.60	Dynamic	2582.51	Sierrita
		12/9/15		502.00	Dynamic	2580.11	Sierrita
		1/12/16		500.65	Dynamic	2581.46	Sierrita
		2/11/16		499.90	Dynamic	2582.21	BW
		3/4/16		502.45	Dynamic	2579.66	BW
		4/29/16		504.00	Dynamic	2578.11	Sierrita
		10/5/16		506.40	Dynamic	2575.71	BW

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
FFS-3	3083.90	4/20/13 <sup>1</sup>	461.90		Static		BW, 2015a
		4/20/13	532.50		Dynamic		BW, 2015a
		1/15/14		497.29	Dynamic	2586.61	Sierrita
		1/15/14	497.29		Dynamic		BW, 2015a
		1/22/14		497.31	Dynamic	2586.59	Sierrita
		1/22/14	497.31		Dynamic		BW, 2015a
		1/28/14	497.98		Dynamic		BW, 2015a
		1/29/14		497.98	Dynamic	2585.92	Sierrita
		2/5/14	499.18		Dynamic		BW, 2015a
		3/13/14		502.16	Dynamic	2581.74	Sierrita
		5/14/14		508.87	Dynamic	2575.03	Sierrita
		5/30/14	508.87		Dynamic		BW, 2015a
		6/9/14		509.68	Dynamic	2574.22	Sierrita
		6/9/14	509.68		Dynamic		BW, 2015a
		7/6/14		511.70	Dynamic	2572.20	Sierrita
		7/6/14	510.70		Dynamic		BW, 2015a
		7/31/14		513.10	Dynamic	2570.80	Sierrita
		7/31/14	513.10		Dynamic		BW, 2015a
		8/27/14		514.25	Dynamic	2569.65	Sierrita
		8/27/14	514.25		Dynamic		BW, 2015a
		10/1/14		497.80	Static	2586.10	Sierrita
		10/1/14	496.80		Static		BW, 2015a
		11/4/14		519.50	Dynamic	2564.40	Sierrita
		11/4/14	518.50		Dynamic		BW, 2015a
		12/2/14		521.35	Dynamic	2562.55	Sierrita
		12/2/14	520.35		Dynamic		BW, 2015a
		1/4/15		523.10	Dynamic	2560.80	Sierrita
		2/4/15		522.10	Dynamic	2561.80	Sierrita
		3/3/15		524.05	Dynamic	2559.85	Sierrita
		4/9/15		525.40	Dynamic	2558.50	Sierrita
		5/2/15		526.95	Dynamic	2556.95	Sierrita
		6/11/15		509.50	Static	2574.40	Sierrita
		7/6/15		529.40	Dynamic	2554.50	Sierrita
		8/18/15		530.00	Dynamic	2553.90	Sierrita
		10/7/15		530.70	Dynamic	2553.20	Sierrita
		11/4/15		535.70	Dynamic	2548.20	Sierrita
		12/9/15		538.30	Dynamic	2545.60	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		535.40	Dynamic	2548.50	BW
		3/4/16		540.22	Dynamic	2543.68	BW
		4/8/16		541.65	Dynamic	2542.25	Sierrita
		10/5/16		544.45	Dynamic	2539.45	BW

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
FFS-4	3097.92	5/29/13	497.96		Static		BW, 2015a
		5/29/13	544.45		Dynamic		BW, 2015a
		1/15/14		548.14	Dynamic	2549.78	Sierrita
		1/15/14	548.14		Dynamic		BW, 2015a
		1/22/14		550.75	Dynamic	2547.17	Sierrita
		1/22/14	550.75		Dynamic		BW, 2015a
		1/28/14	552.10		Dynamic		BW, 2015a
		1/29/14		552.10	Dynamic	2545.82	Sierrita
		2/5/14	554.16		Dynamic		BW, 2015a
		3/13/14		559.71	Dynamic	2538.21	Sierrita
		5/14/14		570.41	Dynamic	2527.51	Sierrita
		5/30/14	570.41		Dynamic		BW, 2015a
		6/9/14		572.45	Dynamic	2525.47	Sierrita
		6/9/14	572.45		Dynamic		BW, 2015a
		7/6/14		576.05	Dynamic	2521.87	Sierrita
		7/6/14	574.88		Dynamic		BW, 2015a
		7/31/14		578.25	Dynamic	2519.67	Sierrita
		7/31/14	578.25		Dynamic		BW, 2015a
		8/27/14		580.50	Dynamic	2517.42	Sierrita
		8/27/14	580.50		Dynamic		BW, 2015a
		10/1/14		529.75	Static	2568.17	Sierrita
		10/1/14	528.58		Static		BW, 2015a
		11/4/14		595.40	Dynamic	2502.52	Sierrita
		11/4/14	594.23		Dynamic		BW, 2015a
		12/2/14		602.10	Dynamic	2495.82	Sierrita
		12/2/14	600.93		Dynamic		BW, 2015a
		1/4/15		608.90	Dynamic	2489.02	Sierrita
		3/3/15		622.65	Dynamic	2475.27	Sierrita
		4/9/15		661.30	Dynamic	2436.62	Sierrita
		5/2/15		668.25	Dynamic	2429.67	Sierrita
		6/11/15		541.42	Static	2556.50	Sierrita
		7/6/15		541.73	Static	2556.19	Sierrita
		8/18/15		696.60	Dynamic	2401.32	Sierrita
		10/7/15		694.80	Dynamic	2403.12	Sierrita
		11/4/15		697.00	Dynamic	2400.92	Sierrita
		12/9/15		698.85	Dynamic	2399.07	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		696.38	Dynamic	2401.54	BW
		3/4/16		693.48	Dynamic	2404.44	BW
		4/8/16		693.95	Dynamic	2403.97	Sierrita
		10/5/16		692.75	Dynamic	2405.17	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
FFS-5	3107.73	1/28/13	522.49		Static		BW, 2015a
		1/28/13	555.55		Dynamic		BW, 2015a
		3/13/14		Obstructed		NA	Sierrita
		5/13/14		554.32	Dynamic	2553.41	Sierrita
		5/15/14		554.32	Dynamic	2553.41	Sierrita
		5/15/14	554.32		Dynamic		BW, 2015a
		5/22/14		563.67	Dynamic	2544.06	Sierrita
		5/22/14	563.67		Dynamic		BW, 2015a
		6/9/14		565.20	Dynamic	2542.53	Sierrita
		6/9/14	565.20		Dynamic		BW, 2015a
		7/6/14		566.80	Dynamic	2540.93	Sierrita
		7/6/14	566.80		Dynamic		BW, 2015a
		7/31/14		568.60	Dynamic	2539.13	Sierrita
		7/31/14	568.60		Dynamic		BW, 2015a
		8/27/14		569.80	Dynamic	2537.93	Sierrita
		8/27/14	569.80		Dynamic		BW, 2015a
		10/1/14		554.18	Static	2553.55	Sierrita
		10/1/14	553.18		Static		BW, 2015a
		11/4/14		575.55	Dynamic	2532.18	Sierrita
		11/4/14	574.55		Dynamic		BW, 2015a
		12/2/14		577.65	Dynamic	2530.08	Sierrita
		12/2/14	576.65		Dynamic		BW, 2015a
		1/4/15		579.20	Dynamic	2528.53	Sierrita
		3/3/15		581.00	Dynamic	2526.73	Sierrita
		4/9/15		582.55	Dynamic	2525.18	Sierrita
		5/2/15		584.00	Dynamic	2523.73	Sierrita
		6/11/15		567.15	Static	2540.58	Sierrita
		7/6/15		566.90	Static	2540.83	Sierrita
		8/18/15		588.00	Dynamic	2519.73	Sierrita
		10/7/15		589.35	Dynamic	2518.38	Sierrita
		11/4/15		590.10	Dynamic	2517.63	Sierrita
		12/9/15		591.40	Dynamic	2516.33	Sierrita
		1/12/16		591.58	Dynamic	2516.15	Sierrita
		2/11/16		592.80	Dynamic	2514.93	BW
		3/4/16		593.15	Dynamic	2514.58	BW
		4/8/16		594.05	Dynamic	2513.68	Sierrita
		10/5/16		596.99	Dynamic	2510.74	BW

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
FFS-6	3110.44	12/17/12	535.30		Static		BW, 2015a
		12/17/12	549.40		Dynamic		BW, 2015a
		1/15/14		539.28	Dynamic	2571.16	Sierrita
		1/15/14	550.79		Dynamic		BW, 2015a
		1/22/14		552.04	Dynamic	2558.40	Sierrita
		1/22/14	552.04		Dynamic		BW, 2015a
		1/28/14	547.78		Dynamic		BW, 2015a
		1/29/14		547.78	Dynamic	2562.66	Sierrita
		2/5/14	554.68		Dynamic		BW, 2015a
		3/12/14		559.21	Dynamic	2551.23	Sierrita
		5/13/14		566.06	Dynamic	2544.38	Sierrita
		5/30/14	566.06		Dynamic		BW, 2015a
		6/9/14		567.10	Dynamic	2543.34	Sierrita
		6/9/14	567.10		Dynamic		BW, 2015a
		7/6/14		569.00	Dynamic	2541.44	Sierrita
		7/6/14	568.04		Dynamic		BW, 2015a
		7/31/14		571.10	Dynamic	2539.34	Sierrita
		7/31/14	571.10		Dynamic		BW, 2015a
		8/27/14		572.90	Dynamic	2537.54	Sierrita
		8/27/14	572.90		Dynamic		BW, 2015a
		10/1/14		564.20	Static	2546.24	Sierrita
		10/1/14	563.24		Static		BW, 2015a
		11/4/14		577.80	Dynamic	2532.64	Sierrita
		11/4/14	576.84		Dynamic		BW, 2015a
		12/2/14		578.62	Dynamic		BW, 2015a
		1/4/15		581.40	Dynamic	2529.04	Sierrita
		2/4/15		582.15	Dynamic	2528.29	Sierrita
		3/3/15		583.40	Dynamic	2527.04	Sierrita
		4/9/15		584.75	Dynamic	2525.69	Sierrita
		5/2/15		585.70	Dynamic	2524.74	Sierrita
		7/6/15		587.75	Dynamic	2522.69	Sierrita
		8/18/15		588.94	Dynamic	2521.50	Sierrita
		10/7/15		590.60	Dynamic	2519.84	Sierrita
		11/4/15		588.95	Dynamic	2521.49	Sierrita
		12/9/15		592.80	Dynamic	2517.64	Sierrita
		1/12/16		593.30	Dynamic	2517.14	Sierrita
		2/11/16		594.60	Dynamic	2515.84	BW
		3/4/16		594.85	Dynamic	2515.59	BW
		4/8/16		596.10	Dynamic	2514.34	Sierrita
		10/5/16		600.45	Dynamic	2509.99	BW
FICO C-4	2836.19	6/19/15		262.70	Dynamic	2573.49	Sierrita
		11/24/15		UTM		NA	Sierrita
		4/28/16		235.80	Static	2600.39	Sierrita
		12/8/16		251.14	Static	2585.05	Sierrita
FICO E-6	2841.16	6/19/15		259.31	Dynamic	2581.85	Sierrita
		11/24/15		232.65	Static	2608.51	Sierrita
		4/28/16		260.00	Dynamic	2581.16	Sierrita
		12/8/16		255.31	Dynamic	2585.85	Sierrita
FICO E-9	2888	12/29/16		174.60	Static	2666.56	Sierrita
FICO S-25	2748	12/29/16		145.92	Static	2695.24	Sierrita
FICO S-25A	ND	12/29/16		166.35	Static	2674.81	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
GV-01-GVDWID	2942.35	1/9/07		221.00		2721.35	Sierrita
		4/10/07		218.11		2724.24	Sierrita
		8/6/07		231.00		2711.35	Sierrita
		1/7/08		221.50		2720.85	Sierrita
		4/16/08		225.50		2716.85	Sierrita
		7/7/08		231.00		2711.35	Sierrita
		11/25/08		228.00		2714.35	Sierrita
		3/3/09		220.50		2721.85	Sierrita
		7/29/09		201.9		2740.45	Sierrita
		11/4/09		232.80		2709.55	Sierrita
		1/27/10		224.80		2717.55	Sierrita
		4/1/10		227.12		2715.23	Sierrita
		10/14/10		233.00		2709.35	Sierrita
		3/18/11		224.00		2718.35	Sierrita
		4/28/11		231.00		2711.35	Sierrita
		12/7/11		233.20		2709.15	Sierrita
		3/14/12		234.25		2708.10	Sierrita
		6/7/12		242.28		2700.07	Sierrita
		8/29/12		231.00		2711.35	Sierrita
		11/15/12		239.00		2703.35	Sierrita
		1/29/13		238.61		2703.74	Sierrita
		5/16/13		254.09		2688.26	Sierrita
		7/11/13		248.19		2694.16	Sierrita
		7/21/14		229.00		2713.35	Sierrita
		10/14/14		257.60	Static	2684.75	Sierrita
		1/12/15		255.60	Static <sup>1</sup>	2686.75	Sierrita
		7/22/15		261.03	Static <sup>1</sup>	2681.32	Sierrita
		10/21/15		354.60	Dynamic	2587.75	Sierrita
		1/19/16		257.60	Static <sup>1</sup>	2684.75	Sierrita
		4/20/16		260.50	Static <sup>1</sup>	2681.85	Sierrita
		8/24/16		352.10	Dynamic	2590.25	Sierrita
		11/3/16		261.00	Static <sup>1</sup>	2681.35	Sierrita
GV-01-PCWW	2789.65	4/2/15		176.50	Static	2613.15	Sierrita
		10/20/15		176.70	Static	2612.95	Sierrita
		4/21/16		176.60	Static	2613.05	Sierrita
		10/20/16		176.40	Static	2613.25	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
GV-02-GVDWID	2930.47	1/9/07		185.30		2745.17	Sierrita
		4/10/07		187.10		2743.37	Sierrita
		7/11/07		200.45		2730.02	Sierrita
		10/3/07		199.33		2731.14	Sierrita
		1/7/08		190.62		2739.85	Sierrita
		4/16/08		194.95		2735.52	Sierrita
		7/7/08		201.05		2729.42	Sierrita
		11/25/08		199.58		2730.89	Sierrita
		2/4/09		192.88		2737.59	Sierrita
		7/29/09		231.9		2698.57	Sierrita
		11/4/09		203.50		2726.97	Sierrita
		1/27/10		195.15		2735.32	Sierrita
		4/1/10		197.10		2733.37	Sierrita
		7/28/10		202.76		2727.71	Sierrita
		10/14/10		204.55		2725.92	Sierrita
		1/20/11		198.88		2731.59	Sierrita
		4/28/11		204.77		2725.70	Sierrita
		7/20/11		206.14		2724.33	Sierrita
		12/7/11		204.43		2726.04	Sierrita
		3/14/12		204.35		2726.12	Sierrita
		6/7/12		211.76		2718.71	Sierrita
		8/29/12		219.00		2711.47	Sierrita
		11/15/12		214.51		2715.96	Sierrita
		1/29/13		209.49		2720.98	Sierrita
		5/16/13		219.48		2710.99	Sierrita
		7/11/13		220.75		2709.72	Sierrita
		1/10/14		221.29		2709.18	Sierrita
		10/14/14		229.70	Static	2700.77	Sierrita
		1/12/15		221.90	Static <sup>1</sup>	2708.57	Sierrita
		4/15/15		223.10	Static <sup>1</sup>	2707.37	Sierrita
		10/21/15		229.80	Static <sup>1</sup>	2700.67	Sierrita
		1/19/16		UTM		NA	Sierrita
		4/20/16		233.00	Static <sup>1</sup>	2697.47	Sierrita
		8/24/16		246.00	Static	2684.47	Sierrita
		11/3/16		254.00	Static	2676.47	Sierrita
GV-02-PCWW	2775.42	4/2/15		164.30	Static	2611.12	Sierrita
		10/20/15		164.20	Static	2611.22	Sierrita
		4/21/16		164.10	Static	2611.32	Sierrita
		10/20/16		164.10	Static	2611.32	Sierrita
GV-SI-GVDWID	3042.65	01/09/07		237.50		2805.15	Sierrita
		04/10/07		238.55		2804.10	Sierrita
		08/06/07		240.31		2802.34	Sierrita
		10/03/07		244.40		2798.25	Sierrita
		01/07/08		237.75		2804.90	Sierrita
		04/16/08		247.55		2795.10	Sierrita
		8/14/08		245.50		2797.15	Sierrita
		11/6/08		246.00		2796.65	Sierrita
		2/4/09		247.46		2795.19	Sierrita
		4/1/10		247.60		2795.05	Sierrita
		4/28/11		257.00		2785.65	Sierrita
		6/20/12		257.92		2784.73	Sierrita
		5/16/13		267.53		2775.12	Sierrita
		4/15/15		274.38		2768.27	Sierrita
		10/21/15		269.46		2773.19	Sierrita
		4/20/16		277.00		2765.65	Sierrita
		11/3/16		267.00		2775.65	Sierrita
HAVEN GOLF	ND	5/29/12		220.00		NA	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
I-10	3210.58	1/15/07		655.89		2554.69	Sierrita
		4/16/07		630.00		2580.58	Sierrita
		7/10/07		656.00		2554.58	Sierrita
		1/8/08		659.58		2551.00	Sierrita
		4/14/08		658.80		2551.78	Sierrita
		7/21/08		657.10		2553.48	Sierrita
		10/24/08		660.82		2549.76	Sierrita
		5/12/09		660.80		2549.78	Sierrita
		6/15/12		662.39		2548.19	Sierrita
		6/11/13		661.26		2549.32	Sierrita
		4/30/14		668.91	Dynamic	2541.67	Sierrita
		9/11/14		670.20		2540.38	Sierrita
		5/14/15		687.57	Static	2523.01	Sierrita
		11/18/15		695.41	Static	2515.17	Sierrita
		6/23/16		699.03	Static	2511.55	Sierrita
		12/8/16		702.30	Static	2508.28	Sierrita
IW-1	3144.69	1/14/06	379.80		Dynamic	BW, 2015a	
		2/20/06	380.29		Dynamic	BW, 2015a	
		3/14/06	379.27		Dynamic	BW, 2015a	
		4/15/06	379.95		Dynamic	BW, 2015a	
		5/14/06	383.00		Dynamic	BW, 2015a	
		6/10/06	383.60		Dynamic	BW, 2015a	
		7/16/06	382.53		Dynamic	BW, 2015a	
		8/13/06	383.30		Dynamic	BW, 2015a	
		9/16/06	382.20		Dynamic	BW, 2015a	
		10/21/06	381.32		Dynamic	BW, 2015a	
		11/11/06	383.80		Dynamic	BW, 2015a	
		12/16/06		360.95		2783.74	Sierrita
		12/16/06	360.95		Static	BW, 2015a	
		1/25/07	385.10		Dynamic	BW, 2015a	
		2/24/07		386.70		2757.99	Sierrita
		2/24/07	386.70		Dynamic	BW, 2015a	
		3/17/07	388.20		Dynamic	BW, 2015a	
		4/24/07	390.55		Dynamic	BW, 2015a	
		5/30/07	391.70		Dynamic	BW, 2015a	
		6/26/07	394.05		Dynamic	BW, 2015a	
		8/29/07	402.50		Dynamic	BW, 2015a	
		10/19/07		399.90		2744.79	Sierrita
		11/29/07	402.45		Dynamic	BW, 2015a	
		1/29/08		400.45		2744.24	Sierrita
		1/29/08	400.45		Dynamic	BW, 2015a	
		2/29/08	400.25		Dynamic	BW, 2015a	
		3/31/08	398.00		Dynamic	BW, 2015a	
		5/7/08		398.90		2745.79	Sierrita
		5/27/08	402.00		Dynamic	BW, 2015a	
		6/30/08	405.35		Dynamic	BW, 2015a	
		7/29/08		405.85		2738.84	Sierrita
		7/29/08	405.85		Dynamic	BW, 2015a	
		8/29/08	404.00		Dynamic	BW, 2015a	
		9/29/08	404.44		Dynamic	BW, 2015a	
		10/24/08		404.80		2739.89	Sierrita
		10/24/08	404.08		Dynamic	BW, 2015a	
		1/21/09		400		2744.69	Sierrita
		3/10/09	370.50		Static	BW, 2015a	
		5/13/09		370.50		2774.19	Sierrita
		5/13/09	397.50		Dynamic	BW, 2015a	
		12/15/09	396.40		Dynamic	BW, 2015a	
		4/12/10		394.45		2750.24	Sierrita
		3/9/11	370.98		Static	BW, 2015a	
		4/15/11	370.92		Static	BW, 2015a	

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-1	3144.69	5/11/11		392.80		2751.89	Sierrita
		5/11/11	392.90		Dynamic		BW, 2015a
		6/27/11	391.25		Dynamic		BW, 2015a
		7/12/11	372.75		Static		BW, 2015a
		8/23/11	369.54		Static		BW, 2015a
		12/29/11	439.80		Dynamic		BW, 2015a
		1/26/12	440.54		Dynamic		BW, 2015a
		2/28/12	369.94		Static		BW, 2015a
		3/30/12	438.73		Dynamic		BW, 2015a
		5/21/12		438.48		2706.21	Sierrita
		5/21/12	438.48		Dynamic		BW, 2015a
		6/27/12	380.00		Static		BW, 2015a
		7/31/12	431.11		Dynamic		BW, 2015a
		8/21/12	379.84		Static		BW, 2015a
		9/28/12	442.81		Dynamic		BW, 2015a
		10/25/12	382.39		Static		BW, 2015a
		11/28/12	442.71		Dynamic		BW, 2015a
		4/15/13		439.81	Dynamic	2704.88	Sierrita
		6/24/13	384.67		Static		BW, 2015a
		7/31/13	443.70		Dynamic		BW, 2015a
		8/1/13	384.56		Static		BW, 2015a
		9/30/13	444.16		Dynamic		BW, 2015a
		10/31/13	391.01		Static		BW, 2015a
		11/28/13	472.29		Dynamic		BW, 2015a
		12/9/13	391.38		Static		BW, 2015a
		1/28/14		461.65	Dynamic	2683.04	Sierrita
		1/28/14	461.65		Dynamic		BW, 2015a
		2/24/14		392.49	Dynamic	2752.20	Sierrita
		2/24/14	392.49		Static		BW, 2015a
		3/25/14		393.89	Dynamic	2750.80	Sierrita
		3/31/14	393.89		Static		BW, 2015a
		4/25/14		Obstructed		NA	Sierrita
		5/30/14		Obstructed		NA	Sierrita
		6/5/14		445.60	Dynamic	2699.09	Sierrita
		6/5/14	445.60		Dynamic		BW, 2015a
		7/6/14		387.90	Dynamic	2756.79	Sierrita
		7/6/14	387.19		Static		BW, 2015a
		7/31/14		441.90	Dynamic	2702.79	Sierrita
		7/31/14	441.90		Dynamic		BW, 2015a
		8/27/14		383.00	Dynamic	2761.69	Sierrita
		8/27/14	383.00		Static		BW, 2015a
		10/1/14		445.50	Dynamic	2699.19	Sierrita
		10/1/14	444.79		Dynamic		BW, 2015a
		11/4/14		443.90	Dynamic	2700.79	Sierrita
		11/4/14	443.19		Dynamic		BW, 2015a
		12/2/14		446.60	Dynamic	2698.09	Sierrita
		12/2/14	445.89		Dynamic		BW, 2015a
		4/9/15		443.90	Dynamic	2700.79	Sierrita
		5/2/15		382.95	Static	2761.74	Sierrita
		6/11/15		442.50	Dynamic	2702.19	Sierrita
		7/8/15		442.15	Dynamic	2702.54	Sierrita
		10/7/15		444.25	Dynamic	2700.44	Sierrita
		11/4/15		444.15	Dynamic	2700.54	Sierrita
		12/9/15		391.10	Static	2753.59	Sierrita
		1/12/16		449.05	Dynamic	2695.64	Sierrita
		2/11/16		385.30	Static	2759.39	BW
		3/4/16		440.20	Dynamic	2704.49	BW
		4/29/16		441.70	Dynamic	2702.99	Sierrita
		10/5/16		437.30	Dynamic	2707.39	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-2	3098.29	12/16/06		404.30		2693.99	Sierrita
		2/24/07		406.80		2691.49	Sierrita
		5/4/07		344.00		2754.29	Sierrita
		7/31/07		381.00		2717.29	Sierrita
IW-2A	3112.28	2/5/08	351.52		Static		BW, 2015a
		2/5/08	392.32		Dynamic		BW, 2015a
		3/31/08	412.80		Dynamic		BW, 2015a
		4/25/08		412.90		2699.38	Sierrita
		4/30/08	412.90		Dynamic		BW, 2015a
		3/10/09	358.20		Static		BW, 2015a
		5/13/09		358.80		2753.48	Sierrita
		4/12/10		410.18		2702.10	Sierrita
		3/9/11	396.82		Dynamic		BW, 2015a
		4/15/11	358.88		Static		BW, 2015a
		5/11/11		394.91		2717.37	Sierrita
		5/11/11	394.91		Dynamic		BW, 2015a
		6/27/11	395.50		Dynamic		BW, 2015a
		7/12/11	361.00		Static		BW, 2015a
		8/23/11	398.38		Dynamic		BW, 2015a
		12/29/11	404.13		Dynamic		BW, 2015a
		1/26/12	404.22		Dynamic		BW, 2015a
		2/28/12	365.63		Static		BW, 2015a
		5/21/12		404.32		2707.96	Sierrita
		5/21/12	404.32		Dynamic		BW, 2015a
		8/21/12	369.52		Static		BW, 2015a
		9/28/12	417.08		Dynamic		BW, 2015a
		10/25/12	374.18		Static		BW, 2015a
		11/28/12	423.40		Dynamic		BW, 2015a
		4/15/13		370.91	Dynamic	2741.37	Sierrita
		6/24/13	376.98		Static		BW, 2015a
		7/31/13	424.16		Dynamic		BW, 2015a
		8/1/13	376.86		Static		BW, 2015a
		9/30/13	424.21		Dynamic		BW, 2015a
		10/31/13	383.28		Static		BW, 2015a
		11/28/13	425.78		Dynamic		BW, 2015a
		12/9/13	382.12		Static		BW, 2015a
		1/28/14		439.64	Dynamic	2672.64	Sierrita
		1/28/14	439.64		Dynamic		BW, 2015a
		2/24/14		384.22	Dynamic	2728.06	Sierrita
		2/24/14	384.22		Static		BW, 2015a
		3/25/14		440.29	Dynamic	2671.99	Sierrita
		3/31/14	440.29		Dynamic		BW, 2015a
		4/25/14		384.28	Dynamic	2728.00	Sierrita
		5/30/14		440.37	Dynamic	2671.91	Sierrita
		5/30/14	440.37		Dynamic		BW, 2015a
		6/9/14		429.35	Dynamic	2682.93	Sierrita
		6/9/14	429.35		Dynamic		BW, 2015a
		7/6/14		379.90	Dynamic	2732.38	Sierrita
		7/6/14	379.44		Static		BW, 2015a
		7/31/14		423.50	Dynamic	2688.78	Sierrita
		7/31/14	423.50		Dynamic		BW, 2015a
		8/27/14		377.70	Dynamic	2734.58	Sierrita
		8/27/14	377.70		Static		BW, 2015a
		10/1/14		377.60	Dynamic	2734.68	Sierrita
		10/1/14	377.14		Static		BW, 2015a
		11/4/14		420.10	Dynamic	2692.18	Sierrita
		11/4/14	419.64		Dynamic		BW, 2015a
		12/2/14		422.20	Dynamic	2690.08	Sierrita
		4/9/15		412.00	Dynamic	2700.28	Sierrita
		5/2/15		413.80	Dynamic	2698.48	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-2A	3112.28	6/11/15		410.00	Dynamic	2702.28	Sierrita
		7/8/15		412.50	Dynamic	2699.78	Sierrita
		10/7/15		411.90	Dynamic	2700.38	Sierrita
		11/4/15		408.90	Dynamic	2703.38	Sierrita
		12/9/15		380.90	Static	2731.38	Sierrita
		1/12/16		408.50	Dynamic	2703.78	Sierrita
		2/11/16		375.30	Static	2736.98	BW
		3/4/16		414.30	Dynamic	2697.98	BW
		4/29/16		397.20	Dynamic	2715.08	Sierrita
		10/5/16		424.30	Dynamic	2687.98	BW
IW-3A	3121.45	1/14/06	410.83		Dynamic		BW, 2015a
		2/20/06	408.25		Dynamic		BW, 2015a
		3/14/06	410.00		Dynamic		BW, 2015a
		4/15/06	401.60		Dynamic		BW, 2015a
		5/14/06	391.75		Dynamic		BW, 2015a
		6/10/06	385.50		Dynamic		BW, 2015a
		7/16/06	379.42		Dynamic		BW, 2015a
		8/13/06	369.11		Dynamic		BW, 2015a
		10/21/06	432.25		Dynamic		BW, 2015a
		11/11/06	431.80		Dynamic		BW, 2015a
		12/5/06		431.80		2689.65	Sierrita
		1/25/07	431.00		Dynamic		BW, 2015a
		2/24/07	440.00		Dynamic		BW, 2015a
		3/17/07	440.60		Dynamic		BW, 2015a
		4/24/07	439.30		Dynamic		BW, 2015a
		5/30/07	436.22		Dynamic		BW, 2015a
		6/26/07	436.00		Dynamic		BW, 2015a
		7/31/07		381.50		2739.95	Sierrita
		8/29/07	430.20		Dynamic		BW, 2015a
		10/19/07		427.80		2693.65	Sierrita
		11/29/07	427.40		Dynamic		BW, 2015a
		1/29/08		425.60		2695.85	Sierrita
		1/29/08	425.60		Dynamic		BW, 2015a
		2/29/08	423.80		Dynamic		BW, 2015a
		4/25/08		421.30		2700.15	Sierrita
		4/30/08	421.30		Dynamic		BW, 2015a
		6/30/08	425.20		Dynamic		BW, 2015a
		7/29/08		420.90		2700.55	Sierrita
		7/29/08	420.90		Dynamic		BW, 2015a
		8/29/08	413.90		Dynamic		BW, 2015a
		9/29/08	414.22		Dynamic		BW, 2015a
		10/24/08		141.50		2979.95	Sierrita
		10/24/08	414.50		Dynamic		BW, 2015a
		5/13/09	413.30		Dynamic		BW, 2015a
		12/15/09	410.00		Dynamic		BW, 2015a
		4/12/10		420.23		2701.22	Sierrita
		3/9/11	402.95		Dynamic		BW, 2015a
		4/15/11	378.58		Static		BW, 2015a
		5/11/11		413.40		2708.05	Sierrita
		5/11/11	413.40		Dynamic		BW, 2015a
		6/27/11	415.70		Dynamic		BW, 2015a
		7/12/11	377.59		Static		BW, 2015a
		8/23/11	416.08		Dynamic		BW, 2015a
		12/29/11	419.50		Dynamic		BW, 2015a
		1/26/12	419.34		Dynamic		BW, 2015a
		2/28/12	381.70		Static		BW, 2015a
		3/30/12	409.57		Dynamic		BW, 2015a
		6/20/12		401.37		2720.08	Sierrita
		6/27/12	383.95		Static		BW, 2015a
		7/31/12	429.81		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-3A	3121.45	8/21/12	388.48		Static		BW, 2015a
		9/28/12	449.48		Dynamic		BW, 2015a
		10/25/12	394.88		Static		BW, 2015a
		11/28/12	450.08		Dynamic		BW, 2015a
		5/14/13		449.56	Dynamic	2671.89	Sierrita
		6/24/13	398.14		Static		BW, 2015a
		7/31/13	451.92		Dynamic		BW, 2015a
		8/1/13	397.74		Static		BW, 2015a
		9/30/13	452.32		Dynamic		BW, 2015a
		10/30/13	410.79		Static		BW, 2015a
		11/28/13	453.60		Dynamic		BW, 2015a
		12/9/13	409.38		Static		BW, 2015a
		1/28/14		455.66	Dynamic	2665.79	Sierrita
		1/28/14	455.66		Dynamic		BW, 2015a
		2/24/14		408.59	Static	2712.86	Sierrita
		2/24/14	408.59		Static		BW, 2015a
		3/25/14		454.96	Dynamic	2666.49	Sierrita
		3/31/14	454.96		Dynamic		BW, 2015a
		4/25/14		403.99	Dynamic	2717.46	Sierrita
		5/30/14		454.72	Dynamic	2666.73	Sierrita
		5/30/14	454.72		Dynamic		BW, 2015a
		6/9/14		446.10	Dynamic	2675.35	Sierrita
		6/9/14	446.10		Dynamic		BW, 2015a
		7/6/14		398.60	Static	2722.85	Sierrita
		7/6/14	397.89		Static		BW, 2015a
		7/31/14		441.40	Dynamic	2680.05	Sierrita
		7/31/14	441.40		Dynamic		BW, 2015a
		8/27/14		394.90	Static	2726.55	Sierrita
		8/27/14	394.90		Static		BW, 2015a
		10/1/14		451.05	Dynamic	2670.40	Sierrita
		10/1/14	450.34		Dynamic		BW, 2015a
		11/4/14		442.75	Dynamic	2678.70	Sierrita
		11/4/14	442.04		Dynamic		BW, 2015a
		12/2/14		446.10	Dynamic	2675.35	Sierrita
		4/9/15		440.60	Dynamic	2680.85	Sierrita
		5/2/15		444.80	Dynamic	2676.65	Sierrita
		6/11/15		441.00	Dynamic	2680.45	Sierrita
		7/8/15		444.20	Dynamic	2677.25	Sierrita
		10/7/15		444.65	Dynamic	2676.80	Sierrita
		11/4/15		442.65	Dynamic	2678.80	Sierrita
		12/9/15		402.55	Static	2718.90	Sierrita
		1/12/16		435.90	Dynamic	2685.55	Sierrita
		2/11/16		387.50	Static	2733.95	BW
		3/4/16		381.95	Static	2739.50	BW
		4/29/16		372.45	Static	2749.00	Sierrita
		10/5/16		367.25	Static	2754.20	BW
IW-4	3137.06	1/14/06	495.10		Dynamic		BW, 2015a
		2/20/06	419.27		Dynamic		BW, 2015a
		3/14/06	385.75		Static		BW, 2015a
		4/15/06	424.75		Dynamic		BW, 2015a
		5/14/06	419.70		Dynamic		BW, 2015a
		6/10/06	420.36		Dynamic		BW, 2015a
		7/16/06	422.05		Dynamic		BW, 2015a
		8/13/06	420.30		Dynamic		BW, 2015a
		9/16/06	417.30		Dynamic		BW, 2015a
		10/21/06	415.75		Dynamic		BW, 2015a
		11/10/06	417.25		Dynamic		BW, 2015a
		12/16/06	416.20		Dynamic		BW, 2015a
		1/17/07	379.65		Static		BW, 2015a
		2/24/07		417.70		2719.36	Sierrita

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-4	3137.06	2/24/07	417.70		Dynamic		BW, 2015a
		3/19/07	417.80		Dynamic		BW, 2015a
		4/24/07	422.50		Dynamic		BW, 2015a
		5/29/07	423.55		Dynamic		BW, 2015a
		6/26/07	424.30		Dynamic		BW, 2015a
		7/21/07		425.30		2711.76	Sierrita
		7/21/07	425.30		Dynamic		BW, 2015a
		8/29/07	427.50		Dynamic		BW, 2015a
		10/19/07		428.90		2708.16	Sierrita
		11/28/07	434.05		Dynamic		BW, 2015a
		1/19/08		433.70		2703.36	Sierrita
		1/29/08	433.70		Dynamic		BW, 2015a
		2/29/08	437.50		Dynamic		BW, 2015a
		4/21/08		441.90		2695.16	Sierrita
		4/30/08	441.90		Dynamic		BW, 2015a
		7/29/08		409.22		2727.84	Sierrita
		7/29/08	409.22		Dynamic		BW, 2015a
		8/29/08	448.50		Dynamic		BW, 2015a
		9/29/08	449.75		Dynamic		BW, 2015a
		10/24/08		452.10		2684.96	Sierrita
		10/24/08	452.10		Dynamic		BW, 2015a
		1/21/09		453		2684.06	Sierrita
		3/10/09	383.20		Static		BW, 2015a
		5/13/09		383.20		2753.86	Sierrita
		5/13/09	455.50		Dynamic		BW, 2015a
		10/21/09	421.50				BW, 2015a
		12/15/09	419.00		Dynamic		BW, 2015a
		4/12/10		420.70		2716.36	Sierrita
		3/10/11	426.33		Dynamic		BW, 2015a
		4/15/11	377.11		Static		BW, 2015a
		5/11/11		414.25		2722.81	Sierrita
		5/11/11	414.25		Dynamic		BW, 2015a
		6/27/11	409.23		Dynamic		BW, 2015a
		7/12/11	379.00		Static		BW, 2015a
		8/23/11	406.05		Dynamic		BW, 2015a
		12/29/11	407.19		Dynamic		BW, 2015a
		1/26/12	409.42		Dynamic		BW, 2015a
		2/28/12	381.88		Static		BW, 2015a
		3/30/12	408.98		Dynamic		BW, 2015a
		5/21/12		402.19		2734.87	Sierrita
		5/21/12	402.19		Dynamic		BW, 2015a
		6/27/12	386.94		Static		BW, 2015a
		8/21/12	388.60		Static		BW, 2015a
		9/28/12	403.20		Dynamic		BW, 2015a
		10/25/12	388.42		Static		BW, 2015a
		11/28/12	408.98		Dynamic		BW, 2015a
		4/15/13		402.34	Dynamic	2734.72	Sierrita
		6/24/13	390.86		Static		BW, 2015a
		7/31/13	411.10		Dynamic		BW, 2015a
		8/1/13	390.61		Static		BW, 2015a
		9/30/13	410.90		Dynamic		BW, 2015a
		10/30/13	394.62		Static		BW, 2015a
		11/28/13	414.08		Dynamic		BW, 2015a
		12/9/13	393.74		Static		BW, 2015a
		1/28/14		410.69	Dynamic	2726.37	Sierrita
		1/28/14	410.69		Dynamic		BW, 2015a
		2/24/14		393.32	Static	2743.74	Sierrita
		2/24/14	393.32		Static		BW, 2015a
		3/25/14		410.27	Dynamic	2726.79	Sierrita
		3/31/14	410.27		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-4	3137.06	4/25/14		390.98	Dynamic	2746.08	Sierrita
		5/30/14		410.30	Dynamic	2726.76	Sierrita
		5/30/14	410.30		Dynamic		BW, 2015a
		6/9/14		408.10	Dynamic	2728.96	Sierrita
		6/9/14	408.10		Dynamic		BW, 2015a
		7/6/14		388.15	Static	2748.91	Sierrita
		7/6/14	387.44		Static		BW, 2015a
		7/31/14		427.20	Dynamic	2709.86	Sierrita
		7/31/14	427.20		Dynamic		BW, 2015a
		8/27/14		388.20	Static	2748.86	Sierrita
		8/27/14	388.20		Static		BW, 2015a
		10/1/14		Insufficient Flow		NA	Sierrita
		11/4/14		426.05	Dynamic	2711.01	Sierrita
		11/4/14	425.34		Dynamic		BW, 2015a
		12/2/14		424.10	Dynamic	2712.96	Sierrita
		4/9/15		385.05	Static	2752.01	Sierrita
		5/2/15		388.90	Static	2748.16	Sierrita
		6/11/15		422.10	Dynamic	2714.96	Sierrita
		7/8/15		390.88	Static	2746.18	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		392.20	Static	2744.86	Sierrita
		12/9/15		391.00	Static	2746.06	Sierrita
		1/12/16		430.30	Dynamic	2706.76	Sierrita
		2/11/16		385.90	Static	2751.16	BW
		3/4/16		419.10	Dynamic	2717.96	BW
		4/29/16		380.50	Static	2756.56	Sierrita
		10/5/16		377.00	Static	2760.06	BW
IW-5	3137.65	5/13/09		375.90		2761.75	Sierrita
		4/12/10		430.60		2707.05	Sierrita
IW-5A	3091.47	8/18/10	413.90		Dynamic		BW, 2015a
		8/18/10	377.50		Static		BW, 2015a
		4/15/11	377.25		Static		BW, 2015a
		6/27/11	416.52		Dynamic		BW, 2015a
		7/12/11	379.31		Static		BW, 2015a
		8/23/11	383.44		Dynamic		BW, 2015a
		12/29/11	421.55		Dynamic		BW, 2015a
		1/26/12	421.04		Dynamic		BW, 2015a
		2/28/12	380.65		Static		BW, 2015a
		3/29/12	426.14		Dynamic		BW, 2015a
		5/22/12		468.65		2622.82	Sierrita
		5/22/12	468.65		Dynamic		BW, 2015a
		7/31/12	452.38		Dynamic		BW, 2015a
		8/21/12	388.09		Static		BW, 2015a
		10/25/12	389.56		Static		BW, 2015a
		11/27/12	512.20		Dynamic		BW, 2015a
		4/15/13		514.20	Dynamic	2577.27	Sierrita
		6/24/13	388.89		Static		BW, 2015a
		7/31/13	514.18		Dynamic		BW, 2015a
		8/1/13	388.64		Static		BW, 2015a
		9/30/13	514.02		Dynamic		BW, 2015a
		10/30/13	392.27		Static		BW, 2015a
		11/28/13	516.11		Dynamic		BW, 2015a
		12/9/13	390.72		Static		BW, 2015a
		1/28/14	531.51		Dynamic		BW, 2015a
		1/29/14		531.51	Dynamic	2559.96	Sierrita
		2/24/14		390.02	Static	2701.45	Sierrita
		2/24/14	390.02		Static		BW, 2015a
		3/24/14		Obstructed			Sierrita
		4/25/14		389.58	Dynamic	2701.89	Sierrita
		5/30/14		511.90	Dynamic	2579.57	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-5A	3091.47	5/30/14	511.90		Dynamic		BW, 2015a
		6/9/14		621.00	Dynamic	2470.47	Sierrita
		6/9/14	621.00		Dynamic		BW, 2015a
		7/6/14		387.80	Static	2703.67	Sierrita
		7/6/14	387.30		Static		BW, 2015a
		7/31/14		387.30	Static	2704.17	Sierrita
		7/31/14	387.30		Static		BW, 2015a
		8/27/14		386.30	Static	2705.17	Sierrita
		8/27/14	386.30		Static		BW, 2015a
		10/1/14		386.75	Static	2704.72	Sierrita
		10/1/14	386.25		Static		BW, 2015a
		11/4/14		389.10	Static	2702.37	Sierrita
		11/4/14	388.60		Static		BW, 2015a
		12/2/14		389.80	Static	2701.67	Sierrita
		4/9/15		388.75	Static	2702.72	Sierrita
		5/2/15		390.00	Static	2701.47	Sierrita
		6/11/15		390.05	Static	2701.42	Sierrita
		7/8/15		391.80	Static	2699.67	Sierrita
		10/7/15		392.05	Static	2699.42	Sierrita
		11/4/15		391.20	Static	2700.27	Sierrita
		12/9/15		392.80	Static	2698.67	Sierrita
		1/12/16		392.65	Static	2698.82	Sierrita
		2/11/16		389.90	Static	2701.57	BW
		3/4/16		388.12	Static	2703.35	BW
		4/29/16		386.30	Static	2705.17	Sierrita
		10/5/16		381.03	Static	2710.44	BW
IW-6A	3132.26	1/14/06	415.90		Dynamic		BW, 2015a
		2/20/06	409.20		Dynamic		BW, 2015a
		3/14/06	424.68		Dynamic		BW, 2015a
		4/15/06	422.90		Dynamic		BW, 2015a
		5/14/06	410.09		Dynamic		BW, 2015a
		6/10/06	407.04		Dynamic		BW, 2015a
		7/16/06	412.00		Dynamic		BW, 2015a
		8/13/06	412.98		Dynamic		BW, 2015a
		9/16/06	413.80		Dynamic		BW, 2015a
		10/20/06	438.70		Dynamic		BW, 2015a
		11/11/06	425.00		Dynamic		BW, 2015a
				425.00		2707.26	Sierrita
		12/16/06	433.30		Dynamic		BW, 2015a
		1/29/07	432.60		Dynamic		BW, 2015a
		2/24/07		433.60		2698.66	Sierrita
		2/24/07	433.60		Dynamic		BW, 2015a
		3/17/07	432.90		Dynamic		BW, 2015a
		4/24/07	430.33		Dynamic		BW, 2015a
		5/29/07	433.00		Dynamic		BW, 2015a
		6/22/07	431.75		Dynamic		BW, 2015a
		7/31/07		432.28		2699.98	Sierrita
		8/29/07	433.90		Dynamic		BW, 2015a
		10/17/07		433.35		2698.91	Sierrita
		11/29/07	421.90		Dynamic		BW, 2015a
		1/29/08		416.90		2715.36	Sierrita
		1/29/08	416.90		Dynamic		BW, 2015a
		2/29/08	415.85		Dynamic		BW, 2015a
		4/22/08		415.45		2716.81	Sierrita
		4/30/08	415.45		Dynamic		BW, 2015a
		7/29/08		416.82		2715.44	Sierrita
		7/29/08	416.82		Dynamic		BW, 2015a
		8/29/08	418.65		Dynamic		BW, 2015a
		9/29/08	419.00		Dynamic		BW, 2015a
		10/24/08		419.33		2712.93	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-6A	3132.26	10/24/08	419.33		Dynamic		BW, 2015a
		1/29/09		418		2714.26	Sierrita
		3/10/09	387.30		Static		BW, 2015a
		5/13/09		387.30		2744.96	Sierrita
		5/13/09	417.00		Dynamic		BW, 2015a
		12/15/09	415.20		Dynamic		BW, 2015a
		4/12/10		384.70		2747.56	Sierrita
		3/9/11	408.45		Dynamic		BW, 2015a
		4/15/11	383.52		Static		BW, 2015a
		5/11/11		410.61		2721.65	Sierrita
		5/11/11	410.61		Dynamic		BW, 2015a
		6/29/11	411.24		Dynamic		BW, 2015a
		7/12/11	384.23		Static		BW, 2015a
		8/23/11	411.45		Dynamic		BW, 2015a
		12/29/11	388.75		Static		BW, 2015a
		1/26/12	413.41		Dynamic		BW, 2015a
				419.75		2712.51	Sierrita
		5/22/12	419.75		Dynamic		BW, 2015a
		7/31/12	429.91		Dynamic		BW, 2015a
		9/26/12	435.34		Dynamic		BW, 2015a
		10/25/12	400.84		Static		BW, 2015a
		11/27/12	436.72		Dynamic		BW, 2015a
		4/15/13		433.21	Dynamic	2699.05	Sierrita
		6/24/13	404.24		Static		BW, 2015a
		7/31/13	439.11		Dynamic		BW, 2015a
		8/1/13	404.22		Static		BW, 2015a
		9/30/13	439.14		Dynamic		BW, 2015a
		10/29/13	406.02		Static		BW, 2015a
		11/28/13	440.29		Dynamic		BW, 2015a
		12/9/13	405.19		Static		BW, 2015a
		1/28/14		435.59	Dynamic	2696.67	Sierrita
		1/28/14	435.64		Dynamic		BW, 2015a
		2/24/14		407.02	Static	2725.24	Sierrita
		2/24/14	407.02		Static		BW, 2015a
		3/24/14		432.16	Dynamic	2700.10	Sierrita
		3/31/14	432.16		Dynamic		BW, 2015a
		4/25/14		408.39	Dynamic	2723.87	Sierrita
		5/30/14		431.90	Dynamic	2700.36	Sierrita
		5/30/14	431.90		Dynamic		BW, 2015a
		6/9/14		435.40	Dynamic	2696.86	Sierrita
		6/9/14	435.40		Dynamic		BW, 2015a
		7/7/14		435.40	Dynamic	2696.86	Sierrita
		7/7/14	434.98		Dynamic		BW, 2015a
		7/31/14		438.80	Dynamic	2693.46	Sierrita
		7/31/14	438.80		Dynamic		BW, 2015a
		8/27/14		403.40	Static	2728.86	Sierrita
		8/27/14	403.40		Static		BW, 2015a
		10/1/14		435.70	Dynamic	2696.56	Sierrita
		10/1/14	435.28		Dynamic		BW, 2015a
		11/4/14		436.00	Dynamic	2696.26	Sierrita
		11/4/14	435.58		Dynamic		BW, 2015a
		12/2/14		436.00	Dynamic	2696.26	Sierrita
		4/9/15		404.30	Static	2727.96	Sierrita
		5/2/15		403.80	Static	2728.46	Sierrita
		6/11/15		403.80	Static	2728.46	Sierrita
		7/18/15		407.30	Static	2724.96	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		410.60	Static	2721.66	Sierrita
		12/9/15		413.30	Static	2718.96	Sierrita
		1/12/16		413.80	Static	2718.46	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-6A	3132.26	2/11/16		410.60	Static	2721.66	BW
		3/4/16		410.10	Static	2722.16	BW
		4/29/16		409.55	Static	2722.71	Sierrita
		10/5/16		406.30	Static	2725.96	BW
IW-8	3122.19	1/14/06	462.10		Dynamic		BW, 2015a
		2/20/06	456.60		Dynamic		BW, 2015a
		3/14/06	461.30		Dynamic		BW, 2015a
		4/15/06	460.25		Dynamic		BW, 2015a
		5/14/06	460.75		Dynamic		BW, 2015a
		6/10/06	465.50		Dynamic		BW, 2015a
		10/19/06	359.29		Static		BW, 2015a
		10/19/06	386.40		Dynamic		BW, 2015a
		12/16/06	435.88		Dynamic		BW, 2015a
		1/19/07	428.30		Dynamic		BW, 2015a
		2/24/07		434.05		2688.14	Sierrita
		2/24/07	434.05		Dynamic		BW, 2015a
		3/17/07	437.37		Dynamic		BW, 2015a
		4/24/07	444.00		Dynamic		BW, 2015a
		5/30/07	440.60		Dynamic		BW, 2015a
		6/26/07	442.35		Dynamic		BW, 2015a
		7/31/07		438.75		2683.44	Sierrita
		8/29/07	439.00		Dynamic		BW, 2015a
		10/19/07		436.80		2685.39	Sierrita
		11/29/07	435.00		Dynamic		BW, 2015a
		1/29/08		437.25		2684.94	Sierrita
		1/29/08	437.25		Dynamic		BW, 2015a
		2/29/08	436.00		Dynamic		BW, 2015a
		3/31/08	455.00		Dynamic		BW, 2015a
		4/25/08		436.70		2685.49	Sierrita
		4/30/08	436.70		Dynamic		BW, 2015a
		7/29/08		437.00		2685.19	Sierrita
		7/29/08	437.00		Dynamic		BW, 2015a
		8/29/08	436.35		Dynamic		BW, 2015a
		9/29/08	436.50		Dynamic		BW, 2015a
		10/24/08		436.92		2685.27	Sierrita
		10/24/08	436.92		Dynamic		BW, 2015a
		1/21/09		439		2683.19	Sierrita
		3/10/09	377.80		Static		BW, 2015a
		5/13/09		377.80		2744.39	Sierrita
		5/13/09	438.00		Dynamic		BW, 2015a
		12/15/09	436.70		Dynamic		BW, 2015a
		4/12/10		438.36		2683.83	Sierrita
		3/10/11	435.58		Dynamic		BW, 2015a
		4/15/11	374.08		Static		BW, 2015a
		5/11/11		430.52		2691.67	Sierrita
		5/11/11	430.52		Dynamic		BW, 2015a
		6/27/11	432.55		Dynamic		BW, 2015a
		7/12/11	378.15		Static		BW, 2015a
		8/23/11	434.14		Dynamic		BW, 2015a
		12/29/11	435.30		Dynamic		BW, 2015a
		1/26/12	437.51		Dynamic		BW, 2015a
		2/28/12	381.39		Static		BW, 2015a
		3/30/12	437.32		Dynamic		BW, 2015a
		5/21/12		438.67		2683.52	Sierrita
		5/21/12	438.69		Dynamic		BW, 2015a
		6/27/12	386.50		Static		BW, 2015a
		7/31/12	441.33		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-8	3122.19	8/21/12	384.85		Static		BW, 2015a
		9/28/12	385.39		Static		BW, 2015a
		10/25/12	385.68		Static		BW, 2015a
		11/28/12	386.97		Static		BW, 2015a
		5/14/13		379.15	Dynamic	2743.04	Sierrita
		6/24/13	388.58		Static		BW, 2015a
		7/31/13	390.25		Static		BW, 2015a
		8/1/13	387.34		Static		BW, 2015a
		9/30/13	391.14		Static		BW, 2015a
		11/28/13	392.23		Static		BW, 2015a
		12/9/13	401.69		Static		BW, 2015a
		1/28/14		466.20	Dynamic	2655.99	Sierrita
		1/28/14	466.20		Dynamic		BW, 2015a
		2/24/14		400.57	Dynamic	2721.62	Sierrita
		2/24/14	400.57		Static		BW, 2015a
		3/25/14		392.79	Dynamic	2729.40	Sierrita
		3/31/14	392.79		Static		BW, 2015a
		4/25/14		Obstructed		NA	Sierrita
		5/30/14		Obstructed		NA	Sierrita
		6/9/14		Obstructed		NA	Sierrita
		7/6/14		391.10	Dynamic	2731.09	Sierrita
		7/6/14	390.60		Static		BW, 2015a
		7/31/14		459.90	Dynamic	2662.29	Sierrita
		7/31/14	459.90		Dynamic		BW, 2015a
		8/27/14		389.20	Static	2732.99	Sierrita
		8/27/14	389.20		Static		BW, 2015a
		10/1/14		452.30	Dynamic	2669.89	Sierrita
		10/1/14	451.80		Dynamic		BW, 2015a
		11/4/14		446.40	Dynamic	2675.79	Sierrita
		11/4/14	445.90		Dynamic		BW, 2015a
		12/2/14		449.00	Dynamic	2673.19	Sierrita
		4/9/15		443.55	Dynamic	2678.64	Sierrita
		5/2/15		446.95	Dynamic	2675.24	Sierrita
		6/11/15		444.60	Dynamic	2677.59	Sierrita
		7/8/15		447.78	Dynamic	2674.41	Sierrita
		10/7/15		443.75	Dynamic	2678.44	Sierrita
		11/4/15		440.60	Dynamic	2681.59	Sierrita
		12/9/15		394.80	Static	2727.39	Sierrita
		1/12/16		446.25	Dynamic	2675.94	Sierrita
		2/11/16		388.10	Static	2734.09	BW
		3/4/16		433.75	Dynamic	2688.44	BW
		4/29/16		431.90	Dynamic	2690.29	Sierrita
		10/5/16		424.75	Dynamic	2697.44	BW
IW-9	3102.94	1/14/06	450.73		Dynamic		BW, 2015a
		2/20/06	438.00		Dynamic		BW, 2015a
		3/14/06	465.15		Dynamic		BW, 2015a
		4/15/06	437.70		Dynamic		BW, 2015a
		5/14/06	423.75		Dynamic		BW, 2015a
		6/10/06	425.75		Dynamic		BW, 2015a
		7/16/06	409.70		Dynamic		BW, 2015a
		8/13/06	408.50		Dynamic		BW, 2015a
		9/16/06	403.10		Dynamic		BW, 2015a
		10/21/06	400.40		Dynamic		BW, 2015a
		11/10/06	402.72		Dynamic		BW, 2015a
		11/15/06		402.72		2700.22	Sierrita
		12/16/06	404.00		Dynamic		BW, 2015a
		1/17/07	346.62		Static		BW, 2015a
		2/24/07		405.95		2696.99	Sierrita
		2/24/07	405.95		Dynamic		BW, 2015a
		3/19/07	405.90		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-9	3102.94	4/24/07	408.00		Dynamic		BW, 2015a
		5/29/07	407.60		Dynamic		BW, 2015a
		6/26/07	408.35		Dynamic		BW, 2015a
		7/21/07		405.68		2697.26	Sierrita
		7/21/07	405.68		Dynamic		BW, 2015a
		8/29/07	398.00		Dynamic		BW, 2015a
		10/19/07		379.00		2723.94	Sierrita
		1/19/08		491.10		2611.84	Sierrita
		1/29/08	491.10		Dynamic		BW, 2015a
		2/29/08	476.20		Dynamic		BW, 2015a
		4/21/08		480.80		2622.14	Sierrita
		4/30/08	480.80		Dynamic		BW, 2015a
		7/29/08		473.00		2629.94	Sierrita
		7/29/08	473.00		Dynamic		BW, 2015a
		8/29/08	478.80		Dynamic		BW, 2015a
		9/29/08	478.29		Dynamic		BW, 2015a
		10/24/08		475.03		2627.91	Sierrita
		10/24/08	475.03		Dynamic		BW, 2015a
		1/21/09		469		2633.94	Sierrita
		3/10/09	357.20		Static		BW, 2015a
		5/13/09		357.20		2745.74	Sierrita
		5/13/09	464.60		Dynamic		BW, 2015a
		12/15/09	434.50		Dynamic		BW, 2015a
		4/12/10		426.67		2676.27	Sierrita
		3/9/11	377.51		Dynamic		BW, 2015a
		4/15/11	348.92		Static		BW, 2015a
		5/26/11		503.43		2599.51	Sierrita
		6/27/11	541.95		Dynamic		BW, 2015a
		7/12/11	353.63		Static		BW, 2015a
		8/23/11	532.85		Dynamic		BW, 2015a
		12/29/11	527.68		Dynamic		BW, 2015a
		1/26/12	519.52		Dynamic		BW, 2015a
		2/28/12	357.62		Static		BW, 2015a
		3/30/12	498.65		Dynamic		BW, 2015a
		5/21/12		518.95		2583.99	Sierrita
		5/21/12	518.95		Dynamic		BW, 2015a
		6/27/12	365.39		Static		BW, 2015a
		8/21/12	364.63		Static		BW, 2015a
		9/28/12	517.21		Dynamic		BW, 2015a
		10/25/12	365.94		Static		BW, 2015a
		11/28/12	515.27		Dynamic		BW, 2015a
		4/15/13		502.13	Dynamic	2600.81	Sierrita
		6/24/13	367.33		Static		BW, 2015a
		7/31/13	517.14		Dynamic		BW, 2015a
		8/1/13	366.73		Static		BW, 2015a
		9/30/13	517.08		Dynamic		BW, 2015a
		10/30/13	376.14		Static		BW, 2015a
		11/28/13	511.24		Dynamic		BW, 2015a
		12/9/13	374.47		Static		BW, 2015a
		1/28/14		483.69	Dynamic	2619.25	Sierrita
		1/28/14	483.69		Dynamic		BW, 2015a
		2/24/14		373.42	Static	2729.52	Sierrita
		2/24/14	373.42		Static		BW, 2015a
		3/25/14		455.68	Dynamic	2647.26	Sierrita
		3/31/14	455.68		Dynamic		BW, 2015a
		4/25/14		366.85	Dynamic	2736.09	Sierrita
		5/30/14	367.02		Static	2735.92	Sierrita
		6/9/14		425.70	Dynamic	2677.24	Sierrita
		6/9/14	425.70		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-9	3102.94	7/6/14		364.20	Static	2738.74	Sierrita
		7/6/14	363.66		Static		BW, 2015a
		7/31/14		420.70	Dynamic	2682.24	Sierrita
		7/31/14	420.70		Dynamic		BW, 2015a
		8/27/14		362.50	Static	2740.44	Sierrita
		8/27/14	362.50		Static		BW, 2015a
		10/1/14		363.03	Dynamic	2739.91	Sierrita
		10/1/14	362.49		Static		BW, 2015a
		11/4/14		360.80	Static	2742.14	Sierrita
		11/4/14	360.26		Static		BW, 2015a
		12/2/14		362.40	Dynamic	2740.54	Sierrita
		4/9/15		363.90	Static	2739.04	Sierrita
		5/2/15		365.45	Static	2737.49	Sierrita
		6/11/15		365.65	Static	2737.29	Sierrita
		7/8/15		367.75	Static	2735.19	Sierrita
		10/7/15		367.10	Static	2735.84	Sierrita
		11/4/15		365.87	Static	2737.07	Sierrita
		12/9/15		367.90	Static	2735.04	Sierrita
		1/12/16		368.92	Static	2734.02	Sierrita
		2/11/16		364.20	Static	2738.74	BW
		3/4/16		361.32	Static	2741.62	BW
		4/29/16		358.88	Static	2744.06	Sierrita
		10/5/16		353.05	Static	2749.89	BW
IW-10	3129.64	2/20/06	459.50		Dynamic		BW, 2015a
		3/14/06	460.50		Dynamic		BW, 2015a
		4/15/06	468.10		Dynamic		BW, 2015a
		5/14/06	453.00		Dynamic		BW, 2015a
		6/10/06	490.55		Dynamic		BW, 2015a
		7/16/06	453.40		Dynamic		BW, 2015a
		8/13/06	458.00		Dynamic		BW, 2015a
		9/16/06	460.60		Dynamic		BW, 2015a
		10/20/06	458.95		Dynamic		BW, 2015a
		11/10/06	464.05		Dynamic		BW, 2015a
		11/15/06		464.05		2665.59	Sierrita
		12/16/06	463.21		Dynamic		BW, 2015a
		1/17/07	370.70		Static		BW, 2015a
		2/24/07		463.40		2666.24	Sierrita
		2/24/07	463.40		Dynamic		BW, 2015a
		3/19/07	466.30		Dynamic		BW, 2015a
		4/24/07	465.60		Dynamic		BW, 2015a
		5/29/07	464.80		Dynamic		BW, 2015a
		6/26/07	466.05		Dynamic		BW, 2015a
		7/21/07		464.22		2665.42	Sierrita
		7/21/07	465.70		Dynamic		BW, 2015a
		8/29/07	465.00		Dynamic		BW, 2015a
		10/18/07		465.25		2664.39	Sierrita
		11/28/07	466.10		Dynamic		BW, 2015a
		1/19/08		465.75		2663.89	Sierrita
		1/29/08	465.75		Dynamic		BW, 2015a
		2/29/08	463.75		Dynamic		BW, 2015a
		3/31/08	464.20		Dynamic		BW, 2015a
		4/21/08		463.29		2666.35	Sierrita
		4/30/08	463.29		Dynamic		BW, 2015a
		5/27/08	464.00		Dynamic		BW, 2015a
		6/30/08	465.35		Dynamic		BW, 2015a
		7/29/08		466.11		2663.53	Sierrita
		7/29/08	466.11		Dynamic		BW, 2015a
		8/16/08	352.36		Static		BW, 2015a
		8/29/08	467.52		Dynamic		BW, 2015a
		9/29/08	468.22		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-10	3129.64	10/24/08		468.33		2661.31	Sierrita
		10/24/08	468.33		Dynamic		BW, 2015a
		1/21/09		465		2664.64	Sierrita
		3/10/09	391.20		Static		BW, 2015a
		5/13/09		391.20		2738.44	Sierrita
		5/13/09	467.00		Dynamic		BW, 2015a
		12/15/09	465.00		Dynamic		BW, 2015a
		4/12/10		463.16		2666.48	Sierrita
		3/9/11	457.23		Dynamic		BW, 2015a
		4/15/11	385.42		Static		BW, 2015a
		5/11/11		456.68		2672.96	Sierrita
		5/11/11	456.68		Dynamic		BW, 2015a
		6/27/11	456.74		Dynamic		BW, 2015a
		7/12/11	387.19		Static		BW, 2015a
		8/23/11	457.70		Dynamic		BW, 2015a
		12/29/11	465.20		Dynamic		BW, 2015a
		1/26/12	460.47		Dynamic		BW, 2015a
		2/28/12	389.21		Static		BW, 2015a
		3/29/12	465.39		Dynamic		BW, 2015a
		5/22/12		466.57		2663.07	Sierrita
		5/22/12	466.57		Dynamic		BW, 2015a
		6/27/12	398.46		Static		BW, 2015a
		8/21/12	408.19		Static		BW, 2015a
		9/26/12	483.26		Dynamic		BW, 2015a
		10/25/12	411.87		Static		BW, 2015a
		4/15/13		405.06	Dynamic	2724.58	Sierrita
		6/24/13	413.49		Static		BW, 2015a
		7/31/13	482.88		Dynamic		BW, 2015a
		8/1/13	413.74		Static		BW, 2015a
		9/30/13	483.33		Dynamic		BW, 2015a
		10/30/13	417.82		Static		BW, 2015a
		11/28/13	484.51		Dynamic		BW, 2015a
		12/9/13	414.63		Static		BW, 2015a
		1/28/14	487.15		Dynamic		BW, 2015a
		1/29/14		487.15	Dynamic	2642.49	Sierrita
		2/24/14		416.79	Static	2712.85	Sierrita
		2/24/14	416.79		Static		BW, 2015a
		3/24/14		485.73	Dynamic	2643.91	Sierrita
		3/31/14	485.73		Dynamic		BW, 2015a
		4/25/14		415.32	Dynamic	2714.32	Sierrita
		5/30/14		485.78	Dynamic	2643.86	Sierrita
		5/30/14	485.78		Dynamic		BW, 2015a
		6/9/14		480.10	Dynamic	2649.54	Sierrita
		6/9/14	480.10		Dynamic		BW, 2015a
		7/6/14		478.30	Dynamic	2651.34	Sierrita
		7/6/14	477.80		Dynamic		BW, 2015a
		7/31/14		472.30	Dynamic	2657.34	Sierrita
		7/31/14	472.30		Dynamic		BW, 2015a
		8/27/14		Insufficient Flow		NA	Sierrita
		10/1/14		Obstructed		NA	Sierrita
		11/4/14		Obstructed		NA	Sierrita
		12/2/14		Obstructed		NA	Sierrita
		4/9/15		Obstructed		NA	Sierrita
		5/2/15		Obstructed		NA	Sierrita
		6/11/15		Obstructed		NA	Sierrita
		7/8/15		Obstructed		NA	Sierrita
		10/4/15		Obstructed		NA	Sierrita
		11/4/15		Obstructed		NA	Sierrita
		12/9/15		Obstructed		NA	Sierrita
		1/12/16		UTM		NA	BW

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-10	3129.64	2/11/16		UTM		NA	BW
		3/4/16		UTM		NA	BW
		4/29/16		UTM		NA	Sierrita
		10/5/16		UTM		NA	BW
IW-11	3127.20	1/14/06	439.25		Dynamic		BW, 2015a
		2/20/06	446.40		Dynamic		BW, 2015a
		3/14/06	382.25		Static		BW, 2015a
		4/15/06	385.38		Static		BW, 2015a
		7/16/06	379.58		Static		BW, 2015a
		8/13/06	381.30		Static		BW, 2015a
		9/16/06	429.65		Dynamic		BW, 2015a
		10/20/06	427.48		Dynamic		BW, 2015a
		11/11/06	429.25		Dynamic		BW, 2015a
		11/21/06		429.25		2697.95	Sierrita
		12/16/06	427.72		Dynamic		BW, 2015a
		1/25/07	428.20		Dynamic		BW, 2015a
		2/24/07		428.05		2699.15	Sierrita
		2/24/07	428.05		Dynamic		BW, 2015a
		3/17/07	429.00		Dynamic		BW, 2015a
		4/24/07	428.95		Dynamic		BW, 2015a
		5/30/07	428.82		Dynamic		BW, 2015a
		6/22/07	429.85		Dynamic		BW, 2015a
		7/31/07		428.50		2698.70	Sierrita
		8/29/07	429.80		Dynamic		BW, 2015a
		10/17/07		430.00		2697.20	Sierrita
		11/29/07	429.85		Dynamic		BW, 2015a
		1/29/08		430.00		2697.20	Sierrita
		1/29/08	430.00		Dynamic		BW, 2015a
		2/28/08	428.75		Dynamic		BW, 2015a
		3/31/08	428.50		Dynamic		BW, 2015a
		4/22/08		428.00		2699.20	Sierrita
		4/30/08	428.00		Dynamic		BW, 2015a
		5/27/08	424.80		Dynamic		BW, 2015a
		6/30/08	430.55		Dynamic		BW, 2015a
		7/29/08		430.90		2696.30	Sierrita
		7/29/08	430.90		Dynamic		BW, 2015a
		8/29/08	431.80		Dynamic		BW, 2015a
		9/29/08	432.87		Dynamic		BW, 2015a
		10/24/08		433.01		2694.19	Sierrita
		10/24/08	433.01		Dynamic		BW, 2015a
		1/21/09		429		2698.20	Sierrita
		3/10/09	379.70		Static		BW, 2015a
		5/13/09		379.70		2747.50	Sierrita
		5/13/09	429.00		Dynamic		BW, 2015a
		12/15/09	424.60		Dynamic		BW, 2015a
		4/12/10		421.14		2706.06	Sierrita
		3/9/11	413.68		Dynamic		BW, 2015a
		4/15/11	375.43		Static		BW, 2015a
		5/11/11		414.21		2712.99	Sierrita
		5/11/11	414.21		Dynamic		BW, 2015a
		6/27/11	411.76		Dynamic		BW, 2015a
		8/23/11	450.45		Dynamic		BW, 2015a
		12/29/11	452.00		Dynamic		BW, 2015a
		1/26/12	449.33		Dynamic		BW, 2015a
		3/29/12	451.42		Dynamic		BW, 2015a
		5/22/12		439.67		2687.53	Sierrita
		5/22/12	439.67		Dynamic		BW, 2015a
		7/31/12	459.23		Dynamic		BW, 2015a
		8/22/12	392.18		Static		BW, 2015a
		9/26/12	466.43		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-11	3127.20	11/25/12	400.03		Static		BW, 2015a
		11/27/12	467.67		Dynamic		BW, 2015a
		4/15/13		463.19	Dynamic	2664.01	Sierrita
		6/25/13	400.53		Static		BW, 2015a
		7/31/13	468.40		Dynamic		BW, 2015a
		8/1/13	400.57		Static		BW, 2015a
		9/30/13	468.46		Dynamic		BW, 2015a
		10/29/13	405.57		Static		BW, 2015a
		11/28/13	469.52		Dynamic		BW, 2015a
		12/9/13	404.57		Static		BW, 2015a
		1/28/14	472.74		Dynamic		BW, 2015a
		1/29/14		472.74	Dynamic	2654.46	Sierrita
		2/24/14	404.71		Static		BW, 2015a
		2/25/14		404.71	Static	2722.49	Sierrita
		3/24/14		473.94	Dynamic	2653.26	Sierrita
		3/31/14	473.94		Dynamic		BW, 2015a
		4/28/14		403.28	Dynamic	2723.92	Sierrita
		5/30/14		Obstructed		NA	Sierrita
		6/9/14	398.70		Static	2728.50	Sierrita
		6/9/14		398.70	Static		BW, 2015a
		7/7/14		370.70	Static	2756.50	Sierrita
		7/7/14	369.95		Static		BW, 2015a
		7/31/14		360.70	Static	2766.50	Sierrita
		7/31/14	360.70		Static		BW, 2015a
		8/27/14		338.50	Static	2788.70	Sierrita
		8/27/14	338.50		Static		BW, 2015a
		10/1/14		339.20	Static	2788.00	Sierrita
		10/1/14	338.45		Static		BW, 2015a
		11/4/14		Obstructed		NA	Sierrita
		12/2/14		Obstructed		NA	Sierrita
		4/9/15		Obstructed		NA	Sierrita
		5/2/15		394.40	Static	2732.80	Sierrita
		6/11/15		503.10	Dynamic	2624.10	Sierrita
		7/18/15		405.75	Static	2721.45	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		523.40	Dynamic	2603.80	Sierrita
		12/9/15		UTM		NA	Sierrita
		1/12/16		540.70	Dynamic	2586.50	Sierrita
		2/11/16		533.30	Dynamic	2593.90	BW
		3/4/16		529.30	Dynamic	2597.90	BW
		4/29/16		397.80	Static	2729.40	Sierrita
		10/5/16		398.25	Static	2728.95	BW
IW-12	3138.18	2/20/06	447.10		Dynamic		BW, 2015a
		3/14/06	375.33		Static		BW, 2015a
		4/15/06	368.35		Static		BW, 2015a
		5/14/06	433.60		Dynamic		BW, 2015a
		6/10/06	429.70		Dynamic		BW, 2015a
		7/16/06	430.70		Dynamic		BW, 2015a
		8/13/06	420.80		Dynamic		BW, 2015a
		9/16/06	417.98		Dynamic		BW, 2015a
		10/20/06	413.20		Dynamic		BW, 2015a
		11/10/06	413.20		Dynamic		BW, 2015a
		12/16/06	443.18		Dynamic		BW, 2015a
		1/17/07	376.60		Static		BW, 2015a
		2/24/07		456.20		2681.98	Sierrita
		2/24/07	456.20		Dynamic		BW, 2015a
		3/19/07	464.00		Dynamic		BW, 2015a
		4/24/07	451.90		Dynamic		BW, 2015a
		5/29/07	449.10		Dynamic		BW, 2015a
		6/22/07	432.20		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-12	3138.18	7/21/07		428.78		2709.40	Sierrita
		7/21/07	428.78		Dynamic		BW, 2015a
		8/29/07	431.80		Dynamic		BW, 2015a
		10/17/07		433.00		2705.18	Sierrita
		11/28/07	434.80		Dynamic		BW, 2015a
		6/30/08	426.20		Dynamic		BW, 2015a
		7/29/08		425.90		2712.28	Sierrita
		7/29/08	425.90		Dynamic		BW, 2015a
		8/29/08	428.58		Dynamic		BW, 2015a
		9/29/08	427.40		Dynamic		BW, 2015a
		10/24/08		425.90		2712.28	Sierrita
		10/24/08	425.90		Dynamic		BW, 2015a
		1/29/09		427		2711.18	Sierrita
		3/10/09	375.80		Static		BW, 2015a
		5/13/09		375.80		2762.38	Sierrita
		5/13/09	430.60		Dynamic		BW, 2015a
		12/15/09	428.90		Dynamic		BW, 2015a
		4/12/10		425.40		2712.78	Sierrita
		3/9/11	414.92		Dynamic		BW, 2015a
		4/14/11	371.21		Static		BW, 2015a
		5/11/11		415.81		2722.37	Sierrita
		5/11/11	415.81		Dynamic		BW, 2015a
		6/29/11	415.29		Dynamic		BW, 2015a
		7/12/11	372.05		Static		BW, 2015a
		8/23/11	411.60		Dynamic		BW, 2015a
		12/29/11	372.28		Static		BW, 2015a
		1/26/12	415.39		Dynamic		BW, 2015a
		2/28/12	373.26		Static		BW, 2015a
		3/29/12	393.68		Dynamic		BW, 2015a
		5/22/12		411.45		2726.73	Sierrita
		5/22/12	411.45		Dynamic		BW, 2015a
		6/27/12	371.15		Static		BW, 2015a
		7/31/12	427.28		Dynamic		BW, 2015a
		8/22/12	376.92		Static		BW, 2015a
		9/26/12	422.48		Dynamic		BW, 2015a
		10/25/12	382.92		Static		BW, 2015a
		11/27/12	426.02		Dynamic		BW, 2015a
		5/14/13		420.22	Dynamic	2717.96	Sierrita
		6/25/13	386.04		Static		BW, 2015a
		7/31/13	440.86		Dynamic		BW, 2015a
		8/1/13	386.00		Static		BW, 2015a
		9/30/13	441.10		Dynamic		BW, 2015a
		10/29/13	395.37		Static		BW, 2015a
		11/28/13	435.47		Dynamic		BW, 2015a
		12/9/13	391.32		Static		BW, 2015a
		1/28/14		381.41	Static	2756.77	Sierrita
		1/28/14	381.41		Static		BW, 2015a
		2/24/14		380.19	Static	2757.99	Sierrita
		2/24/14	380.19		Static		BW, 2015a
		3/24/14		380.01	Static	2758.17	Sierrita
		3/31/14	380.01		Static		BW, 2015a
		4/28/14		386.78	Dynamic	2751.40	Sierrita
		5/30/14	434.66		Dynamic	2703.52	Sierrita
		5/30/14	434.66		Dynamic		BW, 2015a
		6/9/14		500.10	Dynamic	2638.08	Sierrita
		7/7/14		490.40	Dynamic	2647.78	Sierrita
		7/7/14	489.69		Dynamic		BW, 2015a
		7/31/14		478.50	Dynamic	2659.68	Sierrita
		7/31/14	478.50		Dynamic		BW, 2015a
		8/27/14		386.40	Static	2751.78	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-12	3138.18	8/27/14	386.40		Static		BW, 2015a
		10/1/14		486.30	Dynamic	2651.88	Sierrita
		10/1/14	485.59		Dynamic		BW, 2015a
		11/4/14		475.70	Dynamic	2662.48	Sierrita
		11/4/14	474.99		Dynamic		BW, 2015a
		12/2/14		475.95	Dynamic	2662.23	Sierrita
		12/2/14	475.24		Dynamic		BW, 2015a
		4/9/15		458.20	Dynamic	2679.98	Sierrita
		5/2/15		484.20	Dynamic	2653.98	Sierrita
		6/11/15		448.60	Dynamic	2689.58	Sierrita
		7/18/15		456.50	Dynamic	2681.68	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		481.30	Dynamic	2656.88	Sierrita
		12/9/15		UTM		NA	Sierrita
		1/12/16		504.25	Dynamic	2633.93	Sierrita
		2/11/16		464.25	Dynamic	2673.93	BW
		3/4/16		472.65	Dynamic	2665.53	BW
		4/29/16		499.70	Dynamic	2638.48	Sierrita
		10/5/16		389.60	Static	2748.58	BW
IW-13	3143.35	1/14/06	382.10		Static		BW, 2015a
		2/20/06	398.95		Dynamic		BW, 2015a
		3/14/06	386.25		Static		BW, 2015a
		4/15/06	403.55		Dynamic		BW, 2015a
		5/14/06	402.85		Dynamic		BW, 2015a
		6/10/06	405.27		Dynamic		BW, 2015a
		7/16/06	406.30		Dynamic		BW, 2015a
		8/13/06	408.80		Dynamic		BW, 2015a
		9/16/06	409.38		Dynamic		BW, 2015a
		10/20/06	408.10		Dynamic		BW, 2015a
		11/11/06	409.95		Dynamic		BW, 2015a
		12/16/06	408.25		Dynamic		BW, 2015a
		1/29/07	411.20		Dynamic		BW, 2015a
		2/24/07	411.90		Dynamic		BW, 2015a
		3/17/07	411.60		Dynamic		BW, 2015a
		4/24/07	411.15		Dynamic		BW, 2015a
		5/30/07	412.91		Dynamic		BW, 2015a
		6/22/07	412.75		Dynamic		BW, 2015a
		7/31/07		412.13		2731.22	Sierrita
		8/29/07	411.88		Dynamic		BW, 2015a
		10/17/07		413.30		2730.05	Sierrita
		11/29/07	413.40		Dynamic		BW, 2015a
		1/29/08		412.21		2731.14	Sierrita
		1/29/08	412.21		Dynamic		BW, 2015a
		2/28/08	411.10		Dynamic		BW, 2015a
		3/31/08	410.79		Dynamic		BW, 2015a
		4/22/08		410.42		2732.93	Sierrita
		4/30/08	410.42		Dynamic		BW, 2015a
		5/27/08	409.50		Dynamic		BW, 2015a
		6/30/08	409.18		Dynamic		BW, 2015a
		7/29/08		410.00		2733.35	Sierrita
		7/29/08	410.00		Dynamic		BW, 2015a
		8/29/08	410.30		Dynamic		BW, 2015a
		9/29/08	411.02		Dynamic		BW, 2015a
		10/24/08		410.95		2732.40	Sierrita
		10/24/08	410.95		Dynamic		BW, 2015a
		1/29/09		411		2732.35	Sierrita
		3/10/09	388.90		Static		BW, 2015a
		5/13/09		388.90		2754.45	Sierrita
		5/13/09	410.00		Dynamic		BW, 2015a
		12/15/09	408.60		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-13	3143.35	4/12/10		404.66		2738.69	Sierrita
		3/9/11	386.19		Static		BW, 2015a
		4/14/11	382.59		Static		BW, 2015a
		5/11/11		401.85		2741.50	Sierrita
		5/11/11	401.85		Dynamic		BW, 2015a
		6/29/11	401.54		Dynamic		BW, 2015a
		7/12/11	383.55		Static		BW, 2015a
		8/23/11	402.38		Dynamic		BW, 2015a
		12/29/11	402.00		Dynamic		BW, 2015a
		1/26/12	401.86		Dynamic		BW, 2015a
		2/28/12	386.00		Static		BW, 2015a
		3/29/12	403.60		Dynamic		BW, 2015a
		6/20/12		405.53		2737.82	Sierrita
		6/27/12	387.62		Static		BW, 2015a
		7/31/12	443.39		Dynamic		BW, 2015a
		8/22/12	389.92		Static		BW, 2015a
		9/26/12	450.28		Dynamic		BW, 2015a
		10/26/12	392.99		Static		BW, 2015a
		11/27/12	420.16		Dynamic		BW, 2015a
		4/15/13		410.89	Dynamic	2732.46	Sierrita
		6/25/13	396.57		Static		BW, 2015a
		7/31/13	422.24		Dynamic		BW, 2015a
		8/1/13	396.63		Static		BW, 2015a
		9/30/13	422.31		Dynamic		BW, 2015a
		10/29/13	409.74		Static		BW, 2015a
		11/28/13	423.62		Dynamic		BW, 2015a
		12/9/13	398.81		Static		BW, 2015a
		1/28/14		432.93	Dynamic	2710.42	Sierrita
		1/28/14	432.93		Dynamic		BW, 2015a
		2/24/14	401.88		Static		BW, 2015a
		2/25/14		401.88	Static	2741.47	Sierrita
		3/24/14		438.75	Dynamic	2704.60	Sierrita
		3/31/14	438.75		Dynamic		BW, 2015a
		4/25/14		403.78	Dynamic	2739.57	Sierrita
		5/30/14		438.80	Dynamic	2704.55	Sierrita
		5/30/14	438.80		Dynamic		BW, 2015a
		6/9/14		416.40	Static	2726.95	Sierrita
		6/9/14	416.40		Static		BW, 2015a
		7/7/14		405.70	Static	2737.65	Sierrita
		7/7/14	404.74		Static		BW, 2015a
		7/31/14		405.70	Static	2737.65	Sierrita
		7/31/14	405.70		Static		BW, 2015a
		8/27/14		404.30	Static	2739.05	Sierrita
		8/27/14	404.30		Static		BW, 2015a
		10/1/14		459.50	Static	2683.85	Sierrita
		10/1/14		406.90	Static	2736.45	Sierrita
		10/1/14	405.94		Static		BW, 2015a
		11/4/14		404.20	Static	2739.15	Sierrita
		11/4/14	403.24		Static		BW, 2015a
		12/2/14		402.80	Static	2740.55	Sierrita
		12/2/14	401.84		Static		BW, 2015a
		4/9/15		398.70	Static	2744.65	Sierrita
		5/2/15		399.20	Static	2744.15	Sierrita
		6/11/15		398.80	Static	2744.55	Sierrita
		7/18/15		400.65	Static	2742.70	Sierrita
		10/7/15		401.93	Static	2741.42	Sierrita
		11/4/15		401.70	Static	2741.65	Sierrita
		12/9/15		402.50	Static	2740.85	Sierrita
		1/12/16		402.80	Static	2740.55	Sierrita
		2/11/16		402.40	Static	2740.95	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-13	3143.35	3/4/16		401.80	Static	2741.55	BW
		4/29/16		402.35	Static	2741.00	Sierrita
		10/5/16		399.82	Static	2743.53	BW
IW-14	3146.42	1/14/06	441.20		Dynamic		BW, 2015a
		2/20/06	436.10		Dynamic		BW, 2015a
		3/14/06	379.95		Static		BW, 2015a
		4/15/06	459.58		Dynamic		BW, 2015a
		5/14/06	445.42		Dynamic		BW, 2015a
		6/10/06	447.55		Dynamic		BW, 2015a
		7/16/06	450.11		Dynamic		BW, 2015a
		8/13/06	458.50		Dynamic		BW, 2015a
		9/16/06	458.09		Dynamic		BW, 2015a
		10/20/06	456.00		Dynamic		BW, 2015a
		11/11/06	471.68		Dynamic		BW, 2015a
		11/15/06		471.68		2674.74	Sierrita
		12/16/06	470.30		Dynamic		BW, 2015a
		1/29/07	474.40		Dynamic		BW, 2015a
		2/24/07		463.35		2683.07	Sierrita
		2/24/07	463.35		Dynamic		BW, 2015a
		3/17/07	479.00		Dynamic		BW, 2015a
		4/24/07	471.90		Dynamic		BW, 2015a
		5/29/07	476.90		Dynamic		BW, 2015a
		6/22/07	476.40		Dynamic		BW, 2015a
		7/31/07		474.00		2672.42	Sierrita
		8/29/07	480.50		Dynamic		BW, 2015a
		10/16/07		480.00		2666.42	Sierrita
		11/29/07	491.30		Dynamic		BW, 2015a
		1/29/08		478.50		2667.92	Sierrita
		1/29/08	478.50		Dynamic		BW, 2015a
		2/28/08	465.10		Dynamic		BW, 2015a
		3/31/08	464.99		Dynamic		BW, 2015a
		4/21/08		457.75		2688.67	Sierrita
		4/30/08	457.75		Dynamic		BW, 2015a
		5/27/08	473.90		Dynamic		BW, 2015a
		6/30/08	477.77		Dynamic		BW, 2015a
		7/29/08		478.06		2668.36	Sierrita
		7/29/08	478.06		Dynamic		BW, 2015a
		8/29/08	467.20		Dynamic		BW, 2015a
		9/29/08	466.99		Dynamic		BW, 2015a
		10/24/08		467.07		2679.35	Sierrita
		10/24/08	467.07		Dynamic		BW, 2015a
		1/29/09		466		2680.42	Sierrita
		3/10/09	383.30		Static		BW, 2015a
		5/13/09		383.30		2763.12	Sierrita
		5/13/09	460.00		Dynamic		BW, 2015a
		12/15/09	447.90		Dynamic		BW, 2015a
		4/21/10		422.20		2724.22	Sierrita
		3/10/11	406.36		Dynamic		BW, 2015a
		4/14/11	378.11		Static		BW, 2015a
		5/11/11		404.48		2741.94	Sierrita
		5/11/11	404.48		Dynamic		BW, 2015a
		6/29/11	403.37		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-14	3146.42	7/12/11	349.52		Static		BW, 2015a
		8/23/11	404.40		Dynamic		BW, 2015a
		12/29/11	395.50		Dynamic		BW, 2015a
		2/28/12	380.28		Static		BW, 2015a
		3/29/12	459.54		Dynamic		BW, 2015a
		5/22/12		458.57		2687.85	Sierrita
		5/22/12	458.57		Dynamic		BW, 2015a
		6/27/12	381.75		Static		BW, 2015a
		7/31/12	455.15		Dynamic		BW, 2015a
		8/22/12	383.91		Static		BW, 2015a
		9/26/12	459.39		Dynamic		BW, 2015a
		10/26/12	386.33		Static		BW, 2015a
		11/27/12	459.43		Dynamic		BW, 2015a
		4/15/13		460.72	Dynamic	2685.70	Sierrita
		6/25/13	386.94		Static		BW, 2015a
		8/1/13	386.93		Static		BW, 2015a
		9/30/13	458.60		Dynamic		BW, 2015a
		10/28/13	391.09		Static		BW, 2015a
		11/28/13	451.70		Dynamic		BW, 2015a
		12/9/13	390.79		Static		BW, 2015a
		1/28/14		459.02	Dynamic	2687.40	Sierrita
		1/28/14	459.02		Dynamic		BW, 2015a
		2/24/14	393.02		Static		BW, 2015a
		2/25/14		393.02	Dynamic	2753.40	Sierrita
		3/24/14		455.21	Dynamic	2691.21	Sierrita
		3/31/14	455.21		Dynamic		BW, 2015a
		4/28/14		394.49	Dynamic	2751.93	Sierrita
		5/30/14		453.19	Dynamic	2693.23	Sierrita
		5/30/14	453.19		Dynamic		BW, 2015a
		6/9/14		459.40	Dynamic	2687.02	Sierrita
		6/9/14	459.40		Dynamic		BW, 2015a
		7/7/14		459.30	Dynamic	2687.12	Sierrita
		7/7/14	459.13		Dynamic		BW, 2015a
		7/31/14		459.30	Dynamic	2687.12	Sierrita
		7/31/14	459.30		Dynamic		BW, 2015a
		8/27/14		394.60	Static	2751.82	Sierrita
		8/27/14	394.60		Static		BW, 2015a
		10/1/14	459.33		Dynamic		BW, 2015a
		11/4/14		459.40	Dynamic	2687.02	Sierrita
		11/4/14	459.23		Dynamic		BW, 2015a
		12/2/14		459.40	Dynamic	2687.02	Sierrita
		12/2/14	459.23		Dynamic		BW, 2015a
		4/9/15		459.50	Dynamic	2686.92	Sierrita
		5/2/15		459.50	Dynamic	2686.92	Sierrita
		6/11/15		400.05	Static	2746.37	Sierrita
		7/18/15		460.10	Dynamic	2686.32	Sierrita
		10/7/15		400.92	Static	2745.50	Sierrita
		11/4/15		459.45	Dynamic	2686.97	Sierrita
		12/9/15		400.80	Static	2745.62	Sierrita
		1/12/16		459.55	Dynamic	2686.87	Sierrita
		2/11/16		459.60	Dynamic	2686.82	BW
		3/4/16		400.75	Static	2745.67	BW
		4/29/16		459.50	Dynamic	2686.92	Sierrita
		10/5/16		394.05	Static	2752.37	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-15	3152.02	2/20/06	416.20		Dynamic		BW, 2015a
		3/14/06	387.55		Static		BW, 2015a
		4/15/06	420.70		Dynamic		BW, 2015a
		5/14/06	417.60		Dynamic		BW, 2015a
		6/10/06	419.48		Dynamic		BW, 2015a
		7/16/06	422.65		Dynamic		BW, 2015a
		8/13/06	423.60		Dynamic		BW, 2015a
		9/16/06	424.60		Dynamic		BW, 2015a
		10/20/06	424.35		Dynamic		BW, 2015a
		11/11/06	427.27		Dynamic		BW, 2015a
		11/15/06		427.27		2724.75	Sierrita
		12/16/06	427.79		Dynamic		BW, 2015a
		1/29/07	429.75		Dynamic		BW, 2015a
		2/24/07		429.89		2722.13	Sierrita
		2/24/07	429.89		Dynamic		BW, 2015a
		3/17/07	431.05		Dynamic		BW, 2015a
		4/24/07	431.40		Dynamic		BW, 2015a
		5/30/07	431.90		Dynamic		BW, 2015a
		6/22/07	431.60		Dynamic		BW, 2015a
		7/31/07		430.55		2721.47	Sierrita
		8/29/07	429.70		Dynamic		BW, 2015a
		10/16/07		390.30		2761.72	Sierrita
		11/29/07	428.15		Dynamic		BW, 2015a
		1/29/08		430.45		2721.57	Sierrita
		1/29/08	430.45		Dynamic		BW, 2015a
		2/28/08	430.18		Dynamic		BW, 2015a
		3/31/08	429.95		Dynamic		BW, 2015a
		4/22/08		429.70		2722.32	Sierrita
		4/30/08	429.70		Dynamic		BW, 2015a
		5/27/08	427.81				BW, 2015a
		6/30/08	429.65		Dynamic		BW, 2015a
		7/29/08		429.50		2722.52	Sierrita
		7/29/08	429.50		Dynamic		BW, 2015a
		8/29/08	430.95		Dynamic		BW, 2015a
		9/29/08	430.50		Dynamic		BW, 2015a
		10/24/08		430.49		2721.53	Sierrita
		10/24/08	430.49		Dynamic		BW, 2015a
		1/29/09		430		2722.02	Sierrita
		3/10/09	388.00		Static		BW, 2015a
		5/13/09		388.00		2764.02	Sierrita
		5/13/09	427.80		Dynamic		BW, 2015a
		12/15/09	425.40		Dynamic		BW, 2015a
		4/12/10		419.39		2732.63	Sierrita
		3/9/11	415.00		Dynamic		BW, 2015a
		4/14/11	394.57		Static		BW, 2015a
		5/11/11		414.82		2737.20	Sierrita
		5/11/11	414.82		Dynamic		BW, 2015a
		6/29/11	412.55		Dynamic		BW, 2015a
		7/12/11	384.89		Static		BW, 2015a
		8/23/11	416.35		Dynamic		BW, 2015a
		12/30/11	414.20		Dynamic		BW, 2015a
		1/26/12	418.02		Dynamic		BW, 2015a
		2/28/12	373.03		Static		BW, 2015a
		3/29/12	421.94		Dynamic		BW, 2015a
		5/22/12		410.54		2741.48	Sierrita
		5/22/12	410.54		Dynamic		BW, 2015a
		6/27/12	387.88		Static		BW, 2015a
		7/31/12	418.27		Dynamic		BW, 2015a
		8/22/12	389.33		Static		BW, 2015a
		9/26/12	433.77		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-15	3152.02	10/26/12	391.31		Static		BW, 2015a
		11/27/12	438.04		Dynamic		BW, 2015a
		5/14/13		439.64	Dynamic	2712.38	Sierrita
		6/25/13	392.73		Dynamic		BW, 2015a
		7/31/13	440.11		Dynamic		BW, 2015a
		8/1/13	392.95		Static		BW, 2015a
		9/30/13	440.52		Dynamic		BW, 2015a
		10/28/13	395.39		Static		BW, 2015a
		11/28/13	441.34		Dynamic		BW, 2015a
		12/9/13	395.57		Static		BW, 2015a
		1/28/14		458.15	Dynamic	2693.87	Sierrita
		1/28/14	458.15		Dynamic		BW, 2015a
		2/24/14	397.32		Static		BW, 2015a
		2/25/14		397.32	Dynamic	2754.70	Sierrita
		3/24/14		477.16	Dynamic	2674.86	Sierrita
		3/31/14	477.16		Dynamic		BW, 2015a
		4/28/14		399.11	Dynamic	2752.91	Sierrita
		5/30/14		477.18	Dynamic	2674.84	Sierrita
		5/30/14	477.18		Dynamic		BW, 2015a
		6/9/14		491.25	Dynamic	2660.77	Sierrita
		6/9/14	491.25		Dynamic		BW, 2015a
		7/7/14		399.40	Static	2752.62	Sierrita
		7/7/14	399.15		Static		BW, 2015a
		7/31/14		491.30	Dynamic	2660.72	Sierrita
		7/31/14	491.30		Dynamic		BW, 2015a
		8/27/14		400.60	Static	2751.42	Sierrita
		8/27/14	400.60		Static		BW, 2015a
		10/1/14		491.40	Dynamic	2660.62	Sierrita
		10/1/14	491.15		Dynamic		BW, 2015a
		11/4/14		491.40	Dynamic	2660.62	Sierrita
		11/4/14	491.15		Dynamic		BW, 2015a
		12/2/14		491.40	Dynamic	2660.62	Sierrita
		12/2/14	491.15		Dynamic		BW, 2015a
		4/9/15		491.40	Dynamic	2660.62	Sierrita
		5/2/15		401.70	Static	2750.32	Sierrita
		6/11/15		408.20	Static	2743.82	Sierrita
		10/7/15		404.60	Static	2747.42	Sierrita
		11/4/15		491.40	Dynamic	2660.62	Sierrita
		12/9/15		403.75	Static	2748.27	Sierrita
		1/12/16		498.37	Dynamic	2653.65	Sierrita
		2/11/16		491.40	Dynamic	2660.62	BW
		3/4/16		404.10	Static	2747.92	BW
		4/29/16		498.30	Dynamic	2653.72	Sierrita
		10/5/16		UTM		NA	BW

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-16	3162.85	1/14/06	399.60		Static		BW, 2015a
		2/20/06	405.00		Dynamic		BW, 2015a
		3/14/06	405.60		Dynamic		BW, 2015a
		4/15/06	406.97		Dynamic		BW, 2015a
		5/14/06	406.45		Dynamic		BW, 2015a
		6/10/06	407.55		Dynamic		BW, 2015a
		7/16/06	408.31		Dynamic		BW, 2015a
		8/13/06	408.95		Dynamic		BW, 2015a
		9/16/06	409.20		Dynamic		BW, 2015a
		10/20/06	408.94		Dynamic		BW, 2015a
		11/11/06	409.69		Dynamic		BW, 2015a
		11/15/06		409.69		2753.16	Sierrita
		12/16/06	409.81		Dynamic		BW, 2015a
		1/29/07	410.00		Dynamic		BW, 2015a
		2/24/07		409.95		2752.90	Sierrita
		2/24/07	409.95		Dynamic		BW, 2015a
		3/17/07	409.35		Dynamic		BW, 2015a
		4/24/07	409.00		Dynamic		BW, 2015a
		5/30/07	409.50		Dynamic		BW, 2015a
		6/22/07	409.10		Dynamic		BW, 2015a
		7/31/07		409.50		2753.35	Sierrita
		8/29/07	409.65		Dynamic		BW, 2015a
		10/16/07		409.17		2753.68	Sierrita
		11/29/07	408.90		Dynamic		BW, 2015a
		1/29/08		409.20		2753.65	Sierrita
		1/29/08	409.20		Dynamic		BW, 2015a
		2/28/08	408.80		Dynamic		BW, 2015a
		3/31/08	408.92		Dynamic		BW, 2015a
		4/22/08		408.89		2753.96	Sierrita
		4/30/08	408.89		Dynamic		BW, 2015a
		5/27/08	408.92		Dynamic		BW, 2015a
		6/30/08	408.48		Dynamic		BW, 2015a
		7/29/08		409.02		2753.83	Sierrita
		7/29/08	409.02		Dynamic		BW, 2015a
		8/29/08	408.44		Dynamic		BW, 2015a
		9/29/08	408.24		Dynamic		BW, 2015a
		10/24/08		408.29		2754.56	Sierrita
		10/24/08	408.29		Dynamic		BW, 2015a
		1/29/09		409		2753.85	Sierrita
		3/10/09	402.00		Static		BW, 2015a
		5/13/09		402.00		2760.85	Sierrita
		5/13/09	409.00		Dynamic		BW, 2015a
		12/15/09	408.80		Dynamic		BW, 2015a
		4/12/10		405.68		2757.17	Sierrita
		3/9/11	399.82		Dynamic		BW, 2015a
		4/14/11	399.44		Static		BW, 2015a
		6/29/11		339.30		2823.55	Sierrita
		6/29/11	399.30		Static		BW, 2015a
		7/12/11	399.56		Static		BW, 2015a
		8/25/11	400.05		Static		BW, 2015a
		12/29/11	398.25		Static		BW, 2015a
		1/26/12	400.69		Static		BW, 2015a
		2/28/12	401.00		Static		BW, 2015a
		3/29/12	401.53		Static		BW, 2015a
		6/27/12		402.80		2760.05	Sierrita
		6/27/12	402.80		Static		BW, 2015a
		7/31/12	432.47		Static		BW, 2015a
		8/22/12	403.78		Static		BW, 2015a
		9/26/12	404.54		Static		BW, 2015a
		10/26/12	405.16		Static		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-16	3162.85	11/27/12	405.72		Static		BW, 2015a
		5/14/13		407.10	Static	2755.75	Sierrita
		5/14/13	407.10		Static		BW, 2015a
		6/25/13	407.10		Static		BW, 2015a
		8/1/13	406.93		Static		BW, 2015a
		10/28/13	408.18		Static		BW, 2015a
		1/28/14		409.04	Static	2753.81	Sierrita
		2/24/14		410.15	Static	2752.70	Sierrita
		3/24/14		411.11	Static	2751.74	Sierrita
		4/25/14		411.92	Static	2750.93	Sierrita
		5/30/14		411.90	Static	2750.95	Sierrita
		6/25/15		414.08	Static	2748.77	Sierrita
		7/18/15		414.05	Static	2748.80	Sierrita
		10/7/15		414.40	Static	2748.45	Sierrita
		1/12/16		414.68	Static	2748.17	Sierrita
		4/29/16		414.74	Static	2748.11	Sierrita
		10/5/16		413.48	Static	2749.37	BW
IW-17	3160.76	1/14/06	423.54		Static		BW, 2015a
		2/17/06	426.60		Dynamic		BW, 2015a
		3/14/06	427.00		Dynamic		BW, 2015a
		4/15/06	427.50		Dynamic		BW, 2015a
		5/14/06	427.70		Dynamic		BW, 2015a
		6/10/06	427.60		Dynamic		BW, 2015a
		7/16/06	428.10		Dynamic		BW, 2015a
		8/13/06	426.35		Static		BW, 2015a
		9/16/06	428.81		Dynamic		BW, 2015a
		10/20/06	428.72		Dynamic		BW, 2015a
		11/11/06	429.15		Dynamic		BW, 2015a
		11/15/06		429.15		2731.61	Sierrita
		12/16/06	429.25		Dynamic		BW, 2015a
		1/29/07	429.58		Dynamic		BW, 2015a
		2/24/07		429.70		2731.06	Sierrita
		2/24/07	429.70		Dynamic		BW, 2015a
		3/17/07	429.50		Dynamic		BW, 2015a
		4/24/07	428.80		Dynamic		BW, 2015a
		5/30/07	429.60		Dynamic		BW, 2015a
		6/22/07	428.25		Dynamic		BW, 2015a
		7/26/07		427.97		2732.79	Sierrita
		8/29/07	428.35		Dynamic		BW, 2015a
		10/16/07		427.70		2733.06	Sierrita
		11/29/07	427.48		Dynamic		BW, 2015a
		1/29/08		428.12		2732.64	Sierrita
		1/29/08	428.12		Dynamic		BW, 2015a
		2/28/08	427.95		Dynamic		BW, 2015a
		3/31/08	428.30		Dynamic		BW, 2015a
		4/22/08		428.23		2732.53	Sierrita
		4/30/08	428.23		Dynamic		BW, 2015a
		5/27/08	428.50		Dynamic		BW, 2015a
		6/30/08	428.33		Dynamic		BW, 2015a
		7/29/08		428.40		2732.36	Sierrita
		7/29/08	428.40		Dynamic		BW, 2015a
		8/29/08	428.00		Dynamic		BW, 2015a
		9/29/08	428.33		Dynamic		BW, 2015a
		10/24/08		428.45		2732.31	Sierrita
		10/24/08	428.45		Dynamic		BW, 2015a
		1/29/09		428		2732.76	Sierrita
		3/10/09	425.00		Static		BW, 2015a
		5/13/09	425.00			2735.76	Sierrita
		5/13/09	428.00		Dynamic		BW, 2015a
		12/15/09	427.60		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-17	3160.76	4/12/10		425.12		2735.64	Sierrita
		3/9/11	423.13		Dynamic		BW, 2015a
		4/14/11	422.59		Static		BW, 2015a
		6/29/11		422.10		2738.66	Sierrita
		6/29/11	422.10		Static		BW, 2015a
		7/12/11	421.01		Static		BW, 2015a
		8/25/11	422.00		Static		BW, 2015a
		12/29/11	422.00		Static		BW, 2015a
		1/26/12	423.06		Static		BW, 2015a
		2/28/12	423.15		Static		BW, 2015a
		3/29/12	423.21		Static		BW, 2015a
		6/27/12		424.10		2736.66	Sierrita
		6/27/12	424.10		Static		BW, 2015a
		7/31/12	429.62		Static		BW, 2015a
		8/22/12	424.92		Static		BW, 2015a
		9/26/12	425.55		Static		BW, 2015a
		10/26/12	426.15		Static		BW, 2015a
		11/27/12	426.82		Static		BW, 2015a
		5/14/13		428.86	Static	2731.90	Sierrita
		5/14/13	428.86		Static		BW, 2015a
		6/25/13	428.86		Static		BW, 2015a
		8/1/13	428.94		Static		BW, 2015a
		10/28/13	429.63		Static		BW, 2015a
		1/28/14		432.11	Static	2728.65	Sierrita
		2/24/14		422.09	Static	2738.67	Sierrita
		3/24/14		435.40	Static	2725.36	Sierrita
		4/25/14		437.29	Static	2723.47	Sierrita
		5/30/14		437.35	Static	2723.41	Sierrita
		6/25/15		443.59	Static	2717.17	Sierrita
		7/18/15		443.60	Static	2717.16	Sierrita
		10/7/15		444.35	Static	2716.41	Sierrita
		1/12/16		444.90	Static	2715.86	Sierrita
		4/29/16		445.02	Static	2715.74	Sierrita
		10/5/16		444.65	Static	2716.11	BW
IW-18	3171.15	1/14/06	441.60		Static		BW, 2015a
		2/20/06	450.55		Dynamic		BW, 2015a
		3/14/06	450.40		Dynamic		BW, 2015a
		4/15/06	448.70		Dynamic		BW, 2015a
		5/14/06	446.80		Dynamic		BW, 2015a
		6/10/06	447.02		Dynamic		BW, 2015a
		7/16/06	448.21		Dynamic		BW, 2015a
		8/13/06	448.90		Dynamic		BW, 2015a
		9/16/06	448.98		Dynamic		BW, 2015a
		10/20/06	448.50		Dynamic		BW, 2015a
		11/10/06	449.35		Dynamic		BW, 2015a
		11/21/06		449.02		2722.13	Sierrita
		12/16/06	449.68		Dynamic		BW, 2015a
		1/17/07	444.50		Static		BW, 2015a
		2/24/07		449.55		2721.60	Sierrita
		2/24/07	449.55		Dynamic		BW, 2015a
		3/19/07	448.80		Dynamic		BW, 2015a
		4/24/07	447.80		Dynamic		BW, 2015a
		5/29/07	447.19		Dynamic		BW, 2015a
		6/22/07	446.50		Dynamic		BW, 2015a
		7/21/07		446.35		2724.80	Sierrita
		8/29/07	446.40		Dynamic		BW, 2015a
		10/16/07		445.25		2725.90	Sierrita
		11/28/07	445.00		Dynamic		BW, 2015a
		1/19/08		446.75		2724.40	Sierrita
		1/29/08	446.75		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-18	3171.15	2/28/08	447.00		Dynamic		BW, 2015a
		3/31/08	447.35		Dynamic		BW, 2015a
		4/21/08		447.48		2723.67	Sierrita
		4/30/08	447.48		Dynamic		BW, 2015a
		5/27/08	447.80		Dynamic		BW, 2015a
		6/30/08	447.47		Dynamic		BW, 2015a
		7/29/08		447.00		2724.15	Sierrita
		7/29/08	447.00		Dynamic		BW, 2015a
		8/29/08	446.80		Dynamic		BW, 2015a
		9/29/08	446.36		Dynamic		BW, 2015a
		10/24/08		446.30		2724.85	Sierrita
		10/24/08	446.30		Dynamic		BW, 2015a
		1/29/09		447		2724.15	Sierrita
		3/10/09	441.50		Static		BW, 2015a
		5/13/09		441.50		2729.65	Sierrita
		5/13/09	447.00		Dynamic		BW, 2015a
		12/15/09	447.20		Dynamic		BW, 2015a
		4/12/10		442.94		2728.21	Sierrita
		3/9/11	436.89		Dynamic		BW, 2015a
		4/14/11	432.82		Static		BW, 2015a
		6/29/11		435.35		2735.80	Sierrita
		6/29/11	435.35		Static		BW, 2015a
		7/12/11	435.16		Static		BW, 2015a
		8/25/11	435.50		Static		BW, 2015a
		12/29/11	434.90		Static		BW, 2015a
		1/26/12	436.09		Static		BW, 2015a
		2/28/12	436.22		Static		BW, 2015a
		3/29/12	436.47		Static		BW, 2015a
		6/27/12		436.97		2734.18	Sierrita
		6/27/12	436.97		Static		BW, 2015a
		7/31/12	437.20		Static		BW, 2015a
		8/22/12	437.68		Static		BW, 2015a
		9/26/12	438.78		Static		BW, 2015a
		10/26/12	439.56		Static		BW, 2015a
		11/27/12	440.41		Static		BW, 2015a
		5/14/13		443.11	Static	2728.04	Sierrita
		5/14/13	443.11		Static		BW, 2015a
		6/25/13	443.11		Static		BW, 2015a
		8/1/13	442.87		Static		BW, 2015a
		10/28/13	441.41		Static		BW, 2015a
		1/28/14		447.78	Static	2723.37	Sierrita
		2/24/14		449.75	Static	2721.40	Sierrita
		3/24/14		451.75	Static	2719.40	Sierrita
		4/25/14		453.68	Static	2717.47	Sierrita
		5/30/14		453.70	Static	2717.45	Sierrita
		6/25/15		UTM		NA	Sierrita
		10/7/15		UTM		NA	Sierrita
		1/12/16		461.82	Static	2709.33	Sierrita
		4/29/16		461.72	Static	2709.43	Sierrita
		10/5/16		462.02	Static	2709.13	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-19	3155.39	1/14/06	449.07		Dynamic		BW, 2015a
		2/20/06	447.90		Dynamic		BW, 2015a
		3/14/06	448.30		Dynamic		BW, 2015a
		4/15/06	449.90		Dynamic		BW, 2015a
		5/14/06	444.50		Dynamic		BW, 2015a
		6/10/06	445.36		Dynamic		BW, 2015a
		7/16/06	447.60		Dynamic		BW, 2015a
		8/13/06	447.80		Dynamic		BW, 2015a
		9/16/06	447.38		Dynamic		BW, 2015a
		10/20/06	448.80		Dynamic		BW, 2015a
		11/11/06	418.60		Static		BW, 2015a
		11/21/06		418.60		2736.79	Sierrita
		12/16/06	448.60		Dynamic		BW, 2015a
		1/29/07	448.65		Dynamic		BW, 2015a
		2/23/07		444.65		2710.74	Sierrita
		2/23/07	444.65		Dynamic		BW, 2015a
		3/16/07	443.38		Dynamic		BW, 2015a
		4/24/07	441.30		Dynamic		BW, 2015a
		5/29/07	433.70		Dynamic		BW, 2015a
		6/22/07	432.95		Dynamic		BW, 2015a
		7/26/07		435.85		2719.54	Sierrita
		8/29/07	435.05		Dynamic		BW, 2015a
		11/29/07	450.52		Dynamic		BW, 2015a
		1/29/08		451.28		2704.11	Sierrita
		1/29/08	451.28		Dynamic		BW, 2015a
		2/28/08	451.22		Dynamic		BW, 2015a
		3/31/08	452.19		Dynamic		BW, 2015a
		4/21/08		452.00		2703.39	Sierrita
		4/30/08	452.00		Dynamic		BW, 2015a
		5/27/08	452.45		Dynamic		BW, 2015a
		6/30/08	451.40		Dynamic		BW, 2015a
		7/29/08		451.88		2703.51	Sierrita
		7/29/08	451.88		Dynamic		BW, 2015a
		8/29/08	450.25		Dynamic		BW, 2015a
		9/29/08	450.35		Dynamic		BW, 2015a
		10/24/08		451.08		2704.31	Sierrita
		10/24/08	451.08		Dynamic		BW, 2015a
		1/29/09		451		2704.39	Sierrita
		3/10/09	413.90		Static		BW, 2015a
		5/13/09		413.90		2741.49	Sierrita
		5/13/09	450.00		Dynamic		BW, 2015a
		12/15/09	448.30		Dynamic		BW, 2015a
		4/12/10		445.24		2710.15	Sierrita
		3/9/11	437.57		Dynamic		BW, 2015a
		4/14/11	407.82		Static		BW, 2015a
		5/11/11		436.15		2719.24	Sierrita
		5/11/11	436.15		Dynamic		BW, 2015a
		6/29/11	430.75		Dynamic		BW, 2015a
		7/12/11	407.21		Static		BW, 2015a
		8/25/11	399.60				BW, 2015a
		12/29/11	433.09		Dynamic		BW, 2015a
		1/26/12	433.88		Dynamic		BW, 2015a
		2/28/12	408.38		Static		BW, 2015a
		3/29/12	434.42		Dynamic		BW, 2015a
		5/22/12		432.62		2722.77	Sierrita
		5/22/12	432.62		Dynamic		BW, 2015a
		6/27/12	409.19		Static		BW, 2015a
		8/22/12	409.73		Static		BW, 2015a
		9/26/12	435.37		Dynamic		BW, 2015a
		10/26/12	411.86		Static		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-19	3155.39	11/27/12	437.02		Dynamic		BW, 2015a
		5/14/13		439.33	Dynamic	2716.06	Sierrita
		6/25/13	415.12		Static		BW, 2015a
		7/31/13	438.92		Dynamic		BW, 2015a
		8/1/13	415.19		Static		BW, 2015a
		10/28/13	416.00		Static		BW, 2015a
		11/28/13	468.62		Dynamic		BW, 2015a
		1/28/14		465.41	Dynamic	2689.98	Sierrita
		1/28/14	465.41		Dynamic		BW, 2015a
		2/24/14	422.21		Static		BW, 2015a
		2/25/14		422.21	Static	2733.18	Sierrita
		3/24/14		469.27	Dynamic	2686.12	Sierrita
		3/31/14	469.27		Dynamic		BW, 2015a
		4/28/14		425.55	Dynamic	2729.84	Sierrita
		5/30/14		469.21	Dynamic	2686.18	Sierrita
		5/30/14	469.21		Dynamic		BW, 2015a
		6/9/14		473.38	Dynamic	2682.01	Sierrita
		6/9/14	473.38		Dynamic		BW, 2015a
		7/7/14		474.40	Dynamic	2680.99	Sierrita
		7/7/14	473.57		Dynamic		BW, 2015a
		7/31/14		473.70	Dynamic	2681.69	Sierrita
		7/31/14	473.70		Dynamic		BW, 2015a
		8/27/14		428.00	Static	2727.39	Sierrita
		8/27/14	428.00		Static		BW, 2015a
		10/1/14		475.80	Dynamic	2679.59	Sierrita
		10/1/14	474.97		Dynamic		BW, 2015a
		11/4/14		475.50	Dynamic	2679.89	Sierrita
		11/4/14	474.67		Dynamic		BW, 2015a
		12/2/14		476.05	Dynamic	2679.34	Sierrita
		12/2/14	475.22		Dynamic		BW, 2015a
		4/9/15		482.20	Dynamic	2673.19	Sierrita
		5/2/15		488.30	Dynamic	2667.09	Sierrita
		6/11/15		431.40	Static	2723.99	Sierrita
		7/18/15		435.95	Static	2719.44	Sierrita
		10/7/15		439.15	Static	2716.24	Sierrita
		11/4/15		504.00	Dynamic	2651.39	Sierrita
		12/9/15		439.95	Static	2715.44	Sierrita
		1/12/16		507.40	Dynamic	2647.99	Sierrita
		2/11/16		506.30	Dynamic	2649.09	BW
		3/4/16		439.55	Static	2715.84	BW
		4/29/16		435.95	Static	2719.44	Sierrita
		10/5/16		506.30	Dynamic	2649.09	BW
IW-20	3164.21	1/14/06	450.32		Dynamic		BW, 2015a
		2/20/06	451.65		Dynamic		BW, 2015a
		3/14/06	453.50		Dynamic		BW, 2015a
		4/15/06	450.23		Dynamic		BW, 2015a
		5/14/06	450.33		Dynamic		BW, 2015a
		6/10/06	450.60		Dynamic		BW, 2015a
		7/16/06	442.80		Dynamic		BW, 2015a
		8/13/06	450.55		Dynamic		BW, 2015a
		9/16/06	435.70		Dynamic		BW, 2015a
		10/20/06	441.60		Dynamic		BW, 2015a
		11/11/06	421.25		Static		BW, 2015a
				421.25		2742.96	Sierrita
		12/16/06	449.60		Dynamic		BW, 2015a
		1/29/07		445.30		2718.91	Sierrita
		1/29/07	445.30		Dynamic		BW, 2015a
		3/16/07	417.72		Static		BW, 2015a
		4/24/07	428.00		Dynamic		BW, 2015a
		5/29/07	427.60		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-20	3164.21	6/22/07	427.20		Dynamic		BW, 2015a
		7/26/07		426.21		2738.00	Sierrita
		8/29/07	447.90		Dynamic		BW, 2015a
		10/16/07		424.15		2740.06	Sierrita
		11/29/07	423.30		Dynamic		BW, 2015a
		1/29/08		424.65		2739.56	Sierrita
		1/29/08	424.65		Dynamic		BW, 2015a
		2/28/08	424.68		Dynamic		BW, 2015a
		3/31/08	425.05		Dynamic		BW, 2015a
		4/21/08		425.15		2739.06	Sierrita
		4/30/08	425.15		Dynamic		BW, 2015a
		5/27/08	425.18		Dynamic		BW, 2015a
		6/30/08	423.04		Dynamic		BW, 2015a
		7/29/08		422.99		2741.22	Sierrita
		7/29/08	422.99		Dynamic		BW, 2015a
		8/29/08	424.44		Dynamic		BW, 2015a
		9/29/08	424.04		Dynamic		BW, 2015a
		10/24/08		424.14		2740.07	Sierrita
		10/24/08	424.14		Dynamic		BW, 2015a
		1/29/09		442		2722.21	Sierrita
		3/10/09	414.00		Static		BW, 2015a
		5/13/09		414.00		2750.21	Sierrita
		5/13/09	423.00		Dynamic		BW, 2015a
		12/15/09	418.80		Dynamic		BW, 2015a
		4/29/10		418.07		2746.14	Sierrita
		3/9/11	412.78		Dynamic		BW, 2015a
		4/14/11	407.11		Static		BW, 2015a
		5/11/11		413.15		2751.06	Sierrita
		5/11/11	413.15		Dynamic		BW, 2015a
		6/29/11	412.53		Dynamic		BW, 2015a
		7/12/11	406.25		Static		BW, 2015a
		8/25/11	412.15		Dynamic		BW, 2015a
		12/29/11	412.80		Dynamic		BW, 2015a
		1/26/12	406.99		Static		BW, 2015a
		2/28/12	408.09		Static		BW, 2015a
		3/29/12	414.89		Dynamic		BW, 2015a
		6/20/12		414.50		2749.71	Sierrita
		6/27/12	407.99		Static		BW, 2015a
		8/22/12	409.11		Static		BW, 2015a
		9/26/12	419.49		Dynamic		BW, 2015a
		10/26/12	411.89		Static		BW, 2015a
		11/27/12	419.84		Dynamic		BW, 2015a
		6/17/13		417.26	Dynamic	2746.95	Sierrita
		6/17/13	417.26		Dynamic		BW, 2015a
		6/25/13	413.74		Static		BW, 2015a
		8/1/13	415.77		Static		BW, 2015a
		9/30/13	421.16		Dynamic		BW, 2015a
		10/28/13	413.71		Static		BW, 2015a
		11/28/13	421.93		Dynamic		BW, 2015a
		12/9/13	417.48		Static		BW, 2015a
		1/28/14		424.25	Dynamic	2739.96	Sierrita
		1/28/14	424.25		Dynamic		BW, 2015a
		2/24/14	420.71		Static		BW, 2015a
		2/25/14		420.71	Static	2743.50	Sierrita
		3/24/14		427.83	Dynamic	2736.38	Sierrita
		3/31/14	427.83		Dynamic		BW, 2015a
		4/28/14		421.94	Dynamic	2742.27	Sierrita
		5/30/14		427.89	Dynamic	2736.32	Sierrita
		5/30/14	427.89		Dynamic		BW, 2015a
		6/9/14		429.20	Dynamic	2735.01	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-20	3164.21	6/9/14	429.20		Dynamic		BW, 2015a
		7/7/14		430.10	Dynamic	2734.11	Sierrita
		7/7/14	429.77		Dynamic		BW, 2015a
		7/31/14		430.00	Dynamic	2734.21	Sierrita
		7/31/14	430.00		Dynamic		BW, 2015a
		8/27/14		424.80	Static	2739.41	Sierrita
		8/27/14	424.80		Static		BW, 2015a
		10/1/14		432.80	Dynamic	2731.41	Sierrita
		10/1/14	432.47		Dynamic		BW, 2015a
		11/4/14		432.90	Dynamic	2731.31	Sierrita
		11/4/14	432.57		Dynamic		BW, 2015a
		12/2/14		435.80	Dynamic	2728.41	Sierrita
		12/2/14	435.47		Dynamic		BW, 2015a
		4/9/15		431.30	Static	2732.91	Sierrita
		5/2/15		431.75	Static	2732.46	Sierrita
		6/11/15		430.80	Static	2733.41	Sierrita
		7/18/15		434.65	Static	2729.56	Sierrita
		10/7/15		437.70	Static	2726.51	Sierrita
		11/4/15		437.80	Static	2726.41	Sierrita
		12/9/15		438.60	Static	2725.61	Sierrita
		1/12/16		439.80	Static	2724.41	Sierrita
		2/11/16		439.15	Static	2725.06	BW
		3/4/16		438.70	Static	2725.51	BW
		4/29/16		438.88	Static	2725.33	Sierrita
		10/5/16		435.00	Static	2729.21	BW
IW-21	3171.37	1/14/06	452.50		Dynamic		BW, 2015a
		2/20/06	455.75		Dynamic		BW, 2015a
		3/14/06	452.00		Dynamic		BW, 2015a
		4/15/06	453.20		Dynamic		BW, 2015a
		5/14/06	447.90		Dynamic		BW, 2015a
		6/10/06	448.00		Dynamic		BW, 2015a
		7/16/06	450.16		Dynamic		BW, 2015a
		8/13/06	450.10		Dynamic		BW, 2015a
		9/16/06	449.10		Dynamic		BW, 2015a
		10/20/06	448.28		Dynamic		BW, 2015a
		11/11/06	424.80		Static		BW, 2015a
		11/21/06		424.80		2746.57	Sierrita
		12/16/06	450.70		Dynamic		BW, 2015a
		1/29/07	451.68		Dynamic		BW, 2015a
		2/23/07		449.65		2721.72	Sierrita
		2/23/07	449.65		Dynamic		BW, 2015a
		3/16/07	448.68		Dynamic		BW, 2015a
		4/24/07	447.70		Dynamic		BW, 2015a
		5/29/07	446.36		Dynamic		BW, 2015a
		6/22/07	444.15		Dynamic		BW, 2015a
		7/26/07		454.04		2717.33	Sierrita
		8/29/07	443.35		Dynamic		BW, 2015a
		10/16/07		442.10		2729.27	Sierrita
		11/29/07	441.00		Dynamic		BW, 2015a
		1/29/08		441.68		2729.69	Sierrita
		1/29/08	441.68		Dynamic		BW, 2015a
		2/28/08	441.61		Dynamic		BW, 2015a
		3/31/08	442.00		Dynamic		BW, 2015a
		4/21/08		441.50		2729.87	Sierrita
		4/30/08	441.50		Dynamic		BW, 2015a
		5/27/08	439.42		Dynamic		BW, 2015a
		7/29/08		454.00		2717.37	Sierrita
		7/29/08	454.00		Dynamic		BW, 2015a
		8/29/08	455.94		Dynamic		BW, 2015a
		9/29/08	456.00		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-21	3171.37	10/24/08		443.08		2728.29	Sierrita
		10/24/08	455.89		Dynamic		BW, 2015a
		1/29/09		484		2687.37	Sierrita
		3/10/09	415.60		Static		BW, 2015a
		5/13/09		415.60		2755.77	Sierrita
		5/13/09	452.00		Dynamic		BW, 2015a
		12/15/09	447.50		Dynamic		BW, 2015a
		5/11/11		736.00		2435.37	Sierrita
		4/15/13		612.58	Dynamic	2558.79	Sierrita
		1/28/14		Obstructed		NA	Sierrita
		3/24/14		Obstructed		NA	Sierrita
		4/25/14		Obstructed		NA	Sierrita
		5/30/14		Obstructed		NA	Sierrita
		6/9/14		Obstructed		NA	Sierrita
		7/7/14		Obstructed		NA	Sierrita
		7/31/14		Obstructed		NA	Sierrita
		8/27/14		Obstructed		NA	Sierrita
		10/1/14		Obstructed		NA	Sierrita
		11/4/14		Obstructed		NA	Sierrita
		12/2/14		Obstructed		NA	Sierrita
		12/2/14	506.93		Dynamic		BW, 2015a
		4/9/15		504.10	Dynamic	2667.27	Sierrita
		5/2/15		501.80	Dynamic	2669.57	Sierrita
		6/11/15		433.70	Static	2737.67	Sierrita
		7/18/15		498.30	Dynamic	2673.07	Sierrita
		10/7/15		512.00	Dynamic	2659.37	Sierrita
		11/4/15		510.90	Dynamic	2660.47	Sierrita
		12/9/15		502.70	Dynamic	2668.67	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		511.10	Dynamic	2660.27	BW
		3/4/16		437.10	Static	2734.27	BW
		4/29/16		510.10	Dynamic	2661.27	Sierrita
		10/5/16		436.30	Static	2735.07	BW
IW-22	3128.25	1/14/06	469.88		Dynamic		BW, 2015a
		2/20/06	470.92		Dynamic		BW, 2015a
		3/14/06	390.50		Static		BW, 2015a
		4/15/06	477.00		Dynamic		BW, 2015a
		5/14/06	462.00		Dynamic		BW, 2015a
		6/10/06	461.37		Dynamic		BW, 2015a
		7/16/06	460.80		Dynamic		BW, 2015a
		8/13/06	464.28		Dynamic		BW, 2015a
		9/16/06	466.65		Dynamic		BW, 2015a
		10/20/06	465.25		Dynamic		BW, 2015a
		11/11/06	434.75		Dynamic		BW, 2015a
		11/21/06		434.75		2693.50	Sierrita
		12/16/06	432.65		Dynamic		BW, 2015a
		1/29/07	439.45		Dynamic		BW, 2015a
		2/24/07		433.58		2694.67	Sierrita
		2/24/07	433.58		Dynamic		BW, 2015a
		3/17/07	434.90		Dynamic		BW, 2015a
		4/24/07	435.60		Dynamic		BW, 2015a
		5/30/07	435.10		Dynamic		BW, 2015a
		6/22/07	438.55		Dynamic		BW, 2015a
		7/31/07		430.00		2698.25	Sierrita
		8/29/07	436.75		Dynamic		BW, 2015a
		10/18/07		435.75		2692.50	Sierrita
		11/29/07	436.90		Dynamic		BW, 2015a
		1/29/08		438.50		2689.75	Sierrita
		1/29/08	438.50		Dynamic		BW, 2015a
		2/29/08	437.50		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-22	3128.25	3/31/08	436.90		Dynamic		BW, 2015a
		4/25/08		439.30		2688.95	Sierrita
		4/30/08	439.30		Dynamic		BW, 2015a
		5/27/08	439.00		Dynamic		BW, 2015a
		6/30/08	441.00		Dynamic		BW, 2015a
		7/29/08		442.08		2686.17	Sierrita
		7/29/08	442.08		Dynamic		BW, 2015a
		8/29/08	442.80		Dynamic		BW, 2015a
		9/29/08	443.06		Dynamic		BW, 2015a
		10/24/08		455.89		2672.36	Sierrita
		10/24/08	443.08		Dynamic		BW, 2015a
		1/21/09		442		2686.25	Sierrita
		3/10/09	384.00		Static		BW, 2015a
		5/13/09		384.00		2744.25	Sierrita
		5/13/09	443.00		Dynamic		BW, 2015a
		12/15/09	438.00		Dynamic		BW, 2015a
		4/12/10		434.62		2693.63	Sierrita
		3/9/11	424.56		Dynamic		BW, 2015a
		4/15/11	378.72		Static		BW, 2015a
		5/11/11		431.21		2697.04	Sierrita
		5/11/11	431.21		Dynamic		BW, 2015a
		6/27/11	430.12		Dynamic		BW, 2015a
		7/12/11	369.50		Static		BW, 2015a
		8/23/11	433.80		Dynamic		BW, 2015a
		12/29/11	402.80		Dynamic		BW, 2015a
		1/26/12	418.31		Dynamic		BW, 2015a
		3/29/12	452.67		Dynamic		BW, 2015a
		5/22/12		448.78		2679.47	Sierrita
		5/22/12	448.78		Dynamic		BW, 2015a
		6/27/12	382.79		Static		BW, 2015a
		7/31/12	442.68		Dynamic		BW, 2015a
		8/22/12	400.60		Static		BW, 2015a
		9/26/12	462.71		Dynamic		BW, 2015a
		10/26/12	408.11		Static		BW, 2015a
		11/27/12	460.35		Dynamic		BW, 2015a
		4/15/13		459.72	Dynamic	2668.53	Sierrita
		6/25/13	408.44		Static		BW, 2015a
		7/31/13	467.14		Dynamic		BW, 2015a
		8/1/13	408.82		Static		BW, 2015a
		9/30/13	467.52		Dynamic		BW, 2015a
		10/29/13	415.89		Static		BW, 2015a
		11/28/13	468.90		Dynamic		BW, 2015a
		12/9/13	414.17		Static		BW, 2015a
		1/28/14	467.14		Dynamic		BW, 2015a
		1/29/14		467.14	Dynamic	2661.11	Sierrita
		2/24/14	414.41		Static		BW, 2015a
		2/25/14		414.41	Static	2713.84	Sierrita
		3/24/14		471.95	Dynamic	2656.30	Sierrita
		3/31/14	471.95		Dynamic		BW, 2015a
		4/28/14		411.44		2716.81	Sierrita
		5/30/14		466.14	Dynamic	2662.11	Sierrita
		5/30/14	466.14		Dynamic		BW, 2015a
		6/9/14		461.20	Dynamic	2667.05	Sierrita
		6/9/14	461.20		Dynamic		BW, 2015a
		7/7/14		459.10	Dynamic	2669.15	Sierrita
		7/7/14	458.43		Dynamic		BW, 2015a
		7/31/14		452.40	Dynamic	2675.85	Sierrita
		7/31/14	452.40		Dynamic		BW, 2015a
		8/27/14		397.80	Static	2730.45	Sierrita
		8/27/14	397.80		Static		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-22	3128.25	10/1/14		461.00	Dynamic	2667.25	Sierrita
		10/1/14	460.33		Dynamic		BW, 2015a
		11/4/14		452.80	Dynamic	2675.45	Sierrita
		11/4/14	452.13		Dynamic		BW, 2015a
		12/2/14		453.20	Dynamic	2675.05	Sierrita
		12/2/14	452.53		Dynamic		BW, 2015a
		4/9/15		451.70	Dynamic	2676.55	Sierrita
		5/2/15		400.60	Static	2727.65	Sierrita
		6/11/15		400.10	Static	2728.15	Sierrita
		7/8/15		462.90	Dynamic	2665.35	Sierrita
		10/7/15		475.40	Dynamic	2652.85	Sierrita
		11/4/15		464.55	Dynamic	2663.70	Sierrita
		12/9/15		472.90	Dynamic	2655.35	Sierrita
		1/12/16		470.30	Dynamic	2657.95	Sierrita
		2/11/16		464.35	Dynamic	2663.90	BW
		3/4/16		412.40	Static	2715.85	BW
		4/29/16		456.20	Dynamic	2672.05	Sierrita
		10/5/16		401.17	Static	2727.08	BW
IW-23	3128.53	1/14/06	464.40		Dynamic		BW, 2015a
		3/14/06	377.75		Static		BW, 2015a
		4/15/06	504.00		Dynamic		BW, 2015a
		5/14/06	472.25		Dynamic		BW, 2015a
		6/10/06	490.55		Dynamic		BW, 2015a
		7/16/06	470.30		Dynamic		BW, 2015a
		11/11/06	544.50		Dynamic		BW, 2015a
		12/16/06		544.50		2584.03	Sierrita
		12/16/06	493.02		Dynamic		BW, 2015a
		1/29/07	497.00		Dynamic		BW, 2015a
		2/24/07		499.20		2629.33	Sierrita
		2/24/07	499.20		Dynamic		BW, 2015a
		3/17/07	496.00		Dynamic		BW, 2015a
		4/24/07	491.30		Dynamic		BW, 2015a
		5/30/07	497.70		Dynamic		BW, 2015a
		6/26/07	503.30		Dynamic		BW, 2015a
		7/31/07		500.00		2628.53	Sierrita
		8/29/07	500.50		Dynamic		BW, 2015a
		10/18/07		518.95		2609.58	Sierrita
		3/10/09	375.00		Static		BW, 2015a
		5/13/09		375.00		2753.53	Sierrita
		5/13/09	510.00		Dynamic		BW, 2015a
		4/12/10		538.78		2589.75	Sierrita
		3/9/11	384.85				BW, 2015a
		4/15/11	369.88		Static		BW, 2015a
		5/11/11		516.15		2612.38	Sierrita
		5/11/11	516.15		Dynamic		BW, 2015a
		6/27/11	525.00		Dynamic		BW, 2015a
		7/12/11	372.42		Static		BW, 2015a
		8/23/11	538.30		Dynamic		BW, 2015a
		12/29/11	534.50		Dynamic		BW, 2015a
		1/26/12	529.71		Dynamic		BW, 2015a
		3/29/12	546.38		Dynamic		BW, 2015a
		5/22/12		523.21		2605.32	Sierrita
		5/22/12	523.21		Dynamic		BW, 2015a
		8/22/12	381.70		Static		BW, 2015a
		9/26/12	535.61		Dynamic		BW, 2015a
		10/26/12	384.71		Static		BW, 2015a
		11/27/12	483.41		Dynamic		BW, 2015a
		4/15/13		482.11	Dynamic	2646.42	Sierrita
		6/25/13	385.08		Static		BW, 2015a
		8/1/13	385.44		Static		BW, 2015a
		9/30/13	426.62		Dynamic		BW, 2015a
		10/30/13	394.39		Static		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-23	3128.53	11/28/13	428.20		Dynamic		BW, 2015a
		12/9/13	387.59		Static		BW, 2015a
		1/28/14	528.47		Dynamic		BW, 2015a
		1/29/14		528.47	Dynamic	2600.06	Sierrita
		2/24/14	389.51		Static		BW, 2015a
		2/25/14		389.51	Static	2739.02	Sierrita
		3/24/14		Obstructed		NA	Sierrita
		4/28/14		385.17	Dynamic	2743.36	Sierrita
		5/30/14		519.31	Dynamic	2609.22	Sierrita
		5/30/14	519.31		Dynamic		BW, 2015a
		6/9/14		546.60	Dynamic	2581.93	Sierrita
		6/9/14	546.60		Dynamic		BW, 2015a
		7/6/14		546.60	Dynamic	2581.93	Sierrita
		7/6/14	545.73		Dynamic		BW, 2015a
		7/31/14		534.90	Dynamic	2593.63	Sierrita
		7/31/14	534.90		Dynamic		BW, 2015a
		8/27/14		Insufficient Flow		NA	Sierrita
		10/1/14		546.65	Dynamic	2581.88	Sierrita
		10/1/14	545.78		Dynamic		BW, 2015a
		11/4/14		525.20	Dynamic	2603.33	Sierrita
		11/4/14	524.33		Dynamic		BW, 2015a
		12/2/14		539.60	Dynamic	2588.93	Sierrita
		12/2/14	538.73		Dynamic		BW, 2015a
		4/9/15		471.70	Dynamic	2656.83	Sierrita
		5/2/15		484.70	Dynamic	2643.83	Sierrita
		6/11/15		379.95	Static	2748.58	Sierrita
		7/8/15		482.40	Dynamic	2646.13	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		468.00	Dynamic	2660.53	Sierrita
		12/9/15		383.50	Static	2745.03	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		377.40	Static	2751.13	BW
		3/4/16		376.30	Static	2752.23	BW
		4/29/16		372.40	Static	2756.13	Sierrita
		10/5/16		369.75	Static	2758.78	BW
IW-24	3113.29	1/14/06	416.70		Dynamic		BW, 2015a
		2/20/06	392.50		Dynamic		BW, 2015a
		3/14/06	353.90		Static		BW, 2015a
		4/15/06	495.72		Dynamic		BW, 2015a
		5/14/06	418.20		Dynamic		BW, 2015a
		6/10/06	446.65		Dynamic		BW, 2015a
		7/16/06	412.75		Dynamic		BW, 2015a
		8/13/06	477.00		Dynamic		BW, 2015a
		9/16/06	418.00		Dynamic		BW, 2015a
		10/20/06	545.50		Dynamic		BW, 2015a
		11/11/06	395.80		Dynamic		BW, 2015a
		3/3/07	344.00		Static		BW, 2015a
		5/30/07	353.50		Dynamic		BW, 2015a
		2/29/08	555.10		Dynamic		BW, 2015a
		3/31/08	525.25		Dynamic		BW, 2015a
		4/25/08		522.50		2590.79	Sierrita
		4/30/08	522.50		Dynamic		BW, 2015a
		5/27/08	433.30		Dynamic		BW, 2015a
		6/30/08	451.50		Dynamic		BW, 2015a
		7/29/08		452.50		2660.79	Sierrita
		7/29/08	452.50		Dynamic		BW, 2015a
		8/29/08	467.00		Dynamic		BW, 2015a
		8/29/08	467.66		Dynamic		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-24	3113.29	10/24/08		466.99		2646.30	Sierrita
		10/24/08	466.99		Dynamic		BW, 2015a
		3/10/09	348.00		Static		BW, 2015a
		5/13/09		348.00		2765.29	Sierrita
		5/13/09	526.50		Dynamic		BW, 2015a
		4/12/10		522.90		2590.39	Sierrita
		3/24/11	480.11		Dynamic		BW, 2015a
		4/15/11	345.38		Static		BW, 2015a
		5/11/11		456.05		2657.24	Sierrita
		5/11/11	456.05		Dynamic		BW, 2015a
		6/27/11	446.19		Dynamic		BW, 2015a
		7/12/11	346.60		Static		BW, 2015a
		8/23/11	426.80		Dynamic		BW, 2015a
		12/29/11	458.40		Dynamic		BW, 2015a
		1/26/12	478.61		Dynamic		BW, 2015a
		2/28/12	349.58		Static		BW, 2015a
				512.88		2600.41	Sierrita
		5/22/12	512.88		Dynamic		BW, 2015a
		6/27/12	354.00		Static		BW, 2015a
		7/31/12	439.87		Dynamic		BW, 2015a
		8/22/12	355.46		Static		BW, 2015a
		9/28/12	441.60		Dynamic		BW, 2015a
		10/26/12	355.87		Static		BW, 2015a
		11/28/12	543.91		Dynamic		BW, 2015a
		4/15/13		533.21	Dynamic	2580.08	Sierrita
		6/25/13	356.47		Static		BW, 2015a
		7/31/13	544.16		Dynamic		BW, 2015a
		8/1/13	355.91		Dynamic		BW, 2015a
		9/30/13	544.71		Dynamic		BW, 2015a
		10/30/13	359.61		Static		BW, 2015a
		11/28/13	536.89		Dynamic		BW, 2015a
		1/28/14		522.00	Dynamic	2591.29	Sierrita
		1/28/14	522.00		Dynamic		BW, 2015a
		2/24/14	358.72		Static		BW, 2015a
		2/25/14		358.72	Static	2754.57	Sierrita
		3/25/14		517.78	Dynamic	2595.51	Sierrita
		3/31/14	517.78		Dynamic		BW, 2015a
		4/28/14		356.88	Dynamic	2756.41	Sierrita
		5/30/14		514.60	Dynamic	2598.69	Sierrita
		5/30/14	514.60		Dynamic		BW, 2015a
		6/9/14		499.00	Dynamic	2614.29	Sierrita
		6/9/14	499.00		Dynamic		BW, 2015a
		7/6/14		483.40	Dynamic	2629.89	Sierrita
		7/6/14	482.90		Dynamic		BW, 2015a
		7/31/14		457.10	Dynamic	2656.19	Sierrita
		7/31/14	457.10		Dynamic		BW, 2015a
		8/27/14		355.00	Static	2758.29	Sierrita
		8/27/14	355.00		Static		BW, 2015a
		10/1/14		458.25	Dynamic	2655.04	Sierrita
		10/1/14	457.75		Dynamic		BW, 2015a
		11/4/14		475.15	Dynamic	2638.14	Sierrita
		11/4/14	474.65		Dynamic		BW, 2015a
		12/2/14		466.90	Dynamic	2646.39	Sierrita
		12/2/14	466.40		Dynamic		BW, 2015a
		4/9/15		399.90	Dynamic	2713.39	Sierrita
		5/2/15		407.60	Dynamic	2705.69	Sierrita
		6/11/15		359.80	Static	2753.49	Sierrita
		7/8/15		404.85	Dynamic	2708.44	Sierrita
		10/7/15		403.40	Dynamic	2709.89	Sierrita
		11/4/15		399.65	Dynamic	2713.64	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-24	3113.29	12/9/15		409.25	Dynamic	2704.04	Sierrita
		1/12/16		416.10	Dynamic	2697.19	Sierrita
		2/11/16		401.60	Dynamic	2711.69	BW
		3/4/16		394.75	Dynamic	2718.54	BW
		4/29/16		389.90	Dynamic	2723.39	Sierrita
		10/5/16		349.62	Static	2763.67	BW
IW-25	3091.66	10/28/10	351.00		Static		BW, 2015a
		10/28/10	375.00		Dynamic		BW, 2015a
		5/21/12	400.85		Dynamic		BW, 2015a
		6/30/12	380.50		Static		BW, 2015a
		7/31/12	465.37		Dynamic		BW, 2015a
		8/25/12	380.20		Static		BW, 2015a
		9/28/12	462.88		Dynamic		BW, 2015a
		11/28/12	427.43		Static		BW, 2015a
		4/15/13		422.52	Dynamic	2669.14	Sierrita
		6/26/13	380.43		Static		BW, 2015a
		7/31/13	451.60		Dynamic		BW, 2015a
		8/1/13	378.56		Static		BW, 2015a
		9/30/13	451.58		Dynamic		BW, 2015a
		10/31/13	384.18		Static		BW, 2015a
		11/28/13	452.68		Dynamic		BW, 2015a
		12/9/13	388.78		Static		BW, 2015a
		1/28/14	447.14		Dynamic		BW, 2015a
		3/31/14	445.09		Dynamic		BW, 2015a
		5/30/14	442.11		Dynamic		BW, 2015a
		6/9/14		436.90	Dynamic	2654.76	Sierrita
		6/9/14	436.90		Dynamic		BW, 2015a
		7/6/14	434.97		Dynamic		BW, 2015a
		7/31/14	436.10		Dynamic		BW, 2015a
		8/27/14	379.50		Static		BW, 2015a
		10/1/14	442.32		Dynamic		BW, 2015a
		11/4/14	437.37		Dynamic		BW, 2015a
		12/2/14	440.87		Dynamic		BW, 2015a
		4/9/15		433.00	Dynamic	2658.66	Sierrita
		5/2/15		439.70	Dynamic	2651.96	Sierrita
		6/11/15		439.40	Dynamic	2652.26	Sierrita
		7/8/15		444.75	Dynamic	2646.91	Sierrita
		10/7/15		441.50	Dynamic	2650.16	Sierrita
		11/4/15		439.05	Dynamic	2652.61	Sierrita
		12/9/15		443.00	Dynamic	2648.66	Sierrita
		1/12/16		438.75	Dynamic	2652.91	Sierrita
		2/11/16		424.75	Dynamic	2666.91	BW
		3/4/16		417.30	Dynamic	2674.36	BW
		4/29/16		416.90	Dynamic	2674.76	Sierrita
		10/5/16		413.50	Dynamic	2678.16	BW
IW-26	3100.03	10/10/10	361.00		Static		BW, 2015a
		10/10/10	394.00		Dynamic		BW, 2015a
		5/21/12	484.33		Dynamic		BW, 2015a
		6/30/12	376.70		Static		BW, 2015a
		7/31/12	487.67		Dynamic		BW, 2015a
		8/25/12	376.70		Static		BW, 2015a
		9/28/12	481.21		Dynamic		BW, 2015a
		11/28/12	493.38		Dynamic		BW, 2015a
		4/15/13		492.21	Dynamic	2607.82	Sierrita
		6/26/13	384.32		Static		BW, 2015a
		7/31/13	494.16		Dynamic		BW, 2015a
		8/1/13	383.28		Static		BW, 2015a
		9/30/13	494.24		Dynamic		BW, 2015a
		10/29/13	384.54		Static		BW, 2015a
		10/31/13	384.21		Static		BW, 2015a

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-26	3100.03	11/28/13	382.75		Static		BW, 2015a
		12/9/13	382.88		Static		BW, 2015a
		1/28/14	380.61		Static		BW, 2015a
		3/31/14	380.55		Static		BW, 2015a
		5/30/14	379.35		Static		BW, 2015a
		6/9/14		376.80	Static	2723.23	Sierrita
		6/9/14	376.80		Static		BW, 2015a
		7/6/14	378.29		Static		BW, 2015a
		7/31/14	377.60		Static		BW, 2015a
		8/27/14	377.60		Static		BW, 2015a
		10/1/14	377.69		Static		BW, 2015a
		11/4/14	377.89		Static		BW, 2015a
		12/2/14	379.19		Static		BW, 2015a
		4/9/15		432.60	Dynamic	2667.43	Sierrita
		5/2/15		436.70	Dynamic	2663.33	Sierrita
		6/11/15		439.30	Dynamic	2660.73	Sierrita
		7/8/15		441.60	Dynamic	2658.43	Sierrita
		10/7/15		442.95	Dynamic	2657.08	Sierrita
		11/4/15		441.10	Dynamic	2658.93	Sierrita
		12/9/15		445.15	Dynamic	2654.88	Sierrita
		1/12/16		443.85	Dynamic	2656.18	Sierrita
		2/11/16		437.40	Dynamic	2662.63	BW
		3/4/16		431.20	Dynamic	2668.83	BW
		4/29/16		428.00	Dynamic	2672.03	Sierrita
		10/5/16		378.60	Static	2721.43	BW
IW-27	3120.33	12/3/10	378.50		Static		BW, 2015a
		12/3/10	393.30		Dynamic		BW, 2015a
		5/22/12	416.34		Dynamic		BW, 2015a
		10/30/13	395.56		Static		BW, 2015a
		11/28/13	395.04		Static		BW, 2015a
		12/9/13	395.21		Static		BW, 2015a
		1/28/14	394.70		Static		BW, 2015a
		2/24/14	418.11		Dynamic		BW, 2015a
		3/31/14	394.72		Static		BW, 2015a
		5/30/14	394.32		Static		BW, 2015a
		6/5/14		393.50	Static	2726.83	Sierrita
		6/5/14	393.50		Static		BW, 2015a
		7/6/14	392.32		Static		BW, 2015a
		7/31/14	392.50		Static		BW, 2015a
		8/27/14	392.70		Static		BW, 2015a
		10/1/14	393.02		Static		BW, 2015a
		11/4/14	455.07		Dynamic		BW, 2015a
		12/2/14	459.52		Dynamic		BW, 2015a
		4/9/15		457.85	Dynamic	2662.48	Sierrita
		5/2/15		466.20	Dynamic	2654.13	Sierrita
		6/11/15		471.10	Dynamic	2649.23	Sierrita
		7/8/15		468.55	Dynamic	2651.78	Sierrita
		10/7/15		468.00	Dynamic	2652.33	Sierrita
		11/4/15		458.95	Dynamic	2661.38	Sierrita
		12/9/15		470.00	Dynamic	2650.33	Sierrita
		1/12/16		473.25	Dynamic	2647.08	Sierrita
		2/11/16		464.25	Dynamic	2656.08	BW
		3/4/16		458.35	Dynamic	2661.98	BW
		4/29/16		458.80	Dynamic	2661.53	Sierrita
		10/5/16		396.75	Static	2723.58	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
IW-28	3110.71	1/5/11	382.00		Static		BW, 2015a
		1/5/11	409.00		Dynamic		BW, 2015a
		5/22/12	439.61		Dynamic		BW, 2015a
		6/30/12	392.40		Static		BW, 2015a
		7/31/12	451.37		Dynamic		BW, 2015a
		8/25/12	392.40		Static		BW, 2015a
		9/28/12	449.60		Dynamic		BW, 2015a
		11/27/12	451.70		Dynamic		BW, 2015a
		4/15/13		447.89	Dynamic	2662.82	Sierrita
		6/26/13	403.12		Static		BW, 2015a
		7/31/13	453.58		Dynamic		BW, 2015a
		8/1/13	401.30		Static		BW, 2015a
		9/30/13	454.16		Dynamic		BW, 2015a
		10/31/13	405.26		Static		BW, 2015a
		11/28/13	442.66		Dynamic		BW, 2015a
		12/9/13	405.53		Static		BW, 2015a
		1/28/14	424.78		Dynamic		BW, 2015a
		2/24/14	405.49		Static		BW, 2015a
		3/31/14	439.97		Dynamic		BW, 2015a
		5/30/14	440.07		Dynamic		BW, 2015a
		6/9/14		434.70	Dynamic	2676.01	Sierrita
		6/9/14	434.70		Dynamic		BW, 2015a
		7/6/14	432.39		Dynamic		BW, 2015a
		7/31/14	431.80		Dynamic		BW, 2015a
		8/27/14	400.95		Static		BW, 2015a
		10/1/14	433.44		Dynamic		BW, 2015a
		11/4/14	433.39		Dynamic		BW, 2015a
		12/2/14	434.49		Dynamic		BW, 2015a
		4/9/15		434.70	Dynamic	2676.01	Sierrita
		5/2/15		434.50	Dynamic	2676.21	Sierrita
		6/11/15		434.50	Dynamic	2676.21	Sierrita
		7/8/15		437.10	Dynamic	2673.61	Sierrita
		10/7/15		443.25	Dynamic	2667.46	Sierrita
		11/4/15		441.50	Dynamic	2669.21	Sierrita
		12/9/15		444.20	Dynamic	2666.51	Sierrita
		1/12/16		441.50	Dynamic	2669.21	Sierrita
		2/11/16		439.20	Dynamic	2671.51	BW
		3/4/16		UTM		NA	BW
		4/29/16		435.45	Dynamic	2675.26	Sierrita
		10/5/16		404.35	Static	2706.36	BW
IW-29	3088.00	5/12/14		389.50	Static	2698.50	Sierrita
		5/13/14	389.75		Static		BW, 2015b
		8/27/14	394.7		Static		BW, 2015b
		4/9/15		436.10	Dynamic	2651.90	Sierrita
		5/2/15		437.85	Dynamic	2650.15	Sierrita
		6/11/15		437.80	Dynamic	2650.20	Sierrita
		7/18/15		437.60	Dynamic	2650.40	Sierrita
		10/7/15		408.50	Static	2679.50	Sierrita
		11/4/15		437.88	Dynamic	2650.12	Sierrita
		12/9/15		407.90	Static	2680.10	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		437.60	Dynamic	2650.40	BW
M-5	2994.14	3/4/16		437.52	Dynamic	2650.48	BW
		4/29/16		434.10	Dynamic	2653.90	Sierrita
		10/5/16		437.55	Dynamic	2650.45	BW
		6/16/15		490.32	Static	2503.82	Sierrita
		11/17/15		494.45	Static	2499.69	Sierrita
		6/15/16		494.60	Static	2499.54	Sierrita
		12/8/16		494.92	Static	2499.22	Sierrita

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
M-8	2996.96	1/15/07		460.92		2536.04	Sierrita
		4/16/07		458.83		2538.13	Sierrita
		7/10/07		462.57		2534.39	Sierrita
		10/8/07		465.65		2531.31	Sierrita
		1/9/08		464.68		2532.28	Sierrita
		4/14/08		462.50		2534.46	Sierrita
		7/25/08		466.18		2530.78	Sierrita
		10/28/08		468.82		2528.14	Sierrita
		1/20/09		466.25		2530.71	Sierrita
		5/12/09		465.10		2531.86	Sierrita
		11/5/09		465.60		2531.36	Sierrita
		5/28/10		466.61		2530.35	Sierrita
		10/21/10		471.61		2525.35	Sierrita
		6/15/11		467.35		2529.61	Sierrita
		11/17/11		471.23		2525.73	Sierrita
		6/29/12		464.98		2531.98	Sierrita
		10/29/12		472.66		2524.30	Sierrita
		4/17/13		466.32		2530.64	Sierrita
		5/21/13		464.70		2532.26	Sierrita
		10/29/13		472.55		2524.41	Sierrita
		3/12/14		472.63		2524.33	Sierrita
		4/22/14		473.69		2523.27	Sierrita
		5/8/14		473.53		2523.43	Sierrita
		6/9/14		476.70	Static	2520.26	Sierrita
		7/28/14		479.96		2517.00	Sierrita
		8/7/14		480.13		2516.83	Sierrita
		9/8/14		481.99	Static	2514.97	Sierrita
		10/28/14		484.31		2512.65	Sierrita
		11/4/14		484.66		2512.30	Sierrita
		12/16/14		484.74	Static	2512.22	Sierrita
		1/29/15		484.88	Static	2512.08	Sierrita
		2/27/15		484.93	Static	2512.03	Sierrita
		3/19/15		484.02	Static	2512.94	Sierrita
		4/6/15		484.53	Static	2512.43	Sierrita
		5/21/15		486.24	Static	2510.72	Sierrita
		6/1/15		486.56	Static	2510.40	Sierrita
		7/23/15	UTM			NA	Sierrita
		8/31/15	UTM			NA	Sierrita
		10/26/15	UTM			NA	Sierrita
		11/17/15	UTM			NA	Sierrita
		1/7/16	UTM			NA	Sierrita
		2/9/16	UTM			NA	Sierrita
		3/7/16	UTM			NA	Sierrita
		6/8/16	UTM			NA	Sierrita
		8/25/16		496.75	Static	2500.21	Sierrita
		10/27/16		499.00	Static	2497.96	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
M-9	2971.02	7/18/06		442.70		2528.32	Sierrita
		1/15/07		445.76		2525.26	Sierrita
		7/10/07		450.75		2520.27	Sierrita
		10/8/07		453.15		2517.87	Sierrita
		1/8/08		447.50		2523.52	Sierrita
		4/14/08		448.50		2522.52	Sierrita
		7/21/08		454.27		2516.75	Sierrita
		10/28/08		457.72		2513.30	Sierrita
		1/20/09		450.78		2520.24	Sierrita
		5/13/09		452.00		2519.02	Sierrita
		6/16/10		453.85		2517.17	Sierrita
		6/2/11		452.35		2518.67	Sierrita
		6/27/12		455.78		2515.24	Sierrita
		5/1/13		473.80		2497.22	Sierrita
		3/12/14		483.66		2487.36	Sierrita
		4/22/14		464.39		2506.63	Sierrita
		5/8/14		464.37		2506.65	Sierrita
		6/9/14		457.78		2513.24	Sierrita
		7/28/14		461.34		2509.68	Sierrita
		8/7/14		462.06		2508.96	Sierrita
		9/8/14		463.43	Static	2507.59	Sierrita
		10/28/14		464.55		2506.47	Sierrita
		11/4/14		466.10		2504.92	Sierrita
		12/16/14		467.81	Static	2503.21	Sierrita
		1/20/15		461.04	Static	2509.98	Sierrita
		2/27/15		465.19	Static	2505.83	Sierrita
		3/19/15		460.12	Static	2510.90	Sierrita
		4/6/15		460.84	Static	2510.18	Sierrita
		5/21/15		461.18	Static	2509.84	Sierrita
		6/1/15		461.29	Static	2509.73	Sierrita
		7/23/15		467.84	Static	2503.18	Sierrita
		8/31/15		469.81	Static	2501.21	Sierrita
		11/17/15		470.74	Static	2500.28	Sierrita
		1/7/16		466.20	Static	2504.82	Sierrita
		2/9/16		465.51	Static	2505.51	Sierrita
		3/7/16		465.39	Static	2505.63	Sierrita
		4/25/16		466.80	Static	2504.22	Sierrita
		8/24/16		473.63	Static	2497.39	Sierrita
		12/8/16		474.77	Static	2496.25	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
M-10	3002.69	7/18/06		472.72		2529.97	Sierrita
		1/15/07		473.65		2529.04	Sierrita
		4/16/07		471.47		2531.22	Sierrita
		7/10/07		477.16		2525.53	Sierrita
		10/8/07		478.45		2524.24	Sierrita
		1/8/08		477.60		2525.09	Sierrita
		4/14/08		475.48		2527.21	Sierrita
		7/21/08		480.15		2522.54	Sierrita
		10/28/08		483.70		2518.99	Sierrita
		1/20/09		475.85		2526.84	Sierrita
		5/12/09		478.80		2523.89	Sierrita
		11/5/09		481.20		2521.49	Sierrita
		6/4/10		480.29		2522.40	Sierrita
		10/21/10		486.40		2516.29	Sierrita
		5/10/11		478.33		2524.36	Sierrita
		11/16/11		484.66		2518.03	Sierrita
		6/25/12		482.73		2519.96	Sierrita
		10/29/12		486.64		2516.05	Sierrita
		4/17/13		478.63		2524.06	Sierrita
		10/29/13		486.07		2516.62	Sierrita
		4/22/14		483.06	Static	2519.63	Sierrita
		11/4/14		493.67	Static	2509.02	Sierrita
		4/6/15		491.46	Static	2511.23	Sierrita
		10/26/15		UTM		NA	Sierrita
		2/9/16		UTM		NA	Sierrita
		6/8/16		UTM		NA	Sierrita
		12/5/16		503.92	Static	2498.77	Sierrita
M-11	2938.82	6/16/15		433.11	Static	2505.71	Sierrita
		11/17/15		435.43	Static	2503.39	Sierrita
		6/15/16		437.35	Static	2501.47	Sierrita
		12/8/16		439.08	Static	2499.74	Sierrita
M-13	3077.00	6/18/15		569.71	Static	2507.29	Sierrita
		11/17/15		574.92	Static	2502.08	Sierrita
		6/15/16		573.72	Static	2503.28	Sierrita
		12/8/16		575.10	Static	2503.28	Sierrita
M-20	3054.00	7/18/06		484.18		2569.82	Sierrita
		1/15/07		489.14		2564.86	Sierrita
		7/10/07		486.70		2567.30	Sierrita
		7/12/07		493.26		2560.74	Sierrita
		1/9/08		495.80		2558.20	Sierrita
		4/14/08		494.22		2559.78	Sierrita
		7/25/08		493.70		2560.30	Sierrita
		10/28/08		498.00		2556.00	Sierrita
		1/20/09		497.75		2556.25	Sierrita
		5/12/09		496.80		2557.20	Sierrita
		5/28/10		498.51		2555.49	Sierrita
		5/9/11		499.14		2554.86	Sierrita
		6/26/12		500.50		2553.50	Sierrita
		4/23/13		499.65		2554.35	Sierrita
		4/22/14		511.42	Static	2542.58	Sierrita
		4/27/15		529.31	Static	2524.69	Sierrita
		11/18/15		536.18	Static	2517.82	Sierrita
		4/26/16		538.43	Static	2515.57	Sierrita
		12/8/16		539.96	Static	2514.04	Sierrita

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MC-1	3038.621	5/22/13	418.97		Static		BW, 2015a
		5/22/13	435.55		Dynamic		BW, 2015a
		1/15/14		440.93	Dynamic	2597.69	Sierrita
		1/15/14	440.93		Dynamic		BW, 2015a
		1/22/14		437.02	Dynamic	2601.60	Sierrita
		1/22/14	437.02		Dynamic		BW, 2015a
		1/28/14	442.57		Dynamic		BW, 2015a
		1/29/14		442.57	Dynamic	2596.05	Sierrita
		2/5/14	443.86		Dynamic		BW, 2015a
		2/12/14	444.84		Dynamic		BW, 2015a
		3/13/14		447.98	Dynamic	2590.64	Sierrita
		5/14/14		455.31	Dynamic	2583.31	Sierrita
		5/30/14	455.31		Dynamic		BW, 2015a
		6/9/14		456.50	Dynamic	2582.12	Sierrita
		6/9/14	456.50		Dynamic		BW, 2015a
		7/6/14		458.90	Dynamic	2579.72	Sierrita
		7/6/14	458.40		Dynamic		BW, 2015a
		7/31/14		460.50	Dynamic	2578.12	Sierrita
		7/31/14	460.50		Dynamic		BW, 2015a
		8/27/14		462.20	Dynamic	2576.42	Sierrita
		8/27/14	462.20		Dynamic		BW, 2015a
		10/1/14		450.25	Static	2588.37	Sierrita
		10/1/14	449.75		Static		BW, 2015a
		11/4/14		466.80	Dynamic	2571.82	Sierrita
		11/4/14	466.30		Dynamic		BW, 2015a
		12/2/14		468.10	Dynamic	2570.52	Sierrita
		12/2/14	467.60		Dynamic		BW, 2015a
		1/4/15		469.30	Dynamic	2569.32	Sierrita
		2/4/15		469.65	Dynamic	2568.97	Sierrita
		3/3/15		470.90	Dynamic	2567.72	Sierrita
		4/9/15		472.20	Dynamic	2566.42	BW
		5/2/15		473.40	Dynamic	2565.22	BW
		6/11/15		460.25	Static	2578.37	BW
		7/6/15		475.74	Dynamic	2562.88	BW
		8/18/15		462.52	Static	2576.10	Sierrita
		10/7/15		478.15	Dynamic	2560.47	BW
		11/4/15		479.70	Dynamic	2558.92	BW
		12/9/15		480.90	Dynamic	2557.72	BW
		1/12/16		UTM		NA	Sierrita
		2/11/16		481.30	Dynamic	2557.32	BW
		3/4/16		482.20	Dynamic	2556.42	BW
		4/8/16		483.60	Dynamic	2555.02	Sierrita
		10/5/16		488.55	Dynamic	2550.07	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MC-2	3008.28	3/24/13	412.55		Static		BW, 2015a
		3/24/13	431.52		Dynamic		BW, 2015a
		3/14/14		Obstructed		NA	Sierrita
		5/14/14		440.68	Dynamic	2567.60	Sierrita
		5/15/14		440.66	Dynamic	2567.62	Sierrita
		5/15/14	440.66		Dynamic		BW, 2015a
		5/22/14		442.47	Dynamic	2565.81	Sierrita
		5/22/14	442.47		Dynamic		BW, 2015a
		5/30/14	442.47		Dynamic		BW, 2015a
		6/9/14		443.70	Dynamic	2564.58	Sierrita
		6/9/14	443.70		Dynamic		BW, 2015a
		7/6/14		445.80	Dynamic	2562.48	Sierrita
		7/6/14	445.63		Dynamic		BW, 2015a
		7/31/14		447.50	Dynamic	2560.78	Sierrita
		7/31/14	447.50		Dynamic		BW, 2015a
		8/27/14		449.30	Dynamic	2558.98	Sierrita
		8/27/14	449.30		Dynamic		BW, 2015a
		10/1/14		442.65	Static	2565.63	Sierrita
		10/1/14	442.48		Static		BW, 2015a
		11/4/14		453.60	Dynamic	2554.68	Sierrita
		11/4/14	453.43		Dynamic		BW, 2015a
		12/2/14		454.75	Dynamic	2553.53	Sierrita
		12/2/14	454.58		Dynamic		BW, 2015a
		1/4/15		456.40	Dynamic	2551.88	Sierrita
		3/3/15		457.95	Dynamic	2550.33	Sierrita
		4/9/15		459.20	Dynamic	2549.08	BW
		5/2/15		460.65	Dynamic	2547.63	BW
		6/11/15		453.20	Static	2555.08	BW
		7/6/15		463.20	Dynamic	2545.08	BW
		8/18/15		464.40	Dynamic	2543.88	Sierrita
		10/7/15		465.95	Dynamic	2542.33	BW
		11/4/15		466.50	Dynamic	2541.78	BW
		12/9/15		467.70	Dynamic	2540.58	BW
		1/12/16		468.13	Dynamic	2540.15	Sierrita
		2/11/16		468.35	Dynamic	2539.93	BW
		3/4/16		469.40	Dynamic	2538.88	BW
		4/8/16		468.15	Dynamic	2540.13	Sierrita
		10/5/16		476.00	Dynamic	2532.28	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MC-3	3062.33	12/3/12	491.98		Static		BW, 2015a
		12/3/12	507.05		Dynamic		BW, 2015a
		3/13/14		Obstructed		NA	Sierrita
		5/13/14		515.62	Dynamic	2546.71	Sierrita
		5/15/14		515.62	Dynamic	2546.71	Sierrita
		5/15/14	515.62		Dynamic		BW, 2015a
		5/22/14		516.21	Dynamic	2546.12	Sierrita
		5/22/14	516.21		Dynamic		BW, 2015a
		5/30/14	516.21		Dynamic		BW, 2015a
		6/9/14		517.70	Dynamic	2544.63	Sierrita
		6/9/14	517.70		Dynamic		BW, 2015a
		7/6/14		519.50	Dynamic	2542.83	Sierrita
		7/6/14	518.83		Dynamic		BW, 2015a
		7/31/14		521.40	Dynamic	2540.93	Sierrita
		7/31/14	521.40		Dynamic		BW, 2015a
		8/27/14		522.95	Dynamic	2539.38	Sierrita
		8/27/14	522.95		Dynamic		BW, 2015a
		10/1/14		519.75	Static	2542.58	Sierrita
		10/1/14	519.08		Static		BW, 2015a
		11/4/14		527.25	Dynamic	2535.08	Sierrita
		11/4/14	526.58		Dynamic		BW, 2015a
		12/2/14		528.65	Dynamic	2533.68	Sierrita
		12/2/14	527.98		Dynamic		BW, 2015a
		1/4/15		530.50	Dynamic	2531.83	Sierrita
		2/4/15		531.21	Dynamic	2531.12	Sierrita
		3/3/15		532.10	Dynamic	2530.23	Sierrita
		4/9/15		533.10	Dynamic	2529.23	BW
		5/2/15		534.05	Dynamic	2528.28	BW
		6/11/15		531.35	Static	2530.98	BW
		7/6/15		536.45	Dynamic	2525.88	BW
		8/18/15		537.60	Dynamic	2524.73	Sierrita
		10/7/15		538.84	Dynamic	2523.49	BW
		11/4/15		539.80	Dynamic	2522.53	BW
		12/9/15		540.85	Dynamic	2521.48	BW
		1/12/16		541.37	Dynamic	2520.96	Sierrita
		2/11/16		542.04	Dynamic	2520.29	BW
		3/4/16		542.70	Dynamic	2519.63	BW
		4/8/16		543.60	Dynamic	2518.73	Sierrita
		10/5/16		548.30	Dynamic	2514.03	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MC-4	3096.035	8/13/12	530.67		Static		BW, 2015a
		8/13/12	548.72		Dynamic		BW, 2015a
		3/13/14		Obstructed		NA	Sierrita
		5/13/14		560.86	Dynamic	2535.18	Sierrita
		5/15/14		560.86	Dynamic	2535.18	Sierrita
		5/15/14	560.86		Dynamic		BW, 2015a
		5/22/14		561.09	Dynamic	2534.95	Sierrita
		5/22/14	561.09		Dynamic		BW, 2015a
		5/30/14	561.09		Dynamic		BW, 2015a
		6/5/14		561.90	Dynamic	2534.14	Sierrita
		6/5/14	561.90		Dynamic		BW, 2015a
		7/6/14		564.00	Dynamic	2532.04	Sierrita
		7/6/14	563.06		Dynamic		BW, 2015a
		7/31/14		565.70	Dynamic	2530.34	Sierrita
		7/31/14	565.70		Dynamic		BW, 2015a
		8/27/14		567.25	Dynamic	2528.79	Sierrita
		8/27/14	567.25		Dynamic		BW, 2015a
		10/1/14		558.80	Static	2537.24	Sierrita
		10/1/14	557.86		Static		BW, 2015a
		11/4/14		572.20	Dynamic	2523.84	Sierrita
		11/4/14	571.26		Dynamic		BW, 2015a
		12/2/14		573.70	Dynamic	2522.34	Sierrita
		12/2/14	572.76		Dynamic		BW, 2015a
		1/4/15		575.35	Dynamic	2520.69	Sierrita
		2/4/15		576.10	Dynamic	2519.94	Sierrita
		3/3/15		576.95	Dynamic	2519.09	Sierrita
		4/9/15		577.95	Dynamic	2518.09	Sierrita
		5/2/15		579.10	Dynamic	2516.94	Sierrita
		6/11/15		569.10	Static	2526.94	Sierrita
		7/6/15		581.40	Dynamic	2514.64	Sierrita
		8/18/15		582.70	Dynamic	2513.34	Sierrita
		10/7/15		UTM		NA	Sierrita
		11/4/15		585.00	Dynamic	2511.04	Sierrita
		12/9/15		586.30	Dynamic	2509.74	Sierrita
		1/12/16		586.45	Dynamic	2509.59	Sierrita
		2/11/16		587.55	Dynamic	2508.49	BW
		3/4/16		588.35	Dynamic	2507.69	BW
		4/8/16		589.21	Dynamic	2506.83	Sierrita
		10/5/16		594.10	Dynamic	2501.94	BW
MH-1	3179.27	11/21/06		443.90		2735.37	Sierrita
		1/10/07		444.15		2735.12	Sierrita
		4/20/07		442.70		2736.57	Sierrita
		7/3/07		441.33		2737.94	Sierrita
		11/8/07		440.10		2739.17	Sierrita
		1/28/08		439.97		2739.30	Sierrita
		4/24/08		440.44		2738.83	Sierrita
		8/7/08		439.65		2739.62	Sierrita
		11/14/08		441.45		2737.82	Sierrita
		2/17/09		440.90		2738.37	Sierrita
		6/2/09		440.70		2738.57	Sierrita
		4/13/10		438.62		2740.65	Sierrita
		4/19/11		436.65		2742.62	Sierrita
		4/25/12		436.95		2742.32	Sierrita
		4/29/14		448.90		2730.37	Sierrita
		6/4/15		460.67	Static	2718.60	Sierrita
		11/18/15		467.79	Static	2711.48	Sierrita
		6/15/16		470.26	Static	2709.01	Sierrita
		12/8/16		475.20	Static	2704.07	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-3	3155.87	12/18/06		427.70		2728.17	Sierrita
		2/23/07		427.31		2728.56	Sierrita
		4/23/07		425.51		2730.36	Sierrita
		7/21/07		424.22		2731.65	Sierrita
		10/20/07		422.15		2733.72	Sierrita
		1/19/08		424.80		2731.07	Sierrita
		4/21/08		425.44		2730.43	Sierrita
		7/29/08		424.15		2731.72	Sierrita
		10/24/08		426.10		2729.77	Sierrita
		2/17/09		425.46		2730.41	Sierrita
		6/2/09		425.18		2730.69	Sierrita
		4/13/10		418.92		2736.95	Sierrita
		4/19/11		420.10		2735.77	Sierrita
		4/25/12		419.53		2736.34	Sierrita
		4/2/13		425.84		2730.03	Sierrita
		3/12/14		433.09		2722.78	Sierrita
		4/25/14		436.44		2719.43	Sierrita
		5/14/14		436.40		2719.47	Sierrita
		6/24/14		436.38		2719.49	Sierrita
		7/7/14		439.20		2716.67	Sierrita
		8/8/14		440.46		2715.41	Sierrita
		9/9/14		441.45	Static	2714.42	Sierrita
		10/28/14		441.25		2714.62	Sierrita
		11/26/14		441.30		2714.57	Sierrita
		12/20/14		441.33	Static	2714.54	Sierrita
		1/29/15		441.35	Static	2714.52	Sierrita
		2/27/15		441.33	Static	2714.54	Sierrita
		3/26/15		445.39	Static	2710.48	Sierrita
		4/29/15		445.36	Static	2710.51	Sierrita
		5/21/15		445.34	Static	2710.53	Sierrita
		6/3/15		445.40	Static	2710.47	Sierrita
		7/23/15		448.90	Static	2706.97	Sierrita
		8/25/15		450.58	Static	2705.29	Sierrita
		11/2/15		453.46	Static	2702.41	Sierrita
		1/7/16		453.66	Static	2702.21	Sierrita
		2/11/16		453.79	Static	2702.08	Sierrita
		3/11/16		453.87	Static	2702.00	Sierrita
		6/23/16		451.18	Static	2704.69	Sierrita
		12/8/16		452.40	Static	2703.47	Sierrita
MH-5	3123.47	11/21/06		389.22		2734.25	Sierrita
		1/12/07		390.70		2732.77	Sierrita
		4/20/07		391.60		2731.87	Sierrita
		7/3/07		391.66		2731.81	Sierrita
		11/8/07		392.95		2730.52	Sierrita
		1/28/08		391.40		2732.07	Sierrita
		4/24/08		390.30		2733.17	Sierrita
		8/7/08		391.55		2731.92	Sierrita
		11/14/08		391.98		2731.49	Sierrita
		2/17/09		391.33		2732.14	Sierrita
		6/2/09		391.30		2732.17	Sierrita
		4/13/10		381.47		2742.00	Sierrita
		4/18/11		387.96		2735.51	Sierrita
		6/14/12		398.80		2724.67	Sierrita
		5/23/13		403.59		2719.88	Sierrita
		4/29/14		Obstructed		NA	Sierrita
		5/22/14		Obstructed		NA	Sierrita
		5/28/14		408.22		2715.25	Sierrita
		6/16/15		408.45	Static	2715.02	Sierrita
		11/18/15		416.66	Static	2706.81	Sierrita
		6/15/16		411.64	Static	2711.83	Sierrita
		12/8/16		418.54	Static	2704.93	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-6	3133.97	11/14/06		381.65		2752.32	Sierrita
		1/9/07		378.32		2755.65	Sierrita
		4/20/07		374.80		2759.17	Sierrita
		7/3/07		379.00		2754.97	Sierrita
		11/8/07		380.30		2753.67	Sierrita
		1/28/08		379.15		2754.82	Sierrita
		4/24/08		379.20		2754.77	Sierrita
		8/7/08		379.50		2754.47	Sierrita
		11/14/08		379.50		2754.47	Sierrita
		2/17/09		378.52		2755.45	Sierrita
		6/2/09		379.45		2754.52	Sierrita
		4/13/10		389.35		2744.62	Sierrita
		5/17/11		387.85		2746.12	Sierrita
		6/7/12		382.63		2751.34	Sierrita
		4/2/13		402.02		2731.95	Sierrita
		4/29/14		403.91		2730.06	Sierrita
		6/4/15		403.20	Static	2730.77	Sierrita
		11/18/15		412.41	Static	2721.56	Sierrita
		6/15/16		382.92	Static	2751.05	Sierrita
		12/8/16		388.37	Static	2745.60	Sierrita
MH-7	3111.23	11/21/06		357.85		2753.38	Sierrita
		1/12/07		360.20		2751.03	Sierrita
		4/20/07		368.20		2743.03	Sierrita
		7/3/07		370.20		2741.03	Sierrita
		11/8/07		370.60		2740.63	Sierrita
		1/28/08		371.00		2740.23	Sierrita
		4/24/08		370.92		2740.31	Sierrita
		8/8/08		372.22		2739.01	Sierrita
		11/14/08		373.20		2738.03	Sierrita
		2/17/09		372.48		2738.75	Sierrita
		6/2/09		371.53		2739.70	Sierrita
		4/13/10		372.63		2738.60	Sierrita
		4/18/11		368.76		2742.47	Sierrita
		6/14/12		381.09		2730.14	Sierrita
		5/23/13		391.31		2719.92	Sierrita
		4/29/14		389.57		2721.66	Sierrita
		6/4/15		392.63	Static	2718.60	Sierrita
		11/18/15		393.67	Static	2717.56	Sierrita
		6/15/16		383.49	Static	2727.74	Sierrita
		12/8/16		394.20	Static	2717.03	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-9	3162.57	11/8/06		380.58		2781.99	Sierrita
		1/9/07		362.10		2800.47	Sierrita
		4/20/07		363.60		2798.97	Sierrita
		7/3/07		365.25		2797.32	Sierrita
		11/8/07		367.95		2794.62	Sierrita
		1/28/08		368.58		2793.99	Sierrita
		4/24/08		367.08		2795.49	Sierrita
		8/8/08		370.38		2792.19	Sierrita
		11/14/08		371.70		2790.87	Sierrita
		2/17/09		371.97		2790.60	Sierrita
		6/2/09		370.30		2792.27	Sierrita
		4/15/10		373.30		2789.27	Sierrita
		4/19/11		375.11		2787.46	Sierrita
		4/26/12		380.49		2782.08	Sierrita
		5/23/13		386.04		2776.53	Sierrita
		3/12/14		390.22		2772.35	Sierrita
		4/25/14		390.54		2772.03	Sierrita
		5/14/14		390.45		2772.12	Sierrita
		6/24/14		390.41		2772.16	Sierrita
		7/29/14		388.82		2773.75	Sierrita
		8/8/14		387.62		2774.95	Sierrita
		9/9/14		387.00	Static	2775.57	Sierrita
		10/28/14		387.73		2774.84	Sierrita
		11/26/14		388.10		2774.47	Sierrita
		12/21/14		388.40	Static	2774.17	Sierrita
		1/29/15		388.56	Static	2774.01	Sierrita
		2/27/15		388.62	Static	2773.95	Sierrita
		3/26/15		388.39	Static	2774.18	Sierrita
		4/29/15		388.42	Static	2774.15	Sierrita
		5/21/15		388.45	Static	2774.12	Sierrita
		6/3/15		388.51	Static	2774.06	Sierrita
		7/23/15		389.72	Static	2772.85	Sierrita
		8/25/15		388.55	Static	2774.02	Sierrita
		11/2/15		388.62	Static	2773.95	Sierrita
		1/7/16		388.77	Static	2773.80	Sierrita
		2/11/16		388.70	Static	2773.87	Sierrita
		3/11/16		388.64	Static	2773.93	Sierrita
		6/23/16		387.85	Static	2774.72	Sierrita
		12/8/16		388.71	Static	2773.86	Sierrita
MH-10	3187.84	11/8/06		346.70		2841.14	Sierrita
		1/9/07		364.80		2823.04	Sierrita
		4/3/07		355.65		2832.19	Sierrita
		7/16/07		356.75		2831.09	Sierrita
		10/16/07		357.60		2830.24	Sierrita
		1/3/08		358.32		2829.52	Sierrita
		4/28/08		358.83		2829.01	Sierrita
		7/31/08		358.50		2829.34	Sierrita
		11/4/08		360.00		2827.84	Sierrita
		1/2/09		360.15		2827.69	Sierrita
		4/14/09		363.50		2824.34	Sierrita
		4/26/10		362.04		2825.80	Sierrita
		5/18/11		363.39		2824.45	Sierrita
		6/5/12		366.25		2821.59	Sierrita
		6/10/13		369.96		2817.88	Sierrita
		4/23/14		371.84	Static	2816.00	Sierrita
		4/14/15		374.09	Static	2813.75	Sierrita
		11/18/15		375.39	Static	2812.45	Sierrita
		6/8/16		375.14	Static	2812.70	Sierrita
		12/8/16		375.43	Static	2812.41	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-11	3041.76	11/9/06		369.90		2671.86	Sierrita
		1/11/07		369.55		2672.21	Sierrita
		4/10/07		370.46		2671.30	Sierrita
		7/17/07		372.75		2669.01	Sierrita
		10/3/07		373.80		2667.96	Sierrita
		1/4/08		373.36		2668.40	Sierrita
		4/29/08		373.89		2667.87	Sierrita
		7/29/08		375.10		2666.66	Sierrita
		11/7/08		376.85		2664.91	Sierrita
		3/19/09		374.88		2666.88	Sierrita
		5/13/09		375.75		2666.01	Sierrita
		4/27/10		375.85		2665.91	Sierrita
		5/24/11		376.65		2665.11	Sierrita
		5/24/12		376.65		2665.11	Sierrita
		4/23/13		383.85		2657.91	Sierrita
		3/12/14		399.52		2642.24	Sierrita
		4/29/14		404.51		2637.25	Sierrita
		5/14/14		404.48		2637.28	Sierrita
		6/12/14		408.00		2633.76	Sierrita
		7/28/14		411.79		2629.97	Sierrita
		8/7/14		412.19		2629.57	Sierrita
		9/8/14		413.51	Static	2628.25	Sierrita
		10/29/14		416.87		2624.89	Sierrita
		11/26/14		419.24		2622.52	Sierrita
		12/17/14		421.06	Static	2620.70	Sierrita
		1/29/15		422.70	Static	2619.06	Sierrita
		2/27/15		422.96	Static	2618.80	Sierrita
		3/18/15		421.87	Static	2619.89	Sierrita
		4/16/15		420.86	Static	2620.90	Sierrita
		5/21/15		421.21	Static	2620.55	Sierrita
		6/2/15		421.52	Static	2620.24	Sierrita
		7/24/15		425.30	Static	2616.46	Sierrita
		8/14/15		427.11	Static	2614.65	Sierrita
		11/5/15		428.08	Static	2613.68	Sierrita
		1/18/16		428.18	Static	2613.58	Sierrita
		2/11/16		428.23	Static	2613.53	Sierrita
		3/8/16		428.31	Static	2613.45	Sierrita
		5/18/16		432.35	Static	2609.41	Sierrita
		12/8/16		433.00	Static	2608.76	Sierrita
MH-12	3055.08	3/12/14		Obstructed		NA	Sierrita
		4/29/14		UTM		NA	Sierrita
		5/14/14		UTM		NA	Sierrita
		6/9/14		UTM		NA	Sierrita
		7/28/14		UTM		NA	Sierrita
		8/7/14		UTM		NA	Sierrita
		9/8/14		UTM		NA	Sierrita
		10/28/14		UTM		NA	Sierrita
		11/26/14		UTM		NA	Sierrita
		12/17/14		UTM		NA	Sierrita
		1/28/15		UTM		NA	Sierrita
		2/27/15		UTM		NA	Sierrita
		3/18/15		UTM		NA	Sierrita
		4/2/15		UTM		NA	Sierrita
		5/21/15		UTM		NA	Sierrita
		6/11/15		UTM		NA	Sierrita
		7/23/15		UTM		NA	Sierrita
		8/25/15		UTM		NA	Sierrita
		11/5/15		UTM		NA	Sierrita
		1/7/16		UTM		NA	Sierrita
		2/11/16		UTM		NA	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-12	3055.08	3/7/16		UTM		NA	Sierrita
		6/23/16		UTM		NA	Sierrita
MH-13A	3026.23	11/10/06		327.84		2698.39	Sierrita
		1/24/07		326.35		2699.88	Sierrita
		4/18/07		328.14		2698.09	Sierrita
		7/17/07		330.98		2695.25	Sierrita
		10/4/07		331.70		2694.53	Sierrita
		1/4/08		330.85		2695.38	Sierrita
		4/29/08		331.80		2694.43	Sierrita
		7/16/08		333.78		2692.45	Sierrita
		10/20/08		334.64		2691.59	Sierrita
		1/23/09		332.98		2693.25	Sierrita
		4/15/09		332.19		2694.04	Sierrita
		4/21/10		333.27		2692.96	Sierrita
		5/23/11		334.40		2691.83	Sierrita
		6/11/12		337.90		2688.33	Sierrita
		4/3/13		344.58		2681.65	Sierrita
		3/12/14		353.78		2672.45	Sierrita
		4/10/14		355.73		2670.50	Sierrita
		5/14/14		355.70		2670.53	Sierrita
		6/12/14		360.00		2666.23	Sierrita
		7/28/14		362.78		2663.45	Sierrita
		8/7/14		363.32		2662.91	Sierrita
		9/8/14		364.56	Static	2661.67	Sierrita
		10/29/14		365.24		2660.99	Sierrita
		11/26/14		365.91		2660.32	Sierrita
		12/17/14		366.51	Static	2659.72	Sierrita
		1/29/15		366.84	Static	2659.39	Sierrita
		2/27/15		366.90	Static	2659.33	Sierrita
		3/18/15		370.52	Static	2655.71	Sierrita
		4/22/15		370.80	Static	2655.43	Sierrita
		5/21/15		370.92	Static	2655.31	Sierrita
		6/2/15		371.02	Static	2655.21	Sierrita
		7/23/15		371.17	Static	2655.06	Sierrita
		8/25/15		375.27	Static	2650.96	Sierrita
		11/5/15		377.29	Static	2648.94	Sierrita
		1/18/16		377.24	Static	2648.99	Sierrita
		2/11/16		377.19	Static	2649.04	Sierrita
		3/8/16		377.30	Static	2648.93	Sierrita
		4/6/16		378.85	Static	2647.38	Sierrita
		12/8/16		379.20	Static	2647.03	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-13B	3025.63	11/10/06		330.70		2694.93	Sierrita
		1/24/07		330.58		2695.05	Sierrita
		4/18/07		332.21		2693.42	Sierrita
		7/17/07		335.47		2690.16	Sierrita
		10/3/07		335.90		2689.73	Sierrita
		1/4/08		334.85		2690.78	Sierrita
		4/29/08		336.35		2689.28	Sierrita
		7/16/08		337.92		2687.71	Sierrita
		10/20/08		339.14		2686.49	Sierrita
		1/23/09		337.20		2688.43	Sierrita
		4/15/09		336.50		2689.13	Sierrita
		4/21/10		337.47		2688.16	Sierrita
		5/23/11		338.75		2686.88	Sierrita
		6/11/12		342.50		2683.13	Sierrita
		4/3/13		348.98		2676.65	Sierrita
		3/12/14		358.93		2666.70	Sierrita
		4/10/14		361.02		2664.61	Sierrita
		5/14/14		360.97		2664.66	Sierrita
		6/12/14		365.82		2659.81	Sierrita
		7/28/14		368.39		2657.24	Sierrita
		8/7/14		369.30		2656.33	Sierrita
		9/8/14		369.93	Static	2655.70	Sierrita
		10/29/14		370.39		2655.24	Sierrita
		11/26/14		370.78		2654.85	Sierrita
		12/17/14		371.23	Static	2654.40	Sierrita
		1/29/15		372.73	Static	2652.90	Sierrita
		2/27/15		373.00	Static	2652.63	Sierrita
		3/18/15		375.64	Static	2649.99	Sierrita
		4/22/15		375.55	Static	2650.08	Sierrita
		5/21/15		375.62	Static	2650.01	Sierrita
		6/2/15		375.68	Static	2649.95	Sierrita
		7/23/15		375.75	Static	2649.88	Sierrita
		8/25/15		380.98	Static	2644.65	Sierrita
		11/5/15		383.30	Static	2642.33	Sierrita
		1/18/16		383.41	Static	2642.22	Sierrita
		2/11/16		383.38	Static	2642.25	Sierrita
		3/8/16		383.47	Static	2642.16	Sierrita
		4/6/16		384.00	Static	2641.63	Sierrita
		12/8/16		384.42	Static	2641.21	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-13C	3028.46	11/10/06		335.38		2693.08	Sierrita
		1/24/07		335.45		2693.01	Sierrita
		4/18/07		337.80		2690.66	Sierrita
		7/17/07		339.82		2688.64	Sierrita
		10/4/07		340.75		2687.71	Sierrita
		1/4/08		340.42		2688.04	Sierrita
		4/29/08		341.55		2686.91	Sierrita
		7/16/08		343.35		2685.11	Sierrita
		10/20/08		344.57		2683.89	Sierrita
		1/23/09		343.82		2684.64	Sierrita
		4/15/09		343.08		2685.38	Sierrita
		4/21/10		343.86		2684.60	Sierrita
		5/23/11		344.30		2684.16	Sierrita
		6/11/12		348.75		2679.71	Sierrita
		4/3/13		353.62		2674.84	Sierrita
		3/12/14		362.99		2665.47	Sierrita
		4/10/14		365.21		2663.25	Sierrita
		5/14/14		365.22		2663.24	Sierrita
		6/12/14		370.51		2657.95	Sierrita
		7/28/14		373.52		2654.94	Sierrita
		8/7/14		374.46		2654.00	Sierrita
		9/8/14		375.79	Static	2652.67	Sierrita
		10/29/14		376.54		2651.92	Sierrita
		11/26/14		377.00		2651.46	Sierrita
		12/17/14		377.60	Static	2650.86	Sierrita
		1/29/15		378.11	Static	2650.35	Sierrita
		2/27/15		378.52	Static	2649.94	Sierrita
		3/18/15		382.36	Static	2646.10	Sierrita
		4/22/15		382.61	Static	2645.85	Sierrita
		5/21/15		382.75	Static	2645.71	Sierrita
		6/2/15		382.87	Static	2645.59	Sierrita
		7/23/15		382.94	Static	2645.52	Sierrita
		8/25/15		386.44	Static	2642.02	Sierrita
		11/5/15		388.32	Static	2640.14	Sierrita
		1/18/16		388.46	Static	2640.00	Sierrita
		2/11/16		388.48	Static	2639.98	Sierrita
		3/8/16		388.56	Static	2639.90	Sierrita
		4/6/16		391.65	Static	2636.81	Sierrita
		12/8/16		391.73	Static	2636.73	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-14	3153.46	12/18/06		427.28		2726.18	Sierrita
		2/23/07		426.75		2726.71	Sierrita
		4/23/07		425.58		2727.88	Sierrita
		7/10/07		424.20		2729.26	Sierrita
		10/17/07		422.80		2730.66	Sierrita
		1/18/08		424.87		2728.59	Sierrita
		4/8/08		425.13		2728.33	Sierrita
		7/22/08		423.92		2729.54	Sierrita
		10/6/08		426.03		2727.43	Sierrita
		2/13/09		425.90		2727.56	Sierrita
		4/7/09		424.90		2728.56	Sierrita
		4/15/10		422.91		2730.55	Sierrita
		8/12/10		421.82		2731.64	Sierrita
		4/19/11		418.94		2734.52	Sierrita
		4/25/12		419.83		2733.63	Sierrita
		4/2/13		425.59		2727.87	Sierrita
		10/21/13		426.13		2727.33	Sierrita
		1/3/14		426.45		2727.01	Sierrita
		3/12/14	UTM			NA	Sierrita
		3/25/14		435.04		2718.42	Sierrita
		4/9/14		436.20		2717.26	Sierrita
		5/14/14		436.12		2717.34	Sierrita
		6/24/14		436.09		2717.37	Sierrita
		7/7/14		440.32		2713.14	Sierrita
		8/8/14		441.58		2711.88	Sierrita
		9/9/14		442.76	Static	2710.70	Sierrita
		10/28/14		442.79		2710.67	Sierrita
		11/4/14		443.64		2709.82	Sierrita
		12/20/14		444.48	Static	2708.98	Sierrita
		1/7/15		445.85	Static	2707.61	Sierrita
		2/27/15		446.20	Static	2707.26	Sierrita
		3/26/15		447.25	Static	2706.21	Sierrita
		4/21/15		447.63	Static	2705.83	Sierrita
		5/21/15		447.89	Static	2705.57	Sierrita
		6/2/15		447.93	Static	2705.53	Sierrita
		7/6/15		449.87	Static	2703.59	Sierrita
		8/25/15		452.49	Static	2700.97	Sierrita
		10/7/15		454.52	Static	2698.94	Sierrita
		11/18/15		454.44	Static	2699.02	Sierrita
		1/13/16		455.10	Static	2698.36	Sierrita
		2/11/16		455.18	Static	2698.28	Sierrita
		3/11/16		455.23	Static	2698.23	Sierrita
		4/5/16		455.29	Static	2698.17	Sierrita
		12/6/16		456.18	Static	2697.28	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-15E	3111.37	11/10/06		385.25		2726.12	Sierrita
		2/23/07		384.07		2727.30	Sierrita
		4/23/07		385.11		2726.26	Sierrita
		7/21/07		385.80		2725.57	Sierrita
		10/20/07		387.08		2724.29	Sierrita
		1/18/08		386.60		2724.77	Sierrita
		4/21/08		386.18		2725.19	Sierrita
		7/29/08		387.39		2723.98	Sierrita
		10/24/08		388.51		2722.86	Sierrita
		2/17/09		387.46		2723.91	Sierrita
		6/2/09		386.98		2724.39	Sierrita
		4/13/10		386.17		2725.20	Sierrita
		4/18/11		382.69		2728.68	Sierrita
		6/14/12		391.96		2719.41	Sierrita
		4/2/13		407.42		2703.95	Sierrita
		3/12/14		409.49		2701.88	Sierrita
		4/25/14		410.59		2700.78	Sierrita
		5/14/14		410.62		2700.75	Sierrita
		6/24/14		410.60		2700.77	Sierrita
		7/29/14		404.02		2707.35	Sierrita
		8/8/14		404.33		2707.04	Sierrita
		9/9/14		404.56	Static	2706.81	Sierrita
		10/28/14		402.90		2708.47	Sierrita
		11/26/14		403.20		2708.17	Sierrita
		12/20/14		403.49	Static	2707.88	Sierrita
		1/29/15		403.64	Static	2707.73	Sierrita
		2/27/15		403.66	Static	2707.71	Sierrita
		3/26/15		401.26	Static	2710.11	Sierrita
		4/29/15		401.28	Static	2710.09	Sierrita
		5/21/15		401.25	Static	2710.12	Sierrita
		6/3/15		401.31	Static	2710.06	Sierrita
		7/23/15		411.84	Static	2699.53	Sierrita
		8/25/15		416.47	Static	2694.90	Sierrita
		11/2/15		421.92	Static	2689.45	Sierrita
		1/7/16		422.24	Static	2689.13	Sierrita
		2/11/16		422.21	Static	2689.16	Sierrita
		3/11/16		422.26	Static	2689.11	Sierrita
		6/23/16		405.39	Static	2705.98	Sierrita
		12/8/16		409.57	Static	2701.80	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-15W	3117.07	12/18/06		391.30		2725.77	Sierrita
		2/23/07		390.00		2727.07	Sierrita
		4/23/07		391.18		2725.89	Sierrita
		7/11/07		390.85		2726.22	Sierrita
		10/17/07		393.10		2723.97	Sierrita
		1/18/08		392.90		2724.17	Sierrita
		4/8/08		391.00		2726.07	Sierrita
		7/1/08		392.70		2724.37	Sierrita
		10/6/08		394.00		2723.07	Sierrita
		1/7/09		392.55		2724.52	Sierrita
		5/6/09		390.25		2726.82	Sierrita
		4/15/10		390.58		2726.49	Sierrita
		8/12/10		389.20		2727.87	Sierrita
		5/17/11		388.95		2728.12	Sierrita
		4/25/12		397.62		2719.45	Sierrita
		5/28/13		409.15		2707.92	Sierrita
		12/12/13		414.19		2702.88	Sierrita
		1/3/14		412.60		2704.47	Sierrita
		3/12/14		414.01		2703.06	Sierrita
		4/9/14		412.76		2704.31	Sierrita
		5/14/14		412.77		2704.30	Sierrita
		6/24/14		412.74		2704.33	Sierrita
		7/7/14		413.44		2703.63	Sierrita
		8/8/14		409.65		2707.42	Sierrita
		9/9/14		407.53	Static	2709.54	Sierrita
		10/28/14		403.64		2713.43	Sierrita
		11/4/14		405.18		2711.89	Sierrita
		12/20/14		406.58	Static	2710.49	Sierrita
		1/7/15		405.68	Static	2711.39	Sierrita
		2/27/15		405.79	Static	2711.28	Sierrita
		3/26/15		401.30	Static	2715.77	Sierrita
		4/21/15		401.33	Static	2715.74	Sierrita
		5/18/15		401.27	Static	2715.80	Sierrita
		6/3/15		401.36	Static	2715.71	Sierrita
		7/6/15		401.37	Static	2715.70	Sierrita
		8/25/15		419.08	Static	2697.99	Sierrita
		10/8/15	UTM			NA	Sierrita
		11/2/15	UTM			NA	Sierrita
		1/13/16	UTM			NA	Sierrita
		2/11/16	UTM			NA	Sierrita
		3/11/16	UTM			NA	Sierrita
		4/5/16	UTM			NA	Sierrita
		12/6/16	UTM			NA	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-16E	3097.72	12/18/06		344.70		2753.02	Sierrita
		2/23/07		349.39		2748.33	Sierrita
		4/23/07		352.85		2744.87	Sierrita
		7/21/07		355.00		2742.72	Sierrita
		10/20/07		355.55		2742.17	Sierrita
		1/19/08		355.30		2742.42	Sierrita
		4/21/08		355.15		2742.57	Sierrita
		7/29/08		356.78		2740.94	Sierrita
		10/24/08		357.62		2740.10	Sierrita
		2/17/09		357.02		2740.70	Sierrita
		6/2/09		354.15		2743.57	Sierrita
		4/13/10		357.71		2740.01	Sierrita
		4/18/11		354.93		2742.79	Sierrita
		4/26/12		362.82		2734.90	Sierrita
		5/23/13		364.82		2732.90	Sierrita
		3/12/14		384.61		2713.11	Sierrita
		4/25/14		382.54		2715.18	Sierrita
		5/14/14		382.56		2715.16	Sierrita
		6/24/14		382.55		2715.17	Sierrita
		7/29/14		380.17		2717.55	Sierrita
		8/8/14		381.30		2716.42	Sierrita
		9/9/14		382.26	Static	2715.46	Sierrita
		10/28/14		379.10		2718.62	Sierrita
		11/26/14		380.26		2717.46	Sierrita
		12/21/14		381.24	Static	2716.48	Sierrita
		1/29/15		381.30	Static	2716.42	Sierrita
		2/27/15		381.33	Static	2716.39	Sierrita
		3/26/15		379.61	Static	2718.11	Sierrita
		4/29/15		379.56	Static	2718.16	Sierrita
		5/21/15		379.58	Static	2718.14	Sierrita
		6/3/15		379.64	Static	2718.08	Sierrita
		7/23/15		385.44	Static	2712.28	Sierrita
		8/25/15		386.73	Static	2710.99	Sierrita
		11/2/15		389.51	Static	2708.21	Sierrita
		1/7/16		389.68	Static	2708.04	Sierrita
		2/11/16		389.77	Static	2707.95	Sierrita
		3/11/16		389.80	Static	2707.92	Sierrita
		6/23/16		372.10	Static	2725.62	Sierrita
		12/8/16		377.64	Static	2720.08	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-16W	3100.24	12/18/06		346.62		2753.62	Sierrita
		2/23/07		352.18		2748.06	Sierrita
		4/23/07		355.75		2744.49	Sierrita
		7/11/07		357.47		2742.77	Sierrita
		10/17/07		357.75		2742.49	Sierrita
		1/3/08		357.80		2742.44	Sierrita
		4/24/08		357.87		2742.37	Sierrita
		7/22/08		359.24		2741.00	Sierrita
		10/8/08		360.03		2740.21	Sierrita
		3/19/09		358.73		2741.51	Sierrita
		4/7/09		358.60		2741.64	Sierrita
		4/15/10		360.31		2739.93	Sierrita
		8/12/10		360.42		2739.82	Sierrita
		5/17/11		357.55		2742.69	Sierrita
		4/25/12		364.24		2736.00	Sierrita
		4/2/13		377.99		2722.25	Sierrita
		10/21/13		387.88		2712.36	Sierrita
		1/3/14		389.39		2710.85	Sierrita
		3/12/14		385.88		2714.36	Sierrita
		4/9/14		383.83		2716.41	Sierrita
		5/14/14		383.87		2716.37	Sierrita
		6/24/14		383.89		2716.35	Sierrita
		7/7/14		381.43		2718.81	Sierrita
		8/8/14		382.48		2717.76	Sierrita
		9/9/14		383.38	Static	2716.86	Sierrita
		10/28/14		379.41		2720.83	Sierrita
		11/4/14		380.82		2719.42	Sierrita
		12/21/14		382.11	Static	2718.13	Sierrita
		1/7/15		382.74	Static	2717.50	Sierrita
		2/27/15		382.81	Static	2717.43	Sierrita
		3/26/15		379.84	Static	2720.40	Sierrita
		4/21/15		381.49	Static	2718.75	Sierrita
		5/21/15		381.20	Static	2719.04	Sierrita
		6/3/15		381.43	Static	2718.81	Sierrita
		7/6/15		385.73	Static	2714.51	Sierrita
		8/25/15		387.68	Static	2712.56	Sierrita
		10/8/15		386.10	Static	2714.14	Sierrita
		11/2/15		387.14	Static	2713.10	Sierrita
		1/13/16		387.06	Static	2713.18	Sierrita
		2/11/16		387.02	Static	2713.22	Sierrita
		3/11/16		386.95	Static	2713.29	Sierrita
		4/5/16		387.02	Static	2713.22	Sierrita
		8/16/16		386.20	Static	2714.04	Sierrita
		12/6/16		387.24	Static	2713.00	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-24	3131.16	11/21/06		397.50		2733.66	Sierrita
		4/20/07		399.35		2731.81	Sierrita
		8/3/07		399.33		2731.83	Sierrita
		11/8/07		400.50		2730.66	Sierrita
		1/30/08		396.90		2734.26	Sierrita
		4/24/08		395.89		2735.27	Sierrita
		8/7/08		396.78		2734.38	Sierrita
		11/14/08		396.88		2734.28	Sierrita
		2/17/09		396.31		2734.85	Sierrita
		6/2/09		396.50		2734.66	Sierrita
		4/13/10		386.43		2744.73	Sierrita
		4/18/11		392.84		2738.32	Sierrita
		4/25/12		396.58		2734.58	Sierrita
		4/2/13		408.56		2722.60	Sierrita
		4/29/14		Obstructed		NA	Sierrita
		5/22/14		407.41		2723.75	Sierrita
		6/4/15		404.82	Static	2726.34	Sierrita
		11/18/15		UTM		NA	Sierrita
		6/15/16		UTM		NA	Sierrita
MH-25A	3056.57	11/13/06		454.11		2602.46	Sierrita
		1/10/07		453.10		2603.47	Sierrita
		4/4/07		452.20		2604.37	Sierrita
		7/20/07		454.02		2602.55	Sierrita
		10/3/07		454.69		2601.88	Sierrita
		1/2/08		454.82		2601.75	Sierrita
		4/25/08		454.47		2602.10	Sierrita
		7/2/08		455.68		2600.89	Sierrita
		10/17/08		457.49		2599.08	Sierrita
		1/5/09		457		2599.57	Sierrita
		4/15/09		455.90		2600.67	Sierrita
		4/13/10		458.10		2598.47	Sierrita
		4/27/11		459.25		2597.32	Sierrita
		5/1/12		459.69		2596.88	Sierrita
		4/3/13		461.70		2594.87	Sierrita
		3/12/14		473.95		2582.62	Sierrita
		4/15/14		477.45		2579.12	Sierrita
		5/13/14		477.40		2579.17	Sierrita
		6/9/14		482.36		2574.21	Sierrita
		7/28/14		486.66		2569.91	Sierrita
		8/7/14		488.09		2568.48	Sierrita
		9/8/14		489.49	Static	2567.08	Sierrita
		10/29/14		492.67		2563.90	Sierrita
		11/26/14		495.20		2561.37	Sierrita
		12/17/14		497.76	Static	2558.81	Sierrita
		1/29/15		499.10	Static	2557.47	Sierrita
		2/27/15		500.16	Static	2556.41	Sierrita
		3/18/15		498.50	Static	2558.07	Sierrita
		4/7/15		499.37	Static	2557.20	Sierrita
		5/21/15		501.39	Static	2555.18	Sierrita
		6/1/15		503.19	Static	2553.38	Sierrita
		8/31/15		505.05	Static	2551.52	Sierrita
		11/5/15		505.24	Static	2551.33	Sierrita
		1/7/16		507.87	Static	2548.70	Sierrita
		2/12/16		508.53	Static	2548.04	Sierrita
		3/7/16		508.92	Static	2547.65	Sierrita
		4/11/16		510.58	Static	2545.99	Sierrita
		12/8/16		510.97	Static	2545.60	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-25B	3058.22	11/13/06		455.36		2602.86	Sierrita
		1/10/07		454.28		2603.94	Sierrita
		4/4/07		453.20		2605.02	Sierrita
		7/20/07		455.32		2602.90	Sierrita
		10/3/07		456.01		2602.21	Sierrita
		1/2/08		456.05		2602.17	Sierrita
		4/25/08		456.02		2602.20	Sierrita
		7/2/08		457.10		2601.12	Sierrita
		10/17/08		458.39		2599.83	Sierrita
		1/5/09		458.38		2599.84	Sierrita
		4/15/09		457.28		2600.94	Sierrita
		4/13/10		458.27		2599.95	Sierrita
		4/27/11		460.35		2597.87	Sierrita
		6/15/11		460.85		2597.37	Sierrita
		5/1/12		460.90		2597.32	Sierrita
		4/3/13		463.02		2595.20	Sierrita
		3/12/14		475.49		2582.73	Sierrita
		4/15/14		478.92		2579.30	Sierrita
		5/13/14		478.93		2579.29	Sierrita
		6/9/14		483.75		2574.47	Sierrita
		7/28/14		488.06		2570.16	Sierrita
		8/7/14		489.41		2568.81	Sierrita
		9/8/14		490.78	Static	2567.44	Sierrita
		10/29/14		493.95		2564.27	Sierrita
		11/26/14		496.89		2561.33	Sierrita
		12/17/14		499.64	Static	2558.58	Sierrita
		1/29/15		501.19	Static	2557.03	Sierrita
		2/27/15		502.38	Static	2555.84	Sierrita
		3/18/15		499.72	Static	2558.50	Sierrita
		4/7/15		500.60	Static	2557.62	Sierrita
		5/21/15		502.63	Static	2555.59	Sierrita
		6/1/15		502.94	Static	2555.28	Sierrita
		7/23/15		504.42	Static	2553.80	Sierrita
		8/31/15	UTM			NA	Sierrita
		11/5/15	UTM			NA	Sierrita
		1/7/16	UTM			NA	Sierrita
		2/12/16	UTM			NA	Sierrita
		3/7/16	UTM			NA	Sierrita
		4/11/16	UTM			NA	Sierrita
		9/21/16		515.10	Static	2543.12	Sierrita
		12/8/16		518.21	Static	2540.01	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-25C	3057.24	11/13/06		454.65		2602.59	Sierrita
		1/10/07		453.57		2603.67	Sierrita
		4/13/07		452.30		2604.94	Sierrita
		7/20/07		454.42		2602.82	Sierrita
		10/3/07		455.19		2602.05	Sierrita
		1/2/08		455.06		2602.18	Sierrita
		4/25/08		454.84		2602.40	Sierrita
		7/2/08		456.23		2601.01	Sierrita
		10/17/08		457.49		2599.75	Sierrita
		1/5/09		457.30		2599.94	Sierrita
		4/15/09		456.41		2600.83	Sierrita
		4/13/10		459.28		2597.96	Sierrita
		4/27/11		459.16		2598.08	Sierrita
		6/15/11		459.52		2597.72	Sierrita
		5/1/12		459.76		2597.48	Sierrita
		4/3/13		461.80		2595.44	Sierrita
		3/12/14		474.31		2582.93	Sierrita
		4/15/14		477.67		2579.57	Sierrita
		5/13/14		477.63		2579.61	Sierrita
		6/9/14		482.63		2574.61	Sierrita
		7/28/14		487.01		2570.23	Sierrita
		8/7/14		488.25		2568.99	Sierrita
		9/8/14		489.69	Static	2567.55	Sierrita
		10/29/14		492.81		2564.43	Sierrita
		11/26/14		495.28		2561.96	Sierrita
		12/17/14		497.94	Static	2559.30	Sierrita
		1/29/15		500.06	Static	2557.18	Sierrita
		2/27/15		501.45	Static	2555.79	Sierrita
		3/18/15		498.51	Static	2558.73	Sierrita
		4/7/15	UTM			NA	Sierrita
		5/21/15	UTM			NA	Sierrita
		6/1/15	UTM			NA	Sierrita
		7/23/15	UTM			NA	Sierrita
		8/31/15	UTM			NA	Sierrita
		11/5/15	UTM			NA	Sierrita
		1/7/16	UTM			NA	Sierrita
		2/12/16	UTM			NA	Sierrita
		3/7/16	UTM			NA	Sierrita
		4/11/16	UTM			NA	Sierrita
		9/21/16		514.86	Static	2542.38	Sierrita
		12/8/16		516.18	Static	2541.06	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-26A	3070.89	11/13/06		495.74		2575.15	Sierrita
		1/15/07		495.65		2575.24	Sierrita
		4/4/07		493.75		2577.14	Sierrita
		7/19/07		495.02		2575.87	Sierrita
		10/2/07		496.12		2574.77	Sierrita
		1/2/08		496.28		2574.61	Sierrita
		4/25/08		495.73		2575.16	Sierrita
		7/2/08		496.98		2573.91	Sierrita
		10/17/08		498.23		2572.66	Sierrita
		1/5/09		498.76		2572.13	Sierrita
		4/21/09		497.85		2573.04	Sierrita
		4/13/10		499.68		2571.21	Sierrita
		4/27/11		500.71		2570.18	Sierrita
		5/2/12		501.05		2569.84	Sierrita
		4/4/13		501.96		2568.93	Sierrita
		3/12/14		513.50		2557.39	Sierrita
		4/15/14		513.40		2557.49	Sierrita
		5/13/14		513.36		2557.53	Sierrita
		6/9/14		520.93		2549.96	Sierrita
		7/28/14		524.95		2545.94	Sierrita
		8/7/14		525.55		NA	Sierrita
		9/8/14		UTM		NA	Sierrita
		10/28/14		UTM		NA	Sierrita
		11/26/14		UTM		NA	Sierrita
		12/16/14		UTM		NA	Sierrita
		1/29/15		UTM		NA	Sierrita
		2/27/15		UTM		NA	Sierrita
		3/18/15		UTM		NA	Sierrita
		4/7/15		UTM		NA	Sierrita
		5/2/15		UTM		NA	Sierrita
		6/1/15		UTM		NA	Sierrita
		7/8/15		UTM		NA	Sierrita
		8/17/15		UTM		NA	Sierrita
		11/6/15		UTM		NA	Sierrita
		1/7/16		DRY		DRY	Sierrita
		2/12/16		DRY		DRY	Sierrita
		3/7/16		DRY		DRY	Sierrita
		4/11/16		DRY		DRY	Sierrita
		12/9/16		DRY		DRY	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-26B	3070.50	11/13/06		493.00		2577.50	Sierrita
		1/15/07		492.85		2577.65	Sierrita
		4/4/07		490.78		2579.72	Sierrita
		7/19/07		492.01		2578.49	Sierrita
		10/2/07		493.18		2577.32	Sierrita
		1/2/08		493.76		2576.74	Sierrita
		4/25/08		492.98		2577.52	Sierrita
		7/2/08		494.10		2576.40	Sierrita
		10/20/08		495.31		2575.19	Sierrita
		1/5/09		495.88		2574.62	Sierrita
		4/21/09		494.90		2575.60	Sierrita
		4/13/10		496.77		2573.73	Sierrita
		5/5/11		497.73		2572.77	Sierrita
		5/1/12		498.00		2572.50	Sierrita
		4/4/13		499.03		2571.47	Sierrita
		3/12/14		510.69		2559.81	Sierrita
		4/15/14		510.67		2559.83	Sierrita
		5/13/14		510.68		2559.82	Sierrita
		6/9/14		517.75		2552.75	Sierrita
		7/28/14		522.14		2548.36	Sierrita
		8/7/14		523.46		2547.04	Sierrita
		9/8/14		524.35	Static	2546.15	Sierrita
		10/28/14		527.68		2542.82	Sierrita
		11/26/14		529.90		2540.60	Sierrita
		12/16/14		531.11	Static	2539.39	Sierrita
		1/29/15		531.79	Static	2538.71	Sierrita
		2/27/15		532.68	Static	2537.82	Sierrita
		3/18/15		533.34	Static	2537.16	Sierrita
		4/7/15		534.12	Static	2536.38	Sierrita
		5/21/15		535.90	Static	2534.60	Sierrita
		6/1/15		535.79	Static	2534.71	Sierrita
		7/8/15		537.52	Static	2532.98	Sierrita
		8/17/15	UTM			NA	Sierrita
		11/6/15	UTM			NA	Sierrita
		1/7/16	UTM			NA	Sierrita
		2/12/16	UTM			NA	Sierrita
		3/7/16	UTM			NA	Sierrita
		4/11/16	UTM			NA	Sierrita
		9/21/16		548.09	Static	2522.41	Sierrita
		12/9/16		549.16	Static	2521.34	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-26C	3069.11	11/13/06		494.45		2574.66	Sierrita
		1/15/07		494.10		2575.01	Sierrita
		4/4/07		492.30		2576.81	Sierrita
		7/19/07		493.62		2575.49	Sierrita
		10/2/07		496.58		2572.53	Sierrita
		1/2/08		495.35		2573.76	Sierrita
		4/25/08		494.37		2574.74	Sierrita
		7/2/08		495.55		2573.56	Sierrita
		10/20/08		496.78		2572.33	Sierrita
		1/5/09		497.21		2571.90	Sierrita
		4/21/09		493.95		2575.16	Sierrita
		4/13/10		498.14		2570.97	Sierrita
		4/27/11		499.14		2569.97	Sierrita
		5/1/12		499.44		2569.67	Sierrita
		4/4/13		500.61		2568.50	Sierrita
		3/12/14		512.31		2556.80	Sierrita
		4/15/14		512.27		2556.84	Sierrita
		5/13/14		512.30		2556.81	Sierrita
		6/9/14		519.21		2549.90	Sierrita
		7/28/14		523.77		2545.34	Sierrita
		8/7/14		525.34		2543.77	Sierrita
		9/8/14		526.04	Static	2543.07	Sierrita
		10/28/14		529.30		2539.81	Sierrita
		11/26/14		532.02		2537.09	Sierrita
		12/16/14		535.02	Static	2534.09	Sierrita
		1/29/15		536.86	Static	2532.25	Sierrita
		2/27/15		534.31	Static	2534.80	Sierrita
		3/18/15		535.01	Static	2534.10	Sierrita
		4/7/15		535.70	Static	2533.41	Sierrita
		5/21/15		537.57	Static	2531.54	Sierrita
		6/1/15		539.22	Static	2529.89	Sierrita
		7/8/15		541.12	Static	2527.99	Sierrita
		8/17/15		541.14	Static	2527.97	Sierrita
		11/6/15		541.29	Static	2527.82	Sierrita
		1/7/16		543.66	Static	2525.45	Sierrita
		2/12/16		544.54	Static	2524.57	Sierrita
		3/7/16		545.45	Static	2523.66	Sierrita
		4/11/16		UTM		NA	Sierrita
		9/21/16		549.78	Static	2519.33	Sierrita
		12/9/16		551.19	Static	2517.92	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-28	3142.18	11/14/06		401.10		2741.08	Sierrita
		2/19/07		401.10		2741.08	Sierrita
		4/17/07		402.32		2739.86	Sierrita
		7/16/07		403.18		2739.00	Sierrita
		10/11/07		403.00		2739.18	Sierrita
		1/21/08		402.72		2739.46	Sierrita
		4/8/08		401.90		2740.28	Sierrita
		7/1/08		401.48		2740.70	Sierrita
		10/6/08		402.17		2740.01	Sierrita
		1/7/09		402		2740.18	Sierrita
		4/7/09		401.06		2741.12	Sierrita
		10/13/09		401.10		2741.08	Sierrita
		4/15/10		395.65		2746.53	Sierrita
		8/12/10		398.60		2743.58	Sierrita
		10/12/10		399.00		2743.18	Sierrita
		5/17/11		396.89		2745.29	Sierrita
		10/4/11		397.90		2744.28	Sierrita
		5/21/12		398.64		2743.54	Sierrita
		10/9/12		403.77		2738.41	Sierrita
		4/2/13		405.08		2737.10	Sierrita
		10/21/13		407.88		2734.30	Sierrita
		1/3/14		408.01		2734.17	Sierrita
		3/12/14		411.69		2730.49	Sierrita
		4/9/14		412.72		2729.46	Sierrita
		5/14/14		412.74		2729.44	Sierrita
		6/24/14		412.76		2729.42	Sierrita
		7/7/14		414.90		2727.28	Sierrita
		8/8/14		414.60		2727.58	Sierrita
		9/9/14		414.19	Static	2727.99	Sierrita
		10/28/14		415.32		2726.86	Sierrita
		11/4/14		415.92		2726.26	Sierrita
		12/20/14		416.46	Static	2725.72	Sierrita
		1/7/15		416.16	Static	2726.02	Sierrita
		2/27/15		416.10	Static	2726.08	Sierrita
		3/26/15		414.87	Static	2727.31	Sierrita
		4/21/15		414.83	Static	2727.35	Sierrita
		5/21/15		414.80	Static	2727.38	Sierrita
		6/3/15		414.86	Static	2727.32	Sierrita
		7/6/15		416.53	Static	2725.65	Sierrita
		7/20/15		416.85	Static	2725.33	Sierrita
		8/25/15		417.35	Static	2724.83	Sierrita
		10/8/15		417.68	Static	2724.50	Sierrita
		11/2/15		417.63	Static	2724.55	Sierrita
		1/13/16		418.49	Static	2723.69	Sierrita
		2/11/16		418.67	Static	2723.51	Sierrita
		3/11/16		418.74	Static	2723.44	Sierrita
		4/5/16		417.34	Static	2724.84	Sierrita
		8/16/16		415.50	Static	2726.68	Sierrita
		10/26/16		415.13	Static	2727.05	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-29	3123.15	11/14/06		378.05		2745.10	Sierrita
		2/19/07		376.58		2746.57	Sierrita
		4/17/07		376.75		2746.40	Sierrita
		7/16/07		379.07		2744.08	Sierrita
		10/11/07		381.92		2741.23	Sierrita
		1/18/08		380.41		2742.74	Sierrita
		4/8/08		380.16		2742.99	Sierrita
		7/1/08		380.50		2742.65	Sierrita
		10/7/08		381.52		2741.63	Sierrita
		1/9/09		380.25		2742.90	Sierrita
		4/7/09		379.90		2743.25	Sierrita
		10/13/09		380.52		2742.63	Sierrita
		4/15/10		379.59		2743.56	Sierrita
		8/12/10		378.65		2744.50	Sierrita
		10/12/10		379.31		2743.84	Sierrita
		4/20/11		377.75		2745.40	Sierrita
		5/23/11		377.80		2745.35	Sierrita
		10/4/11		380.25		2742.90	Sierrita
		5/21/12		389.39		2733.76	Sierrita
		10/9/12		365.70		2757.45	Sierrita
		4/2/13		392.00		2731.15	Sierrita
		11/8/13		393.39		2729.76	Sierrita
		12/11/13		394.82		2728.33	Sierrita
		1/3/14		394.63		2728.52	Sierrita
		3/12/14		394.25		2728.90	Sierrita
		4/9/14		393.95		2729.20	Sierrita
		5/14/14		393.92		2729.23	Sierrita
		6/24/14		393.94		2729.21	Sierrita
		7/7/14		392.13		2731.02	Sierrita
		8/8/14		392.28		2730.87	Sierrita
		9/9/14		392.59	Static	2730.56	Sierrita
		10/28/14		400.46		2722.69	Sierrita
		11/4/14		400.90		2722.25	Sierrita
		12/21/14		401.30	Static	2721.85	Sierrita
		1/7/15		402.56	Static	2720.59	Sierrita
		2/27/15		402.89	Static	2720.26	Sierrita
		3/26/15		402.18	Static	2720.97	Sierrita
		4/21/15		402.40	Static	2720.75	Sierrita
		5/21/15		402.49	Static	2720.66	Sierrita
		6/3/15		402.52	Static	2720.63	Sierrita
		7/6/15		404.41	Static	2718.74	Sierrita
		8/25/15		404.64	Static	2718.51	Sierrita
		10/8/15		404.75	Static	2718.40	Sierrita
		11/2/15		404.71	Static	2718.44	Sierrita
		1/13/16		404.88	Static	2718.27	Sierrita
		2/11/16		404.93	Static	2718.22	Sierrita
		3/11/16		404.90	Static	2718.25	Sierrita
		4/5/16		404.94	Static	2718.21	Sierrita
		8/16/16		404.76	Static	2718.39	Sierrita
		10/26/16		404.72	Static	2718.43	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MH-30	3232.45	11/10/06		422.78		2809.67	Sierrita
		1/9/07		421.65		2810.80	Sierrita
		4/9/07		419.32		2813.13	Sierrita
		7/11/07		416.85		2815.60	Sierrita
		10/2/07		416.95		2815.50	Sierrita
		1/18/08		417.34		2815.11	Sierrita
		4/8/08		418.12		2814.33	Sierrita
		7/1/08		417.71		2814.74	Sierrita
		10/6/08		417.11		2815.34	Sierrita
		1/7/09		416.37		2816.08	Sierrita
		4/7/09		415.10		2817.35	Sierrita
		4/15/10		412.03		2820.42	Sierrita
		5/17/11		412.18		2820.27	Sierrita
		4/26/12		420.61		2811.84	Sierrita
		6/6/13		427.36		2805.09	Sierrita
		3/12/14		429.01		2803.44	Sierrita
		4/8/14		429.46		2802.99	Sierrita
		5/14/14		429.47		2802.98	Sierrita
		6/24/14		429.48		2802.97	Sierrita
		7/29/14		430.12		2802.33	Sierrita
		8/8/14		430.23		2802.22	Sierrita
		9/9/14		430.41	Static	2802.04	Sierrita
		10/28/14		451.78		2780.67	Sierrita
		11/26/14		430.82		2801.63	Sierrita
		12/20/14		436.19	Static	2796.26	Sierrita
		1/29/15		440.11	Static	2792.34	Sierrita
		2/27/15		442.88	Static	2789.57	Sierrita
		3/26/15		431.34	Static	2801.11	Sierrita
		4/21/15		431.27	Static	2801.18	Sierrita
		5/21/15		431.31	Static	2801.14	Sierrita
		6/2/15		431.28	Static	2801.17	Sierrita
		7/23/15		431.55	Static	2800.90	Sierrita
		8/25/15		431.70	Static	2800.75	Sierrita
		11/2/15		431.92	Static	2800.53	Sierrita
		1/7/16		432.06	Static	2800.39	Sierrita
		2/11/16		432.00	Static	2800.45	Sierrita
		3/11/16		431.97	Static	2800.48	Sierrita
		4/5/16		430.31	Static	2802.14	Sierrita
		12/8/16		431.40	Static	2801.05	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-1A	2964.66	7/30/07		425.87		2538.79	Sierrita
		10/9/07		428.32		2536.34	Sierrita
		1/24/08		426.32		2538.34	Sierrita
		4/9/08		424.72		2539.94	Sierrita
		7/14/08		428.42		2536.24	Sierrita
		10/17/08		431.02		2533.64	Sierrita
		1/16/09		428.90		2535.76	Sierrita
		4/1/09		426.86		2537.80	Sierrita
		7/1/09		426.90		2537.76	Sierrita
		10/22/09		434.05		2530.61	Sierrita
		4/16/10		428.89		2535.77	Sierrita
		10/13/10		434.09		2530.57	Sierrita
		5/5/11		429.31		2535.35	Sierrita
		10/6/11		433.60		2531.06	Sierrita
		6/12/12		431.38		2533.28	Sierrita
		10/24/12		435.12		2529.54	Sierrita
		4/8/13		429.69		2534.97	Sierrita
		10/23/13		435.06		2529.60	Sierrita
		3/12/14		435.92		2528.74	Sierrita
		4/29/14		437.74		2526.92	Sierrita
		5/8/14		437.72		2526.94	Sierrita
		6/9/14		440.59		2524.07	Sierrita
		7/28/14		443.83		2520.83	Sierrita
		8/7/14		444.58		2520.08	Sierrita
		9/8/14		445.78	Static	2518.88	Sierrita
		10/28/14		448.18		2516.48	Sierrita
		11/12/14		448.42		2516.24	Sierrita
		12/16/14		448.63	Static	2516.03	Sierrita
		1/29/15		448.74	Static	2515.92	Sierrita
		2/27/15		448.80	Static	2515.86	Sierrita
		3/12/15		448.48	Static	2516.18	Sierrita
		4/22/15		449.85	Static	2514.81	Sierrita
		5/21/15		450.06	Static	2514.60	Sierrita
		6/1/15		450.21	Static	2514.45	Sierrita
		7/23/15		454.05	Static	2510.61	Sierrita
		8/25/15		455.41	Static	2509.25	Sierrita
		10/20/15		456.84	Static	2507.82	Sierrita
		11/6/15		456.90	Static	2507.76	Sierrita
		1/7/16		456.62	Static	2508.04	Sierrita
		2/12/16		455.97	Static	2508.69	Sierrita
		3/7/16		455.84	Static	2508.82	Sierrita
		4/7/16		456.52	Static	2508.14	Sierrita
		10/5/16		463.11	Static	2501.55	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-1B	2964.84	7/30/07		425.67		2539.17	Sierrita
		10/9/07		429.20		2535.64	Sierrita
		1/24/08		426.41		2538.43	Sierrita
		4/9/08		425.05		2539.79	Sierrita
		7/14/08		428.98		2535.86	Sierrita
		10/17/08		431.64		2533.20	Sierrita
		1/16/09		429.05		2535.79	Sierrita
		4/1/09		427.23		2537.61	Sierrita
		7/1/09		427.70		2537.14	Sierrita
		10/22/09		434.90		2529.94	Sierrita
		4/16/10		429.13		2535.71	Sierrita
		10/13/10		434.47		2530.37	Sierrita
		5/5/11		429.65		2535.19	Sierrita
		10/6/11		434.10		2530.74	Sierrita
		6/12/12		431.95		2532.89	Sierrita
		10/24/12		435.62		2529.22	Sierrita
		4/8/13		429.03		2535.81	Sierrita
		10/23/13		435.71		2529.13	Sierrita
		3/12/14		436.56		2528.28	Sierrita
		4/29/14		438.64		2526.20	Sierrita
		5/8/14		438.67		2526.17	Sierrita
		6/9/14		441.65		2523.19	Sierrita
		7/28/14		444.85		2519.99	Sierrita
		8/7/14		445.81		2519.03	Sierrita
		9/8/14		446.61	Static	2518.23	Sierrita
		10/28/14		448.92		2515.92	Sierrita
		11/12/14		449.05		2515.79	Sierrita
		12/16/14		449.19	Static	2515.65	Sierrita
		1/29/15		449.18	Static	2515.66	Sierrita
		2/27/15		449.19	Static	2515.65	Sierrita
		3/12/15		448.97	Static	2515.87	Sierrita
		4/22/15		450.52	Static	2514.32	Sierrita
		5/21/15		451.10	Static	2513.74	Sierrita
		6/1/15		451.56	Static	2513.28	Sierrita
		7/23/15		454.96	Static	2509.88	Sierrita
		8/25/15		456.16	Static	2508.68	Sierrita
		10/20/15		457.46	Static	2507.38	Sierrita
		11/6/15		457.51	Static	2507.33	Sierrita
		1/7/16		456.88	Static	2507.96	Sierrita
		2/12/16		456.39	Static	2508.45	Sierrita
		3/7/16		456.05	Static	2508.79	Sierrita
		4/7/16		457.18	Static	2507.66	Sierrita
		10/5/16		463.83	Static	2501.01	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-1C	2968.58	7/30/07		423.87		2544.71	Sierrita
		10/9/07		427.02		2541.56	Sierrita
		1/24/08		424.00		2544.58	Sierrita
		4/9/08		423.30		2545.28	Sierrita
		7/14/08		426.73		2541.85	Sierrita
		10/21/08		429.49		2539.09	Sierrita
		1/16/09		426.75		2541.83	Sierrita
		4/1/09		424.90		2543.68	Sierrita
		7/1/09		428.81		2539.77	Sierrita
		10/22/09		427.60		2540.98	Sierrita
		4/16/10		426.93		2541.65	Sierrita
		10/13/10		431.88		2536.70	Sierrita
		4/20/11		427.32		2541.26	Sierrita
		10/6/11		431.80		2536.78	Sierrita
		6/12/12		429.40		2539.18	Sierrita
		10/24/12		433.08		2535.50	Sierrita
		4/8/13		426.50		2542.08	Sierrita
		10/23/13		433.06		2535.52	Sierrita
		3/12/14		434.69		2533.89	Sierrita
		4/29/14		437.08		2531.50	Sierrita
		5/8/14		436.98		2531.60	Sierrita
		6/9/14		440.40		2528.18	Sierrita
		7/28/14		443.49		2525.09	Sierrita
		8/7/14		444.30		2524.28	Sierrita
		9/8/14		445.02	Static	2523.56	Sierrita
		10/28/14		447.53		2521.05	Sierrita
		11/12/14		447.62		2520.96	Sierrita
		12/16/14		447.70	Static	2520.88	Sierrita
		1/29/15		447.80	Static	2520.78	Sierrita
		2/27/15		447.84	Static	2520.74	Sierrita
		3/12/15		447.72	Static	2520.86	Sierrita
		4/22/15		449.56	Static	2519.02	Sierrita
		5/21/15		450.74	Static	2517.84	Sierrita
		6/1/15		451.18	Static	2517.40	Sierrita
		7/23/15		454.01	Static	2514.57	Sierrita
		8/25/15		455.18	Static	2513.40	Sierrita
		10/20/15		456.30	Static	2512.28	Sierrita
		11/6/15		456.67	Static	2511.91	Sierrita
		1/7/16		455.64	Static	2512.94	Sierrita
		2/12/16		455.31	Static	2513.27	Sierrita
		3/7/16		455.12	Static	2513.46	Sierrita
		4/7/16		456.31	Static	2512.27	Sierrita
		10/5/16		463.00	Static	2505.58	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-2	3150.87	8/9/07		575.30		2575.57	Sierrita
		10/9/07		576.60		2574.27	Sierrita
		1/22/08		577.22		2573.65	Sierrita
		4/17/08		576.65		2574.22	Sierrita
		7/14/08		577.35		2573.52	Sierrita
		10/17/08		578.54		2572.33	Sierrita
		1/15/09		579.10		2571.77	Sierrita
		4/1/09		578.38		2572.49	Sierrita
		4/13/10		580.50		2570.37	Sierrita
		4/27/11		581.41		2569.46	Sierrita
		5/2/12		581.75		2569.12	Sierrita
		4/8/13		582.45		2568.42	Sierrita
		3/12/14		592.12		2558.75	Sierrita
		4/9/14		591.93		2558.94	Sierrita
		5/8/14		590.86		2560.01	Sierrita
		6/9/14		600.45		2550.42	Sierrita
		7/28/14		604.52		2546.35	Sierrita
		8/7/14		605.29		2545.58	Sierrita
		9/8/14		607.39	Static	2543.48	Sierrita
		10/28/14		610.63		2540.24	Sierrita
		11/26/14		612.53		2538.34	Sierrita
		12/16/14		613.88	Static	2536.99	Sierrita
		1/29/15		615.76	Static	2535.11	Sierrita
		2/17/15		616.21	Static	2534.66	Sierrita
		3/12/15		617.30	Static	2533.57	Sierrita
		4/7/15		618.25	Static	2532.62	Sierrita
		5/21/15		619.83	Static	2531.04	Sierrita
		6/1/15		620.29	Static	2530.58	Sierrita
		7/22/15		621.75	Static	2529.12	Sierrita
		8/14/15		622.49	Static	2528.38	Sierrita
		11/18/15		625.66	Static	2525.21	Sierrita
		1/7/16		UTM		NA	Sierrita
		2/11/16		UTM		NA	Sierrita
		3/7/16		UTM		NA	Sierrita
		6/8/16		UTM		NA	Sierrita
		12/8/16		633.18	Static	2517.69	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-3B <sup>3</sup>	2909.12	9/10/07		359.38		2549.74	Sierrita
		10/9/07		359.55		2549.57	Sierrita
		1/21/08		357.13		2551.99	Sierrita
		4/16/08		357.10		2552.02	Sierrita
		7/14/08		358.71		2550.41	Sierrita
		10/22/08		361.77		2547.35	Sierrita
		1/19/09		358.95		2550.17	Sierrita
		4/1/09		357.70		2551.42	Sierrita
		7/27/09		361.21		2547.91	Sierrita
		10/22/09		365.50		2543.62	Sierrita
		3/11/10		359.36		2549.76	Sierrita
		4/14/10		360.30		2548.82	Sierrita
		7/21/10		362.20		2546.92	Sierrita
		10/26/10		364.82		2544.30	Sierrita
		1/18/11		361.99		2547.13	Sierrita
		5/4/11		361.59		2547.53	Sierrita
		7/6/11		363.80		2545.32	Sierrita
		11/22/11		365.10		2544.02	Sierrita
		1/11/12		363.36		2545.76	Sierrita
		5/8/12		362.09		2547.03	Sierrita
		8/7/12		363.87		2545.25	Sierrita
		1/8/13		362.33		2546.79	Sierrita
		4/9/13		360.13		2548.99	Sierrita
		5/21/13		359.84		2549.28	Sierrita
		8/27/13		365.16		2543.96	Sierrita
		10/24/13		366.19		2542.93	Sierrita
		1/7/14		364.11		2545.01	Sierrita
		3/12/14		368.18		2540.94	Sierrita
		4/16/14		369.34		2539.78	Sierrita
		5/14/14		369.35		2539.77	Sierrita
		6/23/14		369.35		2539.77	Sierrita
		7/1/14		375.64		2533.48	Sierrita
		7/8/14		375.64		2533.48	Sierrita
		8/8/14		377.48		2531.64	Sierrita
		9/9/14		378.82	Static	2530.30	Sierrita
		10/29/14		379.96		2529.16	Sierrita
		11/13/14		381.17		2527.95	Sierrita
		12/17/14		382.07	Static	2527.05	Sierrita
		1/21/15		382.22	Static	2526.90	Sierrita
		2/27/15		382.40	Static	2526.72	Sierrita
		3/26/15		382.99	Static	2526.13	Sierrita
		4/27/15		384.26	Static	2524.86	Sierrita
		5/21/15		385.07	Static	2524.05	Sierrita
		6/2/15		385.86	Static	2523.26	Sierrita
		7/7/15		388.29	Static	2520.83	Sierrita
		8/14/15		390.46	Static	2518.66	Sierrita
		10/21/15		390.68	Static	2518.44	Sierrita
		11/2/15		390.72	Static	2518.40	Sierrita
		1/4/16		391.00	Static	2518.12	Sierrita
		2/11/16		391.06	Static	2518.06	Sierrita
		3/11/16		391.15	Static	2517.97	Sierrita
		4/11/16		392.36	Static	2516.76	Sierrita
		7/6/16		395.89	Static	2513.23	Sierrita
		8/24/16		397.00	Static	2512.12	Sierrita
		10/5/16		398.28	Static	2510.84	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-3C	2908.87	7/5/07		356.30		2552.57	Sierrita
		10/10/07		359.85		2549.02	Sierrita
		1/21/08		356.74		2552.13	Sierrita
		4/15/08		357.18		2551.69	Sierrita
		7/14/08		359.84		2549.03	Sierrita
		10/21/08		361.99		2546.88	Sierrita
		1/19/09		359.61		2549.26	Sierrita
		4/1/09		358		2550.87	Sierrita
		7/22/09		362		2546.87	Sierrita
		10/22/09		362.80		2546.07	Sierrita
		3/11/10		359.62		2549.25	Sierrita
		4/14/10		360.45		2548.42	Sierrita
		7/21/10		367.50		2541.37	Sierrita
		10/26/10		365.13		2543.74	Sierrita
		1/18/11		361.62		2547.25	Sierrita
		5/4/11		361.61		2547.26	Sierrita
		7/6/11		363.75		2545.12	Sierrita
		10/5/11		365.50		2543.37	Sierrita
		1/11/12		363.36		2545.51	Sierrita
		5/7/12		362.35		2546.52	Sierrita
		8/7/12		364.49		2544.38	Sierrita
		10/10/12		366.50		2542.37	Sierrita
		1/8/13		362.59		2546.28	Sierrita
		4/9/13		360.45		2548.42	Sierrita
		8/27/13		365.47		2543.40	Sierrita
		10/24/13		366.79		2542.08	Sierrita
		1/7/14		364.19		2544.68	Sierrita
		3/12/14		368.09		2540.78	Sierrita
		4/16/14		369.60		2539.27	Sierrita
		5/14/14		369.63		2539.24	Sierrita
		6/23/14		369.65		2539.22	Sierrita
		7/1/14		376.55		2532.32	Sierrita
		7/9/14		376.55		2532.32	Sierrita
		8/8/14		377.79		2531.08	Sierrita
		9/9/14		379.28	Static	2529.59	Sierrita
		10/29/14		380.51		2528.36	Sierrita
		11/13/14		381.92		2526.95	Sierrita
		12/17/14		383.22	Static	2525.65	Sierrita
		1/21/15		381.99	Static	2526.88	Sierrita
		2/27/15		382.14	Static	2526.73	Sierrita
		3/26/15		383.42	Static	2525.45	Sierrita
		4/27/15		384.85	Static	2524.02	Sierrita
		5/21/15		385.50	Static	2523.37	Sierrita
		6/2/15		386.10	Static	2522.77	Sierrita
		7/7/15		389.01	Static	2519.86	Sierrita
		8/14/15		391.60	Static	2517.27	Sierrita
		10/21/15		391.47	Static	2517.40	Sierrita
		11/2/15		391.43	Static	2517.44	Sierrita
		1/4/16		391.32	Static	2517.55	Sierrita
		2/11/16		391.29	Static	2517.58	Sierrita
		3/11/16		391.35	Static	2517.52	Sierrita
		4/11/16		392.60	Static	2516.27	Sierrita
		7/6/16		396.00	Static	2512.87	Sierrita
		8/24/16		397.63	Static	2511.24	Sierrita
		10/5/16		398.89	Static	2509.98	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-4A	2923.63	10/9/07		307.67		2615.96	Sierrita
		1/22/08		303.85		2619.78	Sierrita
		4/16/08		305.46		2618.17	Sierrita
		7/17/08		308.05		2615.58	Sierrita
		10/22/08		309.65		2613.98	Sierrita
		1/19/09		306.28		2617.35	Sierrita
		4/2/09		306.69		2616.94	Sierrita
		7/1/09		307.92		2615.71	Sierrita
		10/26/09		309.10		2614.53	Sierrita
		1/26/10		308.52		2615.11	Sierrita
		4/14/10		308.53		2615.10	Sierrita
		7/21/10		311.05		2612.58	Sierrita
		10/13/10		312.00		2611.63	Sierrita
		1/19/11		308.82		2614.81	Sierrita
		5/4/11		309.68		2613.95	Sierrita
		7/6/11		311.75		2611.88	Sierrita
		10/5/11		312.50		2611.13	Sierrita
		1/17/12		310.05		2613.58	Sierrita
		5/7/12		310.42		2613.21	Sierrita
		8/13/12		313.30		2610.33	Sierrita
		10/23/12		314.17		2609.46	Sierrita
		2/21/13		311.70		2611.93	Sierrita
		4/10/13		312.68		2610.95	Sierrita
		7/10/13		316.31		2607.32	Sierrita
		10/22/13		318.07		2605.56	Sierrita
		1/10/14		316.34		2607.29	Sierrita
		3/12/14		319.78		2603.85	Sierrita
		4/8/14		321.40		2602.23	Sierrita
		5/6/14		321.36		2602.27	Sierrita
		6/23/14		321.33		2602.30	Sierrita
		7/8/14		329.06		2594.57	Sierrita
		8/8/14		331.16		2592.47	Sierrita
		9/9/14		332.77	Static	2590.86	Sierrita
		10/29/14		334.28		2589.35	Sierrita
		11/12/14		335.68		2587.95	Sierrita
		12/17/14		336.93	Static	2586.70	Sierrita
		1/14/15		337.62	Static	2586.01	Sierrita
		2/27/15		337.92	Static	2585.71	Sierrita
		3/26/15		339.75	Static	2583.88	Sierrita
		4/15/15		340.81	Static	2582.82	Sierrita
		5/21/15		340.96	Static	2582.67	Sierrita
		6/2/15		341.09	Static	2582.54	Sierrita
		7/8/15		345.02	Static	2578.61	Sierrita
		8/14/15		348.22	Static	2575.41	Sierrita
		10/22/15		349.01	Static	2574.62	Sierrita
		11/2/15		349.11	Static	2574.52	Sierrita
		1/4/16		349.81	Static	2573.82	Sierrita
		2/11/16		349.90	Static	2573.73	Sierrita
		3/8/16		349.95	Static	2573.68	Sierrita
		4/7/16		351.76	Static	2571.87	Sierrita
		7/5/16		355.00	Static	2568.63	Sierrita
		8/24/16		357.00	Static	2566.63	Sierrita
		10/25/16		359.05	Static	2564.58	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-4B	2923.57	10/11/07		308.72		2614.85	Sierrita
		1/7/08		304.22		2619.35	Sierrita
		4/16/08		306.48		2617.09	Sierrita
		7/18/08		308.95		2614.62	Sierrita
		10/22/08		310.77		2612.80	Sierrita
		1/21/09		306		2617.57	Sierrita
		4/2/09		306.72		2616.85	Sierrita
		7/1/09		309.1		2614.47	Sierrita
		10/26/09		313.00		2610.57	Sierrita
		1/26/10		308.29		2615.28	Sierrita
		4/14/10		308.79		2614.78	Sierrita
		7/21/10		311.22		2612.35	Sierrita
		10/13/10		312.39		2611.18	Sierrita
		1/19/11		308.84		2614.73	Sierrita
		5/4/11		310.40		2613.17	Sierrita
		7/6/11		312.85		2610.72	Sierrita
		10/5/11		313.50		2610.07	Sierrita
		1/17/12		309.81		2613.76	Sierrita
		5/7/12		311.47		2612.10	Sierrita
		8/13/12		314.42		2609.15	Sierrita
		10/23/12		315.28		2608.29	Sierrita
		2/21/13		311.79		2611.78	Sierrita
		4/10/13		313.17		2610.40	Sierrita
		7/10/13		317.96		2605.61	Sierrita
		10/22/13		319.56		2604.01	Sierrita
		1/10/14		316.92		2606.65	Sierrita
		3/12/14		322.35		2601.22	Sierrita
		4/8/14		324.09		2599.48	Sierrita
		5/6/14		324.03		2599.54	Sierrita
		6/23/14		324.00		2599.57	Sierrita
		7/8/14		333.65		2589.92	Sierrita
		8/8/14		335.20		2588.37	Sierrita
		9/9/14		336.99	Static	2586.58	Sierrita
		10/29/14		338.56		2585.01	Sierrita
		11/12/14		339.10		2584.47	Sierrita
		12/17/14		339.66	Static	2583.91	Sierrita
		1/14/15		340.55	Static	2583.02	Sierrita
		2/27/15		340.70	Static	2582.87	Sierrita
		3/26/15		343.16	Static	2580.41	Sierrita
		4/15/15		345.50	Static	2578.07	Sierrita
		5/21/15		346.89	Static	2576.68	Sierrita
		6/2/15		348.27	Static	2575.30	Sierrita
		7/8/15		348.40	Static	2575.17	Sierrita
		8/14/15		348.79	Static	2574.78	Sierrita
		10/22/15		351.65	Static	2571.92	Sierrita
		11/2/15		351.79	Static	2571.78	Sierrita
		1/4/16		351.66	Static	2571.91	Sierrita
		2/11/16		351.63	Static	2571.94	Sierrita
		3/8/16		351.59	Static	2571.98	Sierrita
		4/7/16		354.90	Static	2568.67	Sierrita
		7/5/16		357.28	Static	2566.29	Sierrita
		8/24/16		360.30	Static	2563.27	Sierrita
		10/25/16		362.00	Static	2561.57	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-4C	2923.66	8/12/07		307.13		2616.53	Sierrita
		10/12/07		308.78		2614.88	Sierrita
		1/22/08		304.90		2618.76	Sierrita
		4/16/08		306.75		2616.91	Sierrita
		7/18/08		309.10		2614.56	Sierrita
		10/22/08		311.41		2612.25	Sierrita
		1/21/09		306.80		2616.86	Sierrita
		4/2/09		311.49		2612.17	Sierrita
		7/1/09		311.68		2611.98	Sierrita
		10/26/09		311.30		2612.36	Sierrita
		1/26/10		309.53		2614.13	Sierrita
		4/14/10		309.58		2614.08	Sierrita
		7/21/10		312.75		2610.91	Sierrita
		10/13/10		313.49		2610.17	Sierrita
		1/19/11		309.94		2613.72	Sierrita
		5/4/11		311.53		2612.13	Sierrita
		7/6/11		314.05		2609.61	Sierrita
		10/5/11		314.80		2608.86	Sierrita
		1/12/12		311.00		2612.66	Sierrita
		5/7/12		312.37		2611.29	Sierrita
		8/13/12		315.55		2608.11	Sierrita
		10/23/12		316.47		2607.19	Sierrita
		2/21/13		312.89		2610.77	Sierrita
		4/10/13		314.14		2609.52	Sierrita
		7/10/13		318.94		2604.72	Sierrita
		10/22/13		320.63		2603.03	Sierrita
		1/10/14		318.02		2605.64	Sierrita
		3/12/14		323.88		2599.78	Sierrita
		4/8/14		325.83		2597.83	Sierrita
		5/6/14		325.81		2597.85	Sierrita
		6/23/14		325.84		2597.82	Sierrita
		7/8/14		335.70		2587.96	Sierrita
		8/8/14		336.88		2586.78	Sierrita
		9/9/14		338.81	Static	2584.85	Sierrita
		10/29/14		340.60		2583.06	Sierrita
		11/12/14		341.00		2582.66	Sierrita
		12/17/14		341.53	Static	2582.13	Sierrita
		1/14/15		342.40	Static	2581.26	Sierrita
		2/27/15		342.47	Static	2581.19	Sierrita
		3/26/15		344.92	Static	2578.74	Sierrita
		4/15/15		347.40	Static	2576.26	Sierrita
		5/21/15		349.11	Static	2574.55	Sierrita
		6/2/15		350.79	Static	2572.87	Sierrita
		7/8/15		350.81	Static	2572.85	Sierrita
		8/14/15		350.93	Static	2572.73	Sierrita
		10/22/15		353.38	Static	2570.28	Sierrita
		11/2/15		353.47	Static	2570.19	Sierrita
		1/4/16		353.36	Static	2570.30	Sierrita
		2/11/16		353.31	Static	2570.35	Sierrita
		3/8/16		353.28	Static	2570.38	Sierrita
		4/7/16		356.68	Static	2566.98	Sierrita
		7/5/16		359.00	Static	2564.66	Sierrita
		8/24/16		362.00	Static	2561.66	Sierrita
		10/25/16		363.81	Static	2559.85	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-5B	2944.35	10/12/07		268.27		2676.08	Sierrita
		1/7/08		262.09		2682.26	Sierrita
		4/17/08		266.22		2678.13	Sierrita
		7/24/08		268.61		2675.74	Sierrita
		10/23/08		272.16		2672.19	Sierrita
		1/21/09		265.83		2678.52	Sierrita
		4/2/09		269.20		2675.15	Sierrita
		1/25/10		268.30		2676.05	Sierrita
		4/27/10		268.02		2676.33	Sierrita
		12/10/10		272.31		2672.04	Sierrita
		6/24/11		275.70		2668.65	Sierrita
		11/21/11		273.28		2671.07	Sierrita
		6/20/12		277.46		2666.89	Sierrita
		11/6/12		280.33		2664.02	Sierrita
		6/12/13		288.32		2656.03	Sierrita
		10/24/13		287.84		2656.51	Sierrita
		3/12/14		287.24		2657.11	Sierrita
		4/29/14		294.80		2649.55	Sierrita
		5/14/14		294.78		2649.57	Sierrita
		6/23/14		294.76		2649.59	Sierrita
		7/28/14		299.29		2645.06	Sierrita
		8/7/14		301.38		2642.97	Sierrita
		9/8/14		302.31	Static	2642.04	Sierrita
		10/15/14		300.14		2644.21	Sierrita
		11/26/14		300.87		2643.48	Sierrita
		12/17/14		301.43	Static	2642.92	Sierrita
		1/29/15		301.89	Static	2642.46	Sierrita
		2/27/15		302.08	Static	2642.27	Sierrita
		3/18/15		303.65	Static	2640.70	Sierrita
		4/28/15		307.69	Static	2636.66	Sierrita
		5/21/15		309.80	Static	2634.55	Sierrita
		6/2/15		311.87	Static	2632.48	Sierrita
		7/24/15		311.80	Static	2632.55	Sierrita
		8/25/15		312.19	Static	2632.16	Sierrita
		11/4/15		312.41	Static	2631.94	Sierrita
		1/7/16		309.68	Static	2634.67	Sierrita
		2/12/16		308.51	Static	2635.84	Sierrita
		3/8/16		308.22	Static	2636.13	Sierrita
		4/12/16		310.08	Static	2634.27	Sierrita
		9/21/16		316.53	Static	2627.82	Sierrita
		10/26/16		315.69	Static	2628.66	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-5C	2944.91	8/23/07		294.04		2650.87	Sierrita
		10/13/07		289.70		2655.21	Sierrita
		1/7/08		285.09		2659.82	Sierrita
		4/17/08		281.52		2663.39	Sierrita
		7/24/08		282.42		2662.49	Sierrita
		10/23/08		285.03		2659.88	Sierrita
		1/22/09		281.38		2663.53	Sierrita
		5/13/09		282.35		2662.56	Sierrita
		10/27/09		284.70		2660.21	Sierrita
		4/27/10		276.49		2668.42	Sierrita
		12/10/10		278.31		2666.60	Sierrita
		5/24/11		278.21		2666.70	Sierrita
		11/21/11		280.98		2663.93	Sierrita
		6/18/12		281.66		2663.25	Sierrita
		11/6/12		286.84		2658.07	Sierrita
		6/13/13		292.47		2652.44	Sierrita
		11/12/13		292.49		2652.42	Sierrita
		3/12/14		291.79		2653.12	Sierrita
		5/6/14		298.74		2646.17	Sierrita
		6/23/14		298.76		2646.15	Sierrita
		7/28/14		304.81		2640.10	Sierrita
		8/7/14		305.34		2639.57	Sierrita
		9/8/14		305.94	Static	2638.97	Sierrita
		10/15/14		305.76		2639.15	Sierrita
		11/26/14		305.90		2639.01	Sierrita
		12/17/14		306.05	Static	2638.86	Sierrita
		1/29/15		306.20	Static	2638.71	Sierrita
		2/27/15		306.28	Static	2638.63	Sierrita
		3/18/15		307.24	Static	2637.67	Sierrita
		4/28/15		311.45	Static	2633.46	Sierrita
		5/21/15		314.13	Static	2630.78	Sierrita
		6/2/15		316.83	Static	2628.08	Sierrita
		7/24/15		316.72	Static	2628.19	Sierrita
		8/25/15		316.75	Static	2628.16	Sierrita
		11/4/15		316.90	Static	2628.01	Sierrita
		1/7/16		314.72	Static	2630.19	Sierrita
		2/12/16		313.11	Static	2631.80	Sierrita
		3/8/16		312.89	Static	2632.02	Sierrita
		6/9/16		316.98	Static	2627.93	Sierrita
		9/21/16		322.60	Static	2622.31	Sierrita
		10/26/16		325.16	Static	2619.75	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-6A	3043.37	10/2/07		303.60		2739.77	Sierrita
		1/22/08		303.27		2740.10	Sierrita
		4/18/08		304.02		2739.35	Sierrita
		7/24/08		305.81		2737.56	Sierrita
		10/23/08		307.85		2735.52	Sierrita
		1/22/09		305.87		2737.50	Sierrita
		4/2/09		304.87		2738.50	Sierrita
		7/22/09		307.15		2736.22	Sierrita
		10/26/09		307.00		2736.37	Sierrita
		3/11/10		306.15		2737.22	Sierrita
		4/21/10		306.44		2736.93	Sierrita
		8/10/10		309.12		2734.25	Sierrita
		10/26/10		308.95		2734.42	Sierrita
		1/18/11		307.78		2735.59	Sierrita
		5/5/11		308.13		2735.24	Sierrita
		7/7/11		309.90		2733.47	Sierrita
		10/6/11		311.10		2732.27	Sierrita
		1/11/12		311.24		2732.13	Sierrita
		6/12/12		314.95		2728.42	Sierrita
		8/13/12		317.93		2725.44	Sierrita
		10/18/12		316.94		2726.43	Sierrita
		1/8/13		321.98		2721.39	Sierrita
		4/9/13		323.05		2720.32	Sierrita
		7/10/13		326.23		2717.14	Sierrita
		10/22/13		329.74		2713.63	Sierrita
		1/6/14		329.94		2713.43	Sierrita
		3/12/14		329.85		2713.52	Sierrita
		4/9/14		330.14		2713.23	Sierrita
		5/14/14		330.12		2713.25	Sierrita
		6/23/14		330.08		2713.29	Sierrita
		7/8/14		331.19		2712.18	Sierrita
		8/7/14		331.41		2711.96	Sierrita
		9/8/14		331.78	Static	2711.59	Sierrita
		10/29/14		331.92		2711.45	Sierrita
		11/26/14		332.08		2711.29	Sierrita
		12/2/14		331.73	Static	2711.64	Sierrita
		1/8/15		332.23	Static	2711.14	Sierrita
		2/27/15		332.26	Static	2711.11	Sierrita
		3/18/15		331.64	Static	2711.73	Sierrita
		4/16/15		332.31	Static	2711.06	Sierrita
		5/21/15		332.86	Static	2710.51	Sierrita
		6/2/15		333.38	Static	2709.99	Sierrita
		7/2/15		335.11	Static	2708.26	Sierrita
		8/25/15		335.91	Static	2707.46	Sierrita
		10/19/15		336.37	Static	2707.00	Sierrita
		11/5/15		336.32	Static	2707.05	Sierrita
		1/18/16		335.74	Static	2707.63	Sierrita
		2/11/16		335.70	Static	2707.67	Sierrita
		3/8/16		335.80	Static	2707.57	Sierrita
		4/6/16		334.20	Static	2709.17	Sierrita
		7/5/16		332.08	Static	2711.29	Sierrita
		10/25/16		331.40	Static	2711.97	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2007-6B	3043.05	10/4/07		319.17		2723.88	Sierrita
		1/21/08		314.78		2728.27	Sierrita
		4/17/08		314.75		2728.30	Sierrita
		7/24/08		317.04		2726.01	Sierrita
		10/23/08		318.17		2724.88	Sierrita
		1/22/09		316.58		2726.47	Sierrita
		4/2/09		316.05		2727.00	Sierrita
		7/22/09		317.49		2725.56	Sierrita
		10/26/09		319.37		2723.68	Sierrita
		3/11/10		316.58		2726.47	Sierrita
		4/21/10		316.64		2726.41	Sierrita
		8/10/10		318.40		2724.65	Sierrita
		10/26/10		318.66		2724.39	Sierrita
		1/18/11		317.52		2725.53	Sierrita
		5/5/11		317.00		2726.05	Sierrita
		7/7/11		318.58		2724.47	Sierrita
		10/6/11		319.92		2723.13	Sierrita
		1/11/12		320.03		2723.02	Sierrita
		6/12/12		325.69		2717.36	Sierrita
		8/13/12		329.12		2713.93	Sierrita
		10/18/12		332.52		2710.53	Sierrita
		1/8/13		333.92		2709.13	Sierrita
		4/9/13		335.80		2707.25	Sierrita
		7/10/13		337.52		2705.53	Sierrita
		10/22/13		340.62		2702.43	Sierrita
		1/6/14		340.62		2702.43	Sierrita
		3/12/14		340.61		2702.44	Sierrita
		4/9/14		340.98		2702.07	Sierrita
		5/14/14		341.00		2702.05	Sierrita
		6/23/14		341.04		2702.01	Sierrita
		7/8/14		341.95		2701.10	Sierrita
		8/7/14		342.50		2700.55	Sierrita
		9/8/14		342.88	Static	2700.17	Sierrita
		10/29/14		342.96		2700.09	Sierrita
		11/26/14		343.11		2699.94	Sierrita
		12/2/14		345.25		2697.80	Sierrita
		1/8/15		346.10	Static	2696.95	Sierrita
		2/27/15		346.87	Static	2696.18	Sierrita
		3/18/15		346.11	Static	2696.94	Sierrita
		4/16/15		347.00	Static	2696.05	Sierrita
		5/21/15		347.39	Static	2695.66	Sierrita
		6/2/15		347.75	Static	2695.30	Sierrita
		7/2/15		350.24	Static	2692.81	Sierrita
		8/25/15		351.57	Static	2691.48	Sierrita
		10/19/15		351.41	Static	2691.64	Sierrita
		11/5/15		351.30	Static	2691.75	Sierrita
		1/18/16		351.95	Static	2691.10	Sierrita
		2/11/16		352.06	Static	2690.99	Sierrita
		3/8/16		352.13	Static	2690.92	Sierrita
		4/6/16		350.88	Static	2692.17	Sierrita
		7/5/16		346.62	Static	2696.43	Sierrita
		8/17/16		346.51	Static	2696.54	Sierrita
		10/25/16		346.80	Static	2696.25	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
MO-2009-1 <sup>3</sup>	2890.78	6/2/09		226.35		2664.43	Sierrita
		7/29/09		222.46		2668.32	Sierrita
		11/3/09		225.90		2664.88	Sierrita
		1/25/10		212.26		2678.52	Sierrita
		4/20/10		219.94		2670.84	Sierrita
		8/10/10		227.88		2662.90	Sierrita
		12/15/10		215.16		2675.62	Sierrita
		2/2/11		214.99		2675.79	Sierrita
		6/16/11		226.45		2664.33	Sierrita
		8/31/11		223.97		2666.81	Sierrita
		12/1/11		219.96		2670.82	Sierrita
		1/11/12		222.55		2668.23	Sierrita
		5/9/12		225.63		2665.15	Sierrita
		8/15/12		234.23		2656.55	Sierrita
		11/29/12		229.30		2661.48	Sierrita
		1/8/13		229.63		2661.15	Sierrita
		4/10/13		233.98		2656.80	Sierrita
		7/11/13		238.53		2652.25	Sierrita
		10/16/13		237.57		2653.21	Sierrita
		1/6/14		236.58		2654.20	Sierrita
		3/12/14		237.34		2653.44	Sierrita
		4/24/14		248.16		2642.62	Sierrita
		5/6/14		248.19		2642.59	Sierrita
		6/23/14		248.22		2642.56	Sierrita
		7/8/14		252.36		2638.42	Sierrita
		8/7/14		254.35		2636.43	Sierrita
		9/8/14		256.45	Static	2634.33	Sierrita
		10/29/14		258.27		2632.51	Sierrita
		11/26/14		259.64		2631.14	Sierrita
		12/2/14		248.01		2642.77	Sierrita
		1/13/15		248.22	Static	2642.56	Sierrita
		2/27/15		250.14	Static	2640.64	Sierrita
		3/26/15		251.42	Static	2639.36	Sierrita
		4/15/15		262.15	Static	2628.63	Sierrita
		5/21/15		266.63	Static	2624.15	Sierrita
		6/2/15		269.42	Static	2621.36	Sierrita
		7/7/15		268.50	Static	2622.28	Sierrita
		8/14/15		268.44	Static	2622.34	Sierrita
		10/20/15		254.32	Static	2636.46	Sierrita
		11/2/15		253.14	Static	2637.64	Sierrita
		1/6/16		252.71	Static	2638.07	Sierrita
		2/11/16		252.67	Static	2638.11	Sierrita
		3/8/16		252.51	Static	2638.27	Sierrita
		4/12/16		251.75	Static	2639.03	Sierrita
		7/5/16		255.42	Static	2635.36	Sierrita
		10/26/16		259.08	Static	2631.70	Sierrita
MW-2016-5A	2927.07	8/10/16		427.25	Static	2499.82	Clear Creek
		10/6/16		431.85	Static	2495.22	Sierrita
MW-2016-5B	2925.46	8/4/16		425.50	Static	2499.96	Clear Creek
		10/6/16		427.01	Static	2498.45	Sierrita
MW-2016-6	2969.20	8/16/16		471.29	Static	2497.91	Clear Creek
		10/6/16		471.48	Static	2497.72	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
NP-2 <sup>3</sup>	2904.75	11/6/07		355.10		2549.65	Sierrita
		1/11/08		353.67		2551.08	Sierrita
		4/17/08		352.20		2552.55	Sierrita
		7/11/08		355.10		2549.65	Sierrita
		10/9/08		356.24		2548.51	Sierrita
		2/9/09		355.00		2549.75	Sierrita
		4/24/09		354.80		2549.95	Sierrita
		9/22/09		358.90		2545.85	Sierrita
		12/31/09		358.57		2546.18	Sierrita
		2/17/10		357.20		2547.55	Sierrita
		4/22/10		356.38		2548.37	Sierrita
		8/5/10		357.93		2546.82	Sierrita
		10/25/10		360.80		2543.95	Sierrita
		1/19/11		358.68		2546.07	Sierrita
		5/3/11		358.30		2546.45	Sierrita
		7/18/11		359.72		2545.03	Sierrita
		12/5/11		360.27		2544.48	Sierrita
		3/21/12		358.10		2546.65	Sierrita
		6/18/12		359.28		2545.47	Sierrita
		8/15/12		360.45		2544.30	Sierrita
		11/29/12		360.79		2543.96	Sierrita
		2/20/13		356.92		2547.83	Sierrita
		6/17/13		358.19		2546.56	Sierrita
		8/27/13		360.56		2544.19	Sierrita
		10/30/13		362.56		2542.19	Sierrita
		1/7/14		361.24		2543.51	Sierrita
		3/12/14		363.18		2541.57	Sierrita
		4/23/14		364.29		2540.46	Sierrita
		5/14/14		364.22		2540.53	Sierrita
		6/23/14		364.24		2540.51	Sierrita
		7/1/14		368.67		2536.08	Sierrita
		8/8/14		370.36		2534.39	Sierrita
		9/9/14		372.75	Static	2532.00	Sierrita
		10/13/14		374.58		2530.17	Sierrita
		11/26/14		375.76		2528.99	Sierrita
		12/17/14		376.89	Static	2527.86	Sierrita
		1/14/15		377.12	Static	2527.63	Sierrita
		2/27/15		377.25	Static	2527.50	Sierrita
		3/26/15		377.65	Static	2527.10	Sierrita
		4/28/15		UTM		NA	Sierrita
		5/21/15		UTM		NA	Sierrita
		6/2/15		UTM		NA	Sierrita
		7/23/15		UTM		NA	Sierrita
		8/25/15		UTM		NA	Sierrita
		11/2/15		UTM		NA	Sierrita
		1/14/16		UTM		NA	Sierrita
		2/11/16		UTM		NA	Sierrita
		3/11/16		UTM		NA	Sierrita
		6/8/16		UTM		NA	Sierrita
		8/23/16		392.03	Static	2512.72	Sierrita
		12/5/16		394.30	Static	2510.45	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bsl)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
PS-1	3040.665	12/30/11	497.01		Static		BW, 2015a
		12/30/11	517.69		Dynamic		BW, 2015a
		3/13/14		Obstructed		NA	Sierrita
		5/8/14		516.79	Dynamic	2523.88	Sierrita
		5/15/14		516.79	Dynamic	2523.88	Sierrita
		5/15/14	516.79		Dynamic		BW, 2015a
		5/22/14		525.44	Dynamic	2515.23	Sierrita
		5/22/14	525.44		Dynamic		BW, 2015a
		5/30/14	525.44		Dynamic		BW, 2015a
		6/5/14		525.25	Dynamic	2515.42	Sierrita
		6/5/14	525.25		Dynamic		BW, 2015a
		7/6/14		527.00	Dynamic	2513.67	Sierrita
		7/6/14	526.79		Dynamic		BW, 2015a
		7/31/14		527.40	Dynamic	2513.27	Sierrita
		7/31/14	527.40		Dynamic		BW, 2015a
		8/27/14		527.40	Dynamic	2513.27	Sierrita
		8/27/14	527.40		Dynamic		BW, 2015a
		10/1/14		517.95	Static	2522.72	Sierrita
		10/1/14	517.74		Static		BW, 2015a
		11/4/14		531.19	Dynamic	2509.48	Sierrita
		11/4/14	530.98		Dynamic		BW, 2015a
		12/2/14		532.05	Dynamic	2508.62	Sierrita
		12/2/14	531.84		Dynamic		BW, 2015a
		1/4/15		532.50	Dynamic	2508.17	Sierrita
		2/4/15		533.20	Dynamic	2507.47	Sierrita
		3/3/15		533.60	Dynamic	2507.07	Sierrita
		4/9/15		534.15	Dynamic	2506.52	Sierrita
		5/2/15		534.95	Dynamic	2505.72	Sierrita
		6/9/15		536.00	Dynamic	2504.67	Sierrita
		7/6/15		537.05	Dynamic	2503.62	Sierrita
		8/18/15		538.65	Dynamic	2502.02	Sierrita
		10/7/15		540.50	Dynamic	2500.17	Sierrita
		11/4/15		540.98	Dynamic	2499.69	Sierrita
		12/9/15		541.40	Dynamic	2499.27	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		541.90	Dynamic		BW
		3/4/16		542.22	Dynamic		BW
		4/8/16		542.50	Dynamic	2498.17	Sierrita
		10/5/16		547.81	Dynamic	2492.86	BW

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
PS-2	3027.365	6/5/12	486.97		Static		BW, 2015a
		6/5/12	509.07		Dynamic		BW, 2015a
		1/15/14		507.18	Dynamic	2520.18	Sierrita
		1/15/14	507.18		Dynamic		BW, 2015a
		1/22/14		494.54	Dynamic	2532.82	Sierrita
		1/28/14	507.91		Dynamic		BW, 2015a
		2/5/14	506.02		Dynamic		BW, 2015a
		3/13/14		510.78	Dynamic	2516.58	Sierrita
		5/8/14		514.76	Dynamic	2512.60	Sierrita
		5/30/14	514.76		Dynamic		BW, 2015a
		6/5/14		514.95	Dynamic	2512.41	Sierrita
		6/5/14	514.95		Dynamic		BW, 2015a
		7/6/14		516.80	Dynamic	2510.56	Sierrita
		7/6/14	516.59		Dynamic		BW, 2015a
		7/31/14		518.30	Dynamic	2509.06	Sierrita
		7/31/14	518.30		Dynamic		BW, 2015a
		8/27/14		519.40	Dynamic	2507.96	Sierrita
		8/27/14	519.40		Dynamic		BW, 2015a
		10/1/14		507.20	Static	2520.16	Sierrita
		10/1/14	506.99		Static		BW, 2015a
		11/4/14		523.35	Dynamic	2504.01	Sierrita
		11/4/14	523.14		Dynamic		BW, 2015a
		12/2/14		523.80	Dynamic	2503.56	Sierrita
		12/2/14	523.59		Dynamic		BW, 2015a
		1/4/15		524.60	Dynamic	2502.76	Sierrita
		2/4/15		524.50	Dynamic	2502.86	Sierrita
		3/3/15		524.70	Dynamic	2502.66	Sierrita
		4/9/15		525.20	Dynamic	2502.16	Sierrita
		5/2/15		526.10	Dynamic	2501.26	Sierrita
		6/9/15		527.00	Dynamic	2500.36	Sierrita
		7/6/15		528.20	Dynamic	2499.16	Sierrita
		8/18/15		529.80	Dynamic	2497.56	Sierrita
		10/7/15		531.75	Dynamic	2495.61	Sierrita
		11/4/15		531.95	Dynamic	2495.41	Sierrita
		12/9/15		532.15	Dynamic	2495.21	Sierrita
		1/12/16		531.25	Dynamic	2496.11	Sierrita
		2/11/16		532.30	Dynamic	2495.06	BW
		3/4/16		532.50	Dynamic	2494.86	BW
		4/8/16		532.70	Dynamic	2494.66	Sierrita
		10/5/16		538.80	Dynamic	2488.56	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
PS-3	3006.290	5/14/12	466.60		Static		BW, 2015a
		5/14/12	490.30		Dynamic		BW, 2015a
		1/15/14		488.84	Dynamic	2517.45	Sierrita
		1/15/14	488.84		Dynamic		BW, 2015a
		1/22/14		488.23	Dynamic	2518.06	Sierrita
		1/22/14	488.23		Dynamic		BW, 2015a
		1/28/14	487.89		Dynamic		BW, 2015a
		2/5/14	490.26		Dynamic		BW, 2015a
		3/13/14		491.86	Dynamic	2514.43	Sierrita
		5/8/14		495.82	Dynamic	2510.47	Sierrita
		5/30/14	495.82		Dynamic		BW, 2015a
		6/5/14		495.90	Dynamic	2510.39	Sierrita
		6/5/14	495.90		Dynamic		BW, 2015a
		7/6/14		497.70	Dynamic	2508.59	Sierrita
		7/6/14	497.47		Dynamic		BW, 2015a
		7/31/14		498.90	Dynamic	2507.39	Sierrita
		7/31/14	498.90		Dynamic		BW, 2015a
		8/27/14		500.25	Dynamic	2506.04	Sierrita
		8/27/14	500.25		Dynamic		BW, 2015a
		10/1/14		486.45	Static	2519.84	Sierrita
		10/1/14	486.22		Static		BW, 2015a
		11/4/14		503.75	Dynamic	2502.54	Sierrita
		11/4/14	503.52		Dynamic		BW, 2015a
		12/2/14		504.20	Dynamic	2502.09	Sierrita
		12/2/14	503.97		Dynamic		BW, 2015a
		1/4/15		504.55	Dynamic	2501.74	Sierrita
		2/4/15		504.45	Dynamic	2501.84	Sierrita
		3/3/15		504.75	Dynamic	2501.54	Sierrita
		4/9/15		505.50	Dynamic	2500.79	Sierrita
		5/2/15		506.35	Dynamic	2499.94	Sierrita
		6/9/15		507.50	Dynamic	2498.79	Sierrita
		7/6/15		508.92	Dynamic	2497.37	Sierrita
		8/18/15		510.50	Dynamic	2495.79	Sierrita
		10/7/15		512.40	Dynamic	2493.89	Sierrita
		11/4/15		512.55	Dynamic	2493.74	Sierrita
		12/9/15		512.75	Dynamic	2493.54	Sierrita
		1/12/16		511.65	Dynamic	2494.64	Sierrita
		2/11/16		512.55	Dynamic	2493.74	BW
		3/4/16		512.97	Dynamic	2493.32	BW
		4/8/16		515.20	Dynamic	2491.09	Sierrita
		10/5/16		519.45	Dynamic	2486.84	BW

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
PS-4	3045.74	7/6/12	497.85		Static		BW, 2015a
		7/6/12	508.95		Dynamic		BW, 2015a
		1/15/14		513.92	Dynamic	2531.82	Sierrita
		1/15/14	513.92		Dynamic		BW, 2015a
		1/22/14		514.38	Dynamic	2531.36	Sierrita
		1/22/14	514.38		Dynamic		BW, 2015a
		1/28/14	514.64		Dynamic		BW, 2015a
		2/5/14	515.45		Dynamic		BW, 2015a
		3/13/14		508.14	Dynamic	2537.60	Sierrita
		5/8/14		522.58	Dynamic	2523.16	Sierrita
		5/30/14	522.58		Dynamic		BW, 2015a
		6/5/14		523.05	Dynamic	2522.69	Sierrita
		6/5/14	523.05		Dynamic		BW, 2015a
		7/6/14		525.25	Dynamic	2520.49	Sierrita
		7/6/14	525.02		Dynamic		BW, 2015a
		7/31/14		526.30	Dynamic	2519.44	Sierrita
		7/31/14	526.30		Dynamic		BW, 2015a
		8/27/14		527.50	Dynamic	2518.24	Sierrita
		8/27/14	527.50		Dynamic		BW, 2015a
		10/1/14		520.05	Static	2525.69	Sierrita
		10/1/14	519.82		Static		BW, 2015a
		11/4/14		531.80	Dynamic	2513.94	Sierrita
		11/4/14	531.57		Dynamic		BW, 2015a
		12/2/14		532.60	Dynamic	2513.14	Sierrita
		12/2/14	532.37		Dynamic		BW, 2015a
PZ-7	3549.17	1/4/15		524.20	Dynamic	2521.54	Sierrita
		2/4/15		534.50	Dynamic	2511.24	Sierrita
		3/3/15		535.05	Dynamic	2510.69	Sierrita
		4/9/15		535.65	Dynamic	2510.09	Sierrita
		5/2/15		536.45	Dynamic	2509.29	Sierrita
		6/9/15		537.60	Dynamic	2508.14	Sierrita
		7/6/15		538.95	Dynamic	2506.79	Sierrita
		8/18/15		540.10	Dynamic	2505.64	Sierrita
		10/7/15		541.95	Dynamic	2503.79	Sierrita
		11/4/15		542.75	Dynamic	2502.99	Sierrita
		12/9/15		543.10	Dynamic	2502.64	Sierrita
		1/12/16		UTM		NA	Sierrita
		2/11/16		543.90	Dynamic	2501.84	BW
		3/4/16		544.50	Dynamic	2501.24	BW
		4/8/16		544.90	Dynamic	2500.84	Sierrita
		10/5/16		551.08	Dynamic	2494.66	BW
		11/16/06		139.55		3409.62	Sierrita
		1/12/07		139.50		3409.67	Sierrita
		4/9/07		139.65		3409.52	Sierrita
		7/24/07		139.76		3409.41	Sierrita
		10/16/07		139.49		3409.68	Sierrita
		1/7/08		139.25		3409.92	Sierrita
		4/28/08		139.59		3409.58	Sierrita
		7/11/08		139.71		3409.46	Sierrita
		10/14/08		139.73		3409.44	Sierrita
		2/9/09		139.79		3409.38	Sierrita
		4/6/09		139.80		3409.37	Sierrita
		4/23/10		140.22		3408.95	Sierrita
		5/18/11		140.62		3408.55	Sierrita
		6/6/12		136.67		3412.50	Sierrita
		6/10/13		136.91		3412.26	Sierrita
		4/8/14		135.75		3413.42	Sierrita
		4/21/15		136.49	Static	3412.68	Sierrita
		11/18/15		138.20	Static	3410.97	Sierrita
		4/26/16		138.28	Static	3410.89	Sierrita
		12/9/16		138.70	Static	3410.47	Sierrita

**APPENDIX C**  
**Water Elevation Data**

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
PZ-8	3480.36	11/14/06		206.30		3274.06	Sierrita
		1/10/07		207.42		3272.94	Sierrita
		4/17/07		198.52		3281.84	Sierrita
		7/12/07		209.46		3270.90	Sierrita
		10/5/07		205.30		3275.06	Sierrita
		1/3/08		212.94		3267.42	Sierrita
		4/8/08		217.43		3262.93	Sierrita
		7/1/08		221.70		3258.66	Sierrita
		10/8/08		222.49		3257.87	Sierrita
		1/8/09		223.63		3256.73	Sierrita
		4/8/09		224.72		3255.64	Sierrita
		4/20/10		227.87		3252.49	Sierrita
		4/19/11		228.73		3251.63	Sierrita
		4/25/12		229.66		3250.70	Sierrita
		6/10/13		230.86		3249.50	Sierrita
		4/23/14		232.32		3248.04	Sierrita
		4/24/14		232.59		3247.77	Sierrita
		4/14/15		234.11	Static	3246.25	Sierrita
		11/18/15		235.22	Static	3245.14	Sierrita
		4/26/16		233.24	Static	3247.12	Sierrita
		12/9/16		234.38	Static	3245.98	Sierrita
S-1	2920	6/19/15		167.21	Static	2752.79	Sierrita
		11/18/15		169.40	Static	2750.60	Sierrita
		6/15/16		161.51	Static	2758.49	Sierrita
		12/2/16		172.66	Static	2747.34	Sierrita
ST-6 (POE-006)	2855.88	6/18/15		356.25	Static <sup>1</sup>	2499.63	Sierrita
		11/25/15		353.30	Static <sup>1</sup>	2502.58	Sierrita
		6/15/16		359.59	Static <sup>1</sup>	2496.29	Sierrita
		12/21/16		355.76	Static <sup>1</sup>	2500.12	Sierrita
TMM-1	2967.08	6/18/07		432.50		2534.58	Sierrita
		6/19/07		432.00		2535.08	Sierrita
		10/4/07		437.58		2529.50	Sierrita
		1/10/08		435.75		2531.33	Sierrita
		4/18/08		433.30		2533.78	Sierrita
		7/9/08		437.37		2529.71	Sierrita
		10/9/08		439.80		2527.28	Sierrita
		2/4/09		436.62		2530.46	Sierrita
		4/21/09		433.35		2533.73	Sierrita
		10/14/09		444.00		2523.08	Sierrita
		4/20/10		436.99		2530.09	Sierrita
		10/6/10		442.98		2524.10	Sierrita
		4/21/11		437.13		2529.95	Sierrita
		12/21/11		435.50		2531.58	Sierrita
		5/15/12		438.57		2528.51	Sierrita
		11/23/12		443.30		2523.78	Sierrita
		6/19/13		439.14		2527.94	Sierrita
		10/29/13		443.13		2523.95	Sierrita
		4/23/14		442.13		2524.95	Sierrita
		10/2/14		451.94	Static	2515.14	Sierrita
		4/28/15		UTM		NA	Sierrita
		12/2/15		UTM		NA	Sierrita
		6/8/16		UTM		NA	Sierrita
1225	2997.93	6/16/15		492.97	Static	2504.96	Sierrita
		11/17/15		496.96	Static	2500.97	Sierrita
		6/15/16		497.61	Static	2500.32	Sierrita
		12/9/16		499.36	Static	2498.57	Sierrita

## APPENDIX C

### Water Elevation Data

Well Name	Measuring Point Elevation (ft amsl)	Date	Depth to Water (ft bls)	Depth to Water (ft bmp)	Static/ Dynamic	Groundwater Elevation (ft amsl)	Data Source
1350	3033.25	7/12/07		474.29		2558.96	Sierrita
		11/8/07		477.30		2555.95	Sierrita
		1/9/08		477.00		2556.25	Sierrita
		4/14/08		475.50		2557.75	Sierrita
		8/7/08		477.88		2555.37	Sierrita
		11/5/08		479.21		2554.04	Sierrita
		1/19/09		477.33		2555.92	Sierrita
		6/29/09		479.57		2553.68	Sierrita
		5/28/10		478.78		2554.47	Sierrita
		5/9/11		480.42		2552.83	Sierrita
		6/29/12		479.57		2553.68	Sierrita
		5/23/13		481.16		2552.09	Sierrita
		4/29/14		Obstructed		NA	Sierrita
		5/22/14		Obstructed		NA	Sierrita
		5/28/14		494.95		2538.30	Sierrita
		6/16/15		511.79	Static	2521.46	Sierrita
		11/17/15		517.00	Static	2516.25	Sierrita
		6/15/16		520.26	Static	2512.99	Sierrita
		12/9/16		522.40	Static	2510.85	Sierrita
1759	2989.54	6/16/15		484.12	Static	2505.42	Sierrita
		11/17/15		487.52	Static	2502.02	Sierrita
		6/15/16		488.00	Static	2501.54	Sierrita
		12/9/16		490.26	Static	2499.28	Sierrita
2125	3253.98	6/16/15		736.98	Static	2517.00	Sierrita
		11/17/15		741.29	Static	2512.69	Sierrita
		6/15/16		UTM		NA	Sierrita
		11/22/16		749.61	Static	2504.37	Sierrita

Notes:

<sup>1</sup> Well was not pumping, however there may be residual drawdown due to pumping history at the well

<sup>2</sup> Measuring point elevation updated based on Google Earth 2016 aerial photo and elevation data

<sup>3</sup> 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)

BW = BasinWells

Clear Creek = Clear Creek Associates, PLC

DRY = water level below depth of the screen

ft amsl = feet above mean sea level

ft bls = feet below land surface

ft bmp - feet below measuring point

GVDWID = Green Valley Domestic Water Improvement District

ND = No elevation data

NA = Not applicable

Sierrita = Freeport-McMoRan Sierrita, Inc.

UTM = Unable to measure; designation includes physical limitations, not desaturation

## **REFERENCES**

BasinWells Associates. 2015a. Email Correspondence from Buck Schmidt, BasinWells Associates, to James Norris, Clear Creek Associates, Re: BasinWells Associates PLLC/FMI Sierrita Groundwater Sulfate Mitigation Action Well Field Measurements – October 2014. January 22, 2015.

BasinWells Associates. 2015b. Email Correspondence from Buck Schmidt, BasinWells Associates, to James Norris, Clear Creek Associates, Re: BasinWells Associates PLLC/FMI Sierrita Groundwater Sulfate Mitigation Action Well Field Measurements – October 2014. February 10, 2015.

Sierrita Environmental Data Management System Database.

**APPENDIX D**  
**HYDROGRAPHS (ALPHABETIC BY WELL NAME)**

