

Freeport-McMoRan Sierrita Inc.  
6200 W. Duval Mine Rd.  
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Green Valley, Arizona 85622-0527

June 24, 2008

**Via Certified Mail #70062150000436613318**  
**Return Receipt Requested**

Mr. Robert Casey  
Arizona Department of Environmental Quality  
Water Quality Enforcement Unit  
1110 West Washington Street  
Phoenix, Arizona 85007-2935

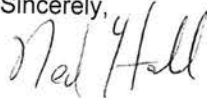
Re: **Groundwater Monitoring Report,**  
**Second Quarter 2008, Mitigation Order on Consent, Docket No. P-50-06**

Dear Mr. Casey:

Freeport-McMoRan Sierrita Inc. ("Sierrita") submits three copies of the attached Quarterly Groundwater Monitoring Report that provides the results of groundwater monitoring conducted during the second quarter of 2008 in the vicinity of the Sierrita Tailing Impoundment. This document was prepared by Hydro Geo Chem, Inc. as described in the Work Plan.

Please do not hesitate to contact Mr. Stuart Brown at (503) 675-5252 or myself at (520) 648-8857 if you have any question regarding this submittal.

Sincerely,



E. L. (Ned) Hall  
Chief Environmental Engineer

ELH:ms  
20080624-001  
Attachment

xc: John Broderick, Sierrita Operations  
Chad Fretz, Sierrita Operations  
Ray Lazuk, Freeport-McMoRan Copper & Gold, Inc.  
Stuart Brown, Bridgewater Group, Inc.

**SECOND QUARTER 2008  
GROUNDWATER MONITORING REPORT  
TASK 2.2 OF AQUIFER CHARACTERIZATION PLAN  
MITIGATION ORDER ON CONSENT DOCKET NO. P-50-06  
PIMA COUNTY, ARIZONA**

Prepared for:

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

Prepared by:

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June 18, 2008



**SECOND QUARTER 2008  
GROUNDWATER MONITORING REPORT  
TASK 2.2 OF AQUIFER CHARACTERIZATION PLAN  
MITIGATION ORDER ON CONSENT DOCKET NO. P-50-06  
PIMA COUNTY, ARIZONA**

Prepared for:

**FREEPORT-MCMORAN SIERRITA INC.**

6200 West Duval Mine Road  
Green Valley, Arizona 85614

Approved by:

Prepared by:

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James R. Norris  
Arizona Registered Geologist No. 30842

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Daniel R. Simpson  
Senior Hydrogeologist

June 18, 2008





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## **1. INTRODUCTION**

This data report was prepared for Freeport-McMoRan Sierrita Inc. (Sierrita), and provides the results of groundwater monitoring conducted in the second quarter of 2008 in the vicinity of the Sierrita Tailing Impoundment (STI). Groundwater monitoring was conducted by Sierrita pursuant to Task 2.2 of the Work Plan (Hydro Geo Chem, Inc. [HGC], 2006) to characterize sulfate in the vicinity of the STI. The Work Plan was submitted to and approved by Arizona Department of Environmental Quality (ADEQ) pursuant to the Mitigation Order on Consent Docket No. P-50-06. HGC prepared this groundwater monitoring report on behalf of Sierrita.

### **1.1 Scope of Groundwater Monitoring**

The scope of the groundwater monitoring program is described in Sections 3.3.2 and Appendix G of the Work Plan (HGC, 2006). Groundwater monitoring for Task 2.2 consists of water elevation measurement and collection of groundwater samples from wells in the vicinity of the STI.

#### **1.1.1 Groundwater Monitoring for Task 2.2**

The Work Plan identifies two purposes for the groundwater monitoring program required in Task 2.2: plume monitoring and regional monitoring. Plume monitoring is conducted quarterly at wells that are proximal to the sulfate plume in order to track the plume's location in the aquifer. Regional monitoring to characterize regional hydrologic conditions using wells that are outside the area of the sulfate plume was completed in the third quarter of 2007 (HGC, 2007). This report presents the results of plume monitoring conducted during the second quarter of 2008. Pursuant to the Work Plan, the only constituent of interest for quarterly plume monitoring is sulfate.

Table 1 lists all wells identified in the Work Plan for quarterly monitoring, their availability for sampling in the second quarter of 2008, and their sampling status. As discussed in the Work Plan, Table 1 consists of wells that are under the control of Sierrita and others that are not. Sierrita agreed to contact owners of private wells and wells owned by water companies identified in the Work Plan for sampling in order to obtain access for sampling. The Work Plan acknowledged that access to some wells may not be permitted by well owners and that some wells may be inappropriate for sampling due to their construction characteristics. Table 1 also includes a list of alternate wells identified by the Work Plan for sampling that have been used in place of wells that were unable to be sampled.

Analytical data for plume monitoring during the second quarter of 2008 were obtained from two sources: Sierrita and HGC. Groundwater sampling and analysis methods used by Sierrita and HGC are described in the Quality Assurance Project Plan (QAPP) contained in Appendix E of the Work Plan (HGC, 2006). Results of groundwater monitoring for Task 2.2 are presented in Section 2.1.

## **2. GROUNDWATER MONITORING RESULTS**

### **2.1 Results of Monitoring for Task 2.2**

Analytical results and groundwater elevation data for the second quarter of 2008 are tabulated in Table 2 and Table 3, respectively. Figure 1 shows the concentrations of dissolved sulfate in the wells sampled in the second quarter 2008. Comparison of dissolved and total sulfate concentrations in Table 2 indicates negligible difference between the two measurements. The highest sulfate concentration measured at co-located wells was used for concentration contouring. Figure 2 shows groundwater elevations in the second quarter 2008. Groundwater elevations were calculated using the depth to water measurements made under static (nonpumping) conditions for all wells shown. Water level data for the IW-series wells were not used to estimate groundwater elevation contours for Figure 2 because the depth to water was measured while the wells were pumping.

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

Pursuant to Section 6.4 of the QAPP, a data verification report was prepared for quality assurance and quality control purposes. The data verification report reviews groundwater data collected by Sierrita and HGC during the second quarter of 2008, and is included in Appendix A.

Analytical laboratory reports for samples collected by Sierrita and HGC in the second quarter of 2008 are provided in portable document format on the compact disc in Appendix B. Copies of groundwater sampling forms for samples collected by HGC are in Appendix C.

As determined by the analytical data verification review, all data for samples collected in the second quarter of 2008 by HGC and Sierrita are of acceptable quality for use in the aquifer characterization being conducted pursuant to the Work Plan.



### **3. DISCUSSION**

This data report provides the results of groundwater monitoring conducted in the vicinity of the STI for the second quarter of 2008. As presented in Table 1, during this monitoring period 76 wells were identified for quarterly quality sampling and 69 wells were identified for water level monitoring. Groundwater samples were collected from 75 plume area wells and depths to water measurements were collected at 82 wells.

Groundwater samples and water level measurements were not collected from all the wells identified in the Work Plan for a variety of reasons, including owner limitations on access, unsuitable well construction, inability to contact the owner, obstruction in well, or a well no longer existing. The specific reason(s) for not sampling these wells are provided in Table 1. In some cases, alternate wells were identified and sampled as described in Table 1. Overall, groundwater monitoring conducted during the second quarter of 2008 is deemed to have met the objective of identifying the location of the sulfate plume from STI.

#### **3.1 Sulfate Distribution**

Figure 1 shows the distribution of sulfate concentrations. The concentration contours shown in Figure 1 are inferred assuming that sulfate concentrations in the aquifer are spatially correlated, although a strict linear interpolation was not applied. Sulfate concentration contours of 50, 100, 250, 500, 1000, and 1500 milligrams per liter (mg/L) are shown as requested by ADEQ (2006). The contours are based on the highest sulfate concentration measured in co-located wells.

Based on the sulfate concentration data on Figure 1, the sulfate plume from the STI (as defined by the 250 mg/L sulfate concentration contour) extends northeast from the southeastern corner of the tailing impoundment to the vicinity of co-located wells CW-3/MO-2007-5. The plume then extends north from wells CW-3/MO-2007-5 to the west of wells NP-2/MO-2007-3 and to Duval Mine Road, just south of the MO-2007-1 wells.



### **3.2 Groundwater Elevation**

Groundwater elevations are shown on Figure 2. Groundwater elevations decrease from west to east in the immediate vicinity of STI, and from south to north across the central portion of the study area near Green Valley. Comparison of the second quarter 2008 water elevations with those observed in previous quarters indicates no substantive difference in groundwater elevations and consequent flow directions. The overall pattern of groundwater flow indicated by groundwater elevations is consistent with expected regional groundwater flow patterns in the southern portion of the Tucson groundwater basin.

The water elevations in co-located wells screened at different depths vary by less than five feet in the north part of the study area. In the south half of the study area, the deepest screened interval at co-located wells at MH-13, MO-2007-5, and MO-2007-6 have lower water elevations than the more shallow wells. The vertical water level differences as calculated between the shallowest and deepest screened intervals at the MH-13, MO-2007-5, and MO-2007-6 wells range from 7.52 to 11.05 feet.

### **3.3 Time Series Graphs of Sulfate Concentration and Groundwater Elevation**

Time series graphs of sulfate concentration and groundwater elevation prepared for the ESP-, CW-, MO-, and GVDWID wells and wells MH-28 and MH-29 near the interceptor wellfield are presented in Appendix D. The graphs depict data collected under Task 2.2 of the Work Plan.

The time series graphs of sulfate concentration do not show any rapid increases in sulfate in wells at the edge of the plume or near the interceptor wellfield. Sulfate does appear to increase over time in CW-7, ESP-4, MO-2007-1B, MO-2007-1C, but the persistence of the apparent trends needs to be verified by additional monitoring. Sulfate concentrations decreased in ESP-1. Groundwater elevation data for active production in wells show the largest range of variation over time. The range of groundwater elevation change in monitoring wells tends to be approximately 8 feet or less.

#### **4. REFERENCES**

- Arizona Department of Environmental Quality. 2006. Correspondence from Robert Casey to John Brack, Regarding: Mitigation Order on Consent, Docket P-50-06-Work Plan Response. September 22, 2006.
- Hydro Geo Chem, Inc. (HGC). 2006. Work Plan to Characterize and Mitigate Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Phelps Dodge Sierrita Tailing Impoundment, Pima County, Arizona. August 11, 2006, revised October 31, 2006.
- HGC. 2007. Third Quarter 2007. Groundwater Monitoring Report, Tasks 2.2, 2.3, and 2.4 of Aquifer Characterization Plan, Mitigation Order on Consent Docket No. P-50-06. September 26, 2007.



## TABLES

**TABLE 1**  
**Summary of Groundwater Monitoring for Mitigation Order Docket No. P-50-06 for Second Quarter 2008**

| Well Name   | ADWR 55 Well Registry Number | Owner    | Purpose          | Casing or Well Depth (feet) | Work Plan Specification |                        | Q2-2008 Monitoring    |                                 | Status  | Substitute Well |
|---|------------------------------|----------|------------------|-----------------------------|-------------------------|------------------------|-----------------------|---------------------------------|---|-----------------|
|   |                              |          |                  |                             | Water Level Measurement | Water Quality Sampling | Water Level Measured? | Water Quality Sample Collected? |   |                 |
| WELLS FOR QUARTERLY [PLUME] MONITORING CONTROLLED BY SIERRITA |                              |          |                  |                             |                         |                        |                       |                                 |   |                 |
| ESP-1   | 623102                       | Sierrita | Plume Monitoring | 1020                        | Q                       | Q                      | NO                    | YES                             | Obstruction in well prevented water level measurement; water quality sample collected in April 2008 |                 |
| ESP-2   | 623103                       | Sierrita | Plume Monitoring | 1044                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| ESP-3   | 623104                       | Sierrita | Plume Monitoring | 1043                        | Q                       | Q                      | NO                    | YES                             | Obstruction in well prevented water level measurement; water quality sample collected in April 2008 |                 |
| ESP-4   | 623105                       | Sierrita | Plume Monitoring | 1045                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| ESP-5   | 623106                       | Sierrita | Plume Monitoring | 950                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only  | 55-515867       |
| IW-1  | 623129                       | Sierrita | Plume Monitoring | 855                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in May 2008  |                 |
| IW-2  | 623130                       | Sierrita | Plume Monitoring | 1035                        | Q                       | Q                      | NO                    | NO                              | Well abandonment planned  |                 |
| IW-2A   | 216464                       | Sierrita | Plume Monitoring | 1041                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-3A   | 623131                       | Sierrita | Plume Monitoring | 1047                        | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-4  | 623132                       | Sierrita | Plume Monitoring | 946                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-5  | 623133                       | Sierrita | Plume Monitoring | 956                         | -                       | Q                      | NO                    | YES                             | Obstruction in well prevented water level measurement; water quality sample collected in April 2008 |                 |
| IW-6A   | 545565                       | Sierrita | Plume Monitoring | 492                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-8  | 508236                       | Sierrita | Plume Monitoring | 783                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-9  | 508238                       | Sierrita | Plume Monitoring | 853                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-10   | 508237                       | Sierrita | Plume Monitoring | 831                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-11   | 508235                       | Sierrita | Plume Monitoring | 605                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-12   | 545555                       | Sierrita | Plume Monitoring | 625                         | -                       | Q                      | NO                    | YES                             | Obstruction in well prevented water level measurement; water quality sample collected in April 2008 |                 |
| IW-13   | 545556                       | Sierrita | Plume Monitoring | 495                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-14   | 545557                       | Sierrita | Plume Monitoring | 550                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-15   | 545558                       | Sierrita | Plume Monitoring | 548                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-16   | 545559                       | Sierrita | Plume Monitoring | 470                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-17   | 545560                       | Sierrita | Plume Monitoring | 502                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-18   | 545561                       | Sierrita | Plume Monitoring | 508                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-19   | 545562                       | Sierrita | Plume Monitoring | 544                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-20   | 545563                       | Sierrita | Plume Monitoring | 506                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-21   | 545564                       | Sierrita | Plume Monitoring | 620                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-22   | 200554                       | Sierrita | Plume Monitoring | 590                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| IW-23   | 200555                       | Sierrita | Plume Monitoring | 964                         | -                       | Q                      | NO                    | YES                             | Obstruction in well prevented water level measurement; water quality sample collected in April 2008 |                 |
| IW-24   | 200556                       | Sierrita | Plume Monitoring | 880                         | -                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |

**TABLE 1**  
**Summary of Groundwater Monitoring for Mitigation Order Docket No. P-50-06 for Second Quarter 2008**

| Well Name | ADWR 55 Well Registry Number | Owner    | Purpose          | Casing or Well Depth (feet) | Work Plan Specification |                        | Q2-2008 Monitoring    |                                 | Status  | Substitute Well |
|-----------|------------------------------|----------|------------------|-----------------------------|-------------------------|------------------------|-----------------------|---------------------------------|---|-----------------|
|           |                              |          |                  |                             | Water Level Measurement | Water Quality Sampling | Water Level Measured? | Water Quality Sample Collected? |   |                 |
| MH-1      | 803629                       | Sierrita | Plume Monitoring | 520                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-3      | 803630                       | Sierrita | Plume Monitoring | 535                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-4      | 803631                       | Sierrita | Plume Monitoring | 540                         | Q                       | -                      | NO                    | NO                              | Obstruction in well prevented water level measurement |                 |
| MH-5      | 803632                       | Sierrita | Plume Monitoring | 640                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-6      | 803633                       | Sierrita | Plume Monitoring | 960                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-7      | 803634                       | Sierrita | Plume Monitoring | 1100                        | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-9      | 803635                       | Sierrita | Plume Monitoring | 1400                        | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-10     | 803636                       | Sierrita | Plume Monitoring | 600                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-11     | 803637                       | Sierrita | Plume Monitoring | 820                         | Q                       | Q <sup>1</sup>         | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-12     | 803638                       | Sierrita | Plume Monitoring | 800                         | Q                       | Q <sup>1</sup>         | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-13A    | 904071                       | Sierrita | Plume Monitoring | 660                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-13B    | 904072                       | Sierrita | Plume Monitoring | 960                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-13C    | 904073                       | Sierrita | Plume Monitoring | 1360                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in May 2008            |                 |
| MH-14     | 528098                       | Sierrita | Plume Monitoring | 561                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-15E    | 528094                       | Sierrita | Plume Monitoring | 467                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-15W    | 528093                       | Sierrita | Plume Monitoring | 466                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-16E    | 528100                       | Sierrita | Plume Monitoring | 460                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-16W    | 528099                       | Sierrita | Plume Monitoring | 460                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-24     | 563799                       | Sierrita | Plume Monitoring | 468                         | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only      |                 |
| MH-25A    | 201528                       | Sierrita | Plume Monitoring | 530                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-25B    | 208429                       | Sierrita | Plume Monitoring | 680                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-25C    | 208426                       | Sierrita | Plume Monitoring | 1101                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-26A    | 201527                       | Sierrita | Plume Monitoring | 538                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-26B    | 208427                       | Sierrita | Plume Monitoring | 735                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-26C    | 208428                       | Sierrita | Plume Monitoring | 910                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-28     | 903648                       | Sierrita | Plume Monitoring | 490                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-29     | 903649                       | Sierrita | Plume Monitoring | 475                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |
| MH-30     | 903884                       | Sierrita | Plume Monitoring | 920                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008          |                 |

**TABLE 1**  
**Summary of Groundwater Monitoring for Mitigation Order Docket No. P-50-06 for Second Quarter 2008**

| Well Name   | ADWR 55 Well Registry Number | Owner      | Purpose          | Casing or Well Depth (feet) | Work Plan Specification |                        | Q2-2008 Monitoring    |                                 | Status  | Substitute Well |
|---|------------------------------|------------|------------------|-----------------------------|-------------------------|------------------------|-----------------------|---------------------------------|---|-----------------|
|   |                              |            |                  |                             | Water Level Measurement | Water Quality Sampling | Water Level Measured? | Water Quality Sample Collected? |   |                 |
| MO-2007-1A  | 907342                       | Sierrita   | Plume Monitoring | 610                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-1B  | 907210                       | Sierrita   | Plume Monitoring | 910                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-1C  | 907209                       | Sierrita   | Plume Monitoring | 1190                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-2   | 906765                       | Sierrita   | Plume Monitoring | 685                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-3B  | 906816                       | Sierrita   | Plume Monitoring | 950                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-3C  | 906817                       | Sierrita   | Plume Monitoring | 1330                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-4A  | 907213                       | Sierrita   | Plume Monitoring | 570                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-4B  | 907212                       | Sierrita   | Plume Monitoring | 950                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-4C  | 907211                       | Sierrita   | Plume Monitoring | 1140                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-5B  | 907456                       | Sierrita   | Plume Monitoring | 970                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-5C  | 907457                       | Sierrita   | Plume Monitoring | 1360                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-6A  | 907607                       | Sierrita   | Plume Monitoring | 620                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| MO-2007-6B  | 907606                       | Sierrita   | Plume Monitoring | 950                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| PZ-7  | 561870                       | Sierrita   | Plume Monitoring | 155                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| PZ-8  | 561866                       | Sierrita   | Plume Monitoring | 280                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| PZ-9  | 561859                       | Sierrita   | Plume Monitoring | 230                         | Q                       | Q                      | NO                    | NO                              | Piezometer is Dry   |                 |
| WELLS FOR QUARTERLY [PLUME] MONITORING NOT CONTROLLED BY SIERRITA |                              |            |                  |                             |                         |                        |                       |                                 |   |                 |
| 1350  | ND                           | TBPI       | Plume Monitoring | ND                          | Q                       | -                      | YES                   | NO                              | Well identified for water level measurement only  |                 |
| CC OF GV  | 501760                       | CC of GV   | Plume Monitoring | 955                         | Q                       | Q                      | NO                    | YES                             | Water quality sample collected in April 2008  | 55-640274       |
| CW-3  | 627483                       | CWC        | Plume Monitoring | 501                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| CW-6  | 627485                       | CWC        | Plume Monitoring | 840                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| CW-7  | 502546                       | CWC        | Plume Monitoring | 1065                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| CW-8  | 543600                       | CWC        | Plume Monitoring | 1200                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| CW-9  | 588121                       | CWC        | Plume Monitoring | 1000                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| CW-10   | 207982                       | CWC        | Plume Monitoring | 1140                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| GV-1-GVDWID   | 603428                       | GVDWID     | Plume Monitoring | 645                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| GV-2-GVDWID   | 603429                       | GVDWID     | Plume Monitoring | 560                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| SI-GVDWID   | 208825                       | GVDWID     | Plume Monitoring | 650                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |
| HAVEN GOLF  | 515867                       | Haven Golf | Plume Monitoring | 500                         | Q                       | Q                      | NO                    | YES                             | Obstruction in well prevented water level measurement; water quality sample collected in April 2008 | 55-623106       |
| I-9   | 608526                       | TBPI       | Plume Monitoring | 900                         | Q                       | Q                      | NO                    | NO                              | Well abandonment completed in October 2007  | None            |
| I-10  | 608525                       | TBPI       | Plume Monitoring | 932                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008  |                 |

**TABLE 1**  
**Summary of Groundwater Monitoring for Mitigation Order Docket No. P-50-06 for Second Quarter 2008**

| Well Name          | ADWR 55 Well Registry Number | Owner       | Purpose          | Casing or Well Depth (feet) | Work Plan Specification |                        | Q2-2008 Monitoring    |                                 | Status                                       | Substitute Well |
|--------------------|------------------------------|-------------|------------------|-----------------------------|-------------------------|------------------------|-----------------------|---------------------------------|--|-----------------|
|                    |                              |             |                  |                             | Water Level Measurement | Water Quality Sampling | Water Level Measured? | Water Quality Sample Collected? |  |                 |
| M-6                | 87388                        | TBPI        | Plume Monitoring | 660                         | Q                       | Q                      | NO                    | NO                              | Well unavailable for monitoring              | M-9, 55-501652  |
| M-8                | 87390                        | TBPI        | Plume Monitoring | 660                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008 |                 |
| M-9                | 501652                       | TBPI        | Plume Monitoring | 440                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008 | 55-87388        |
| M-10               | 501653                       | TBPI        | Plume Monitoring | 1050                        | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008 |                 |
| M-20               | 906595                       | TBPI        | Plume Monitoring | 780                         | Q                       | Q <sup>1</sup>         | YES                   | YES                             | Water quality sample collected in April 2008 |                 |
| NP-2               | 605898                       | CWC         | Plume Monitoring | 515                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008 |                 |
| SCHNEIKER          | 611220                       | Schneiker   | Plume Monitoring | 495                         | Q                       | Q                      | NO                    | NO                              | Owner did not respond to access request      |                 |
| TMM-1 <sup>2</sup> | 616156                       | Pima County | Plume Monitoring | 500                         | Q                       | Q                      | YES                   | YES                             | Water quality sample collected in April 2008 | None            |

<sup>1</sup> MH-11, MH-12 and M-20 added to sampling list after Work Plan approved

<sup>2</sup> Formally listed as Davis-Monthan (55-804995) and PC Parks (55-616156) wells; determined to be the same well located at the Titan Missile Museum (TMM)

ADWR = Arizona Department of Water Resources

Sierrita = Freeport-McMoRan Sierrita Inc.

Q = Quarterly

TBPI = Twin Buttes Properties, Inc.

CC OF GV = Country Club of Green Valley

CWC = Community Water Company of Green Valley

GVDWID = Green Valley Domestic Water Improvement District

ND = No Data



TABLE 2

## Analytical Results for Second Quarter 2008 Groundwater Monitoring

| Well Name   | ADWR 55<br>Well Registry Number | Sample Date | pH<br>(SU) | Specific Conductance<br>(µS/cm) | Temperature<br>(°C) | Sulfate, dissolved<br>(mg/L) | Sulfate, total<br>(mg/L) |
|---|---------------------------------|-------------|------------|---------------------------------|---------------------|------------------------------|--------------------------|
| WELLS FOR QUARTERLY [PLUME] MONITORING CONTROLLED BY SIERRITA |                                 |             |            |                                 |                     |                              |                          |
| ESP-1   | 623102                          | 04/18/08    | 7.61       | 474                             | 29.6                | 102                          | NA                       |
| ESP-2   | 623103                          | 04/18/08    | 7.80       | 325                             | 27.3                | 27.6                         | NA                       |
| ESP-3   | 623104                          | 04/18/08    | 7.82       | 322                             | 27.8                | 35.7                         | NA                       |
| ESP-4   | 623105                          | 04/18/08    | 7.71       | 821                             | 27.2                | 462                          | NA                       |
| IW-1  | 623129                          | 05/07/08    | 6.87       | 847                             | 29.8                | 610                          | NA                       |
| IW-2A   | 216464                          | 04/22/08    | 6.99       | 382                             | 30.5                | 80                           | NA                       |
| IW-3A   | 623131                          | 04/22/08    | 7.03       | 1224                            | 29.3                | 1420                         | NA                       |
| IW-4  | 623132                          | 04/22/08    | 6.59       | 1264                            | 28.6                | 1540                         | NA                       |
| IW-5  | 623133                          | 04/21/08    | 6.64       | 1326                            | 27.5                | 1550                         | NA                       |
| IW-6A   | 545565                          | 04/21/08    | 7.30       | 1309                            | 25.4                | 1920                         | NA                       |
| IW-8  | 508236                          | 04/22/08    | 6.86       | 1301                            | 27.5                | 1700                         | NA                       |
| IW-9  | 508238                          | 04/22/08    | 6.86       | 1328                            | 28.5                | 1670                         | NA                       |
| IW-10   | 508237                          | 04/21/08    | 6.68       | 1338                            | 27.2                | 1470                         | NA                       |
| IW-11   | 508235                          | 04/21/08    | 6.53       | 1303                            | 26                  | 1770                         | NA                       |
| IW-11 DUP   | 508235                          | 04/21/08    | 6.53       | 1303                            | 26                  | 1850                         | NA                       |
| IW-12   | 545555                          | 04/11/08    | 6.51       | 1426                            | 27.4                | 1580                         | NA                       |
| IW-13   | 545556                          | 04/11/08    | 6.61       | 1502                            | 26.8                | 1800                         | NA                       |
| IW-14   | 545557                          | 04/11/08    | 6.49       | 1460                            | 26.8                | 1810                         | NA                       |
| IW-15   | 545558                          | 04/11/08    | 6.42       | 1395                            | 28.3                | 1670                         | NA                       |
| IW-16   | 545559                          | 04/11/08    | 6.64       | 1404                            | 26.4                | 1770                         | NA                       |
| IW-17   | 545560                          | 04/11/08    | 6.49       | 1398                            | 28.5                | 1730                         | NA                       |
| IW-18   | 545561                          | 04/11/08    | 6.61       | 1388                            | 27.5                | 1540                         | NA                       |
| IW-19   | 545562                          | 04/11/08    | 6.62       | 1409                            | 26.3                | 1680                         | NA                       |
| IW-20   | 545563                          | 04/11/08    | 6.74       | 1400                            | 27.3                | 1560                         | NA                       |
| IW-21   | 545564                          | 04/11/08    | 6.85       | 1375                            | 24.6                | 1610                         | NA                       |
| IW-21 DUP   | 545564                          | 04/11/08    | 6.85       | 1375                            | 24.6                | 1610                         | NA                       |
| IW-22   | 200554                          | 04/21/08    | 6.53       | 1362                            | 28.7                | 1760                         | NA                       |
| IW-22 DUP   | 200554                          | 04/21/08    | 6.53       | 1362                            | 28.7                | 1410                         | NA                       |
| IW-23   | 200555                          | 04/21/08    | 6.71       | 1314                            | 28.6                | 1710                         | NA                       |
| IW-24   | 200556                          | 04/22/08    | 6.68       | 1141                            | 28.7                | 1650                         | NA                       |
| IW-24 DUP   | 200556                          | 04/22/08    | 6.68       | 1141                            | 28.7                | 1750                         | NA                       |

TABLE 2

## Analytical Results for Second Quarter 2008 Groundwater Monitoring

| Well Name      | ADWR 55<br>Well Registry Number | Sample Date | pH<br>(SU) | Specific Conductance<br>(µS/cm) | Temperature<br>(°C) | Sulfate, dissolved<br>(mg/L) | Sulfate, total<br>(mg/L) |
|----------------|---------------------------------|-------------|------------|---------------------------------|---------------------|------------------------------|--------------------------|
| MH-10          | 803636                          | 04/28/08    | 6.60       | 973                             | 31                  | 1460                         | NA                       |
| MH-11          | 803637                          | 04/29/08    | 6.48       | 959                             | 30.2                | 1700                         | NA                       |
| MH-12          | 803638                          | 04/30/08    | 6.52       | 1099                            | 31.2                | 1160                         | NA                       |
| MH-13A         | 904071                          | 04/29/08    | 7.09       | 1174                            | 28.8                | 1800                         | NA                       |
| MH-13B         | 904072                          | 04/29/08    | 7.26       | 985                             | 29.6                | 1110                         | NA                       |
| MH-13C         | 904073                          | 05/07/08    | 8.71       | 363                             | 30.4                | 40                           | NA                       |
| MH-25A         | 201528                          | 04/25/08    | 7.54       | 311                             | 27                  | 30                           | NA                       |
| MH-25B         | 208429                          | 04/25/08    | 7.05       | 1138                            | 28.6                | 1750                         | NA                       |
| MH-25C         | 208426                          | 04/25/08    | 7.20       | 1031                            | 30                  | 1240                         | NA                       |
| MH-26A         | 201527                          | 04/25/08    | 7.62       | 317                             | 25.3                | 100                          | NA                       |
| MH-26B         | 208427                          | 04/25/08    | 6.95       | 1095                            | 28.8                | 1630                         | NA                       |
| MH-26C         | 208428                          | 04/25/08    | 8.58       | 872                             | 27.8                | 580                          | NA                       |
| MH-28          | 903548                          | 04/08/08    | 6.99       | 1852                            | 25.5                | 1900                         | NA                       |
| MH-29          | 903649                          | 04/08/08    | 6.98       | 1580                            | 24.1                | 1700                         | NA                       |
| MH-30          | 903884                          | 04/08/08    | 7.27       | 1505                            | 27.1                | 1830                         | NA                       |
| MO-2007-1A     | 907342                          | 04/09/08    | 7.42       | 383                             | 24.1                | 21                           | NA                       |
| MO-2007-1B     | 907210                          | 04/09/08    | 7.70       | 400                             | 23.1                | 35                           | NA                       |
| MO-2007-1C     | 907209                          | 04/09/08    | 7.57       | 596                             | 27.3                | 149                          | NA                       |
| MO-2007-1C DUP | 907209                          | 04/09/08    | 7.57       | 596                             | 27.3                | 153                          | NA                       |
| MO-2007-2      | 906765                          | 04/17/08    | 7.32       | 818                             | 29.8                | 473                          | NA                       |
| MO-2007-3B     | 906816                          | 04/16/08    | 7.77       | 322                             | 28.2                | 37                           | NA                       |
| MO-2007-3C     | 906817                          | 04/15/08    | 7.87       | 477                             | 30.1                | 127                          | NA                       |
| MO-2007-4A     | 907213                          | 04/16/08    | 7.65       | 372                             | 25.8                | 33.1                         | NA                       |
| MO-2007-4B     | 907212                          | 04/16/08    | 7.66       | 343                             | 26.9                | 33.6                         | NA                       |
| MO-2007-4C     | 907211                          | 04/16/08    | 8.19       | 420                             | 29.9                | 80                           | NA                       |
| MO-2007-5B     | 907456                          | 04/17/08    | 7.94       | 877                             | 27.7                | 390                          | NA                       |
| MO-2007-5C     | 907457                          | 04/17/08    | 8.34       | 680                             | 29.7                | 259                          | NA                       |
| MO-2007-6A     | 907607                          | 04/18/08    | 7.61       | 346                             | 27.2                | 20.5                         | NA                       |
| MO-2007-6B     | 907606                          | 04/17/08    | 8.09       | 453                             | 29.9                | 90.4                         | NA                       |
| PZ-7           | 561870                          | 04/28/08    | 7.09       | 699                             | 27.6                | 440                          | NA                       |
| PZ-8           | 561866                          | 04/08/08    | 7.16       | 962                             | 25.4                | 500                          | NA                       |

TABLE 2

## Analytical Results for Second Quarter 2008 Groundwater Monitoring

| Well Name   | ADWR 55<br>Well Registry Number | Sample Date | pH<br>(SU) | Specific Conductance<br>(µS/cm) | Temperature<br>(°C) | Sulfate, dissolved<br>(mg/L) | Sulfate, total<br>(mg/L) |
|---|---------------------------------|-------------|------------|---------------------------------|---------------------|------------------------------|--------------------------|
| WELLS FOR QUARTERLY [PLUME] MONITORING NOT CONTROLLED BY SIERRITA |                                 |             |            |                                 |                     |                              |                          |
| CC of GV  | 501760                          | 04/16/08    | 7.37       | 426                             | 25.2                | 69.4                         | 69                       |
| CW-3  | 627483                          | 04/17/08    | 7.32       | 398                             | 25.6                | 54.1                         | 54                       |
| CW-6  | 627485                          | 04/15/08    | 7.25       | 382                             | 26.9                | 51.2                         | 51.9                     |
| CW-7  | 502546                          | 04/15/08    | 7.31       | 1758                            | 27.6                | 900                          | 900                      |
| CW-8  | 543600                          | 04/15/08    | 7.54       | 1135                            | 29.5                | 441                          | 440                      |
| CW-9  | 588121                          | 04/15/08    | 7.39       | 347                             | 27.4                | 43.7                         | 43.5                     |
| CW-10   | 207982                          | 04/15/08    | 7.51       | 339                             | 30.6                | 50.8                         | 50.3                     |
| GV-1-GVDWID   | 603428                          | 04/16/08    | 7.29       | 399                             | 25.8                | 44.1                         | 43.9                     |
| GV-2-GVDWID   | 603429                          | 04/16/08    | 7.28       | 553                             | 23.7                | 97                           | 99                       |
| SI-GVDWID   | 208825                          | 04/16/08    | 7.27       | 331                             | 26.4                | 2                            | 2                        |
| HAVEN GOLF  | 515867                          | 04/15/08    | 7.34       | 629                             | 24.8                | 106                          | 112                      |
| I-10  | 608525                          | 04/14/08    | 7.29       | 836                             | 29.5                | 490                          | NA                       |
| M-8   | 87390                           | 04/15/08    | 6.85       | 362                             | 28                  | 28.7                         | NA                       |
| M-9   | 501652                          | 04/14/08    | 7.74       | 422                             | 27.8                | 67.2                         | NA                       |
| M-10  | 501653                          | 04/15/08    | 7.99       | 428                             | 27.6                | 81                           | NA                       |
| M-20  | 906595                          | 04/14/08    | 7.18       | 1277                            | 27                  | 1550                         | NA                       |
| NP-2  | 605898                          | 04/17/08    | 7.34       | 379                             | 25.4                | 40                           | 34                       |
| NP-2 DUP  | 605898                          | 04/17/08    | 7.34       | 379                             | 25.4                | 33                           | 33                       |
| TMM-1   | 616156                          | 04/18/08    | 7.54       | 268                             | 25.1                | <1                           | <1                       |

SU = Standard Units  
 µS/cm = microsiemens per centimeter  
 °C = degrees Celsius  
 NA = Not Analyzed  
 DUP = Duplicate sample

**TABLE 3**  
**Groundwater Elevation Data for Water Levels Collected in Second Quarter 2008**

| Well Name   | ADWR 55 Well Registry Number | Survey Source | UTM North   | UTM East   | Measuring Point Elevation (ft amsl) | Date                  | Depth to Water (feet) | Groundwater Elevation (ft amsl) |
|---|------------------------------|---------------|-------------|------------|-------------------------------------|-----------------------|-----------------------|---------------------------------|
| WELLS FOR QUARTERLY [PLUME] MONITORING CONTROLLED BY SIERRITA |                              |               |             |            |                                     |                       |                       |                                 |
| ESP-2   | 623103                       | Sierrita      | 3526924.656 | 500241.637 | 2934.60                             | 04/18/08              | 340.93                | 2593.67                         |
| ESP-4   | 623105                       | Sierrita      | 3526132.758 | 499916.830 | 2958.60                             | 04/18/08              | 350.39                | 2608.21                         |
| ESP-5   | 623106                       | Sierrita      | 3527082.232 | 502007.895 | 2820.00                             | 04/22/08              | 220.08                | 2599.92                         |
| IW-1  | 623129                       | Sierrita      | 3521277.779 | 496905.892 | 3144.69                             | 05/07/08 <sup>1</sup> | 398.90                | 2745.79                         |
| IW-2A   | 216464                       | Sierrita      | 3521337.953 | 497469.228 | 3112.28                             | 04/25/08 <sup>1</sup> | 412.90                | 2699.38                         |
| IW-3A   | 623131                       | Sierrita      | 3521722.640 | 497366.220 | 3121.45                             | 04/25/08 <sup>1</sup> | 421.30                | 2700.15                         |
| IW-4  | 623132                       | Sierrita      | 3522465.879 | 497371.700 | 3137.06                             | 04/21/08 <sup>1</sup> | 441.90                | 2695.16                         |
| IW-6A   | 545565                       | Sierrita      | 3523708.756 | 497381.226 | 3132.26                             | 04/22/08 <sup>1</sup> | 415.45                | 2716.81                         |
| IW-8  | 508236                       | Sierrita      | 3522020.520 | 497368.253 | 3122.19                             | 04/25/08 <sup>1</sup> | 436.70                | 2685.49                         |
| IW-9  | 508238                       | Sierrita      | 3522207.639 | 497369.791 | 3102.94                             | 04/21/08 <sup>1</sup> | 480.80                | 2622.14                         |
| IW-10   | 508237                       | Sierrita      | 3523122.199 | 497370.367 | 3129.64                             | 04/21/08 <sup>1</sup> | 463.29                | 2666.35                         |
| IW-11   | 508235                       | Sierrita      | 3523428.954 | 497371.414 | 3127.20                             | 04/22/08 <sup>1</sup> | 428.00                | 2699.20                         |
| IW-13   | 545556                       | Sierrita      | 3524166.673 | 497363.820 | 3143.35                             | 04/22/08 <sup>1</sup> | 410.42                | 2732.93                         |
| IW-14   | 545557                       | Sierrita      | 3524373.122 | 497367.126 | 3146.42                             | 04/21/08 <sup>1</sup> | 457.75                | 2688.67                         |
| IW-15   | 545558                       | Sierrita      | 3524567.261 | 497372.873 | 3152.02                             | 04/22/08 <sup>1</sup> | 429.70                | 2722.32                         |
| IW-16   | 545559                       | Sierrita      | 3524782.868 | 497370.651 | 3162.85                             | 04/22/08 <sup>1</sup> | 408.89                | 2753.96                         |
| IW-17   | 545560                       | Sierrita      | 3525002.869 | 497373.717 | 3160.76                             | 04/22/08 <sup>1</sup> | 428.23                | 2732.53                         |
| IW-18   | 545561                       | Sierrita      | 3525169.771 | 497374.056 | 3171.15                             | 04/21/08 <sup>1</sup> | 447.48                | 2723.67                         |
| IW-19   | 545562                       | Sierrita      | 3525343.392 | 497373.630 | 3155.39                             | 04/21/08 <sup>1</sup> | 452.00                | 2703.39                         |
| IW-20   | 545563                       | Sierrita      | 3525568.770 | 497364.739 | 3164.21                             | 04/21/08 <sup>1</sup> | 425.15                | 2739.06                         |
| IW-21   | 545564                       | Sierrita      | 3525773.266 | 497374.585 | 3171.37                             | 04/21/08 <sup>1</sup> | 441.50                | 2729.87                         |
| IW-22   | 200554                       | Sierrita      | 3523273.592 | 497369.590 | 3128.25                             | 04/25/08 <sup>1</sup> | 439.30                | 2688.95                         |
| IW-24   | 200556                       | Sierrita      | 3522633.594 | 497371.670 | 3113.29                             | 04/25/08 <sup>1</sup> | 522.50                | 2590.79                         |
| MH-1  | 803629                       | Sierrita      | 3525872.911 | 497372.392 | 3179.27                             | 04/24/08              | 440.44                | 2738.83                         |
| MH-3  | 803630                       | Sierrita      | 3525270.181 | 497472.430 | 3155.87                             | 04/21/08              | 425.44                | 2730.43                         |
| MH-5  | 803632                       | Sierrita      | 3523725.339 | 497477.352 | 3123.47                             | 04/24/08              | 390.30                | 2733.17                         |
| MH-6  | 803633                       | Sierrita      | 3522770.451 | 497436.646 | 3133.97                             | 04/24/08              | 379.20                | 2754.77                         |
| MH-7  | 803634                       | Sierrita      | 3522016.471 | 497502.475 | 3111.23                             | 04/24/08              | 370.92                | 2740.31                         |
| MH-9  | 803635                       | Sierrita      | 3521252.607 | 496438.181 | 3162.57                             | 04/24/08              | 367.08                | 2795.49                         |
| MH-10   | 803636                       | Sierrita      | 3521236.861 | 495717.770 | 3187.84                             | 04/28/08              | 358.83                | 2829.01                         |
| MH-11   | 803637                       | Sierrita      | 3524463.648 | 498749.381 | 3041.76                             | 04/29/08              | 373.89                | 2667.87                         |
| MH-12   | 803638                       | Sierrita      | 3525207.002 | 498772.161 | 3055.08                             | 04/30/08              | 423.12                | 2631.96                         |
| MH-13A  | 904071                       | Sierrita      | 3523793.443 | 498823.857 | 3026.23                             | 04/29/08              | 331.80                | 2694.43                         |
| MH-13B  | 904072                       | Sierrita      | 3523787.358 | 498829.881 | 3025.63                             | 04/29/08              | 336.35                | 2689.28                         |
| MH-13C  | 904073                       | Sierrita      | 3523793.032 | 498797.461 | 3028.46                             | 04/29/08              | 341.55                | 2686.91                         |
| MH-14   | 528098                       | Sierrita      | 3525269.340 | 497517.626 | 3150.77                             | 04/08/08              | 425.13                | 2725.64                         |

**TABLE 3**  
**Groundwater Elevation Data for Water Levels Collected in Second Quarter 2008**

| Well Name   | ADWR 55 Well Registry Number | Survey Source | UTM North   | UTM East   | Measuring Point Elevation (ft amsl) | Date     | Depth to Water (feet) | Groundwater Elevation (ft amsl) |
|---|------------------------------|---------------|-------------|------------|-------------------------------------|----------|-----------------------|---------------------------------|
| MH-15E  | 528094                       | Sierrita      | 3523274.327 | 497584.800 | 3111.37                             | 04/21/08 | 386.18                | 2725.19                         |
| MH-15W  | 528093                       | Sierrita      | 3523275.003 | 497524.067 | 3117.07                             | 04/08/08 | 391.00                | 2726.07                         |
| MH-16E  | 528100                       | Sierrita      | 3521870.233 | 497576.673 | 3097.72                             | 04/21/08 | 355.15                | 2742.57                         |
| MH-16W  | 528099                       | Sierrita      | 3521870.818 | 497516.074 | 3100.24                             | 04/24/08 | 357.87                | 2742.37                         |
| MH-24   | 563799                       | Sierrita      | 3523709.046 | 497390.515 | 3131.16                             | 04/24/08 | 395.89                | 2735.27                         |
| MH-25A  | 201528                       | Sierrita      | 3526510.175 | 498880.349 | 3056.57                             | 04/25/08 | 454.47                | 2602.10                         |
| MH-25B  | 208429                       | Sierrita      | 3526515.244 | 498870.343 | 3058.22                             | 04/25/08 | 456.02                | 2602.20                         |
| MH-25C  | 208426                       | Sierrita      | 3526491.132 | 498874.666 | 3057.24                             | 04/25/08 | 454.84                | 2602.40                         |
| MH-26A  | 201527                       | Sierrita      | 3527818.233 | 498852.692 | 3070.89                             | 04/25/08 | 495.73                | 2575.16                         |
| MH-26B  | 208427                       | Sierrita      | 3527814.016 | 498839.900 | 3069.11                             | 04/25/08 | 492.98                | 2576.13                         |
| MH-26C  | 208428                       | Sierrita      | 3527806.770 | 498865.240 | 3070.50                             | 04/25/08 | 494.37                | 2576.13                         |
| MH-28   | 903548                       | Sierrita      | 3524609.980 | 497471.427 | 3142.18                             | 04/08/08 | 401.90                | 2740.28                         |
| MH-29   | 903649                       | Sierrita      | 3522805.518 | 497604.326 | 3123.15                             | 04/08/08 | 380.16                | 2742.99                         |
| MH-30   | 903884                       | Sierrita      | 3525926.812 | 496682.307 | 3232.45                             | 04/08/08 | 418.12                | 2814.33                         |
| MO-2007-1A  | 907342                       | Sierrita      | 3529331.380 | 500016.947 | 2967.65                             | 04/09/08 | 424.72                | 2542.93                         |
| MO-2007-1B  | 907210                       | Sierrita      | 3529325.119 | 500021.574 | 2966.82                             | 04/09/08 | 425.05                | 2541.77                         |
| MO-2007-1C  | 907209                       | Sierrita      | 3529328.959 | 500013.405 | 2968.58                             | 04/09/08 | 423.30                | 2545.28                         |
| MO-2007-2   | 906765                       | Sierrita      | 3527621.102 | 497912.410 | 3153.83                             | 04/17/08 | 576.65                | 2577.18                         |
| MO-2007-3B  | 906816                       | Sierrita      | 3528508.801 | 500522.491 | 2912.15                             | 04/16/08 | 357.10                | 2555.05                         |
| MO-2007-3C  | 906817                       | Sierrita      | 3528508.743 | 500529.713 | 2911.90                             | 04/15/08 | 357.18                | 2554.72                         |
| MO-2007-4A  | 907213                       | Sierrita      | 3525634.956 | 500383.682 | 2923.63                             | 04/16/08 | 305.46                | 2618.17                         |
| MO-2007-4B  | 907212                       | Sierrita      | 3525613.952 | 500380.947 | 2923.57                             | 04/16/08 | 306.48                | 2617.09                         |
| MO-2007-4C  | 907211                       | Sierrita      | 3525624.484 | 500382.217 | 2923.66                             | 04/16/08 | 306.75                | 2616.91                         |
| MO-2007-5B  | 907456                       | Sierrita      | 3523743.376 | 500013.850 | 2944.35                             | 04/17/08 | 266.22                | 2678.13                         |
| MO-2007-5C  | 907457                       | Sierrita      | 3523736.459 | 500014.152 | 2944.91                             | 04/17/08 | 281.52                | 2663.39                         |
| MO-2007-6A  | 907607                       | Sierrita      | 3521842.050 | 498367.161 | 3043.37                             | 04/18/08 | 304.02                | 2739.35                         |
| MO-2007-6B  | 907606                       | Sierrita      | 3521849.495 | 498367.887 | 3043.05                             | 04/17/08 | 314.75                | 2728.30                         |
| PZ-7  | 561870                       | Sierrita      | 3526357.485 | 492533.171 | 3549.17                             | 04/28/08 | 139.59                | 3409.58                         |
| PZ-8  | 561866                       | Sierrita      | 3524196.243 | 492972.681 | 3480.36                             | 04/08/08 | 217.43                | 3262.93                         |
| PZ-9  | 561859                       | Sierrita      | 3525568.717 | 493180.504 | 3508.07                             | 04/24/08 | Dry                   | <3280                           |
| WELLS FOR QUARTERLY [PLUME] MONITORING NOT CONTROLLED BY SIERRITA |                              |               |             |            |                                     |          |                       |                                 |
| 1350  | ND                           | TBPI          | 3528452.906 | 499357.609 | 3033.25                             | 04/14/08 | 475.50                | 2557.75                         |
| CW-3  | 627483                       | HGC           | 3523809.985 | 500047.663 | 2941.71                             | 04/17/08 | 266.46                | 2675.25                         |
| CW-6  | 627485                       | CWC           | 3525794.239 | 500891.072 | 2867.00                             | 04/17/08 | 254.20                | 2612.80                         |
| CW-7  | 502546                       | CWC           | 3528094.155 | 499659.842 | 2987.50                             | 04/17/08 | 426.40                | 2561.10                         |
| CW-8  | 543600                       | CWC           | 3525661.191 | 499798.520 | 2957.50                             | 04/17/08 | 339.20                | 2618.30                         |
| CW-9  | 588121                       | CWC           | 3528740.784 | 501072.040 | 2834.30                             | 04/17/08 | 308.00                | 2526.30                         |

**TABLE 3**  
**Groundwater Elevation Data for Water Levels Collected in Second Quarter 2008**

| Well Name   | ADWR 55 Well Registry Number | Survey Source | UTM North   | UTM East   | Measuring Point Elevation (ft amsl) | Date     | Depth to Water (feet) | Groundwater Elevation (ft amsl) |
|-------------|------------------------------|---------------|-------------|------------|-------------------------------------|----------|-----------------------|---------------------------------|
| CW-10       | 207982                       | CWC           | 3523455.502 | 500913.364 | 2868.50                             | 04/17/08 | 187.95                | 2680.55                         |
| GV-1-GVDWID | 603428                       | HGC           | 3522254.157 | 499812.869 | 2942.35                             | 04/16/08 | 225.50                | 2716.85                         |
| GV-2-GVDWID | 603429                       | HGC           | 3521654.457 | 499786.207 | 2930.47                             | 04/16/08 | 194.95                | 2735.52                         |
| SI-GVDWID   | 208825                       | HGC           | 3519509.930 | 497227.175 | 3042.65                             | 04/16/08 | 247.55                | 2795.10                         |
| I-10        | 608525                       | Sierrita      | 3528469.536 | 497797.957 | 3210.58                             | 04/14/08 | 658.80                | 2551.78                         |
| M-8         | 87390                        | Sierrita      | 3529692.237 | 499658.916 | 2999.53                             | 04/14/08 | 462.50                | 2537.03                         |
| M-9         | 501652                       | Sierrita      | 3530303.954 | 499984.173 | 2973.81                             | 04/14/08 | 448.50                | 2525.31                         |
| M-10        | 501653                       | Sierrita      | 3530143.114 | 499659.027 | 3005.68                             | 04/14/08 | 475.48                | 2530.20                         |
| M-20        | 906595                       | TBPI          | 3528491.771 | 499082.070 | 3054.00                             | 04/14/08 | 494.22                | 2559.78                         |
| NP-2        | 605898                       | HGC           | 3528517.116 | 500582.904 | 2906.56                             | 04/17/08 | 352.20                | 2554.36                         |
| TMM-1       | 616156                       | HGC           | 3529736.231 | 500018.323 | 2967.08                             | 04/18/08 | 433.30                | 2533.78                         |

<sup>1</sup>Water level measurement was collected under dynamic conditions and not used for contouring

UTM = Universal Transverse Mercator, Zone 12 Band S

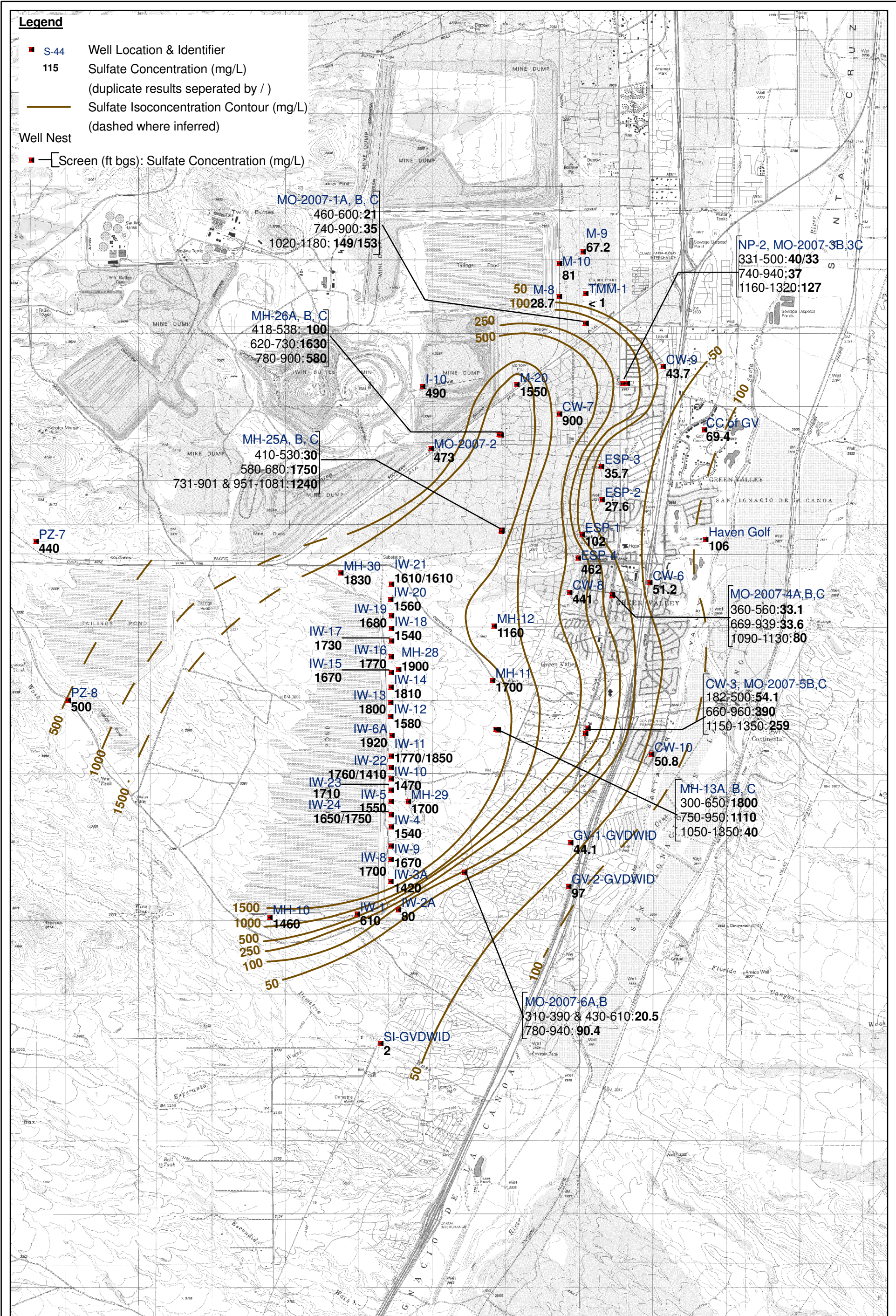
ft amsl = feet above mean sea level

HGC = Hydro Geo Chem, Inc.



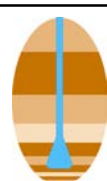
## FIGURES





0 1,900 3,800 Feet

PROJECTION:  
UTM Zone 12N NAD83

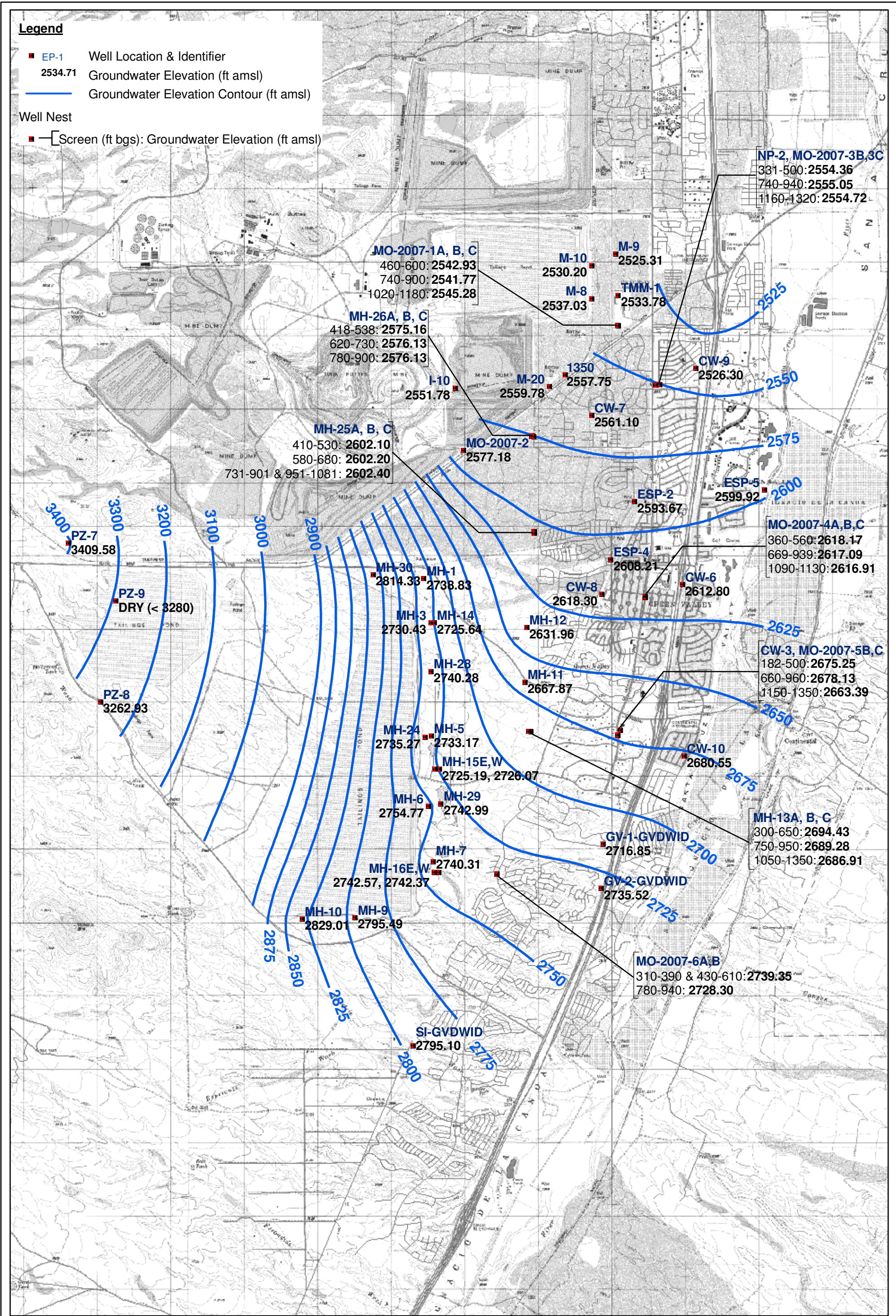


**HYDRO  
GEO  
CHEM, INC.**

**SULFATE CONCENTRATIONS IN  
GROUNDWATER SAMPLES COLLECTED IN  
APRIL 2008**

| Approved | Date     | Author | Date     | File Name | Figure |
|----------|----------|--------|----------|-----------|--------|
| DRS      | 06/18/08 | RAM    | 06/06/08 | 7830136G  | 1      |





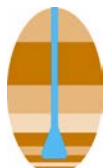
**Legend**

- EP-1 Well Location & Identifier
  - 2534.71 Groundwater Elevation (ft amsl)
  - Groundwater Elevation Contour (ft amsl)
- Well Nest
- — [Screen (ft bgs): Groundwater Elevation (ft amsl)]

1 inch equals 4,000 feet

0 2,000 4,000 Feet

PROJECTION:  
UTM Zone 12N NAD83



**HYDRO  
GEO  
CHEM, INC.**

**GROUNDWATER ELEVATIONS FOR  
APRIL THROUGH MAY 2008**

| Approved | Date     | Author | Date     | File Name | Figure |
|----------|----------|--------|----------|-----------|--------|
| DRS      | 06/18/08 | RAM    | 05/05/08 | 7830106G  | 2      |





**APPENDIX A**

**SECOND QUARTER 2008  
DATA VERIFICATION REPORT FOR GROUNDWATER SAMPLES  
COLLECTED BY FREEPORT-MCMORAN SIERRITA INC.  
AND HYDRO GEO CHEM, INC.**



**APPENDIX A**

**SECOND QUARTER 2008**

**DATA VERIFICATION REPORT FOR GROUNDWATER SAMPLES**  
**COLLECTED BY FREEPORT-MCMORAN SIERRITA INC.**  
**AND HYDRO GEO CHEM, INC.**

Prepared for:

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June 18, 2008



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## TABLE

### A.1 ACZ Project ID and Associated Wells





## 1. INTRODUCTION

This report summarizes the data verification review of groundwater samples collected and analyzed during the second quarter 2008 (Q2-2008) by Freeport-McMoRan Sierrita Inc. (Sierrita), and Hydro Geo Chem, Inc. (HGC) pursuant to Mitigation Order on Consent Docket No. P-50-06 (MO). Sierrita conducted groundwater sampling and analysis at wells under its control with the exception of Twin Buttes Properties, Inc. wells I-10, M-8, M-9, M-10 and M-20 which were sampled by Sierrita with the permission of Twin Buttes Properties, Inc. HGC collected groundwater samples from wells outside the control of Sierrita. All analytical results for groundwater samples collected for this project during the second quarter of 2008 were provided to HGC by ACZ Laboratories Inc (ACZ) for preparation of the Q2-2008 Groundwater Monitoring Report.

Quality assurance (QA) and quality control (QC) procedures are specified in the *Quality Assurance Project Plan for Aquifer Characterization Plan* (QAPP) (Appendix E of HGC, 2006) for field sampling, chain-of-custody (COC) documentation, laboratory analysis, and reporting. This report does not review field sampling or sample handling for samples collected by Sierrita since this information is evaluated following the provisions of the *Quality Assurance/Quality Control Plan for Water Monitoring, Phelps Dodge Sierrita, Inc.* (PDSI, 2005). This report does review field sampling for samples collected by HGC. Additionally, sample handling and laboratory QA/QC data are evaluated according to the data quality indicators (DQIs) given in the QAPP.

Appendix C of the main text of this report contains laboratory reports for Q2-2008 samples collected by Sierrita and HGC including COC forms, laboratory correspondence, QC summaries, data qualifiers, and any case narratives. The Q2-2008 analytical results for all 75 samples collected by Sierrita and HGC and are contained in 13 reports having the ACZ Project numbers identified in Table A.1.

The results of the internal QA/QC tests performed by ACZ are presented with the laboratory reports included in Appendix C. Based on the results of surrogate spike

recoveries, matrix spike/recovery and matrix spike duplicate tests, ACZ did not advise HGC of any modifications that should be made regarding the usability and data validation status of the laboratory test results.

## **2. HGC FIELD OPERATIONS**

Field operations for this project consisted of the following for all monitoring wells sampled by HGC:

- Static water level monitoring,
- Well purging (minimum of 3 wetted casing volumes),
- Collection of water quality field parameters (pH, specific conductance (SC) in microsiemens per centimeter [ $\mu\text{S}/\text{cm}$ ], and temperature in degrees Celsius [ $^{\circ}\text{C}$ ]),
- Collection of groundwater samples for water quality analysis,
- Collection of groundwater quality assurance and quality control samples, and
- Equipment decontamination.

All documentation of field activities was evaluated for quality assurance and has been deemed to have met the documentation requirements stated in the QAPP.

### **2.1 Water Level Monitoring**

Static water level measurements were collected by HGC at nine wells during the second quarter of 2008. To accommodate Community Water Company's (CWC) pumping schedule it is not always possible to collect static water levels because certain wells cannot be shutdown. Water level measurements from wells CW-6 and CW-9 were collected during April 2008 by CWC personnel and depth to water measurements provided to HGC. In all cases, the wells were allowed to come to static conditions before collecting the water level measurement. Before measuring the static water level at each well, the battery on the water level indicator was checked and the sensitivity level was adjusted, if necessary. Each measurement was collected and verified by measuring the depth to water multiple times in order to obtain a consistent reading and accurate measurement.

## 2.2 Groundwater Sampling

During this monitoring period groundwater samples were collected from wells designated for sampling in the quarterly monitoring schedule of the Work Plan. More detailed information regarding the wells sampled for water quality and water level measurements is listed in Table 1 of the main text.

### 2.2.1 Pre-Sampling Field Activities

On each day of sampling, the pH<sup>1</sup> and SC<sup>2</sup> probes were calibrated. In addition, the water level indicator was checked for a signal, which indicates a working meter and battery strength. On each day where sampling extended for more than half a day, a mid-day calibration check was performed on the pH and SC probes to ensure their accurate measurement.

In addition to calibrating the instruments each day, measures were taken to 1) properly decontaminate field equipment, 2) ensure the appropriate storage and transport temperature of the samples, and 3) document activities related to the collection of groundwater samples as part of this project. These objectives were met by 1) replenishing or obtaining supplies of de-ionized water and ice daily, 2) use of the proper preservative and sample collection containers, 3) properly packing the samples on ice during field activities, 4) using de-ionized water to properly decontaminate field equipment prior to the start of sampling each day and after sampling at each well, and 5) obtaining the appropriate field notebook in order to document field activities related to the groundwater monitoring program.

---

<sup>1</sup> Field pH meter was calibrated using a two point calibration and pH buffers 4 and 7

<sup>2</sup> Field SC meter was calibrated using a standard stock solution of 1413  $\mu\text{S}/\text{cm}$

### 2.2.2 Well Purging, Field Measurements, and Sample Collection

Ideally, three wetted casing volumes were purged from each well prior to sampling. However, when three casing volumes could not be purged, this information was noted on the groundwater sampling form (Appendix C) at each well for which this was the case. In cases where purging was necessary prior to sample collection the purge water was discharged to the ground surface.

Field measurements were collected at varying intervals during well purging at each well where a water quality sample was collected. Field parameters were monitored until a consistent measurement was obtained.

During this monitoring period, filtered and unfiltered groundwater samples were collected for analysis from 13 plume monitoring wells not under the control of Sierrita. Filtered and unfiltered groundwater samples were collected concurrently by using a single container to collect an initial sample for separation into bottles for filtered and unfiltered analyses. After collecting the initial sample, the unfiltered sample was collected by pouring a 500-milliliter aliquot of the initial sample into a non-preserved bottle for sulfate analysis. Then each filtered sample was collected by filtering the remaining portion of the initial sample using a clean filtration apparatus and one unused, disposable 0.45-micron filter. All bottles were provided by ACZ. Bottles were checked for the correct preservative and maintained in a clean and secure work area, until used in the field.

### 2.2.3 Post-Sampling Field Activities

Post sampling field activities consisted of equipment decontamination, sample storage, and sample shipping. Field equipment that comes into contact with the sample was decontaminated using a small amount of Alconox<sup>®</sup> detergent and de-ionized water. After washing, the equipment was rinsed thoroughly with de-ionized water.

After sample collection, samples from each well were placed into a plastic bag and stored

on ice until they could be packed securely for shipping to ACZ. In addition, each set of samples collected from each well was individually bagged (without ice) to prevent the label from getting soaked with water and rubbing off or becoming illegible.

### 3. SAMPLE HANDLING

All samples collected by Sierrita and HGC were shipped to ACZ for analysis. COC documentation accompanied all samples submitted and included the sample name, collection date and time. COCs contained in laboratory reports included the date and time the samples were received by ACZ. As noted on the analytical data reports from ACZ, all of the sample bottles were received intact, properly preserved, and in good condition.

The temperatures of the following four shipping containers (identified by their laboratory login numbers) exceeded 4 °C upon receipt at the laboratory.

| ACZ Project ID | Sample Collection Date | Sample Relinquished Date | Sample Received Date by ACZ | Temperature Upon Receipt (°C) |
|----------------|------------------------|--------------------------|-----------------------------|-------------------------------|
| L68674         | 04/11/08               | 04/14/08                 | 04/15/08                    | 4.2                           |
| L68927         | 04/25-28/08            | 04/28/08                 | 04/29/08                    | 4.7                           |
| L69144         | 05/07/08               | 05/08/08                 | 05/09/08                    | 4.9                           |

As noted in the above table, the samples were shipped within three days of sample collection, and the time between sample collection and receipt of samples by ACZ ranged from two to four days. This temperature exceedance is not considered to have a significant impact on the analytical results pertaining to the sulfate analysis for these samples.





## **4. LABORATORY QUALITY CONTROL**

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

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

### **4.1 Licensure**

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

### **4.2 Analytical Methods**

The following list identifies the methods used for sulfate analysis during this monitoring period:

- SM4500 SO4-D (Gravimetric)
- U.S. Environmental Protection Agency (EPA) 300.0 (Ion-Chromatography)
- EPA 375.5 (Turbidimetric)

#### 4.3 Method Detection Limits (MDLs) and Practical Quantification Limits (PQLs)

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

| Method       | MDL<br>(mg/L) | PQL<br>(mg/L) | Target MDL <sup>1</sup><br>(mg/L) |
|--------------|---------------|---------------|-----------------------------------|
| EPA 300.0    | 0.5           | 3             | 10                                |
| EPA 375.4    | 1             | 5             | 10                                |
| SM4500 SO4-D | 10            | 50            | 10                                |

mg/L = milligrams per liter

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

#### 4.4 Timeliness

Holding time was derived from the EPA methods utilized and were calculated beginning from the time of samples collection. The majority of samples submitted to the laboratory were analyzed within their recommended method specific holding time for sulfate analysis in the following: Samples collected on April 16 and 17, 2008 (SI, GV-2, NP-2, and DUP041708) and April 18, 2008 (MO-2007-6A, ESP-2, ESP-3, and ESP-4) were qualified with an “HC” flag, indicating initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.

#### 4.5 Quality Control Measurements

The following QC samples were prepared and analyzed:

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

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

Preparation blanks were run with each group of samples submitted for sulfate analyses using the gravimetric method (SM4500 SO<sub>4</sub>-D). All preparation blanks were prepared from analyte-free water and treated as routine samples. Analytical results of all of the preparation blanks showed that no target analytes were detected at the indicated MDL.

Results from the analyses of the initial calibration blanks and initial calibration verification standards conducted by EPA Methods 300.0 and 375.4 also were reviewed. The results of each initial calibration blank analyzed showed no detections of the target analyte. All analytical results for the initial calibration verification standards and laboratory fortified blanks that were analyzed showed percent recoveries that were within the acceptance criteria specified by the ACZ QA plan and the QAPP.

#### 4.5.2 Analytical Spikes and Analytical Spike Duplicates

Analytical spike and spike duplicate samples were analyzed for all sulfate samples that were analyzed using EPA Methods 300.0 and 375.4. Spike recoveries for most analyses were between 90 and 110 percent. Instances in which analytical spike recoveries were high were qualified with an “M1” indicating the matrix spike recovery was high. However, in each case the method control sample recoveries were acceptable.

#### 4.5.3 Laboratory Control Samples

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

were also reviewed as part of this quality data verification report. Field duplicate samples are discussed in Section 5.1. The relative percent difference (RPDs) for most laboratory duplicate samples were within 20 percent, which is the tolerance range set by the laboratory. In many instances, the data were qualified with an “RA” flag indicating that the RPD was not used for data validation because the sample concentration was less than ten times the MDL, which is too low for accurate evaluation according to ACZ. In all cases where the RPD could be calculated, the results met QA criteria and demonstrate an appropriate level of precision in laboratory analysis of these samples.

#### 4.5.4 Field Blank Samples

During the second quarter of 2008, a total of four field blank samples were collected. Three of these were field and equipment blank samples containing filtered de-ionized water (TB042808A, EQB042808A, and EQB041708F), and one field blank sample collected using unfiltered de-ionized water (FB041708). All of these samples were collected in the field and were submitted along with other samples to evaluate the potential for contaminant introduction under field conditions. As required by Section 4.2.1.5 of the QAPP, a minimum of one field blank sample was collected every time an equipment blank sample was collected at a rate of one in every twenty samples. Analytical results from all field blank samples submitted showed no detections of sulfate.

## **5. DATA QUALITY INDICATORS**

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

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

Each of these DQIs is discussed below in relation to the Q2-2008 groundwater sampling and analysis conducted by Sierrita.

### **5.1 Precision**

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

- Laboratory duplicate samples
- Field duplicate samples

As discussed in Sections 4.5.2 and 4.5.4, there were no exceedances of RPD QA criteria for any laboratory duplicates. During this monitoring period, a total of six field duplicate samples were collected. Five of these (DUP040908A, DUP041108A, DUP042108A,

DUP042108B, and DUP042208A) were collected by Sierrita for filtered analysis, whereas DUP041708 was collected by HGC for filtered and unfiltered sulfate analysis. The collection of six duplicate samples exceeds the QA/QC goal of collecting one duplicate sample for every twenty groundwater samples collected, as stated in Section 4.2.1.5 of the QAPP.

Results for the six duplicate field samples collected are provided in the table below. The range of RPD values was between zero and 22.08 percent. The RPD for sample IW-24 was above the 20 percent acceptance criteria for field duplicates, as stated in Section 3.3.1 of the QAPP. Overall, the high RPD in this sample is not expected to have a significant impact on the aquifer characterization and the DQI for precision is deemed to be met.

| Well ID    | Duplicate Sample ID | ACZ Project Number | Sulfate Field Sample (mg/L) | Sulfate Duplicate Sample (mg/L) | RPD (%) |
|------------|---------------------|--------------------|-----------------------------|---------------------------------|---------|
| NP-2       | DUP041708           | L68784             | 40                          | 33                              | 19.18   |
| IW-11      | DUP042108A          | L68854             | 1770                        | 1850                            | 4.42    |
| IW-21      | DUP041108A          | L68674             | 1610                        | 1610                            | 0.00    |
| IW-22      | DUP042108B          | L68854             | 1760                        | 1410                            | 22.08   |
| IW-24      | DUP042208A          | L68859             | 1650                        | 1750                            | 5.88    |
| MO-2007-1C | DUP040908A          | L68595             | 149                         | 153                             | 2.65    |

mg/L = milligrams per liter  
RPD = Relative Percent Difference

## 5.2 Bias

Bias is a systematic distortion of measurements causing consistent errors in one direction. Bias is managed in this data set by the consistent application of standardized sample collection and analysis procedures.

### **5.3 Accuracy**

Accuracy is a measure of the agreement of a measurement to a known value and is measured using the recoveries from laboratory control samples. As discussed in Sections 4.5.1, 4.5.2, and 4.5.3 respectively, there were no significant exceedances of the recovery QA criteria for any of the calibration standards, analytical spikes, or laboratory control standards. Based on this information, the overall accuracy of the data is judged sufficient for the purpose of aquifer characterization.

### **5.4 Representativeness**

All samples were taken from locations specified in the Work Plan (HGC, 2006) using sampling procedures specified in the QAPP. Therefore, the samples are judged to provide a good representation of groundwater quality at the locations. The analytical data are judged to be representative of groundwater conditions because the analyses used standard procedures and methods that met QA/QC guidelines of the QAPP.

### **5.5 Comparability**

All samples were collected using standardized procedures (HGC, 2006 and PDSI, 2005) and were analyzed by ACZ using standardized methods. Insofar as standardized sample collection and analytical methods are adhered to, the sample results should be comparable.

### **5.6 Completeness**

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



## **5.7 Sensitivity**

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

## **6. REFERENCES**

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

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



## TABLE



**TABLE A.1**  
**ACZ Project ID and Associated Wells**

| <b>ACZ<br/>Project ID</b>  | <b>Wells Reported</b>   |
|--|---|
| <i>Number of wells sampled by <b>Sierrita</b><sup>1</sup>: 62</i><br><i>Number of duplicate samples collected: 5</i><br><i>Number of blank samples collected: 2 (1 field blank and 1 equipment blank)</i>                |   |
| L68591   | MH-28, MH-29  |
| L68595   | MO-2007-1A, MO-2007-1B, MO-2007-1C, DUP040908A  |
| L68596   | MH-30, PZ-8   |
| L68674   | IW-17, IW-18, IW-19, IW-20, IW-21, DUP041108A   |
| L68875   | IW-12, IW-13, IW-14, IW-15, IW-16   |
| L68801   | M-8, M-9, M-10, M-20, I-10, ESP-1, ESP-2, ESP-3, ESP-4, MO-2007-2, MO-2007-3B, MO-2007-3C, MO-2007-4A, MO-2007-4B, MO-2007-4C, MO-2007-5B, MO-2007-5C, MO-2007-6A, MO-2007-6B |
| L68854   | IW-5, IW-6A, IW-10, IW-11, IW-22, IW-23, DUP042108A, DUP042108B   |
| L68859   | IW-2A, IW-3A, IW-4, IW-8, IW-9, IW-24, DUP042208A   |
| L68927   | MH-25A, MH-25B, MH-25C, MH-26A, MH-26B, MH-26C, MH-10, PZ-7   |
| L69000   | MH-11, MH-13A, MH-13B, MH-12, TB042808A, EQB042808A   |
| L69144   | IW-1, MH-13C  |
| <i>Number of wells sampled by <b>HGC</b><sup>2</sup>: 13</i><br><i>Number of duplicate samples collected: 1</i><br><i>Number of blank samples collected: 2 (1 unfiltered field blank and 1 filtered equipment blank)</i> |   |
| L68705   | CW-6, CW-7, CW-8, CW-9, CW-10, HAVEN GOLF   |
| L68784   | SI-GVDWID, GV-1-GVDWID, GV-2-GVDWID, CC of GV, CW-3, NP-2, TMM-1, EQB041708, FB041708, DUP041708  |

<sup>1</sup> Samples collected by Sierrita were filtered in the field using a disposable 0.45-micron filter.

<sup>2</sup> Samples collected by HGC were both filtered and unfiltered.



## **APPENDIX B**

### **ANALYTICAL DATA REPORTS FROM ACZ LABORATORIES, INC.**





Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 20, 2008

Project ID: OJ06DZ  
ACZ Project ID: L69000 – SULFATE ONLY

Dan Simpson:

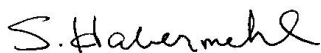
Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 02, 2008. This project was assigned to ACZ's project number, L69000. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L69000. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-11

ACZ Sample ID: **L69000-01**

Date Sampled: 04/29/08 14:05

Date Received: 05/02/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1700   |      |    | mg/L  | 100 | 500 | 05/15/08 11:53 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-13A

ACZ Sample ID: **L69000-02**

Date Sampled: 04/29/08 10:56

Date Received: 05/02/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1800   |      |    | mg/L  | 100 | 500 | 05/15/08 11:56 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-13B

ACZ Sample ID: **L69000-03**

Date Sampled: 04/29/08 09:46

Date Received: 05/02/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1110   |      | *  | mg/L  | 10  | 50  | 05/15/08 12:00 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: TB042808A

ACZ Sample ID: **L69000-04**

Date Sampled: 04/28/08 08:15

Date Received: 05/02/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1320   |      | *  | mg/L  | 10  | 50  | 05/15/08 12:03 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: EB042808A

ACZ Sample ID: **L69000-05**

Date Sampled: 04/28/08 08:15

Date Received: 05/02/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 20     | B    | *  | mg/L  | 10  | 50  | 05/15/08 12:05 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-12

ACZ Sample ID: **L69000-06**

Date Sampled: 04/30/08 13:00

Date Received: 05/02/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1160   |      | *  | mg/L  | 10  | 50  | 05/15/08 12:08 | jlf     |

Arizona license number: AZ0102



**Report Header Explanations**

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

**QC Sample Types**

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

**QC Sample Type Explanations**

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

**ACZ Qualifiers (Qual)**

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

**Method References**

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

**Comments**

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243972</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG243972PBW1    | PBW  | 05/06/08 16:24 |            |     |        | 14.1  | mg/L  |      | -20   | 20    |     |       |      |
| WG243972LCSW2   | LCSW | 05/06/08 16:36 | WC080506-2 | 820 |        | 795.1 | mg/L  | 97   | 90    | 110   |     |       |      |
| WG243972PBW2    | PBW  | 05/06/08 19:36 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243972LCSW5   | LCSW | 05/06/08 19:49 | WC080506-2 | 820 |        | 794.6 | mg/L  | 96.9 | 90    | 110   |     |       |      |
| WG243972PBW3    | PBW  | 05/06/08 22:39 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243972LCSW8   | LCSW | 05/06/08 22:52 | WC080506-2 | 820 |        | 794.2 | mg/L  | 96.9 | 90    | 110   |     |       |      |
| WG243972PBW4    | PBW  | 05/07/08 1:13  |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243972LCSW11  | LCSW | 05/07/08 1:26  | WC080506-2 | 820 |        | 800.3 | mg/L  | 97.6 | 90    | 110   |     |       |      |
| L69001-03DUP    | DUP  | 05/07/08 4:13  |            |     | 84     | 85.1  | mg/L  |      |       |       | 1.3 | 20    |      |
| WG243972LCSW14  | LCSW | 05/07/08 4:25  | WC080506-2 | 820 |        | 804   | mg/L  | 98   | 90    | 110   |     |       |      |
| <b>WG244013</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG244013PBW1    | PBW  | 05/07/08 12:11 |            |     |        | 23.2  | mg/L  |      | -20   | 20    |     |       | B4   |
| WG244013LCSW2   | LCSW | 05/07/08 12:23 | WC080506-2 | 820 |        | 785.7 | mg/L  | 95.8 | 90    | 110   |     |       |      |
| L69002-03DUP    | DUP  | 05/07/08 14:49 |            |     | 161    | 159.9 | mg/L  |      |       |       | 0.7 | 20    |      |
| WG244013PBW2    | PBW  | 05/07/08 14:56 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG244013LCSW5   | LCSW | 05/07/08 15:08 | WC080506-2 | 820 |        | 788.9 | mg/L  | 96.2 | 90    | 110   |     |       |      |
| WG244013PBW3    | PBW  | 05/07/08 17:24 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG244013LCSW8   | LCSW | 05/07/08 17:36 | WC080506-2 | 820 |        | 782.3 | mg/L  | 95.4 | 90    | 110   |     |       |      |
| WG244013PBW4    | PBW  | 05/07/08 19:44 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG244013LCSW11  | LCSW | 05/07/08 19:56 | WC080506-2 | 820 |        | 778.6 | mg/L  | 95   | 90    | 110   |     |       |      |
| WG244013LCSW14  | LCSW | 05/07/08 22:40 | WC080506-2 | 820 |        | 795.7 | mg/L  | 97   | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 2.045 | mg/L  | 102.3 | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | 1  |        | 1.042 | mg/L  | 104.2 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | 1  | .04    | 1.034 | mg/L  | 99.4  | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | 1  | .04    | 1.102 | mg/L  | 106.2 | 85    | 115   | 6.37 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG244050</b> |      |               |            |        |        |        |       |       |         |        |      |       |      |
| WG244050ICV     | ICV  | 05/08/08 5:39 | MS080424-4 | .02006 |        | .0221  | mg/L  | 110.2 | 90      | 110    |      |       |      |
| WG244050ICB     | ICB  | 05/08/08 5:45 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG244050LFB     | LFB  | 05/08/08 5:57 | MS080424-2 | .01    |        | .0107  | mg/L  | 107   | 85      | 115    |      |       |      |
| L68926-01AS     | AS   | 05/08/08 6:16 | MS080424-2 | .01    | U      | .01084 | mg/L  | 108.4 | 70      | 130    |      |       |      |
| L68926-01ASD    | ASD  | 05/08/08 6:22 | MS080424-2 | .01    | U      | .01115 | mg/L  | 111.5 | 70      | 130    | 2.82 | 20    |      |
| L69000-02AS     | AS   | 05/08/08 7:35 | MS080424-2 | .05    | U      | .0548  | mg/L  | 109.6 | 70      | 130    |      |       |      |
| L69000-02ASD    | ASD  | 05/08/08 7:41 | MS080424-2 | .05    | U      | .0536  | mg/L  | 107.2 | 70      | 130    | 2.21 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243959</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243959ICV     | ICV  | 05/07/08 2:46 | MS080424-4 | .05 |        | .0506  | mg/L  | 101.2 | 90      | 110    |      |       |      |
| WG243959ICB     | ICB  | 05/07/08 2:52 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243959LFB     | LFB  | 05/07/08 3:03 | MS080424-2 | .05 |        | .05201 | mg/L  | 104   | 85      | 115    |      |       |      |
| L68999-02AS     | AS   | 05/07/08 4:36 | MS080424-2 | .05 | .0017  | .05087 | mg/L  | 98.3  | 70      | 130    |      |       |      |
| L68999-02ASD    | ASD  | 05/07/08 4:41 | MS080424-2 | .05 | .0017  | .05151 | mg/L  | 99.6  | 70      | 130    | 1.25 | 20    |      |

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 2.0481 | mg/L  | 102.4 | 95     | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .514   | mg/L  | 102.8 | 85     | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | U      | .5084  | mg/L  | 101.7 | 85     | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | U      | .5163  | mg/L  | 103.3 | 85     | 115   | 1.54 | 20    |      |

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG243959</b> |      |               |            |        |        |        |       |       |         |        |     |       |      |
| WG243959ICV     | ICV  | 05/07/08 2:46 | MS080424-4 | .05    |        | .04883 | mg/L  | 97.7  | 90      | 110    |     |       |      |
| WG243959ICB     | ICB  | 05/07/08 2:52 |            |        |        | U      | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG243959LFB     | LFB  | 05/07/08 3:03 | MS080424-2 | .05005 |        | .04877 | mg/L  | 97.4  | 85      | 115    |     |       |      |
| L68999-02AS     | AS   | 05/07/08 4:36 | MS080424-2 | .05005 | U      | .04184 | mg/L  | 83.6  | 70      | 130    |     |       |      |
| L68999-02ASD    | ASD  | 05/07/08 4:41 | MS080424-2 | .05005 | U      | .04188 | mg/L  | 83.7  | 70      | 130    | 0.1 | 20    |      |
| <b>WG244111</b> |      |               |            |        |        |        |       |       |         |        |     |       |      |
| WG244111ICV     | ICV  | 05/09/08 5:03 | MS080424-4 | .05    |        | .05272 | mg/L  | 105.4 | 90      | 110    |     |       |      |
| WG244111ICB     | ICB  | 05/09/08 5:09 |            |        |        | U      | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG244111LFB     | LFB  | 05/09/08 5:21 | MS080424-2 | .05005 |        | .0502  | mg/L  | 100.3 | 85      | 115    |     |       |      |
| L68955-11AS     | AS   | 05/09/08 6:54 | MS080424-2 | .05005 | U      | .05287 | mg/L  | 105.6 | 70      | 130    |     |       |      |
| L68955-11ASD    | ASD  | 05/09/08 7:00 | MS080424-2 | .05005 | U      | .0525  | mg/L  | 104.9 | 70      | 130    | 0.7 | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243959</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243959ICV     | ICV  | 05/07/08 2:46 | MS080424-4 | .05 |        | .04997 | mg/L  | 99.9  | 90      | 110    |      |       |      |
| WG243959ICB     | ICB  | 05/07/08 2:52 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243959LFB     | LFB  | 05/07/08 3:03 | MS080424-2 | .05 |        | .05085 | mg/L  | 101.7 | 85      | 115    |      |       |      |
| L68999-02AS     | AS   | 05/07/08 4:36 | MS080424-2 | .05 | .0001  | .0429  | mg/L  | 85.6  | 70      | 130    |      |       |      |
| L68999-02ASD    | ASD  | 05/07/08 4:41 | MS080424-2 | .05 | .0001  | .04367 | mg/L  | 87.1  | 70      | 130    | 1.78 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC        | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |           |        |        |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 100       |        | 101.51 | mg/L  | 101.5 | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |           |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | 67.97008  |        | 69.89  | mg/L  | 102.8 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | 67.97008  | 645    | 703.92 | mg/L  | 86.7  | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | 67.97008  | 645    | 726.35 | mg/L  | 119.7 | 85    | 115   | 3.14 | 20    | M3   |
| <b>WG244022</b> |      |                |            |           |        |        |       |       |       |       |      |       |      |
| WG244022ICV     | ICV  | 05/12/08 10:18 | II080115-3 | 100       |        | 96.3   | mg/L  | 96.3  | 95    | 105   |      |       |      |
| WG244022ICB     | ICB  | 05/12/08 10:22 |            |           |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG244022LFB     | LFB  | 05/12/08 10:35 | II080423-4 | 67.97008  |        | 69.5   | mg/L  | 102.3 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/12/08 10:41 | II080423-4 | 135.94016 | 671    | 774.08 | mg/L  | 75.8  | 85    | 115   |      |       | M3   |
| L68998-01ASD    | ASD  | 05/12/08 10:45 | II080423-4 | 135.94016 | 671    | 771.83 | mg/L  | 74.2  | 85    | 115   | 0.29 | 20    | M3   |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244070</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG244070ICB     | ICB  | 05/07/08 15:24 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG244070ICV     | ICV  | 05/07/08 15:24 | WI071212-1 | 54.945 |        | 58.2  | mg/L  | 105.9 | 90    | 110   |     |       |      |
| WG244070LFB1    | LFB  | 05/07/08 16:50 | WI071130-1 | 30     |        | 32.8  | mg/L  | 109.3 | 90    | 110   |     |       |      |
| WG244070LFB2    | LFB  | 05/07/08 16:58 | WI071130-1 | 30     |        | 32.9  | mg/L  | 109.7 | 90    | 110   |     |       |      |
| L68877-01AS     | AS   | 05/07/08 17:15 | CL10X      | 30     | 520    | 532   | mg/L  | 40    | 90    | 110   |     |       | M3   |
| L68975-08DUP    | DUP  | 05/07/08 17:15 |            |        | 650    | 657   | mg/L  |       |       |       | 1.1 | 20    |      |
| <b>WG244073</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG244073ICB     | ICB  | 05/07/08 15:24 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG244073ICV     | ICV  | 05/07/08 15:24 | WI071212-1 | 54.945 |        | 58.2  | mg/L  | 105.9 | 90    | 110   |     |       |      |
| WG244073LFB1    | LFB  | 05/07/08 17:39 | WI071130-1 | 30     |        | 32.5  | mg/L  | 108.3 | 90    | 110   |     |       |      |
| L68913-03AS     | AS   | 05/07/08 17:41 | WI071130-1 | 30     | U      | 32.5  | mg/L  | 108.3 | 90    | 110   |     |       |      |
| L68913-04DUP    | DUP  | 05/07/08 17:42 |            |        | 17     | 17.6  | mg/L  |       |       |       | 3.5 | 20    |      |
| WG244073LFB2    | LFB  | 05/07/08 17:48 | WI071130-1 | 30     |        | 32    | mg/L  | 106.7 | 90    | 110   |     |       |      |

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 2.038 | mg/L  | 101.9 | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .523  | mg/L  | 104.6 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | U      | .534  | mg/L  | 106.8 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | U      | .547  | mg/L  | 109.4 | 85    | 115   | 2.41 | 20    |      |

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 1.93  | mg/L  | 96.5  | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .506  | mg/L  | 101.2 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | U      | .517  | mg/L  | 103.4 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | U      | .53   | mg/L  | 106   | 85    | 115   | 2.48 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units    | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|----------|-------|-------|-------|-----|-------|------|
| <b>WG243972</b> |      |                |          |        |        |       |          |       |       |       |     |       |      |
| WG243972LCSW1   | LCSW | 05/06/08 16:26 | PCN28873 | 1408.8 |        | 1414  | µmhos/cm | 100.4 | 90    | 110   |     |       |      |
| WG243972LCSW4   | LCSW | 05/06/08 19:38 | PCN28873 | 1408.8 |        | 1418  | µmhos/cm | 100.7 | 90    | 110   |     |       |      |
| WG243972LCSW7   | LCSW | 05/06/08 22:41 | PCN28873 | 1408.8 |        | 1418  | µmhos/cm | 100.7 | 90    | 110   |     |       |      |
| WG243972LCSW10  | LCSW | 05/07/08 1:15  | PCN28873 | 1408.8 |        | 1416  | µmhos/cm | 100.5 | 90    | 110   |     |       |      |
| L69001-03DUP    | DUP  | 05/07/08 4:13  |          |        | 1650   | 1654  | µmhos/cm |       |       |       | 0.2 | 20    |      |
| WG243972LCSW13  | LCSW | 05/07/08 4:14  | PCN28873 | 1408.8 |        | 1417  | µmhos/cm | 100.6 | 90    | 110   |     |       |      |
| <b>WG244013</b> |      |                |          |        |        |       |          |       |       |       |     |       |      |
| WG244013LCSW1   | LCSW | 05/07/08 12:12 | PCN28873 | 1408.8 |        | 1418  | µmhos/cm | 100.7 | 90    | 110   |     |       |      |
| L69002-03DUP    | DUP  | 05/07/08 14:49 |          |        | 1910   | 1911  | µmhos/cm |       |       |       | 0.1 | 20    |      |
| WG244013LCSW4   | LCSW | 05/07/08 14:57 | PCN28873 | 1408.8 |        | 1425  | µmhos/cm | 101.1 | 90    | 110   |     |       |      |
| WG244013LCSW7   | LCSW | 05/07/08 17:25 | PCN28873 | 1408.8 |        | 1413  | µmhos/cm | 100.3 | 90    | 110   |     |       |      |
| WG244013LCSW10  | LCSW | 05/07/08 19:45 | PCN28873 | 1408.8 |        | 1406  | µmhos/cm | 99.8  | 90    | 110   |     |       |      |
| WG244013LCSW13  | LCSW | 05/07/08 22:29 | PCN28873 | 1408.8 |        | 1398  | µmhos/cm | 99.2  | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 1.948 | mg/L  | 97.4  | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .512  | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | U      | .5    | mg/L  | 100   | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | U      | .508  | mg/L  | 101.6 | 85    | 115   | 1.59 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG244152</b> |      |               |            |    |        |       |       |       |        |       |     |       |      |
| WG244152ICV     | ICV  | 05/12/08 9:06 | WI080428-5 | .3 |        | .2785 | mg/L  | 92.8  | 90     | 110   |     |       |      |
| WG244152ICB     | ICB  | 05/12/08 9:06 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243999LRB     | LRB  | 05/12/08 9:29 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243999LFB     | LFB  | 05/12/08 9:29 | WI080428-2 | .2 |        | .1981 | mg/L  | 99.1  | 90     | 110   |     |       |      |
| L68999-01DUP    | DUP  | 05/12/08 9:29 |            |    | U      | U     | mg/L  |       |        |       | 0   | 20    | RA   |
| L68999-02LFM    | LFM  | 05/12/08 9:29 | WI080428-2 | .2 | U      | .2087 | mg/L  | 104.4 | 90     | 110   |     |       |      |
| L69000-06DUP    | DUP  | 05/12/08 9:34 |            |    | U      | .0059 | mg/L  |       |        |       | 200 | 20    | RA   |
| L69001-01LFM    | LFM  | 05/12/08 9:34 | WI080428-2 | .2 | U      | .2042 | mg/L  | 102.1 | 90     | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: **OJ06DZ**

**Fluoride** SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244088</b> |      |                |            |    |        |       |       |       |       |       |     |       |      |
| WG244088ICV     | ICV  | 05/08/08 11:59 | WC080502-2 | 2  |        | 1.93  | mg/L  | 96.5  | 90    | 110   |     |       |      |
| WG244088ICB     | ICB  | 05/08/08 12:04 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |     |       |      |
| WG244088LFB1    | LFB  | 05/08/08 12:09 | WC080226-1 | 5  |        | 5.02  | mg/L  | 100.4 | 90    | 110   |     |       |      |
| WG244088LFB2    | LFB  | 05/08/08 13:55 | WC080226-1 | 5  |        | 4.9   | mg/L  | 98    | 90    | 110   |     |       |      |
| L68951-01AS     | AS   | 05/08/08 14:48 | WC080226-1 | 5  | .4     | 4.45  | mg/L  | 81    | 90    | 110   |     |       | M2   |
| L68951-01DUP    | DUP  | 05/08/08 14:52 |            |    | .4     | .37   | mg/L  |       |       |       | 7.8 | 20    | RA   |

**WG244235**

|              |     |                |            |   |     |      |      |       |      |     |   |    |  |
|--------------|-----|----------------|------------|---|-----|------|------|-------|------|-----|---|----|--|
| WG244235ICV  | ICV | 05/12/08 11:34 | WC080502-2 | 2 |     | 2.1  | mg/L | 105   | 90   | 110 |   |    |  |
| WG244235ICB  | ICB | 05/12/08 11:41 |            |   |     | U    | mg/L |       | -0.3 | 0.3 |   |    |  |
| WG244235LFB1 | LFB | 05/12/08 11:48 | WC080226-1 | 5 |     | 4.95 | mg/L | 99    | 90   | 110 |   |    |  |
| L68908-01AS  | AS  | 05/12/08 12:03 | WC080226-1 | 5 | 2.1 | 7.43 | mg/L | 106.6 | 90   | 110 |   |    |  |
| L68908-01DUP | DUP | 05/12/08 12:06 |            |   | 2.1 | 2.08 | mg/L |       |      |     | 1 | 20 |  |
| WG244235LFB2 | LFB | 05/12/08 13:53 | WC080226-1 | 5 |     | 4.86 | mg/L | 97.2  | 90   | 110 |   |    |  |

**Iron, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 1.93  | mg/L  | 96.5  | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | 1  |        | 1.036 | mg/L  | 103.6 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | 1  | U      | 1.077 | mg/L  | 107.7 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | 1  | U      | 1.097 | mg/L  | 109.7 | 85    | 115   | 1.84 | 20    |      |

**Lead, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243959</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243959ICV     | ICV  | 05/07/08 2:46 | MS080424-4 | .05 |        | .04908 | mg/L  | 98.2  | 90      | 110    |      |       |      |
| WG243959ICB     | ICB  | 05/07/08 2:52 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243959LFB     | LFB  | 05/07/08 3:03 | MS080424-2 | .05 |        | .04971 | mg/L  | 99.4  | 85      | 115    |      |       |      |
| L68999-02AS     | AS   | 05/07/08 4:36 | MS080424-2 | .05 | .0007  | .05191 | mg/L  | 102.4 | 70      | 130    |      |       |      |
| L68999-02ASD    | ASD  | 05/07/08 4:41 | MS080424-2 | .05 | .0007  | .05201 | mg/L  | 102.6 | 70      | 130    | 0.19 | 20    |      |

**Magnesium, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG244022</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG244022ICV     | ICV  | 05/12/08 10:18 | II080115-3 | 100      |        | 97.97  | mg/L  | 98    | 95    | 105   |      |       |      |
| WG244022ICB     | ICB  | 05/12/08 10:22 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG244022LFB     | LFB  | 05/12/08 10:35 | II080423-4 | 49.96908 |        | 51.55  | mg/L  | 103.2 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/12/08 10:41 | II080423-4 | 99.93816 | 241    | 333.95 | mg/L  | 93    | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/12/08 10:45 | II080423-4 | 99.93816 | 241    | 334.36 | mg/L  | 93.4  | 85    | 115   | 0.12 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 1.9676 | mg/L  | 98.4  | 95     | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .5516  | mg/L  | 110.3 | 85     | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | .091   | .6538  | mg/L  | 112.6 | 85     | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | .091   | .6667  | mg/L  | 115.1 | 85     | 115   | 1.95 | 20    |      |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG243887</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243887ICV     | ICV  | 05/07/08 14:38 | II080405-1 | .00501 |        | .00517 | mg/L  | 103.2 | 95       | 105     |      |       |      |
| WG243887ICB     | ICB  | 05/07/08 14:40 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| WG243887LRB     | LRB  | 05/07/08 14:44 |            |        |        | U      | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG243887LFB     | LFB  | 05/07/08 14:47 | II080421-3 | .002   |        | .00199 | mg/L  | 99.5  | 85       | 115     |      |       |      |
| L68998-02LFM    | LFM  | 05/07/08 15:24 | II080421-3 | .002   | U      | .00204 | mg/L  | 102   | 85       | 115     |      |       |      |
| L68998-02LFMD   | LFMD | 05/07/08 15:27 | II080421-3 | .002   | U      | .002   | mg/L  | 100   | 85       | 115     | 1.98 | 20    |      |

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 2.055 | mg/L  | 102.8 | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .513  | mg/L  | 102.6 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | .04    | .563  | mg/L  | 104.6 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | .04    | .593  | mg/L  | 110.6 | 85    | 115   | 5.19 | 20    |      |

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 1.896 | mg/L  | 94.8  | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .498  | mg/L  | 99.6  | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | U      | .507  | mg/L  | 101.4 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   | 3.11 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244359</b> |      |                |            |       |        |       |       |       |       |       |      |       |      |
| WG244359ICV     | ICV  | 05/13/08 19:24 | WI080312-1 | 2.416 |        | 2.44  | mg/L  | 101   | 90    | 110   |      |       |      |
| WG244359ICB     | ICB  | 05/13/08 19:25 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| <b>WG244360</b> |      |                |            |       |        |       |       |       |       |       |      |       |      |
| WG244360ICV     | ICV  | 05/13/08 19:47 | WI080312-1 | 2.416 |        | 2.448 | mg/L  | 101.3 | 90    | 110   |      |       |      |
| WG244360ICB     | ICB  | 05/13/08 19:48 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG244360LFB1    | LFB  | 05/13/08 19:49 | WI080312-1 | 2     |        | 1.952 | mg/L  | 97.6  | 90    | 110   |      |       |      |
| L68755-01AS     | AS   | 05/13/08 19:52 | WI080312-1 | 40    | 23     | 62.43 | mg/L  | 98.6  | 90    | 110   |      |       |      |
| L68755-03DUP    | DUP  | 05/13/08 19:55 |            |       | .03    | .027  | mg/L  |       |       |       | 10.5 | 20    | RA   |
| L69000-02AS     | AS   | 05/13/08 20:11 | WI080312-1 | 2     | 1.25   | 3.2   | mg/L  | 97.5  | 90    | 110   |      |       |      |
| L69000-03DUP    | DUP  | 05/13/08 20:13 |            |       | 1.51   | 1.516 | mg/L  |       |       |       | 0.4  | 20    |      |
| WG244360LFB2    | LFB  | 05/13/08 20:31 | WI080312-1 | 2     |        | 2.063 | mg/L  | 103.2 | 90    | 110   |      |       |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243972</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG243972LCSW3   | LCSW | 05/06/08 16:39 | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |
| WG243972LCSW6   | LCSW | 05/06/08 19:51 | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |
| WG243972LCSW9   | LCSW | 05/06/08 22:54 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG243972LCSW12  | LCSW | 05/07/08 1:29  | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| L69001-03DUP    | DUP  | 05/07/08 4:13  |          |    | 8.2    | 8.2   | units |       |       |       | 0   | 20    |      |
| WG243972LCSW15  | LCSW | 05/07/08 4:27  | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |
| <b>WG244013</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG244013LCSW3   | LCSW | 05/07/08 12:25 | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |
| L69002-03DUP    | DUP  | 05/07/08 14:49 |          |    | 8.1    | 8.09  | units |       |       |       | 0.1 | 20    |      |
| WG244013LCSW6   | LCSW | 05/07/08 15:11 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG244013LCSW9   | LCSW | 05/07/08 17:39 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG244013LCSW12  | LCSW | 05/07/08 19:59 | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |
| WG244013LCSW15  | LCSW | 05/07/08 22:42 | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 20       |        | 20.23  | mg/L  | 101.2 | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | 99.76186 |        | 100.91 | mg/L  | 101.2 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | 99.76186 | 15.6   | 121.77 | mg/L  | 106.4 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | 99.76186 | 15.6   | 124.97 | mg/L  | 109.6 | 85    | 115   | 2.59 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Residue, Filterable (TDS) @180C** 160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243859</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG243859PBW     | PBW  | 05/03/08 14:10 |          |     |        | U     | mg/L  |       | -20   | 20    |     |       |      |
| WG243859LCSW    | LCSW | 05/03/08 14:12 | PCN29262 | 260 |        | 274   | mg/L  | 105.4 | 80    | 120   |     |       |      |
| L69000-04DUP    | DUP  | 05/03/08 14:59 |          |     | U      | U     | mg/L  |       |       |       | 0   | 20    | RA   |
| <b>WG244041</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG244041PBW     | PBW  | 05/07/08 13:45 |          |     |        | U     | mg/L  |       | -20   | 20    |     |       |      |
| WG244041LCSW    | LCSW | 05/07/08 13:46 | PCN29261 | 260 |        | 296   | mg/L  | 113.8 | 80    | 120   |     |       |      |
| L69012-03DUP    | DUP  | 05/07/08 14:29 |          |     | 6070   | 6062  | mg/L  |       |       |       | 0.1 | 20    |      |

**Selenium, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG243959</b> |      |               |            |     |        |        |       |       |         |        |     |       |      |
| WG243959ICV     | ICV  | 05/07/08 2:46 | MS080424-4 | .05 |        | .05103 | mg/L  | 102.1 | 90      | 110    |     |       |      |
| WG243959ICB     | ICB  | 05/07/08 2:52 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG243959LFB     | LFB  | 05/07/08 3:03 | MS080424-2 | .05 |        | .04686 | mg/L  | 93.7  | 85      | 115    |     |       |      |
| L68999-02AS     | AS   | 05/07/08 4:36 | MS080424-2 | .05 | .0002  | .05381 | mg/L  | 107.2 | 70      | 130    |     |       |      |
| L68999-02ASD    | ASD  | 05/07/08 4:41 | MS080424-2 | .05 | .0002  | .05567 | mg/L  | 110.9 | 70      | 130    | 3.4 | 20    |      |

**Sodium, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 100      |        | 100.79 | mg/L  | 100.8 | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | 98.21624 |        | 99.4   | mg/L  | 101.2 | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | 98.21624 | 160    | 247.27 | mg/L  | 88.9  | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | 98.21624 | 160    | 252.68 | mg/L  | 94.4  | 85    | 115   | 2.16 | 20    |      |

**Sulfate** SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|------|-------|------|
| <b>WG244095</b> |      |                |            |     |        |       |       |     |       |       |      |       |      |
| WG244095PBW     | PBW  | 05/15/08 11:30 |            |     |        | 14    | mg/L  |     | -30   | 30    |      |       |      |
| WG244095LCSW    | LCSW | 05/15/08 11:32 | WC080430-2 | 100 |        | 105   | mg/L  | 105 | 80    | 120   |      |       |      |
| L69000-02DUP    | DUP  | 05/15/08 11:58 |            |     | 1800   | 1860  | mg/L  |     |       |       | 3.3  | 20    |      |
| L69002-04DUP    | DUP  | 05/15/08 12:24 |            |     | 20     | 26    | mg/L  |     |       |       | 26.1 | 20    | RA   |

**Thallium, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC    | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243959</b> |      |               |            |       |        |        |       |       |         |        |      |       |      |
| WG243959ICV     | ICV  | 05/07/08 2:46 | MS080424-4 | .05   |        | .05433 | mg/L  | 108.7 | 90      | 110    |      |       |      |
| WG243959ICB     | ICB  | 05/07/08 2:52 |            |       |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243959LFB     | LFB  | 05/07/08 3:03 | MS080424-2 | .0501 |        | .05339 | mg/L  | 106.6 | 85      | 115    |      |       |      |
| L68999-02AS     | AS   | 05/07/08 4:36 | MS080424-2 | .0501 | U      | .05072 | mg/L  | 101.2 | 70      | 130    |      |       |      |
| L68999-02ASD    | ASD  | 05/07/08 4:41 | MS080424-2 | .0501 | U      | .05121 | mg/L  | 102.2 | 70      | 130    | 0.96 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

Project ID: OJ06DZ

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243978</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243978ICV     | ICV  | 05/06/08 20:31 | II080115-3 | 2  |        | 1.989 | mg/L  | 99.5  | 95    | 105   |      |       |      |
| WG243978ICB     | ICB  | 05/06/08 20:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243978LFB     | LFB  | 05/06/08 20:47 | II080423-4 | .5 |        | .51   | mg/L  | 102   | 85    | 115   |      |       |      |
| L68998-01AS     | AS   | 05/06/08 20:53 | II080423-4 | .5 | .09    | .631  | mg/L  | 108.2 | 85    | 115   |      |       |      |
| L68998-01ASD    | ASD  | 05/06/08 20:57 | II080423-4 | .5 | .09    | .656  | mg/L  | 113.2 | 85    | 115   | 3.89 | 20    |      |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L69000**

| ACZ ID           | WORKNUM  | PARAMETER                       | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|---------------------------------|---------------------------------------|------|---|
| <b>L69000-01</b> | WG243978 | Calcium, dissolved              | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244152 | Cyanide, total                  | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG244088 | Fluoride                        | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG244360 | Nitrate/Nitrite as N            | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243859 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C                       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L69000-02</b> | WG243978 | Calcium, dissolved              | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244152 | Cyanide, total                  | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG244088 | Fluoride                        | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243859 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C                       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L69000-03</b> | WG243978 | Calcium, dissolved              | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244152 | Cyanide, total                  | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG244088 | Fluoride                        | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243859 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C                       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG244095 | Sulfate                         | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L69000-04</b> | WG243978 | Calcium, dissolved              | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244152 | Cyanide, total                  | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243859 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C                       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG244095 | Sulfate                         | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

| ACZ ID           | WORKNUM  | PARAMETER                       | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|---------------------------------|---------------------------------------|------|---|
| <b>L69000-05</b> | WG244022 | Calcium, dissolved              | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243978 | Zinc, dissolved                 | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $< \text{MDL}$ ].   |
|                  | WG244152 | Cyanide, total                  | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10\text{x MDL}$ ).  |
|                  | WG244041 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C                       | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |
|                  | WG244095 | Sulfate                         | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10\text{x MDL}$ ).  |
| <b>L69000-06</b> | WG244022 | Calcium, dissolved              | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243978 | Zinc, dissolved                 | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $< \text{MDL}$ ].   |
|                  | WG244152 | Cyanide, total                  | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10\text{x MDL}$ ).  |
|                  | WG244095 | Sulfate                         | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10\text{x MDL}$ ).  |
|                  | WG244013 | Total Alkalinity                | SM2320B - Titration                   | B4   | Target analyte detected in blank at or above the acceptance criteria.   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69000**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L69000  
 Date Received: 5/2/2008  
 Received By:  
 Date Printed: 5/2/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 1863      | 4.6       | 17          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L69000  
Date Received: 5/2/2008  
Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|-----------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L69000-01 | MH-11     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L69000-02 | MH-13A    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L69000-03 | MH-13B    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L69000-04 | TB042808A |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L69000-05 | EB042808A |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L69000-06 | MH-12     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



Laboratories, Inc.

LL69000

CHAIN of CUSTODY

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

Report to:

Name: Billy Dorris  
Company: Freeport McMoran Sierrita  
E-mail: billy-dorris@fmi.com

Address: 6200 W. Duval Mine Rd  
Green Valley AZ 85614  
Telephone: 520 648 8873

Copy of Report to:

Name: Dan Simpson  
Company: Hydro Geo Chem

E-mail: dans@hginc.com  
Telephone: 520 293 1500 Ext 133

Invoice to:

Name:  
Company:  
E-mail:

Address:  
Telephone:

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

YES ☐  
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:  
Project/PO #: OJ06DZ  
Reporting state for compliance testing:  
Sampler's Name:  
Are any samples NRC licensable material?

# of Containers

SAMPLE IDENTIFICATION DATE:TIME Matrix

| SAMPLE IDENTIFICATION | DATE:TIME      | Matrix |
|-----------------------|----------------|--------|
| MH-11                 | 4-29-08/ 14:05 | GW     |
| MH-13A                | 4-29-08/ 10:56 | GW     |
| MH-13B                | 4-29-08/ 9:46  | GW     |
| TB042808A             | 4-28-08/ 8:15  | GW     |
| EB042808A             | 4-28-08/ 8:15  | GW     |
| MH-12                 | 4-30-08/ 13:00 | GW     |

8  
8  
8  
8  
8  
8

AMBIENT  
SUITE

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

REMARKS/ SAMPLE DISCLOSURES

"Copy of Report" to Dan Simpson contains only SD4 results with QC Summary.

PAGE

of

UPS TRACKING #1Z 867 7E4 23 1000 4708

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

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

Billy F. Dorris

4-30-08/15:00

WPL

5-2-08 10:11



Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 28, 2008

Project ID: OJ06DZ  
ACZ Project ID: L68927 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 29, 2008. This project was assigned to ACZ's project number, L68927. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68927. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-25A

ACZ Sample ID: **L68927-01**

Date Sampled: 04/25/08 13:10

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 30     | B    | *  | mg/L  | 10  | 50  | 05/05/08 16:36 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-25B

ACZ Sample ID: **L68927-02**

Date Sampled: 04/25/08 12:42

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1750   |      | *  | mg/L  | 10  | 50  | 05/05/08 16:38 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-25C

ACZ Sample ID: **L68927-03**

Date Sampled: 04/25/08 14:32

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1240   |      | *  | mg/L  | 10  | 50  | 05/05/08 16:41 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-26A

ACZ Sample ID: **L68927-04**

Date Sampled: 04/25/08 11:13

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 100    |      | *  | mg/L  | 10  | 50  | 05/05/08 16:44 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-26B

ACZ Sample ID: **L68927-05**

Date Sampled: 04/25/08 11:48

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1630   |      | *  | mg/L  | 10  | 50  | 05/05/08 16:46 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-26C

ACZ Sample ID: **L68927-06**

Date Sampled: 04/25/08 10:30

Date Received: 04/29/08

Sample Matrix: *Ground Water*

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 580    |      | *  | mg/L  | 10  | 50  | 05/05/08 16:49 | jlf     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-10

ACZ Sample ID: **L68927-07**

Date Sampled: 04/28/08 12:00

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1460   |      | *  | mg/L  | 10  | 50  | 05/05/08 16:51 | jlf     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: PZ-7

ACZ Sample ID: **L68927-08**

Date Sampled: 04/28/08 13:26

Date Received: 04/29/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 440    |      | *  | mg/L  | 10  | 50  | 05/05/08 16:54 | jlf     |

Arizona license number: AZ0102

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

## Comments

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243852</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG243852PBW1    | PBW  | 05/03/08 11:03 |            |     |        | 14.9  | mg/L  |      | -20   | 20    |     |       |      |
| WG243852LCSW2   | LCSW | 05/03/08 11:15 | WC080314-1 | 820 |        | 774.2 | mg/L  | 94.4 | 90    | 110   |     |       |      |
| WG243852PBW2    | PBW  | 05/03/08 13:59 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243852LCSW5   | LCSW | 05/03/08 14:11 | WC080314-1 | 820 |        | 784.9 | mg/L  | 95.7 | 90    | 110   |     |       |      |
| WG243852PBW3    | PBW  | 05/03/08 16:55 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243852LCSW8   | LCSW | 05/03/08 17:07 | WC080314-1 | 820 |        | 766.1 | mg/L  | 93.4 | 90    | 110   |     |       |      |
| WG243852PBW4    | PBW  | 05/03/08 19:52 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243852LCSW11  | LCSW | 05/03/08 20:04 | WC080314-1 | 820 |        | 762.8 | mg/L  | 93   | 90    | 110   |     |       |      |
| L68931-02DUP    | DUP  | 05/03/08 21:45 |            |     | 843    | 870.7 | mg/L  |      |       |       | 3.2 | 20    |      |
| WG243852LCSW14  | LCSW | 05/03/08 23:19 | WC080314-1 | 820 |        | 793.2 | mg/L  | 96.7 | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 2  |        | 1.974 | mg/L  | 98.7  | 95    | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | 1  |        | 1.063 | mg/L  | 106.3 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | 1  | .05    | 1.129 | mg/L  | 107.9 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | 1  | .05    | 1.113 | mg/L  | 106.3 | 85    | 115   | 1.43 | 20    |      |
| <b>WG243799</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243799ICV     | ICV  | 05/06/08 2:09  | II080115-3 | 2  |        | 1.971 | mg/L  | 98.6  | 95    | 105   |      |       |      |
| WG243799ICB     | ICB  | 05/06/08 2:13  |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243799LFB     | LFB  | 05/06/08 2:27  | II080423-4 | 1  |        | 1.002 | mg/L  | 100.2 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/06/08 2:34  | II080423-4 | 1  | U      | 1.06  | mg/L  | 106   | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/06/08 2:38  | II080423-4 | 1  | U      | 1.071 | mg/L  | 107.1 | 85    | 115   | 1.03 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243829</b> |      |               |            |        |        |        |       |       |         |        |      |       |      |
| WG243829ICV     | ICV  | 05/03/08 0:29 | MS080424-4 | .02006 |        | .02116 | mg/L  | 105.5 | 90      | 110    |      |       |      |
| WG243829ICB     | ICB  | 05/03/08 0:35 |            |        |        | .00043 | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG243829LFB     | LFB  | 05/03/08 0:46 | MS080424-2 | .01    |        | .00983 | mg/L  | 98.3  | 85      | 115    |      |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .01    | U      | .00851 | mg/L  | 85.1  | 70      | 130    |      |       |      |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .01    | U      | .00872 | mg/L  | 87.2  | 70      | 130    | 2.44 | 20    |      |

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243829</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243829ICV     | ICV  | 05/03/08 0:29 | MS080424-4 | .05 |        | .05287 | mg/L  | 105.7 | 90      | 110    |      |       |      |
| WG243829ICB     | ICB  | 05/03/08 0:35 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243829LFB     | LFB  | 05/03/08 0:46 | MS080424-2 | .05 |        | .05011 | mg/L  | 100.2 | 85      | 115    |      |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .05 | U      | .05091 | mg/L  | 101.8 | 70      | 130    |      |       |      |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .05 | U      | .05051 | mg/L  | 101   | 70      | 130    | 0.79 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243763</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40 | II080115-3 | 2  |        | 2.0195 | mg/L  | 101   | 95     | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59 | II080423-4 | .5 |        | .4991  | mg/L  | 99.8  | 85     | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17 | II080423-4 | .5 | .028   | .5284  | mg/L  | 100.1 | 85     | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20 | II080423-4 | .5 | .028   | .5189  | mg/L  | 98.2  | 85     | 115   | 1.81 | 20    |      |

**WG243841**

|              |     |                |            |    |      |        |      |       |        |       |      |    |  |
|--------------|-----|----------------|------------|----|------|--------|------|-------|--------|-------|------|----|--|
| WG243841ICV  | ICV | 05/02/08 22:59 | II080115-3 | 2  |      | 2.0427 | mg/L | 102.1 | 95     | 105   |      |    |  |
| WG243841ICB  | ICB | 05/02/08 23:02 |            |    |      | U      | mg/L |       | -0.009 | 0.009 |      |    |  |
| WG243841LFB  | LFB | 05/02/08 23:15 | II080423-4 | .5 |      | .5214  | mg/L | 104.3 | 85     | 115   |      |    |  |
| L68927-01AS  | AS  | 05/03/08 0:24  | II080423-4 | .5 | .017 | .5549  | mg/L | 107.6 | 85     | 115   |      |    |  |
| L68927-01ASD | ASD | 05/03/08 0:27  | II080423-4 | .5 | .017 | .5532  | mg/L | 107.2 | 85     | 115   | 0.31 | 20 |  |

**WG243843**

|              |     |               |            |    |      |        |      |       |        |       |      |    |  |
|--------------|-----|---------------|------------|----|------|--------|------|-------|--------|-------|------|----|--|
| WG243843ICV  | ICV | 05/06/08 3:45 | II080115-3 | 2  |      | 2.0401 | mg/L | 102   | 95     | 105   |      |    |  |
| WG243843ICB  | ICB | 05/06/08 3:48 |            |    |      | U      | mg/L |       | -0.009 | 0.009 |      |    |  |
| WG243843LFB  | LFB | 05/06/08 4:03 | II080423-4 | .5 |      | .5174  | mg/L | 103.5 | 85     | 115   |      |    |  |
| L68927-03AS  | AS  | 05/06/08 4:39 | II080423-4 | .5 | .078 | .576   | mg/L | 99.6  | 85     | 115   |      |    |  |
| L68927-03ASD | ASD | 05/06/08 4:43 | II080423-4 | .5 | .078 | .5771  | mg/L | 99.8  | 85     | 115   | 0.19 | 20 |  |

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243829</b> |      |               |            |        |        |        |       |      |         |        |      |       |      |
| WG243829ICV     | ICV  | 05/03/08 0:29 | MS080424-4 | .05    |        | .05048 | mg/L  | 101  | 90      | 110    |      |       |      |
| WG243829ICB     | ICB  | 05/03/08 0:35 |            |        |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243829LFB     | LFB  | 05/03/08 0:46 | MS080424-2 | .05005 |        | .04837 | mg/L  | 96.6 | 85      | 115    |      |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .05005 | U      | .02961 | mg/L  | 59.2 | 70      | 130    |      |       | M2   |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .05005 | U      | .02892 | mg/L  | 57.8 | 70      | 130    | 2.36 | 20    | M2   |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243829</b> |      |               |            |     |        |        |       |      |         |        |      |       |      |
| WG243829ICV     | ICV  | 05/03/08 0:29 | MS080424-4 | .05 |        | .05048 | mg/L  | 101  | 90      | 110    |      |       |      |
| WG243829ICB     | ICB  | 05/03/08 0:35 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243829LFB     | LFB  | 05/03/08 0:46 | MS080424-2 | .05 |        | .04796 | mg/L  | 95.9 | 85      | 115    |      |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .05 | U      | .04549 | mg/L  | 91   | 70      | 130    |      |       |      |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .05 | U      | .04514 | mg/L  | 90.3 | 70      | 130    | 0.77 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 100      |        | 101.63 | mg/L  | 101.6 | 95    | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | 67.97008 |        | 74.77  | mg/L  | 110   | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | 67.97008 | 33.6   | 107.1  | mg/L  | 108.1 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | 67.97008 | 33.6   | 106.3  | mg/L  | 107   | 85    | 115   | 0.75 | 20    |      |
| <b>WG243763</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 100      |        | 94.5   | mg/L  | 94.5  | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | 67.97008 |        | 64.75  | mg/L  | 95.3  | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | 67.97008 | 125    | 184.69 | mg/L  | 87.8  | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | 67.97008 | 125    | 181.66 | mg/L  | 83.4  | 85    | 115   | 1.65 | 20    | MA   |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243789</b> |      |               |            |        |        |       |       |       |       |       |     |       |      |
| WG243789ICB     | ICB  | 05/02/08 8:23 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG243789ICV     | ICV  | 05/02/08 8:23 | WI071212-1 | 54.945 |        | 58.6  | mg/L  | 106.7 | 90    | 110   |     |       |      |
| WG243789LFB1    | LFB  | 05/02/08 9:06 | WI071130-1 | 30     |        | 30.4  | mg/L  | 101.3 | 90    | 110   |     |       |      |
| WG243789LFB2    | LFB  | 05/02/08 9:21 | WI071130-1 | 30     |        | 29.6  | mg/L  | 98.7  | 90    | 110   |     |       |      |
| L68922-04AS     | AS   | 05/02/08 9:42 | WI071130-1 | 30     | 32     | 58.5  | mg/L  | 88.3  | 90    | 110   |     |       | M2   |
| L68927-01DUP    | DUP  | 05/02/08 9:58 |            |        | 9      | 9.2   | mg/L  |       |       |       | 2.2 | 20    | RA   |

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 2  |        | 2.012 | mg/L  | 100.6 | 95    | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | .5 |        | .568  | mg/L  | 113.6 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | .5 | U      | .564  | mg/L  | 112.8 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | .5 | U      | .541  | mg/L  | 108.2 | 85    | 115   | 4.16 | 20    |      |
| <b>WG243763</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 2  |        | 1.952 | mg/L  | 97.6  | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | .5 |        | .499  | mg/L  | 99.8  | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | .5 | U      | .512  | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | .5 | U      | .496  | mg/L  | 99.2  | 85    | 115   | 3.17 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243763</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40 | II080115-3 | 2  |        | 1.919 | mg/L  | 96    | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59 | II080423-4 | .5 |        | .494  | mg/L  | 98.8  | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17 | II080423-4 | .5 | U      | .501  | mg/L  | 100.2 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20 | II080423-4 | .5 | U      | .494  | mg/L  | 98.8  | 85    | 115   | 1.41 | 20    |      |

**WG243841**

|              |     |                |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243841ICV  | ICV | 05/02/08 22:59 | II080115-3 | 2  |   | 1.927 | mg/L | 96.4  | 95    | 105  |      |    |  |
| WG243841ICB  | ICB | 05/02/08 23:02 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243841LFB  | LFB | 05/02/08 23:15 | II080423-4 | .5 |   | .51   | mg/L | 102   | 85    | 115  |      |    |  |
| L68927-01AS  | AS  | 05/03/08 0:24  | II080423-4 | .5 | U | .536  | mg/L | 107.2 | 85    | 115  |      |    |  |
| L68927-01ASD | ASD | 05/03/08 0:27  | II080423-4 | .5 | U | .53   | mg/L | 106   | 85    | 115  | 1.13 | 20 |  |

**WG243843**

|              |     |               |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|---------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243843ICV  | ICV | 05/06/08 3:45 | II080115-3 | 2  |   | 1.924 | mg/L | 96.2  | 95    | 105  |      |    |  |
| WG243843ICB  | ICB | 05/06/08 3:48 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243843LFB  | LFB | 05/06/08 4:03 | II080423-4 | .5 |   | .508  | mg/L | 101.6 | 85    | 115  |      |    |  |
| L68927-03AS  | AS  | 05/06/08 4:39 | II080423-4 | .5 | U | .474  | mg/L | 94.8  | 85    | 115  |      |    |  |
| L68927-03ASD | ASD | 05/06/08 4:43 | II080423-4 | .5 | U | .472  | mg/L | 94.4  | 85    | 115  | 0.42 | 20 |  |

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units    | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|----------|-------|-------|-------|-----|-------|------|
| <b>WG243852</b> |      |                |          |        |        |       |          |       |       |       |     |       |      |
| WG243852LCSW1   | LCSW | 05/03/08 11:05 | PCN28873 | 1408.8 |        | 1410  | µmhos/cm | 100.1 | 90    | 110   |     |       |      |
| WG243852LCSW4   | LCSW | 05/03/08 14:00 | PCN28873 | 1408.8 |        | 1413  | µmhos/cm | 100.3 | 90    | 110   |     |       |      |
| WG243852LCSW7   | LCSW | 05/03/08 16:56 | PCN28873 | 1408.8 |        | 1416  | µmhos/cm | 100.5 | 90    | 110   |     |       |      |
| WG243852LCSW10  | LCSW | 05/03/08 19:53 | PCN28873 | 1408.8 |        | 1414  | µmhos/cm | 100.4 | 90    | 110   |     |       |      |
| L68931-02DUP    | DUP  | 05/03/08 21:45 |          |        | 11000  | 10950 | µmhos/cm |       |       |       | 0.5 | 20    |      |
| WG243852LCSW13  | LCSW | 05/03/08 23:08 | PCN28873 | 1408.8 |        | 1408  | µmhos/cm | 99.9  | 90    | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: **OJ06DZ**

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243763</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 2  |        | 1.94  | mg/L  | 97    | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | .5 |        | .495  | mg/L  | 99    | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | .5 | .03    | .522  | mg/L  | 98.4  | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | .5 | .03    | .514  | mg/L  | 96.8  | 85    | 115   | 1.54 | 20    |      |
| <b>WG243841</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243841ICV     | ICV  | 05/02/08 22:59 | II080115-3 | 2  |        | 1.957 | mg/L  | 97.9  | 95    | 105   |      |       |      |
| WG243841ICB     | ICB  | 05/02/08 23:02 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243841LFB     | LFB  | 05/02/08 23:15 | II080423-4 | .5 |        | .517  | mg/L  | 103.4 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/03/08 0:24  | II080423-4 | .5 | U      | .537  | mg/L  | 107.4 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/03/08 0:27  | II080423-4 | .5 | U      | .536  | mg/L  | 107.2 | 85    | 115   | 0.19 | 20    |      |
| <b>WG243942</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243942ICV     | ICV  | 05/06/08 17:26 | II080115-3 | 2  |        | 1.927 | mg/L  | 96.4  | 95    | 105   |      |       |      |
| WG243942ICB     | ICB  | 05/06/08 17:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243942LFB     | LFB  | 05/06/08 17:42 | II080423-4 | .5 |        | .521  | mg/L  | 104.2 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/06/08 17:55 | II080423-4 | .5 | .02    | .532  | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/06/08 17:58 | II080423-4 | .5 | .02    | .535  | mg/L  | 103   | 85    | 115   | 0.56 | 20    |      |
| L68938-01AS     | AS   | 05/06/08 18:37 | II080423-4 | .5 | U      | .487  | mg/L  | 97.4  | 85    | 115   |      |       |      |
| L68938-01ASD    | ASD  | 05/06/08 18:40 | II080423-4 | .5 | U      | .485  | mg/L  | 97    | 85    | 115   | 0.41 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|------|-------|------|
| <b>WG243853</b> |      |                |            |    |        |       |       |       |        |       |      |       |      |
| WG243853ICV     | ICV  | 05/03/08 8:42  | WI080428-5 | .3 |        | .2912 | mg/L  | 97.1  | 90     | 110   |      |       |      |
| WG243853ICB     | ICB  | 05/03/08 8:42  |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243632LRB     | LRB  | 05/03/08 9:11  |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243632LFB     | LFB  | 05/03/08 9:11  | WI080428-2 | .2 |        | .2028 | mg/L  | 101.4 | 90     | 110   |      |       |      |
| L68913-06DUP    | DUP  | 05/03/08 9:20  |            |    | U      | U     | mg/L  |       |        |       | 0    | 20    | RA   |
| L68913-07LFM    | LFM  | 05/03/08 9:20  | WI080428-2 | .2 | U      | .2025 | mg/L  | 101.3 | 90     | 110   |      |       |      |
| <b>WG243989</b> |      |                |            |    |        |       |       |       |        |       |      |       |      |
| WG243989ICV     | ICV  | 05/06/08 8:59  | WI080428-5 | .3 |        | .2841 | mg/L  | 94.7  | 90     | 110   |      |       |      |
| WG243989ICB     | ICB  | 05/06/08 8:59  |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243809LRB1    | LRB  | 05/06/08 15:30 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243809LFB1    | LFB  | 05/06/08 15:30 | WI080428-2 | .2 |        | .207  | mg/L  | 103.5 | 90     | 110   |      |       |      |
| L68922-03DUP    | DUP  | 05/06/08 15:44 |            |    | 1.1    | 1.314 | mg/L  |       |        |       | 17.7 | 20    |      |
| L68922-04LFM    | LFM  | 05/06/08 15:44 | 10XCEN     | 2  | 1.66   | 1.805 | mg/L  | 7.3   | 90     | 110   |      |       | M3   |

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244088</b> |      |                |            |    |        |       |       |       |       |       |     |       |      |
| WG244088ICV     | ICV  | 05/08/08 11:59 | WC080502-2 | 2  |        | 1.93  | mg/L  | 96.5  | 90    | 110   |     |       |      |
| WG244088ICB     | ICB  | 05/08/08 12:04 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |     |       |      |
| WG244088LFB1    | LFB  | 05/08/08 12:09 | WC080226-1 | 5  |        | 5.02  | mg/L  | 100.4 | 90    | 110   |     |       |      |
| WG244088LFB2    | LFB  | 05/08/08 13:55 | WC080226-1 | 5  |        | 4.9   | mg/L  | 98    | 90    | 110   |     |       |      |
| L68926-02AS     | AS   | 05/08/08 14:00 | WC080226-1 | 5  | .7     | 5.37  | mg/L  | 93.4  | 90    | 110   |     |       |      |
| L68926-02DUP    | DUP  | 05/08/08 14:02 |            |    | .7     | .72   | mg/L  |       |       |       | 2.8 | 20    | RA   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: **OJ06DZ**

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243763</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 2  |        | 1.916 | mg/L  | 95.8  | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | 1  |        | .996  | mg/L  | 99.6  | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | 1  | .03    | 1.035 | mg/L  | 100.5 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | 1  | .03    | 1.026 | mg/L  | 99.6  | 85    | 115   | 0.87 | 20    |      |
| <b>WG243841</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243841ICV     | ICV  | 05/02/08 22:59 | II080115-3 | 2  |        | 1.935 | mg/L  | 96.8  | 95    | 105   |      |       |      |
| WG243841ICB     | ICB  | 05/02/08 23:02 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243841LFB     | LFB  | 05/02/08 23:15 | II080423-4 | 1  |        | 1.048 | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/03/08 0:24  | II080423-4 | 1  | U      | 1.095 | mg/L  | 109.5 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/03/08 0:27  | II080423-4 | 1  | U      | 1.085 | mg/L  | 108.5 | 85    | 115   | 0.92 | 20    |      |
| <b>WG243843</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243843ICV     | ICV  | 05/06/08 3:45  | II080115-3 | 2  |        | 1.944 | mg/L  | 97.2  | 95    | 105   |      |       |      |
| WG243843ICB     | ICB  | 05/06/08 3:48  |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243843LFB     | LFB  | 05/06/08 4:03  | II080423-4 | 1  |        | 1.02  | mg/L  | 102   | 85    | 115   |      |       |      |
| L68927-03AS     | AS   | 05/06/08 4:39  | II080423-4 | 1  | .36    | 1.321 | mg/L  | 96.1  | 85    | 115   |      |       |      |
| L68927-03ASD    | ASD  | 05/06/08 4:43  | II080423-4 | 1  | .36    | 1.315 | mg/L  | 95.5  | 85    | 115   | 0.46 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG243829</b> |      |               |            |     |        |        |       |       |         |        |     |       |      |
| WG243829ICV     | ICV  | 05/03/08 0:29 | MS080424-4 | .05 |        | .04934 | mg/L  | 98.7  | 90      | 110    |     |       |      |
| WG243829ICB     | ICB  | 05/03/08 0:35 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG243829LFB     | LFB  | 05/03/08 0:46 | MS080424-2 | .05 |        | .04672 | mg/L  | 93.4  | 85      | 115    |     |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .05 | U      | .05074 | mg/L  | 101.5 | 70      | 130    |     |       |      |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .05 | U      | .05064 | mg/L  | 101.3 | 70      | 130    | 0.2 | 20    |      |

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 100      |        | 102.29 | mg/L  | 102.3 | 95    | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | 49.96908 |        | 55.82  | mg/L  | 111.7 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | 49.96908 | 8.7    | 65.24  | mg/L  | 113.1 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | 49.96908 | 8.7    | 64.43  | mg/L  | 111.5 | 85    | 115   | 1.25 | 20    |      |
| <b>WG243763</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 100      |        | 97.19  | mg/L  | 97.2  | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | 49.96908 |        | 48.54  | mg/L  | 97.1  | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | 49.96908 | 59     | 106.72 | mg/L  | 95.5  | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | 49.96908 | 59     | 104.85 | mg/L  | 91.8  | 85    | 115   | 1.77 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: **OJ06DZ**

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 2  |        | 1.9418 | mg/L  | 97.1  | 95     | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | .5 |        | .5752  | mg/L  | 115   | 85     | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | .5 | U      | .5488  | mg/L  | 109.8 | 85     | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | .5 | U      | .5471  | mg/L  | 109.4 | 85     | 115   | 0.31 | 20    |      |

**WG243763**

|              |     |               |            |    |      |        |      |       |        |       |      |    |  |
|--------------|-----|---------------|------------|----|------|--------|------|-------|--------|-------|------|----|--|
| WG243763ICV  | ICV | 05/02/08 1:40 | II080115-3 | 2  |      | 1.9532 | mg/L | 97.7  | 95     | 105   |      |    |  |
| WG243763ICB  | ICB | 05/02/08 1:44 |            |    |      | U      | mg/L |       | -0.015 | 0.015 |      |    |  |
| WG243763LFB  | LFB | 05/02/08 1:59 | II080423-4 | .5 |      | .5327  | mg/L | 106.5 | 85     | 115   |      |    |  |
| L68926-01AS  | AS  | 05/02/08 2:17 | II080423-4 | .5 | .011 | .5505  | mg/L | 107.9 | 85     | 115   |      |    |  |
| L68926-01ASD | ASD | 05/02/08 2:20 | II080423-4 | .5 | .011 | .5405  | mg/L | 105.9 | 85     | 115   | 1.83 | 20 |  |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG243660</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243660ICV     | ICV  | 05/01/08 11:41 | II080405-1 | .00501 |        | .00525 | mg/L  | 104.8 | 95       | 105     |      |       |      |
| WG243660ICB     | ICB  | 05/01/08 11:43 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| <b>WG243659</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243659LRB     | LRB  | 05/01/08 13:15 |            |        |        | U      | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG243659LFB     | LFB  | 05/01/08 13:17 | II080421-3 | .002   |        | .00197 | mg/L  | 98.5  | 85       | 115     |      |       |      |
| L68926-02LFM    | LFM  | 05/01/08 13:53 | II080421-3 | .002   | U      | .00199 | mg/L  | 99.5  | 85       | 115     |      |       |      |
| L68926-02LFMD   | LFMD | 05/01/08 13:56 | II080421-3 | .002   | U      | .00207 | mg/L  | 103.5 | 85       | 115     | 3.94 | 20    |      |

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 2  |        | 2.046 | mg/L  | 102.3 | 95    | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | .5 |        | .546  | mg/L  | 109.2 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | .5 | U      | .536  | mg/L  | 107.2 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | .5 | U      | .52   | mg/L  | 104   | 85    | 115   | 3.03 | 20    |      |
| <b>WG243942</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243942ICV     | ICV  | 05/06/08 17:26 | II080115-3 | 2  |        | 2.031 | mg/L  | 101.6 | 95    | 105   |      |       |      |
| WG243942ICB     | ICB  | 05/06/08 17:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243942LFB     | LFB  | 05/06/08 17:42 | II080423-4 | .5 |        | .528  | mg/L  | 105.6 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/06/08 17:55 | II080423-4 | .5 | .06    | .582  | mg/L  | 104.4 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/06/08 17:58 | II080423-4 | .5 | .06    | .6    | mg/L  | 108   | 85    | 115   | 3.05 | 20    |      |
| L68938-01AS     | AS   | 05/06/08 18:37 | II080423-4 | .5 | .02    | .568  | mg/L  | 109.6 | 85    | 115   |      |       |      |
| L68938-01ASD    | ASD  | 05/06/08 18:40 | II080423-4 | .5 | .02    | .568  | mg/L  | 109.6 | 85    | 115   | 0    | 20    |      |
| <b>WG244045</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG244045ICV     | ICV  | 05/07/08 20:14 | II080115-3 | 2  |        | 1.924 | mg/L  | 96.2  | 95    | 105   |      |       |      |
| WG244045ICB     | ICB  | 05/07/08 20:18 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG244045LFB     | LFB  | 05/07/08 20:32 | II080423-4 | .5 |        | .504  | mg/L  | 100.8 | 85    | 115   |      |       |      |
| L68913-07AS     | AS   | 05/07/08 20:43 | II080423-4 | .5 | U      | .511  | mg/L  | 102.2 | 85    | 115   |      |       |      |
| L68913-07ASD    | ASD  | 05/07/08 20:47 | II080423-4 | .5 | U      | .507  | mg/L  | 101.4 | 85    | 115   | 0.79 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243763</b> |      |               |            |    |        |       |       |      |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40 | II080115-3 | 2  |        | 1.901 | mg/L  | 95.1 | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59 | II080423-4 | .5 |        | .488  | mg/L  | 97.6 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17 | II080423-4 | .5 | U      | .497  | mg/L  | 99.4 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20 | II080423-4 | .5 | U      | .485  | mg/L  | 97   | 85    | 115   | 2.44 | 20    |      |

**WG243841**

|              |     |                |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243841ICV  | ICV | 05/02/08 22:59 | II080115-3 | 2  |   | 1.909 | mg/L | 95.5  | 95    | 105  |      |    |  |
| WG243841ICB  | ICB | 05/02/08 23:02 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243841LFB  | LFB | 05/02/08 23:15 | II080423-4 | .5 |   | .506  | mg/L | 101.2 | 85    | 115  |      |    |  |
| L68927-01AS  | AS  | 05/03/08 0:24  | II080423-4 | .5 | U | .532  | mg/L | 106.4 | 85    | 115  |      |    |  |
| L68927-01ASD | ASD | 05/03/08 0:27  | II080423-4 | .5 | U | .527  | mg/L | 105.4 | 85    | 115  | 0.94 | 20 |  |

**WG243843**

|              |     |               |            |    |   |       |      |      |       |      |      |    |  |
|--------------|-----|---------------|------------|----|---|-------|------|------|-------|------|------|----|--|
| WG243843ICV  | ICV | 05/06/08 3:45 | II080115-3 | 2  |   | 1.896 | mg/L | 94.8 | 95    | 105  |      |    |  |
| WG243843ICB  | ICB | 05/06/08 3:48 |            |    |   | U     | mg/L |      | -0.03 | 0.03 |      |    |  |
| WG243843LFB  | LFB | 05/06/08 4:03 | II080423-4 | .5 |   | .493  | mg/L | 98.6 | 85    | 115  |      |    |  |
| L68927-03AS  | AS  | 05/06/08 4:39 | II080423-4 | .5 | U | .468  | mg/L | 93.6 | 85    | 115  |      |    |  |
| L68927-03ASD | ASD | 05/06/08 4:43 | II080423-4 | .5 | U | .459  | mg/L | 91.8 | 85    | 115  | 1.94 | 20 |  |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243840</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243840ICV     | ICV  | 05/02/08 17:41 | WI080312-1 | 2.416 |        | 2.477 | mg/L  | 102.5 | 90    | 110   |     |       |      |
| WG243840ICB     | ICB  | 05/02/08 17:42 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG243842</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243842ICV     | ICV  | 05/02/08 18:24 | WI080312-1 | 2.416 |        | 2.388 | mg/L  | 98.8  | 90    | 110   |     |       |      |
| WG243842ICB     | ICB  | 05/02/08 18:25 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| WG243842LFB1    | LFB  | 05/02/08 18:26 | WI080312-1 | 2     |        | 1.847 | mg/L  | 92.4  | 90    | 110   |     |       |      |
| WG243842LFB2    | LFB  | 05/02/08 19:05 | WI080312-1 | 2     |        | 1.877 | mg/L  | 93.9  | 90    | 110   |     |       |      |
| L68927-01AS     | AS   | 05/02/08 19:07 | WI080312-1 | 2     | 1.05   | 3.099 | mg/L  | 102.5 | 90    | 110   |     |       |      |
| L68927-02DUP    | DUP  | 05/02/08 19:10 |            |       | 1.82   | 1.834 | mg/L  |       |       |       | 0.8 | 20    |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243852</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG243852LCSW3   | LCSW | 05/03/08 11:17 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG243852LCSW6   | LCSW | 05/03/08 14:14 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG243852LCSW9   | LCSW | 05/03/08 17:10 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG243852LCSW12  | LCSW | 05/03/08 20:07 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| L68931-02DUP    | DUP  | 05/03/08 21:45 |          |    | 7.7    | 7.67  | units |       |       |       | 0.4 | 20    |      |
| WG243852LCSW15  | LCSW | 05/03/08 23:21 | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243750</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243750ICV     | ICV  | 05/01/08 22:31 | II080115-3 | 20       |        | 20.1   | mg/L  | 100.5 | 95    | 105   |      |       |      |
| WG243750ICB     | ICB  | 05/01/08 22:35 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243750LFB     | LFB  | 05/01/08 22:49 | II080423-4 | 99.76186 |        | 104.57 | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/01/08 23:17 | II080423-4 | 99.76186 | 2.4    | 108.91 | mg/L  | 106.8 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/01/08 23:21 | II080423-4 | 99.76186 | 2.4    | 106.83 | mg/L  | 104.7 | 85    | 115   | 1.93 | 20    |      |
| <b>WG243763</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 20       |        | 20.05  | mg/L  | 100.3 | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | 99.76186 |        | 100.32 | mg/L  | 100.6 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | 99.76186 | 6.7    | 117.01 | mg/L  | 110.6 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | 99.76186 | 6.7    | 113.31 | mg/L  | 106.9 | 85    | 115   | 3.21 | 20    |      |
| <b>WG243841</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243841ICV     | ICV  | 05/02/08 22:59 | II080115-3 | 20       |        | 19.97  | mg/L  | 99.9  | 95    | 105   |      |       |      |
| WG243841ICB     | ICB  | 05/02/08 23:02 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243841LFB     | LFB  | 05/02/08 23:15 | II080423-4 | 99.76186 |        | 102.22 | mg/L  | 102.5 | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/03/08 0:24  | II080423-4 | 99.76186 | 2.9    | 111.66 | mg/L  | 109   | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/03/08 0:27  | II080423-4 | 99.76186 | 2.9    | 109.72 | mg/L  | 107.1 | 85    | 115   | 1.75 | 20    |      |
| <b>WG243843</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243843ICV     | ICV  | 05/06/08 3:45  | II080115-3 | 20       |        | 20.32  | mg/L  | 101.6 | 95    | 105   |      |       |      |
| WG243843ICB     | ICB  | 05/06/08 3:48  |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243843LFB     | LFB  | 05/06/08 4:03  | II080423-4 | 99.76186 |        | 103.43 | mg/L  | 103.7 | 85    | 115   |      |       |      |
| L68927-03AS     | AS   | 05/06/08 4:39  | II080423-4 | 99.76186 | 12.7   | 120.97 | mg/L  | 108.5 | 85    | 115   |      |       |      |
| L68927-03ASD    | ASD  | 05/06/08 4:43  | II080423-4 | 99.76186 | 12.7   | 121.57 | mg/L  | 109.1 | 85    | 115   | 0.49 | 20    |      |

**Residue, Filterable (TDS) @180C**

160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243767</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG243767PBW     | PBW  | 05/01/08 17:00 |          |     |        | U     | mg/L  |       | -20   | 20    |     |       |      |
| WG243767LCSW    | LCSW | 05/01/08 17:01 | PCN29262 | 260 |        | 262   | mg/L  | 100.8 | 80    | 120   |     |       |      |
| L68933-01DUP    | DUP  | 05/01/08 17:20 |          |     | 2620   | 2634  | mg/L  |       |       |       | 0.5 | 20    |      |

**Selenium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243829</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243829ICV     | ICV  | 05/03/08 0:29 | MS080424-4 | .05 |        | .05359 | mg/L  | 107.2 | 90      | 110    |      |       |      |
| WG243829ICB     | ICB  | 05/03/08 0:35 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243829LFB     | LFB  | 05/03/08 0:46 | MS080424-2 | .05 |        | .04831 | mg/L  | 96.6  | 85      | 115    |      |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .05 | .0007  | .04907 | mg/L  | 96.7  | 70      | 130    |      |       |      |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .05 | .0007  | .04861 | mg/L  | 95.8  | 70      | 130    | 0.94 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Sodium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243763</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG243763 CV     | ICV  | 05/02/08 1:40 | II080115-3 | 100      |        | 100.34 | mg/L  | 100.3 | 95    | 105   |      |       |      |
| WG243763 CV     | ICV  | 05/02/08 1:40 | II080115-3 | 100      |        | 97.8   | mg/L  | 97.8  | 95    | 105   |      |       |      |
| WG243763 CB     | ICB  | 05/02/08 1:44 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243763 CB     | ICB  | 05/02/08 1:44 |            |          |        | U      | mg/L  |       | -6    | 6     |      |       |      |
| WG243763 LFB    | LFB  | 05/02/08 1:59 | II080423-4 | 98.21624 |        | 96.5   | mg/L  | 98.3  | 85    | 115   |      |       |      |
| WG243763 LFB    | LFB  | 05/02/08 1:59 | II080423-4 | 98.21624 |        | 98.48  | mg/L  | 100.3 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17 | II080423-4 | 98.21624 | 192    | 284.47 | mg/L  | 94.1  | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20 | II080423-4 | 98.21624 | 192    | 280.31 | mg/L  | 89.9  | 85    | 115   | 1.47 | 20    |      |

**WG243841**

|              |     |                |            |          |      |        |      |       |      |     |      |    |  |
|--------------|-----|----------------|------------|----------|------|--------|------|-------|------|-----|------|----|--|
| WG243841 CV  | ICV | 05/02/08 22:59 | II080115-3 | 100      |      | 99.89  | mg/L | 99.9  | 95   | 105 |      |    |  |
| WG243841 CB  | ICB | 05/02/08 23:02 |            |          |      | U      | mg/L |       | -0.9 | 0.9 |      |    |  |
| WG243841 LFB | LFB | 05/02/08 23:15 | II080423-4 | 98.21624 |      | 101.46 | mg/L | 103.3 | 85   | 115 |      |    |  |
| L68927-01AS  | AS  | 05/03/08 0:24  | II080423-4 | 98.21624 | 36.1 | 141.77 | mg/L | 107.6 | 85   | 115 |      |    |  |
| L68927-01ASD | ASD | 05/03/08 0:27  | II080423-4 | 98.21624 | 36.1 | 140.91 | mg/L | 106.7 | 85   | 115 | 0.61 | 20 |  |

**WG243843**

|              |     |               |            |          |     |        |      |       |      |     |      |    |  |
|--------------|-----|---------------|------------|----------|-----|--------|------|-------|------|-----|------|----|--|
| WG243843 CV  | ICV | 05/06/08 3:45 | II080115-3 | 100      |     | 100.89 | mg/L | 100.9 | 95   | 105 |      |    |  |
| WG243843 CB  | ICB | 05/06/08 3:48 |            |          |     | U      | mg/L |       | -0.9 | 0.9 |      |    |  |
| WG243843 LFB | LFB | 05/06/08 4:03 | II080423-4 | 98.21624 |     | 101.86 | mg/L | 103.7 | 85   | 115 |      |    |  |
| L68927-03AS  | AS  | 05/06/08 4:39 | II080423-4 | 98.21624 | 100 | 201.86 | mg/L | 103.7 | 85   | 115 |      |    |  |
| L68927-03ASD | ASD | 05/06/08 4:43 | II080423-4 | 98.21624 | 100 | 203.09 | mg/L | 105   | 85   | 115 | 0.61 | 20 |  |

**Sulfate**

SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|------|-------|------|
| <b>WG243913</b> |      |                |            |     |        |       |       |     |       |       |      |       |      |
| WG243913 PBW    | PBW  | 05/05/08 16:31 |            |     |        | U     | mg/L  |     | -30   | 30    |      |       |      |
| WG243913 LCSW   | LCSW | 05/05/08 16:33 | WC080430-2 | 100 |        | 100   | mg/L  | 100 | 80    | 120   |      |       |      |
| L68934-02DUP    | DUP  | 05/05/08 17:02 |            |     | 20     | 32    | mg/L  |     |       |       | 46.2 | 20    | RA   |

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC    | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|---------------|------------|-------|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG243829</b> |      |               |            |       |        |        |       |       |         |        |     |       |      |
| WG243829 CV     | ICV  | 05/03/08 0:29 | MS080424-4 | .05   |        | .05428 | mg/L  | 108.6 | 90      | 110    |     |       |      |
| WG243829 CB     | ICB  | 05/03/08 0:35 |            |       |        | U      | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG243829 LFB    | LFB  | 05/03/08 0:46 | MS080424-2 | .0501 |        | .04969 | mg/L  | 99.2  | 85      | 115    |     |       |      |
| L68921-03AS     | AS   | 05/03/08 2:20 | MS080424-2 | .0501 | U      | .04235 | mg/L  | 84.5  | 70      | 130    |     |       |      |
| L68921-03ASD    | ASD  | 05/03/08 2:26 | MS080424-2 | .0501 | U      | .04282 | mg/L  | 85.5  | 70      | 130    | 1.1 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

Project ID: OJ06DZ

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243763</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243763ICV     | ICV  | 05/02/08 1:40  | II080115-3 | 2  |        | 1.937 | mg/L  | 96.9  | 95    | 105   |      |       |      |
| WG243763ICB     | ICB  | 05/02/08 1:44  |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243763LFB     | LFB  | 05/02/08 1:59  | II080423-4 | .5 |        | .489  | mg/L  | 97.8  | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/02/08 2:17  | II080423-4 | .5 | .33    | .838  | mg/L  | 101.6 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/02/08 2:20  | II080423-4 | .5 | .33    | .814  | mg/L  | 96.8  | 85    | 115   | 2.91 | 20    |      |
| <b>WG243841</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243841ICV     | ICV  | 05/02/08 22:59 | II080115-3 | 2  |        | 1.942 | mg/L  | 97.1  | 95    | 105   |      |       |      |
| WG243841ICB     | ICB  | 05/02/08 23:02 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243841LFB     | LFB  | 05/02/08 23:15 | II080423-4 | .5 |        | .505  | mg/L  | 101   | 85    | 115   |      |       |      |
| L68927-01AS     | AS   | 05/03/08 0:24  | II080423-4 | .5 | .01    | .553  | mg/L  | 108.6 | 85    | 115   |      |       |      |
| L68927-01ASD    | ASD  | 05/03/08 0:27  | II080423-4 | .5 | .01    | .545  | mg/L  | 107   | 85    | 115   | 1.46 | 20    |      |
| <b>WG243942</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243942ICV     | ICV  | 05/06/08 17:26 | II080115-3 | 2  |        | 1.974 | mg/L  | 98.7  | 95    | 105   |      |       |      |
| WG243942ICB     | ICB  | 05/06/08 17:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243942LFB     | LFB  | 05/06/08 17:42 | II080423-4 | .5 |        | .527  | mg/L  | 105.4 | 85    | 115   |      |       |      |
| L68926-01AS     | AS   | 05/06/08 17:55 | II080423-4 | .5 | .34    | .862  | mg/L  | 104.4 | 85    | 115   |      |       |      |
| L68926-01ASD    | ASD  | 05/06/08 17:58 | II080423-4 | .5 | .34    | .884  | mg/L  | 108.8 | 85    | 115   | 2.52 | 20    |      |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68927**

| ACZ ID           | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|----------------------|---------------------------------------|------|---|
| <b>L68927-01</b> | WG243829 | Beryllium, dissolved | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243789 | Chloride             | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243853 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG244088 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243913 | Sulfate              | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68927-02</b> | WG243829 | Beryllium, dissolved | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243789 | Chloride             | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243853 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG244088 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243913 | Sulfate              | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68927-03</b> | WG243829 | Beryllium, dissolved | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243789 | Chloride             | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243853 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG244088 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243913 | Sulfate              | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68927**

| ACZ ID           | WORKNUM  | PARAMETER             | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|-----------------------|---------------------------------------|------|---|
| <b>L68927-04</b> | WG243829 | Beryllium, dissolved  | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243789 | Chloride              | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                       | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243989 | Cyanide, total        | M335.4 - Colorimetric w/ distillation | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244088 | Fluoride              | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243913 | Sulfate               | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68927-05</b> | WG243829 | Beryllium, dissolved  | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243763 | Calcium, dissolved    | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243942 | Molybdenum, dissolved | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  | WG243789 | Chloride              | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                       | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243989 | Cyanide, total        | M335.4 - Colorimetric w/ distillation | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244088 | Fluoride              | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243913 | Sulfate               | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68927-06</b> | WG243829 | Beryllium, dissolved  | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243763 | Calcium, dissolved    | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243942 | Molybdenum, dissolved | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  | WG243789 | Chloride              | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                       | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243989 | Cyanide, total        | M335.4 - Colorimetric w/ distillation | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244088 | Fluoride              | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243913 | Sulfate               | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68927**

| ACZ ID           | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|----------------------|---------------------------------------|------|---|
| <b>L68927-07</b> | WG243829 | Beryllium, dissolved | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243763 | Calcium, dissolved   | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243789 | Chloride             | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243989 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244088 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243913 | Sulfate              | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68927-08</b> | WG243829 | Beryllium, dissolved | M200.8 ICP-MS                         | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243763 | Calcium, dissolved   | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243789 | Chloride             | 325.2 / SM4500CI-E                    | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | 325.2 / SM4500CI-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243989 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG244088 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243913 | Sulfate              | SM4500 SO4-D                          | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68927**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68927  
Date Received: 4/29/2008  
Received By:  
Date Printed: 4/29/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        |     | X  |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

Sample #6 one of the three vials have headspace.

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted.

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 2154      | 4.7       | 16          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68927  
Date Received: 4/29/2008  
Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|-----------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68927-01 | MH-25A    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-02 | MH-25B    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-03 | MH-25C    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-04 | MH-26A    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-05 | MH-26B    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-06 | MH-26C    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-07 | MH-10     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68927-08 | PZ-7      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

## Report to:

Name: Bill Dorris  
Company: Freeport McMoran Sierrita  
E-mail: billy-dorris@fmi.com

Address: 6200 W. Duval Mine Rd  
Green Valley, AZ 85614  
Telephone: 520-648-8873

**Copy of Report to:**

Name: Dan Simpson  
Company: Hydro Geo Chem

E-mail: [dans@hginc.com](mailto:dans@hginc.com)  
Telephone: 520-293-1500 Ext 133

**Invoice to:**

Name: \_\_\_\_\_

Company: \_\_\_\_\_

E-mail: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

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

|     |  |
|-----|--|
| YES |  |
| NO  |  |

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

## PROJECT INFORMATION

## ANALYSES REQUESTED (attach list or use quote number)

Quote #:

Project/PO #: 050602

Reporting state for compliance testing:

Sampler's Name:

Are any samples NRC licensable material?

### # of Containers

| SAMPLE IDENTIFICATION | DATE:TIME       | Matrix |
|-----------------------|-----------------|--------|
| MH-25A                | 4-25-08 / 13:10 | GW     |
| MH-25B                | 4-25-08 / 12:42 | GW     |
| MH-25C                | 4-25-08 / 14:32 | GW     |
| MH-26A                | 4-25-08 / 11:13 | GW     |
| MH-26B                | 4-25-08 / 11:48 | GW     |
| MH-26C                | 4-25-08 / 10:30 | GW     |
| MH-10                 | 4-28-08 / 12:00 | GW     |
| PZ-7                  | 4-28-08 / 13:26 | GW     |

8  
8 } ~~THE~~ AMBIENT  
8  
8 } SUITE  
8  
8  
8  
8

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

## REMARKS/ SAMPLE DISCLOSURES

"Copy of report" to Dan Simpson contains only SO<sub>4</sub> results with QC Summary.

PAGE

of

UPS TRACKING # 1Z 867 7E4 23 1000 4691

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

**RELINQUISHED BY:**

DATE:TIME

RECEIVED BY:

DATE:TIME

Billy F. Doris

4-28-08/15:00

WPL

4-29-08 10:57

Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 19, 2008

Project ID: OJ06DZ  
ACZ Project ID: L68859 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 24, 2008. This project was assigned to ACZ's project number, L68859. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68859. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-3A

ACZ Sample ID: **L68859-01**

Date Sampled: 04/22/08 12:50

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1420   |      |    | mg/L  | 10  | 50  | 04/30/08 17:10 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-4

ACZ Sample ID: **L68859-02**

Date Sampled: 04/22/08 11:35

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1540   |      |    | mg/L  | 10  | 50  | 04/30/08 17:12 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-2A

ACZ Sample ID: **L68859-03**

Date Sampled: 04/22/08 13:10

Date Received: 04/24/08

Sample Matrix: *Ground Water*

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | SM4500 SO4-D | 80     |      |    | mg/L  | 10  | 50  | 05/02/08 9:52 | jlf     |

**Arizona license number: AZ0102**



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-8

ACZ Sample ID: **L68859-04**

Date Sampled: 04/22/08 12:35

Date Received: 04/24/08

Sample Matrix: *Ground Water*

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | SM4500 SO4-D | 1700   |      |    | mg/L  | 50  | 250 | 05/02/08 9:58 | jlf     |

Arizona license number: **AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-9

ACZ Sample ID: **L68859-05**

Date Sampled: 04/22/08 11:55

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1670   |      |    | mg/L  | 50  | 250 | 05/02/08 10:04 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-24

ACZ Sample ID: **L68859-06**

Date Sampled: 04/22/08 11:15

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1650   |      |    | mg/L  | 50  | 250 | 05/02/08 10:10 | jlf     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: DUP042208A

ACZ Sample ID: **L68859-07**

Date Sampled: 04/22/08 00:00

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1750   |      |    | mg/L  | 50  | 250 | 05/02/08 10:16 | jlf     |

Arizona license number: AZ0102

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

## Comments

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243813</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG243813PBW1    | PBW  | 05/02/08 15:09 |            |     |        | 14.9  | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW1   | LCSW | 05/02/08 15:19 | WC080314-1 | 820 |        | 736.4 | mg/L  | 89.8 | 90    | 110   |     |       |      |
| WG243813PBW2    | PBW  | 05/02/08 17:42 |            |     |        | 8.6   | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW2   | LCSW | 05/02/08 17:52 | WC080314-1 | 820 |        | 751.5 | mg/L  | 91.6 | 90    | 110   |     |       |      |
| WG243813PBW3    | PBW  | 05/02/08 20:30 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW3   | LCSW | 05/02/08 20:41 | WC080314-1 | 820 |        | 795.4 | mg/L  | 97   | 90    | 110   |     |       |      |
| L68859-06DUP    | DUP  | 05/02/08 23:21 |            |     | 137    | 136.7 | mg/L  |      |       |       | 0.2 | 20    |      |
| WG243813PBW4    | PBW  | 05/02/08 23:27 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW4   | LCSW | 05/02/08 23:38 | WC080314-1 | 820 |        | 789.6 | mg/L  | 96.3 | 90    | 110   |     |       |      |
| L68879-03DUP    | DUP  | 05/03/08 1:04  |            |     | 390    | 389.3 | mg/L  |      |       |       | 0.2 | 20    |      |
| WG243813LCSW5   | LCSW | 05/03/08 2:32  | WC080314-1 | 820 |        | 794.3 | mg/L  | 96.9 | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243462</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243462ICV     | ICV  | 04/25/08 23:56 | II080115-3 | 2  |        | 1.975 | mg/L  | 98.8  | 95    | 105   |      |       |      |
| WG243462ICB     | ICB  | 04/26/08 0:00  |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243462LFB     | LFB  | 04/26/08 0:15  | II080423-4 | 1  |        | 1.023 | mg/L  | 102.3 | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/26/08 1:16  | II080423-4 | 1  | U      | 1.03  | mg/L  | 103   | 85    | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/26/08 1:20  | II080423-4 | 1  | U      | 1.08  | mg/L  | 108   | 85    | 115   | 4.74 | 20    |      |
| <b>WG243562</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45  | II080115-3 | 2  |        | 2.002 | mg/L  | 100.1 | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48  |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02  | II080423-4 | 1  |        | 1.091 | mg/L  | 109.1 | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/29/08 4:58  | II080423-4 | 1  | U      | 1.125 | mg/L  | 112.5 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01  | II080423-4 | 1  | U      | 1.098 | mg/L  | 109.8 | 85    | 115   | 2.43 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243541</b> |      |                |            |        |        |        |       |       |         |        |      |       |      |
| WG243541ICV     | ICV  | 04/28/08 16:37 | MS080424-4 | .02006 |        | .02    | mg/L  | 99.7  | 90      | 110    |      |       |      |
| WG243541ICB     | ICB  | 04/28/08 16:43 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG243541LFB     | LFB  | 04/28/08 16:54 | MS080424-2 | .01    |        | .01058 | mg/L  | 105.8 | 85      | 115    |      |       |      |
| L68859-01AS     | AS   | 04/28/08 18:28 | MS080424-2 | .01    | U      | .01042 | mg/L  | 104.2 | 70      | 130    |      |       |      |
| L68859-01ASD    | ASD  | 04/28/08 18:34 | MS080424-2 | .01    | U      | .00984 | mg/L  | 98.4  | 70      | 130    | 5.73 | 20    |      |
| <b>WG243742</b> |      |                |            |        |        |        |       |       |         |        |      |       |      |
| WG243742ICV     | ICV  | 05/02/08 2:16  | MS080424-4 | .02006 |        | .02147 | mg/L  | 107   | 90      | 110    |      |       |      |
| WG243742ICB     | ICB  | 05/02/08 2:22  |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG243742LFB     | LFB  | 05/02/08 2:33  | MS080424-2 | .01    |        | .01077 | mg/L  | 107.7 | 85      | 115    |      |       |      |
| L68854-03AS     | AS   | 05/02/08 2:57  | MS080424-2 | .02    | U      | .02204 | mg/L  | 110.2 | 70      | 130    |      |       |      |
| L68854-03ASD    | ASD  | 05/02/08 3:02  | MS080424-2 | .02    | U      | .02134 | mg/L  | 106.7 | 70      | 130    | 3.23 | 20    |      |
| L68859-03AS     | AS   | 05/02/08 4:06  | MS080424-2 | .01    | U      | .00985 | mg/L  | 98.5  | 70      | 130    |      |       |      |
| L68859-03ASD    | ASD  | 05/02/08 4:12  | MS080424-2 | .01    | U      | .01011 | mg/L  | 101.1 | 70      | 130    | 2.61 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243541</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243541ICV     | ICV  | 04/28/08 16:37 | MS080424-4 | .05 |        | .05061 | mg/L  | 101.2 | 90      | 110    |      |       |      |
| WG243541ICB     | ICB  | 04/28/08 16:43 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243541LFB     | LFB  | 04/28/08 16:54 | MS080424-2 | .05 |        | .05406 | mg/L  | 108.1 | 85      | 115    |      |       |      |
| L68859-01AS     | AS   | 04/28/08 18:28 | MS080424-2 | .05 | .0028  | .05145 | mg/L  | 97.3  | 70      | 130    |      |       |      |
| L68859-01ASD    | ASD  | 04/28/08 18:34 | MS080424-2 | .05 | .0028  | .05012 | mg/L  | 94.6  | 70      | 130    | 2.62 | 20    |      |

**WG243742**

|              |     |               |            |     |       |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-----|-------|--------|------|-------|---------|--------|------|----|--|
| WG243742ICV  | ICV | 05/02/08 2:16 | MS080424-4 | .05 |       | .05377 | mg/L | 107.5 | 90      | 110    |      |    |  |
| WG243742ICB  | ICB | 05/02/08 2:22 |            |     |       | U      | mg/L |       | -0.0015 | 0.0015 |      |    |  |
| WG243742LFB  | LFB | 05/02/08 2:33 | MS080424-2 | .05 |       | .05192 | mg/L | 103.8 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1  | .002  | .106   | mg/L | 104   | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1  | .002  | .1078  | mg/L | 105.8 | 70      | 130    | 1.68 | 20 |  |
| L68859-03AS  | AS  | 05/02/08 4:06 | MS080424-2 | .05 | .0062 | .06146 | mg/L | 110.5 | 70      | 130    |      |    |  |
| L68859-03ASD | ASD | 05/02/08 4:12 | MS080424-2 | .05 | .0062 | .06165 | mg/L | 110.9 | 70      | 130    | 0.31 | 20 |  |

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.9834 | mg/L  | 99.2  | 95     | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02 | II080423-4 | .5 |        | .53    | mg/L  | 106   | 85     | 115   |      |       |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | .5 | .044   | .5723  | mg/L  | 105.7 | 85     | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | .5 | .044   | .5528  | mg/L  | 101.8 | 85     | 115   | 3.47 | 20    |      |

**WG243538**

|              |     |               |            |    |      |        |      |       |        |       |      |    |  |
|--------------|-----|---------------|------------|----|------|--------|------|-------|--------|-------|------|----|--|
| WG243538ICV  | ICV | 04/29/08 6:08 | II080115-3 | 2  |      | 2.0297 | mg/L | 101.5 | 95     | 105   |      |    |  |
| WG243538ICB  | ICB | 04/29/08 6:12 |            |    |      | U      | mg/L |       | -0.009 | 0.009 |      |    |  |
| WG243538LFB  | LFB | 04/29/08 6:26 | II080423-4 | .5 |      | .5397  | mg/L | 107.9 | 85     | 115   |      |    |  |
| L68756-05AS  | AS  | 04/29/08 6:57 | II080423-4 | .5 | .03  | .577   | mg/L | 109.4 | 85     | 115   |      |    |  |
| L68756-05ASD | ASD | 04/29/08 7:00 | II080423-4 | .5 | .03  | .5787  | mg/L | 109.7 | 85     | 115   | 0.29 | 20 |  |
| L68859-04AS  | AS  | 04/29/08 7:11 | II080423-4 | .5 | .046 | .5419  | mg/L | 99.2  | 85     | 115   |      |    |  |
| L68859-04ASD | ASD | 04/29/08 7:14 | II080423-4 | .5 | .046 | .5015  | mg/L | 91.1  | 85     | 115   | 7.74 | 20 |  |

**WG243744**

|              |     |                |            |     |   |       |      |       |        |       |      |    |  |
|--------------|-----|----------------|------------|-----|---|-------|------|-------|--------|-------|------|----|--|
| WG243744ICV  | ICV | 05/01/08 20:54 | II080115-3 | 2   |   | 1.988 | mg/L | 99.4  | 95     | 105   |      |    |  |
| WG243744ICB  | ICB | 05/01/08 20:57 |            |     |   | U     | mg/L |       | -0.009 | 0.009 |      |    |  |
| WG243744LFB  | LFB | 05/01/08 21:12 | II080423-4 | .5  |   | .492  | mg/L | 98.4  | 85     | 115   |      |    |  |
| L68828-03AS  | AS  | 05/01/08 21:46 | II080423-4 | 2.5 | U | 2.513 | mg/L | 100.5 | 85     | 115   |      |    |  |
| L68828-03ASD | ASD | 05/01/08 21:50 | II080423-4 | 2.5 | U | 2.479 | mg/L | 99.2  | 85     | 115   | 1.36 | 20 |  |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243742</b> |      |               |            |        |        |        |       |       |         |        |      |       |      |
| WG243742ICV     | ICV  | 05/02/08 2:16 | MS080424-4 | .05    |        | .04955 | mg/L  | 99.1  | 90      | 110    |      |       |      |
| WG243742ICB     | ICB  | 05/02/08 2:22 |            |        |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243742LFB     | LFB  | 05/02/08 2:33 | MS080424-2 | .05005 |        | .04965 | mg/L  | 99.2  | 85      | 115    |      |       |      |
| L68854-03AS     | AS   | 05/02/08 2:57 | MS080424-2 | .1001  | U      | .0965  | mg/L  | 96.4  | 70      | 130    |      |       |      |
| L68854-03ASD    | ASD  | 05/02/08 3:02 | MS080424-2 | .1001  | U      | .09724 | mg/L  | 97.1  | 70      | 130    | 0.76 | 20    |      |
| L68859-03AS     | AS   | 05/02/08 4:06 | MS080424-2 | .05005 | U      | .05301 | mg/L  | 105.9 | 70      | 130    |      |       |      |
| L68859-03ASD    | ASD  | 05/02/08 4:12 | MS080424-2 | .05005 | U      | .05315 | mg/L  | 106.2 | 70      | 130    | 0.26 | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243541</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243541ICV     | ICV  | 04/28/08 16:37 | MS080424-4 | .05 |        | .05014 | mg/L  | 100.3 | 90      | 110    |      |       |      |
| WG243541ICB     | ICB  | 04/28/08 16:43 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243541LFB     | LFB  | 04/28/08 16:54 | MS080424-2 | .05 |        | .04981 | mg/L  | 99.6  | 85      | 115    |      |       |      |
| L68859-01AS     | AS   | 04/28/08 18:28 | MS080424-2 | .05 | U      | .04481 | mg/L  | 89.6  | 70      | 130    |      |       |      |
| L68859-01ASD    | ASD  | 04/28/08 18:34 | MS080424-2 | .05 | U      | .04433 | mg/L  | 88.7  | 70      | 130    | 1.08 | 20    |      |

**WG243742**

|              |     |               |            |     |   |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-----|---|--------|------|-------|---------|--------|------|----|--|
| WG243742ICV  | ICV | 05/02/08 2:16 | MS080424-4 | .05 |   | .05062 | mg/L | 101.2 | 90      | 110    |      |    |  |
| WG243742ICB  | ICB | 05/02/08 2:22 |            |     |   | U      | mg/L |       | -0.0003 | 0.0003 |      |    |  |
| WG243742LFB  | LFB | 05/02/08 2:33 | MS080424-2 | .05 |   | .05043 | mg/L | 100.9 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1  | U | .09576 | mg/L | 95.8  | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1  | U | .09478 | mg/L | 94.8  | 70      | 130    | 1.03 | 20 |  |
| L68859-03AS  | AS  | 05/02/08 4:06 | MS080424-2 | .05 | U | .05156 | mg/L | 103.1 | 70      | 130    |      |    |  |
| L68859-03ASD | ASD | 05/02/08 4:12 | MS080424-2 | .05 | U | .05201 | mg/L | 104   | 70      | 130    | 0.87 | 20 |  |

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 100      |        | 100.14 | mg/L  | 100.1 | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | 67.97008 |        | 72.12  | mg/L  | 106.1 | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 67.97008 | 522    | 552.29 | mg/L  | 44.6  | 85    | 115   |      |       | M3   |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 67.97008 | 522    | 566.2  | mg/L  | 65    | 85    | 115   | 2.49 | 20    | M3   |
| <b>WG243462</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243462ICV     | ICV  | 04/25/08 23:56 | II080115-3 | 100      |        | 95.26  | mg/L  | 95.3  | 95    | 105   |      |       |      |
| WG243462ICB     | ICB  | 04/26/08 0:00  |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243462LFB     | LFB  | 04/26/08 0:15  | II080423-4 | 67.97008 |        | 69.2   | mg/L  | 101.8 | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/26/08 1:16  | II080423-4 | 67.97008 | 503    | 543.92 | mg/L  | 60.2  | 85    | 115   |      |       | M3   |
| L68859-04ASD    | ASD  | 04/26/08 1:20  | II080423-4 | 67.97008 | 503    | 560.73 | mg/L  | 84.9  | 85    | 115   | 3.04 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Chloride** 325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243623</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG243623ICB     | ICB  | 04/29/08 13:25 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG243623ICV     | ICV  | 04/29/08 13:25 | WI071212-1 | 54.945 |        | 58    | mg/L  | 105.6 | 90    | 110   |     |       |      |
| WG243623LFB1    | LFB  | 04/29/08 15:06 | WI071130-1 | 30     |        | 32.8  | mg/L  | 109.3 | 90    | 110   |     |       |      |
| WG243623LFB2    | LFB  | 04/29/08 15:15 | WI071130-1 | 30     |        | 33    | mg/L  | 110   | 90    | 110   |     |       |      |
| L68830-12AS     | AS   | 04/29/08 15:15 | WI071130-1 | 30     | 17     | 48.5  | mg/L  | 105   | 90    | 110   |     |       |      |
| L68859-03DUP    | DUP  | 04/29/08 15:16 |            |        | 14     | 13.1  | mg/L  |       |       |       | 6.6 | 20    |      |
| L68854-01DUP    | DUP  | 04/29/08 15:23 |            |        | 160    | 167   | mg/L  |       |       |       | 4.3 | 20    |      |
| L68859-02AS     | AS   | 04/29/08 15:31 | CL10X      | 30     | 150    | 179   | mg/L  | 96.7  | 90    | 110   |     |       |      |

**Chromium, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243462</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243462ICV     | ICV  | 04/25/08 23:56 | II080115-3 | 2  |        | 1.931 | mg/L  | 96.6  | 95    | 105   |      |       |      |
| WG243462ICB     | ICB  | 04/26/08 0:00  |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243462LFB     | LFB  | 04/26/08 0:15  | II080423-4 | .5 |        | .507  | mg/L  | 101.4 | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/26/08 1:16  | II080423-4 | .5 | U      | .486  | mg/L  | 97.2  | 85    | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/26/08 1:20  | II080423-4 | .5 | U      | .518  | mg/L  | 103.6 | 85    | 115   | 6.37 | 20    |      |

**WG243562**

|              |     |               |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|---------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243562ICV  | ICV | 04/29/08 3:45 | II080115-3 | 2  |   | 1.929 | mg/L | 96.5  | 95    | 105  |      |    |  |
| WG243562ICB  | ICB | 04/29/08 3:48 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243562LFB  | LFB | 04/29/08 4:02 | II080423-4 | .5 |   | .537  | mg/L | 107.4 | 85    | 115  |      |    |  |
| L68854-05AS  | AS  | 04/29/08 4:58 | II080423-4 | .5 | U | .516  | mg/L | 103.2 | 85    | 115  |      |    |  |
| L68854-05ASD | ASD | 04/29/08 5:01 | II080423-4 | .5 | U | .509  | mg/L | 101.8 | 85    | 115  | 1.37 | 20 |  |

**Cobalt, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243462</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243462ICV     | ICV  | 04/25/08 23:56 | II080115-3 | 2  |        | 1.897 | mg/L  | 94.9  | 95    | 105   |      |       |      |
| WG243462ICB     | ICB  | 04/26/08 0:00  |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243462LFB     | LFB  | 04/26/08 0:15  | II080423-4 | .5 |        | .494  | mg/L  | 98.8  | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/26/08 1:16  | II080423-4 | .5 | U      | .477  | mg/L  | 95.4  | 85    | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/26/08 1:20  | II080423-4 | .5 | U      | .502  | mg/L  | 100.4 | 85    | 115   | 5.11 | 20    |      |

**WG243611**

|              |     |                |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243611ICV  | ICV | 05/01/08 10:19 | II080115-3 | 2  |   | 1.944 | mg/L | 97.2  | 95    | 105  |      |    |  |
| WG243611ICB  | ICB | 05/01/08 10:22 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243611LFB  | LFB | 05/01/08 10:35 | II080423-4 | .5 |   | .509  | mg/L | 101.8 | 85    | 115  |      |    |  |
| L68854-06AS  | AS  | 05/01/08 11:31 | II080423-4 | .5 | U | .49   | mg/L | 98    | 85    | 115  |      |    |  |
| L68854-06ASD | ASD | 05/01/08 11:34 | II080423-4 | .5 | U | .472  | mg/L | 94.4  | 85    | 115  | 3.74 | 20 |  |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units    | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|----------|------|-------|-------|-----|-------|------|
| <b>WG243669</b> |      |                |          |        |        |       |          |      |       |       |     |       |      |
| WG243669LCSW1   | LCSW | 04/30/08 13:20 | PCN28873 | 1408.8 |        | 1386  | µmhos/cm | 98.4 | 90    | 110   |     |       |      |
| WG243669LCSW4   | LCSW | 04/30/08 15:54 | PCN28873 | 1408.8 |        | 1377  | µmhos/cm | 97.7 | 90    | 110   |     |       |      |
| WG243669LCSW7   | LCSW | 04/30/08 19:06 | PCN28873 | 1408.8 |        | 1377  | µmhos/cm | 97.7 | 90    | 110   |     |       |      |
| L68862-01DUP    | DUP  | 04/30/08 20:47 |          |        | 726    | 727   | µmhos/cm |      |       |       | 0.1 | 20    |      |
| WG243669LCSW10  | LCSW | 04/30/08 22:24 | PCN28873 | 1408.8 |        | 1378  | µmhos/cm | 97.8 | 90    | 110   |     |       |      |
| WG243669LCSW13  | LCSW | 05/01/08 1:11  | PCN28873 | 1408.8 |        | 1375  | µmhos/cm | 97.6 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243462</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243462ICV     | ICV  | 04/25/08 23:56 | II080115-3 | 2  |        | 1.933 | mg/L  | 96.7  | 95    | 105   |      |       |      |
| WG243462ICB     | ICB  | 04/26/08 0:00  |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243462LFB     | LFB  | 04/26/08 0:15  | II080423-4 | .5 |        | .505  | mg/L  | 101   | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/26/08 1:16  | II080423-4 | .5 | U      | .502  | mg/L  | 100.4 | 85    | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/26/08 1:20  | II080423-4 | .5 | U      | .535  | mg/L  | 107   | 85    | 115   | 6.36 | 20    |      |

**WG243562**

|              |     |               |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|---------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243562ICV  | ICV | 04/29/08 3:45 | II080115-3 | 2  |   | 1.902 | mg/L | 95.1  | 95    | 105  |      |    |  |
| WG243562ICB  | ICB | 04/29/08 3:48 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243562LFB  | LFB | 04/29/08 4:02 | II080423-4 | .5 |   | .522  | mg/L | 104.4 | 85    | 115  |      |    |  |
| L68854-05AS  | AS  | 04/29/08 4:58 | II080423-4 | .5 | U | .528  | mg/L | 105.6 | 85    | 115  |      |    |  |
| L68854-05ASD | ASD | 04/29/08 5:01 | II080423-4 | .5 | U | .51   | mg/L | 102   | 85    | 115  | 3.47 | 20 |  |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG243703</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG243703ICV     | ICV  | 04/30/08 10:21 | WI080428-5 | .3 |        | .2992 | mg/L  | 99.7  | 90     | 110   |     |       |      |
| WG243703ICB     | ICB  | 04/30/08 10:21 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243519LRB     | LRB  | 04/30/08 15:01 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| L68859-01DUP    | DUP  | 04/30/08 15:01 |            |    | .058   | .0573 | mg/L  |       |        |       | 1.2 | 20    |      |
| L68859-02LFM    | LFM  | 04/30/08 15:01 | WI080428-2 | .2 | .011   | .2214 | mg/L  | 105.2 | 90     | 110   |     |       |      |
| WG243519LFB     | LFB  | 04/30/08 15:08 | WI080428-2 | .2 |        | .2099 | mg/L  | 105   | 90     | 110   |     |       |      |

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243936</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243936ICV     | ICV  | 05/06/08 14:42 | WC080502-2 | 2  |        | 1.97  | mg/L  | 98.5 | 90    | 110   |      |       |      |
| WG243936ICB     | ICB  | 05/06/08 14:49 |            |    |        | U     | mg/L  |      | -0.3  | 0.3   |      |       |      |
| WG243936LFB1    | LFB  | 05/06/08 14:55 | WC080226-1 | 5  |        | 4.75  | mg/L  | 95   | 90    | 110   |      |       |      |
| L68854-03AS     | AS   | 05/06/08 15:48 | WC080226-1 | 5  | .2     | 4.06  | mg/L  | 77.2 | 90    | 110   |      |       | M2   |
| L68854-03DUP    | DUP  | 05/06/08 15:52 |            |    | .2     | .18   | mg/L  |      |       |       | 10.5 | 20    | RA   |
| WG243936LFB2    | LFB  | 05/06/08 16:27 | WC080226-1 | 5  |        | 4.81  | mg/L  | 96.2 | 90    | 110   |      |       |      |
| L68859-02AS     | AS   | 05/06/08 16:32 | WC080226-1 | 5  | .3     | 4.06  | mg/L  | 75.2 | 90    | 110   |      |       | M2   |
| L68859-02DUP    | DUP  | 05/06/08 16:34 |            |    | .3     | .25   | mg/L  |      |       |       | 18.2 | 20    | RA   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.913 | mg/L  | 95.7  | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02 | II080423-4 | 1  |        | 1.064 | mg/L  | 106.4 | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | 1  | U      | 1.05  | mg/L  | 105   | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | 1  | U      | 1.026 | mg/L  | 102.6 | 85    | 115   | 2.31 | 20    |      |
| <b>WG243538</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG243538ICV     | ICV  | 04/29/08 6:08 | II080115-3 | 2  |        | 1.93  | mg/L  | 96.5  | 95    | 105   |      |       |      |
| WG243538ICB     | ICB  | 04/29/08 6:12 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243538LFB     | LFB  | 04/29/08 6:26 | II080423-4 | 1  |        | 1.093 | mg/L  | 109.3 | 85    | 115   |      |       |      |
| L68756-05AS     | AS   | 04/29/08 6:57 | II080423-4 | 1  | .23    | 1.32  | mg/L  | 109   | 85    | 115   |      |       |      |
| L68756-05ASD    | ASD  | 04/29/08 7:00 | II080423-4 | 1  | .23    | 1.323 | mg/L  | 109.3 | 85    | 115   | 0.23 | 20    |      |
| L68859-04AS     | AS   | 04/29/08 7:11 | II080423-4 | 1  | .3     | 1.274 | mg/L  | 97.4  | 85    | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/29/08 7:14 | II080423-4 | 1  | .3     | 1.168 | mg/L  | 86.8  | 85    | 115   | 8.68 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243541</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243541ICV     | ICV  | 04/28/08 16:37 | MS080424-4 | .05 |        | .04935 | mg/L  | 98.7  | 90      | 110    |      |       |      |
| WG243541ICB     | ICB  | 04/28/08 16:43 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243541LFB     | LFB  | 04/28/08 16:54 | MS080424-2 | .05 |        | .05138 | mg/L  | 102.8 | 85      | 115    |      |       |      |
| L68859-01AS     | AS   | 04/28/08 18:28 | MS080424-2 | .05 | .0001  | .04736 | mg/L  | 94.5  | 70      | 130    |      |       |      |
| L68859-01ASD    | ASD  | 04/28/08 18:34 | MS080424-2 | .05 | .0001  | .04577 | mg/L  | 91.3  | 70      | 130    | 3.41 | 20    |      |
| <b>WG243742</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243742ICV     | ICV  | 05/02/08 2:16  | MS080424-4 | .05 |        | .04861 | mg/L  | 97.2  | 90      | 110    |      |       |      |
| WG243742ICB     | ICB  | 05/02/08 2:22  |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243742LFB     | LFB  | 05/02/08 2:33  | MS080424-2 | .05 |        | .0487  | mg/L  | 97.4  | 85      | 115    |      |       |      |
| L68854-03AS     | AS   | 05/02/08 2:57  | MS080424-2 | .1  | .001   | .09932 | mg/L  | 98.3  | 70      | 130    |      |       |      |
| L68854-03ASD    | ASD  | 05/02/08 3:02  | MS080424-2 | .1  | .001   | .10034 | mg/L  | 99.3  | 70      | 130    | 1.02 | 20    |      |
| L68859-03AS     | AS   | 05/02/08 4:06  | MS080424-2 | .05 | .0024  | .05139 | mg/L  | 98    | 70      | 130    |      |       |      |
| L68859-03ASD    | ASD  | 05/02/08 4:12  | MS080424-2 | .05 | .0024  | .05208 | mg/L  | 99.4  | 70      | 130    | 1.33 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243562</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45  | II080115-3 | 100      |        | 96.83  | mg/L  | 96.8  | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48  |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02  | II080423-4 | 49.96908 |        | 54.16  | mg/L  | 108.4 | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/29/08 4:58  | II080423-4 | 49.96908 | 92.3   | 144.61 | mg/L  | 104.7 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01  | II080423-4 | 49.96908 | 92.3   | 140.9  | mg/L  | 97.3  | 85    | 115   | 2.6  | 20    |      |
| <b>WG243629</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243629ICV     | ICV  | 04/29/08 23:14 | II080115-3 | 100      |        | 100.63 | mg/L  | 100.6 | 95    | 105   |      |       |      |
| WG243629ICB     | ICB  | 04/29/08 23:18 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243629LFB     | LFB  | 04/29/08 23:31 | II080423-4 | 49.96908 |        | 53.16  | mg/L  | 106.4 | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/30/08 0:04  | II080423-4 | 49.96908 | 121    | 173.72 | mg/L  | 105.5 | 85    | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/30/08 0:14  | II080423-4 | 49.96908 | 121    | 177.15 | mg/L  | 112.4 | 85    | 115   | 1.96 | 20    |      |
| <b>WG243699</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243699ICV     | ICV  | 04/30/08 22:35 | II080115-3 | 100      |        | 97.97  | mg/L  | 98    | 95    | 105   |      |       |      |
| WG243699ICB     | ICB  | 04/30/08 22:39 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243699LFB     | LFB  | 04/30/08 22:54 | II080423-4 | 49.96908 |        | 52.72  | mg/L  | 105.5 | 85    | 115   |      |       |      |
| L68859-04AS     | AS   | 04/30/08 23:31 | II080423-4 | 49.96908 | 119    | 159.01 | mg/L  | 80.1  | 85    | 115   |      |       | MA   |
| L68859-04ASD    | ASD  | 04/30/08 23:35 | II080423-4 | 49.96908 | 119    | 171.28 | mg/L  | 104.6 | 85    | 115   | 7.43 | 20    |      |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243462</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243462ICV     | ICV  | 04/25/08 23:56 | II080115-3 | 2  |        | 1.9194 | mg/L  | 96    | 95     | 105   |      |       |      |
| WG243462ICB     | ICB  | 04/26/08 0:00  |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243462LFB     | LFB  | 04/26/08 0:15  | II080423-4 | .5 |        | .5358  | mg/L  | 107.2 | 85     | 115   |      |       |      |
| L68859-04AS     | AS   | 04/26/08 1:16  | II080423-4 | .5 | U      | .5211  | mg/L  | 104.2 | 85     | 115   |      |       |      |
| L68859-04ASD    | ASD  | 04/26/08 1:20  | II080423-4 | .5 | U      | .5483  | mg/L  | 109.7 | 85     | 115   | 5.09 | 20    |      |
| <b>WG243562</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45  | II080115-3 | 2  |        | 1.9074 | mg/L  | 95.4  | 95     | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48  |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02  | II080423-4 | .5 |        | .5588  | mg/L  | 111.8 | 85     | 115   |      |       |      |
| L68854-05AS     | AS   | 04/29/08 4:58  | II080423-4 | .5 | U      | .5453  | mg/L  | 109.1 | 85     | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01  | II080423-4 | .5 | U      | .5328  | mg/L  | 106.6 | 85     | 115   | 2.32 | 20    |      |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG243473</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243473ICV     | ICV  | 04/30/08 17:05 | II080405-1 | .00501 |        | .00515 | mg/L  | 102.8 | 95       | 105     |      |       |      |
| WG243473ICB     | ICB  | 04/30/08 17:08 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| <b>WG243658</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243658LRB     | LRB  | 04/30/08 18:48 |            |        |        | U      | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG243658LFB     | LFB  | 04/30/08 18:51 | II080421-3 | .002   |        | .00187 | mg/L  | 93.5  | 85       | 115     |      |       |      |
| L68859-01LFM    | LFM  | 04/30/08 19:27 | II080421-3 | .002   | U      | .00182 | mg/L  | 91    | 85       | 115     |      |       |      |
| L68859-01LFMD   | LFMD | 04/30/08 19:29 | II080421-3 | .002   | U      | .00181 | mg/L  | 90.5  | 85       | 115     | 0.55 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: **OJ06DZ**

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 2  |        | 2     | mg/L  | 100  | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | .5 |        | .505  | mg/L  | 101  | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | .5 | .1     | .596  | mg/L  | 99.2 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | .5 | .1     | .61   | mg/L  | 102  | 85    | 115   | 2.32 | 20    |      |

**WG243629**

|              |     |                |            |    |     |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|-----|-------|------|-------|-------|------|------|----|--|
| WG243629ICV  | ICV | 04/29/08 23:14 | II080115-3 | 2  |     | 1.99  | mg/L | 99.5  | 95    | 105  |      |    |  |
| WG243629ICB  | ICB | 04/29/08 23:18 |            |    |     | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243629LFB  | LFB | 04/29/08 23:31 | II080423-4 | .5 |     | .522  | mg/L | 104.4 | 85    | 115  |      |    |  |
| L68859-04AS  | AS  | 04/30/08 0:04  | II080423-4 | .5 | .05 | .565  | mg/L | 103   | 85    | 115  |      |    |  |
| L68859-04ASD | ASD | 04/30/08 0:14  | II080423-4 | .5 | .05 | .571  | mg/L | 104.2 | 85    | 115  | 1.06 | 20 |  |
| L68860-01AS  | AS  | 04/30/08 0:32  | II080423-4 | .5 | .91 | 1.468 | mg/L | 111.6 | 85    | 115  |      |    |  |
| L68860-01ASD | ASD | 04/30/08 0:36  | II080423-4 | .5 | .91 | 1.476 | mg/L | 113.2 | 85    | 115  | 0.54 | 20 |  |

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243611</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243611ICV     | ICV  | 05/01/08 10:19 | II080115-3 | 2  |        | 1.914 | mg/L  | 95.7  | 95    | 105   |      |       |      |
| WG243611ICB     | ICB  | 05/01/08 10:22 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243611LFB     | LFB  | 05/01/08 10:35 | II080423-4 | .5 |        | .501  | mg/L  | 100.2 | 85    | 115   |      |       |      |
| L68854-06AS     | AS   | 05/01/08 11:31 | II080423-4 | .5 | U      | .483  | mg/L  | 96.6  | 85    | 115   |      |       |      |
| L68854-06ASD    | ASD  | 05/01/08 11:34 | II080423-4 | .5 | U      | .466  | mg/L  | 93.2  | 85    | 115   | 3.58 | 20    |      |

**WG243819**

|              |     |                |            |    |   |       |      |      |       |      |      |    |  |
|--------------|-----|----------------|------------|----|---|-------|------|------|-------|------|------|----|--|
| WG243819ICV  | ICV | 05/05/08 10:55 | II080115-3 | 2  |   | 1.925 | mg/L | 96.3 | 95    | 105  |      |    |  |
| WG243819ICB  | ICB | 05/05/08 10:58 |            |    |   | U     | mg/L |      | -0.03 | 0.03 |      |    |  |
| WG243819LFB  | LFB | 05/05/08 11:11 | II080423-4 | .5 |   | .488  | mg/L | 97.6 | 85    | 115  |      |    |  |
| L68874-01AS  | AS  | 05/05/08 11:41 | II080423-4 | .5 | U | .494  | mg/L | 98.8 | 85    | 115  |      |    |  |
| L68874-01ASD | ASD | 05/05/08 11:44 | II080423-4 | .5 | U | .497  | mg/L | 99.4 | 85    | 115  | 0.61 | 20 |  |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243635</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243635ICV     | ICV  | 04/29/08 18:37 | WI080312-1 | 2.416 |        | 2.405 | mg/L  | 99.5  | 90    | 110   |     |       |      |
| WG243635ICB     | ICB  | 04/29/08 18:38 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG243616</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243616ICV     | ICV  | 04/29/08 21:24 | WI080312-1 | 2.416 |        | 2.415 | mg/L  | 100   | 90    | 110   |     |       |      |
| WG243616ICB     | ICB  | 04/29/08 21:26 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| WG243616LFB1    | LFB  | 04/29/08 21:27 | WI080312-1 | 2     |        | 1.925 | mg/L  | 96.3  | 90    | 110   |     |       |      |
| WG243616LFB2    | LFB  | 04/29/08 22:05 | WI080312-1 | 2     |        | 1.987 | mg/L  | 99.4  | 90    | 110   |     |       |      |
| L68855-01AS     | AS   | 04/29/08 22:34 | WI080312-1 | 20    | 9.4    | 29.73 | mg/L  | 101.7 | 90    | 110   |     |       |      |
| L68855-02DUP    | DUP  | 04/29/08 22:37 |            |       | 19.3   | 19.98 | mg/L  |       |       |       | 3.5 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243669</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG243669LCSW3   | LCSW | 04/30/08 13:34 | PCN27958 | 6  |        | 6.07  | units | 101.2 | 90    | 110   |     |       |      |
| WG243669LCSW6   | LCSW | 04/30/08 16:09 | PCN27958 | 6  |        | 6.08  | units | 101.3 | 90    | 110   |     |       |      |
| WG243669LCSW9   | LCSW | 04/30/08 19:19 | PCN27958 | 6  |        | 6.07  | units | 101.2 | 90    | 110   |     |       |      |
| L68862-01DUP    | DUP  | 04/30/08 20:47 |          |    | 8.4    | 8.37  | units |       |       |       | 0.4 | 20    |      |
| WG243669LCSW12  | LCSW | 04/30/08 22:38 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG243669LCSW15  | LCSW | 05/01/08 1:25  | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 20       |        | 19.97  | mg/L  | 99.9  | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | 99.76186 |        | 105.4  | mg/L  | 105.7 | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 99.76186 | 10.4   | 113.81 | mg/L  | 103.7 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 99.76186 | 10.4   | 117.96 | mg/L  | 107.8 | 85    | 115   | 3.58 | 20    |      |

**WG243629**

|              |     |                |            |          |      |        |      |       |      |     |      |    |  |
|--------------|-----|----------------|------------|----------|------|--------|------|-------|------|-----|------|----|--|
| WG243629ICV  | ICV | 04/29/08 23:14 | II080115-3 | 20       |      | 19.93  | mg/L | 99.7  | 95   | 105 |      |    |  |
| WG243629ICB  | ICB | 04/29/08 23:18 |            |          |      | U      | mg/L |       | -0.9 | 0.9 |      |    |  |
| WG243629LFB  | LFB | 04/29/08 23:31 | II080423-4 | 99.76186 |      | 104.76 | mg/L | 105   | 85   | 115 |      |    |  |
| L68859-04AS  | AS  | 04/30/08 0:04  | II080423-4 | 99.76186 | 13.1 | 119.95 | mg/L | 107.1 | 85   | 115 |      |    |  |
| L68859-04ASD | ASD | 04/30/08 0:14  | II080423-4 | 99.76186 | 13.1 | 119.9  | mg/L | 107.1 | 85   | 115 | 0.04 | 20 |  |
| L68860-01AS  | AS  | 04/30/08 0:32  | II080423-4 | 99.76186 | 66.4 | 173.52 | mg/L | 107.4 | 85   | 115 |      |    |  |
| L68860-01ASD | ASD | 04/30/08 0:36  | II080423-4 | 99.76186 | 66.4 | 173.1  | mg/L | 107   | 85   | 115 | 0.24 | 20 |  |

**Residue, Filterable (TDS) @180C**

160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243811</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG243811PBW     | PBW  | 05/02/08 13:15 |          |     |        | 14    | mg/L  |       | -20   | 20    |     |       |      |
| WG243811LCSW    | LCSW | 05/02/08 13:16 | PCN29262 | 260 |        | 288   | mg/L  | 110.8 | 80    | 120   |     |       |      |
| L68861-02DUP    | DUP  | 05/02/08 13:44 |          |     | 920    | 926   | mg/L  |       |       |       | 0.7 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Selenium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243541</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243541ICV     | ICV  | 04/28/08 16:37 | MS080424-4 | .05 |        | .05142 | mg/L  | 102.8 | 90      | 110    |      |       |      |
| WG243541ICB     | ICB  | 04/28/08 16:43 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243541LFB     | LFB  | 04/28/08 16:54 | MS080424-2 | .05 |        | .05187 | mg/L  | 103.7 | 85      | 115    |      |       |      |
| L68859-01AS     | AS   | 04/28/08 18:28 | MS080424-2 | .05 | .0006  | .05056 | mg/L  | 99.9  | 70      | 130    |      |       |      |
| L68859-01ASD    | ASD  | 04/28/08 18:34 | MS080424-2 | .05 | .0006  | .05089 | mg/L  | 100.6 | 70      | 130    | 0.65 | 20    |      |

**WG243742**

|              |     |               |            |     |       |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-----|-------|--------|------|-------|---------|--------|------|----|--|
| WG243742ICV  | ICV | 05/02/08 2:16 | MS080424-4 | .05 |       | .05463 | mg/L | 109.3 | 90      | 110    |      |    |  |
| WG243742ICB  | ICB | 05/02/08 2:22 |            |     |       | .00011 | mg/L |       | -0.0003 | 0.0003 |      |    |  |
| WG243742LFB  | LFB | 05/02/08 2:33 | MS080424-2 | .05 |       | .04846 | mg/L | 96.9  | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1  | .0017 | .10208 | mg/L | 100.4 | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1  | .0017 | .10292 | mg/L | 101.2 | 70      | 130    | 0.82 | 20 |  |
| L68859-03AS  | AS  | 05/02/08 4:06 | MS080424-2 | .05 | .0006 | .05687 | mg/L | 112.5 | 70      | 130    |      |    |  |
| L68859-03ASD | ASD | 05/02/08 4:12 | MS080424-2 | .05 | .0006 | .0546  | mg/L | 108   | 70      | 130    | 4.07 | 20 |  |

**Sodium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45 | II080115-3 | 100      |        | 99.38  | mg/L  | 99.4  | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02 | II080423-4 | 98.21624 |        | 109.71 | mg/L  | 111.7 | 85    | 115   |      |       |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | 98.21624 | 209    | 315.36 | mg/L  | 108.3 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | 98.21624 | 209    | 306.51 | mg/L  | 99.3  | 85    | 115   | 2.85 | 20    |      |

**WG243538**

|              |     |               |            |          |     |        |      |       |      |     |      |    |    |
|--------------|-----|---------------|------------|----------|-----|--------|------|-------|------|-----|------|----|----|
| WG243538ICV  | ICV | 04/29/08 6:08 | II080115-3 | 100      |     | 100.7  | mg/L | 100.7 | 95   | 105 |      |    |    |
| WG243538ICV  | ICV | 04/29/08 6:08 | II080115-3 | 100      |     | 102.56 | mg/L | 102.6 | 95   | 105 |      |    |    |
| WG243538ICB  | ICB | 04/29/08 6:12 |            |          |     | U      | mg/L |       | -6   | 6   |      |    |    |
| WG243538ICB  | ICB | 04/29/08 6:12 |            |          |     | U      | mg/L |       | -0.9 | 0.9 |      |    |    |
| WG243538LFB  | LFB | 04/29/08 6:26 | II080423-4 | 98.21624 |     | 111.7  | mg/L | 113.7 | 85   | 115 |      |    |    |
| WG243538LFB  | LFB | 04/29/08 6:26 | II080423-4 | 98.21624 |     | 112.48 | mg/L | 114.5 | 85   | 115 |      |    |    |
| L68859-04AS  | AS  | 04/29/08 7:11 | II080423-4 | 98.21624 | 203 | 288.02 | mg/L | 86.6  | 85   | 115 |      |    |    |
| L68859-04ASD | ASD | 04/29/08 7:14 | II080423-4 | 98.21624 | 203 | 267.5  | mg/L | 65.7  | 85   | 115 | 7.39 | 20 | MA |

**Sulfate**

SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|-----|-------|------|
| <b>WG243705</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243705PBW     | PBW  | 04/30/08 16:20 |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243705LCSW    | LCSW | 04/30/08 16:22 | WC080430-2 | 100 |        | 100   | mg/L  | 100 | 80    | 120   |     |       |      |
| L68859-02DUP    | DUP  | 04/30/08 17:14 |            |     | 1540   | 1553  | mg/L  |     |       |       | 0.8 | 20    |      |
| <b>WG243786</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243786PBW     | PBW  | 05/02/08 9:10  |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243786LCSW    | LCSW | 05/02/08 9:16  | WC080430-2 | 100 |        | 101   | mg/L  | 101 | 80    | 120   |     |       |      |
| L68859-07DUP    | DUP  | 05/02/08 10:23 |            |     | 1750   | 1708  | mg/L  |     |       |       | 2.4 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

Project ID: OJ06DZ

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243541</b> |      |                |            |       |        |        |       |       |         |        |      |       |      |
| WG243541ICV     | ICV  | 04/28/08 16:37 | MS080424-4 | .05   |        | .05191 | mg/L  | 103.8 | 90      | 110    |      |       |      |
| WG243541ICB     | ICB  | 04/28/08 16:43 |            |       |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243541LFB     | LFB  | 04/28/08 16:54 | MS080424-2 | .0501 |        | .0519  | mg/L  | 103.6 | 85      | 115    |      |       |      |
| L68859-01AS     | AS   | 04/28/08 18:28 | MS080424-2 | .0501 | U      | .04795 | mg/L  | 95.7  | 70      | 130    |      |       |      |
| L68859-01ASD    | ASD  | 04/28/08 18:34 | MS080424-2 | .0501 | U      | .04674 | mg/L  | 93.3  | 70      | 130    | 2.56 | 20    |      |

**WG243742**

|              |     |               |            |       |   |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-------|---|--------|------|-------|---------|--------|------|----|--|
| WG243742ICV  | ICV | 05/02/08 2:16 | MS080424-4 | .05   |   | .05349 | mg/L | 107   | 90      | 110    |      |    |  |
| WG243742ICB  | ICB | 05/02/08 2:22 |            |       |   | U      | mg/L |       | -0.0003 | 0.0003 |      |    |  |
| WG243742LFB  | LFB | 05/02/08 2:33 | MS080424-2 | .0501 |   | .0518  | mg/L | 103.4 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1002 | U | .10668 | mg/L | 106.5 | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1002 | U | .10752 | mg/L | 107.3 | 70      | 130    | 0.78 | 20 |  |
| L68859-03AS  | AS  | 05/02/08 4:06 | MS080424-2 | .0501 | U | .05267 | mg/L | 105.1 | 70      | 130    |      |    |  |
| L68859-03ASD | ASD | 05/02/08 4:12 | MS080424-2 | .0501 | U | .05336 | mg/L | 106.5 | 70      | 130    | 1.3  | 20 |  |

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243454</b> |      |                |            |    |        |       |       |       |       |       |     |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 2  |        | 1.937 | mg/L  | 96.9  | 95    | 105   |     |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |     |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | .5 |        | .516  | mg/L  | 103.2 | 85    | 115   |     |       |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | .5 | U      | .5    | mg/L  | 100   | 85    | 115   |     |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   | 4.5 | 20    |      |

**WG243462**

|              |     |                |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243462ICV  | ICV | 04/25/08 23:56 | II080115-3 | 2  |   | 1.912 | mg/L | 95.6  | 95    | 105  |      |    |  |
| WG243462ICB  | ICB | 04/26/08 0:00  |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243462LFB  | LFB | 04/26/08 0:15  | II080423-4 | .5 |   | .508  | mg/L | 101.6 | 85    | 115  |      |    |  |
| L68859-04AS  | AS  | 04/26/08 1:16  | II080423-4 | .5 | U | .503  | mg/L | 100.6 | 85    | 115  |      |    |  |
| L68859-04ASD | ASD | 04/26/08 1:20  | II080423-4 | .5 | U | .525  | mg/L | 105   | 85    | 115  | 4.28 | 20 |  |



FMI Gold & Copper - Sierrita

ACZ Project ID: **L68859**

| ACZ ID           | WORKNUM  | PARAMETER                       | METHOD          | QUAL | DESCRIPTION   |
|------------------|----------|---------------------------------|-----------------|------|---|
| <b>L68859-01</b> | WG243454 | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |
| <b>L68859-02</b> | WG243454 | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |
| <b>L68859-03</b> | WG243454 | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |
| <b>L68859-04</b> | WG243462 | Aluminum, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  |          | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Chromium, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  | WG243538 | Sodium, dissolved               | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68859**

| ACZ ID           | WORKNUM  | PARAMETER                       | METHOD          | QUAL | DESCRIPTION   |
|------------------|----------|---------------------------------|-----------------|------|---|
| <b>L68859-05</b> | WG243462 | Aluminum, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].   |
|                  |          | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Chromium, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].   |
|                  | WG243699 | Magnesium, dissolved            | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243538 | Sodium, dissolved               | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL).  |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |
| <b>L68859-06</b> | WG243462 | Aluminum, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].   |
|                  |          | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Chromium, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].   |
|                  | WG243699 | Magnesium, dissolved            | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243538 | Sodium, dissolved               | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL).  |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

| ACZ ID           | WORKNUM  | PARAMETER                       | METHOD          | QUAL | DESCRIPTION   |
|------------------|----------|---------------------------------|-----------------|------|---|
| <b>L68859-07</b> | WG243462 | Aluminum, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].   |
|                  |          | Calcium, dissolved              | M200.7 ICP      | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Chromium, dissolved             | M200.7 ICP      | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].   |
|                  | WG243699 | Magnesium, dissolved            | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243538 | Sodium, dissolved               | M200.7 ICP      | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.  |
|                  | WG243936 | Fluoride                        | SM4500F-C       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                                 | SM4500F-C       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL).  |
|                  | WG243811 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68859**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68859  
 Date Received: 4/24/2008  
 Received By:  
 Date Printed: 4/24/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 2152      | 3.8       | 18          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68859  
 Date Received: 4/24/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID  | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68859-01 | IW-3A      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68859-02 | IW-4       |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68859-03 | IW-2A      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68859-04 | IW-8       |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68859-05 | IW-9       |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68859-06 | IW-24      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68859-07 | DUP042208A |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

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

Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 16, 2008

Project ID: OJ06DZ  
ACZ Project ID: L68854 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 24, 2008. This project was assigned to ACZ's project number, L68854. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68854. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.





**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-5

ACZ Sample ID: **L68854-01**

Date Sampled: 04/21/08 13:45

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1550   |      |    | mg/L  | 50  | 250 | 04/30/08 16:41 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-6A

ACZ Sample ID: **L68854-02**

Date Sampled: 04/21/08 11:30

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1920   |      |    | mg/L  | 50  | 250 | 04/30/08 16:43 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-10

ACZ Sample ID: **L68854-03**

Date Sampled: 04/21/08 13:00

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1470   |      |    | mg/L  | 50  | 250 | 04/30/08 16:46 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-11

ACZ Sample ID: **L68854-04**

Date Sampled: 04/21/08 12:00

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1770   |      |    | mg/L  | 50  | 250 | 04/30/08 16:50 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-22

ACZ Sample ID: **L68854-05**

Date Sampled: 04/21/08 12:30

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1760   |      |    | mg/L  | 50  | 250 | 04/30/08 16:53 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-23

ACZ Sample ID: **L68854-06**

Date Sampled: 04/21/08 13:25

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1710   |      |    | mg/L  | 10  | 50  | 04/30/08 16:55 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: DUP042108A

ACZ Sample ID: **L68854-07**

Date Sampled: 04/21/08 00:00

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1850   |      |    | mg/L  | 50  | 250 | 04/30/08 16:58 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: DUP042108B

ACZ Sample ID: **L68854-08**

Date Sampled: 04/21/08 00:00

Date Received: 04/24/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1410   |      |    | mg/L  | 50  | 250 | 04/30/08 17:00 | ear     |

Arizona license number: AZ0102



## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

## Comments

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Alkalinity as CaCO3** SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243813</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG243813PBW1    | PBW  | 05/02/08 15:09 |            |     |        | 14.9  | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW1   | LCSW | 05/02/08 15:19 | WC080314-1 | 820 |        | 736.4 | mg/L  | 89.8 | 90    | 110   |     |       |      |
| WG243813PBW2    | PBW  | 05/02/08 17:42 |            |     |        | 8.6   | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW2   | LCSW | 05/02/08 17:52 | WC080314-1 | 820 |        | 751.5 | mg/L  | 91.6 | 90    | 110   |     |       |      |
| WG243813PBW3    | PBW  | 05/02/08 20:30 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW3   | LCSW | 05/02/08 20:41 | WC080314-1 | 820 |        | 795.4 | mg/L  | 97   | 90    | 110   |     |       |      |
| L68854-07DUP    | DUP  | 05/02/08 22:01 |            |     | 119    | 118.8 | mg/L  |      |       |       | 0.2 | 20    |      |
| L68859-06DUP    | DUP  | 05/02/08 23:21 |            |     | 137    | 136.7 | mg/L  |      |       |       | 0.2 | 20    |      |
| WG243813PBW4    | PBW  | 05/02/08 23:27 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243813LCSW4   | LCSW | 05/02/08 23:38 | WC080314-1 | 820 |        | 789.6 | mg/L  | 96.3 | 90    | 110   |     |       |      |
| WG243813LCSW5   | LCSW | 05/03/08 2:32  | WC080314-1 | 820 |        | 794.3 | mg/L  | 96.9 | 90    | 110   |     |       |      |

**Aluminum, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 2  |        | 1.971 | mg/L  | 98.6  | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | 1  |        | 1.056 | mg/L  | 105.6 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | 1  | U      | 1.08  | mg/L  | 108   | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | 1  | U      | 1.07  | mg/L  | 107   | 85    | 115   | 0.93 | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 1  | .14    | 1.188 | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 1  | .14    | 1.228 | mg/L  | 108.8 | 85    | 115   | 3.31 | 20    |      |

**WG243562**

|              |     |               |            |   |   |       |      |       |       |      |      |    |    |
|--------------|-----|---------------|------------|---|---|-------|------|-------|-------|------|------|----|----|
| WG243562ICV  | ICV | 04/29/08 3:45 | II080115-3 | 2 |   | 2.002 | mg/L | 100.1 | 95    | 105  |      |    |    |
| WG243562ICB  | ICB | 04/29/08 3:48 |            |   |   | U     | mg/L |       | -0.09 | 0.09 |      |    |    |
| WG243562LFB  | LFB | 04/29/08 4:02 | II080423-4 | 1 |   | 1.091 | mg/L | 109.1 | 85    | 115  |      |    |    |
| L68836-01AS  | AS  | 04/29/08 4:09 | II080423-4 | 1 | U | 1.189 | mg/L | 118.9 | 85    | 115  |      |    | MA |
| L68836-01ASD | ASD | 04/29/08 4:13 | II080423-4 | 1 | U | 1.145 | mg/L | 114.5 | 85    | 115  | 3.77 | 20 |    |
| L68854-05AS  | AS  | 04/29/08 4:58 | II080423-4 | 1 | U | 1.125 | mg/L | 112.5 | 85    | 115  |      |    |    |
| L68854-05ASD | ASD | 04/29/08 5:01 | II080423-4 | 1 | U | 1.098 | mg/L | 109.8 | 85    | 115  | 2.43 | 20 |    |

**Antimony, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243518</b> |      |               |            |        |        |        |       |       |         |        |      |       |      |
| WG243518ICV     | ICV  | 04/29/08 5:34 | MS080424-4 | .02006 |        | .0201  | mg/L  | 100.2 | 90      | 110    |      |       |      |
| WG243518ICB     | ICB  | 04/29/08 5:40 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG243518LFB     | LFB  | 04/29/08 5:51 | MS080424-2 | .01    |        | .01012 | mg/L  | 101.2 | 85      | 115    |      |       |      |
| L68832-03AS     | AS   | 04/29/08 6:15 | MS080424-2 | .01    | U      | .01024 | mg/L  | 102.4 | 70      | 130    |      |       |      |
| L68832-03ASD    | ASD  | 04/29/08 6:21 | MS080424-2 | .01    | U      | .01027 | mg/L  | 102.7 | 70      | 130    | 0.29 | 20    |      |
| L68854-02AS     | AS   | 04/29/08 7:26 | MS080424-2 | .01    | U      | .01008 | mg/L  | 100.8 | 70      | 130    |      |       |      |
| L68854-02ASD    | ASD  | 04/29/08 7:32 | MS080424-2 | .01    | U      | .00997 | mg/L  | 99.7  | 70      | 130    | 1.1  | 20    |      |

**WG243742**

|              |     |               |            |        |   |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|--------|---|--------|------|-------|---------|--------|------|----|--|
| WG243742ICV  | ICV | 05/02/08 2:16 | MS080424-4 | .02006 |   | .02147 | mg/L | 107   | 90      | 110    |      |    |  |
| WG243742ICB  | ICB | 05/02/08 2:22 |            |        |   | U      | mg/L |       | -0.0012 | 0.0012 |      |    |  |
| WG243742LFB  | LFB | 05/02/08 2:33 | MS080424-2 | .01    |   | .01077 | mg/L | 107.7 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .02    | U | .02204 | mg/L | 110.2 | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .02    | U | .02134 | mg/L | 106.7 | 70      | 130    | 3.23 | 20 |  |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243518</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243518 CV     | ICV  | 04/29/08 5:34 | MS080424-4 | .05 |        | .05068 | mg/L  | 101.4 | 90      | 110    |      |       |      |
| WG243518 CB     | ICB  | 04/29/08 5:40 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243518 LFB    | LFB  | 04/29/08 5:51 | MS080424-2 | .05 |        | .04911 | mg/L  | 98.2  | 85      | 115    |      |       |      |
| L68832-03AS     | AS   | 04/29/08 6:15 | MS080424-2 | .05 | .0013  | .05183 | mg/L  | 101.1 | 70      | 130    |      |       |      |
| L68832-03ASD    | ASD  | 04/29/08 6:21 | MS080424-2 | .05 | .0013  | .05316 | mg/L  | 103.7 | 70      | 130    | 2.53 | 20    |      |
| L68854-02AS     | AS   | 04/29/08 7:26 | MS080424-2 | .05 | .0022  | .05315 | mg/L  | 101.9 | 70      | 130    |      |       |      |
| L68854-02ASD    | ASD  | 04/29/08 7:32 | MS080424-2 | .05 | .0022  | .05446 | mg/L  | 104.5 | 70      | 130    | 2.43 | 20    |      |

**WG243742**

|              |     |               |            |     |      |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-----|------|--------|------|-------|---------|--------|------|----|--|
| WG243742 CV  | ICV | 05/02/08 2:16 | MS080424-4 | .05 |      | .05377 | mg/L | 107.5 | 90      | 110    |      |    |  |
| WG243742 CB  | ICB | 05/02/08 2:22 |            |     |      | U      | mg/L |       | -0.0015 | 0.0015 |      |    |  |
| WG243742 LFB | LFB | 05/02/08 2:33 | MS080424-2 | .05 |      | .05192 | mg/L | 103.8 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1  | .002 | .106   | mg/L | 104   | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1  | .002 | .1078  | mg/L | 105.8 | 70      | 130    | 1.68 | 20 |  |

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG243562 CV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.9834 | mg/L  | 99.2  | 95     | 105   |      |       |      |
| WG243562 CB     | ICB  | 04/29/08 3:48 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243562 LFB    | LFB  | 04/29/08 4:02 | II080423-4 | .5 |        | .53    | mg/L  | 106   | 85     | 115   |      |       |      |
| L68836-01AS     | AS   | 04/29/08 4:09 | II080423-4 | .5 | .007   | .5572  | mg/L  | 110   | 85     | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/29/08 4:13 | II080423-4 | .5 | .007   | .5521  | mg/L  | 109   | 85     | 115   | 0.92 | 20    |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | .5 | .044   | .5723  | mg/L  | 105.7 | 85     | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | .5 | .044   | .5528  | mg/L  | 101.8 | 85     | 115   | 3.47 | 20    |      |

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC     | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243742</b> |      |               |            |        |        |        |       |      |         |        |      |       |      |
| WG243742 CV     | ICV  | 05/02/08 2:16 | MS080424-4 | .05    |        | .04955 | mg/L  | 99.1 | 90      | 110    |      |       |      |
| WG243742 CB     | ICB  | 05/02/08 2:22 |            |        |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243742 LFB    | LFB  | 05/02/08 2:33 | MS080424-2 | .05005 |        | .04965 | mg/L  | 99.2 | 85      | 115    |      |       |      |
| L68854-03AS     | AS   | 05/02/08 2:57 | MS080424-2 | .1001  | U      | .0965  | mg/L  | 96.4 | 70      | 130    |      |       |      |
| L68854-03ASD    | ASD  | 05/02/08 3:02 | MS080424-2 | .1001  | U      | .09724 | mg/L  | 97.1 | 70      | 130    | 0.76 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243518</b> |      |               |            |     |        |        |       |      |         |        |      |       |      |
| WG243518ICV     | ICV  | 04/29/08 5:34 | MS080424-4 | .05 |        | .04982 | mg/L  | 99.6 | 90      | 110    |      |       |      |
| WG243518ICB     | ICB  | 04/29/08 5:40 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243518LFB     | LFB  | 04/29/08 5:51 | MS080424-2 | .05 |        | .04818 | mg/L  | 96.4 | 85      | 115    |      |       |      |
| L68832-03AS     | AS   | 04/29/08 6:15 | MS080424-2 | .05 | U      | .04688 | mg/L  | 93.8 | 70      | 130    |      |       |      |
| L68832-03ASD    | ASD  | 04/29/08 6:21 | MS080424-2 | .05 | U      | .0474  | mg/L  | 94.8 | 70      | 130    | 1.1  | 20    |      |
| L68854-02AS     | AS   | 04/29/08 7:26 | MS080424-2 | .05 | .0001  | .0445  | mg/L  | 88.8 | 70      | 130    |      |       |      |
| L68854-02ASD    | ASD  | 04/29/08 7:32 | MS080424-2 | .05 | .0001  | .0447  | mg/L  | 89.2 | 70      | 130    | 0.45 | 20    |      |

**WG243742**

|              |     |               |            |     |   |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-----|---|--------|------|-------|---------|--------|------|----|--|
| WG243742ICV  | ICV | 05/02/08 2:16 | MS080424-4 | .05 |   | .05062 | mg/L | 101.2 | 90      | 110    |      |    |  |
| WG243742ICB  | ICB | 05/02/08 2:22 |            |     |   | U      | mg/L |       | -0.0003 | 0.0003 |      |    |  |
| WG243742LFB  | LFB | 05/02/08 2:33 | MS080424-2 | .05 |   | .05043 | mg/L | 100.9 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1  | U | .09576 | mg/L | 95.8  | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1  | U | .09478 | mg/L | 94.8  | 70      | 130    | 1.03 | 20 |  |

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 100      |        | 100.14 | mg/L  | 100.1 | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | 67.97008 |        | 72.12  | mg/L  | 106.1 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | 67.97008 | .4     | 71.99  | mg/L  | 105.3 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | 67.97008 | .4     | 71.52  | mg/L  | 104.6 | 85    | 115   | 0.66 | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 67.97008 | 522    | 552.29 | mg/L  | 44.6  | 85    | 115   |      |       | M3   |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 67.97008 | 522    | 566.2  | mg/L  | 65    | 85    | 115   | 2.49 | 20    | M3   |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243623</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG243623ICB     | ICB  | 04/29/08 13:25 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG243623ICV     | ICV  | 04/29/08 13:25 | WI071212-1 | 54.945 |        | 58    | mg/L  | 105.6 | 90    | 110   |     |       |      |
| WG243623LFB1    | LFB  | 04/29/08 15:06 | WI071130-1 | 30     |        | 32.8  | mg/L  | 109.3 | 90    | 110   |     |       |      |
| WG243623LFB2    | LFB  | 04/29/08 15:15 | WI071130-1 | 30     |        | 33    | mg/L  | 110   | 90    | 110   |     |       |      |
| L68830-12AS     | AS   | 04/29/08 15:15 | WI071130-1 | 30     | 17     | 48.5  | mg/L  | 105   | 90    | 110   |     |       |      |
| L68854-01DUP    | DUP  | 04/29/08 15:23 |            |        | 160    | 167   | mg/L  |       |       |       | 4.3 | 20    |      |

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.929 | mg/L  | 96.5  | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02 | II080423-4 | .5 |        | .537  | mg/L  | 107.4 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/29/08 4:09 | II080423-4 | .5 | U      | .554  | mg/L  | 110.8 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/29/08 4:13 | II080423-4 | .5 | U      | .549  | mg/L  | 109.8 | 85    | 115   | 0.91 | 20    |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | .5 | U      | .516  | mg/L  | 103.2 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | .5 | U      | .509  | mg/L  | 101.8 | 85    | 115   | 1.37 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243611</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243611ICV     | ICV  | 05/01/08 10:19 | II080115-3 | 2  |        | 1.944 | mg/L  | 97.2  | 95    | 105   |      |       |      |
| WG243611ICB     | ICB  | 05/01/08 10:22 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243611LFB     | LFB  | 05/01/08 10:35 | II080423-4 | .5 |        | .509  | mg/L  | 101.8 | 85    | 115   |      |       |      |
| L68836-02AS     | AS   | 05/01/08 10:45 | II080423-4 | .5 | .15    | .67   | mg/L  | 104   | 85    | 115   |      |       |      |
| L68836-02ASD    | ASD  | 05/01/08 10:48 | II080423-4 | .5 | .15    | .657  | mg/L  | 101.4 | 85    | 115   | 1.96 | 20    |      |
| L68854-06AS     | AS   | 05/01/08 11:31 | II080423-4 | .5 | U      | .49   | mg/L  | 98    | 85    | 115   |      |       |      |
| L68854-06ASD    | ASD  | 05/01/08 11:34 | II080423-4 | .5 | U      | .472  | mg/L  | 94.4  | 85    | 115   | 3.74 | 20    |      |

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units    | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|----------|------|-------|-------|-----|-------|------|
| <b>WG243669</b> |      |                |          |        |        |       |          |      |       |       |     |       |      |
| WG243669LCSW1   | LCSW | 04/30/08 13:20 | PCN28873 | 1408.8 |        | 1386  | µmhos/cm | 98.4 | 90    | 110   |     |       |      |
| WG243669LCSW4   | LCSW | 04/30/08 15:54 | PCN28873 | 1408.8 |        | 1377  | µmhos/cm | 97.7 | 90    | 110   |     |       |      |
| L68853-05DUP    | DUP  | 04/30/08 17:32 |          |        | 359    | 361   | µmhos/cm |      |       |       | 0.6 | 20    |      |
| L68855-02DUP    | DUP  | 04/30/08 18:59 |          |        | 2440   | 2440  | µmhos/cm |      |       |       | 0   | 20    |      |
| WG243669LCSW7   | LCSW | 04/30/08 19:06 | PCN28873 | 1408.8 |        | 1377  | µmhos/cm | 97.7 | 90    | 110   |     |       |      |
| WG243669LCSW10  | LCSW | 04/30/08 22:24 | PCN28873 | 1408.8 |        | 1378  | µmhos/cm | 97.8 | 90    | 110   |     |       |      |
| WG243669LCSW13  | LCSW | 05/01/08 1:11  | PCN28873 | 1408.8 |        | 1375  | µmhos/cm | 97.6 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.902 | mg/L  | 95.1  | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02 | II080423-4 | .5 |        | .522  | mg/L  | 104.4 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/29/08 4:09 | II080423-4 | .5 | .01    | .551  | mg/L  | 108.2 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/29/08 4:13 | II080423-4 | .5 | .01    | .545  | mg/L  | 107   | 85    | 115   | 1.09 | 20    |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | .5 | U      | .528  | mg/L  | 105.6 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | .5 | U      | .51   | mg/L  | 102   | 85    | 115   | 3.47 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG243490</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG243490ICV     | ICV  | 04/25/08 21:32 | WI080411-5 | .3 |        | .2917 | mg/L  | 97.2  | 90     | 110   |     |       |      |
| WG243490ICB     | ICB  | 04/25/08 21:32 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243434LRB     | LRB  | 04/25/08 21:33 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243434LFB     | LFB  | 04/25/08 21:34 | WI080411-2 | .2 |        | .1911 | mg/L  | 95.6  | 90     | 110   |     |       |      |
| L68842-02LFM    | LFM  | 04/25/08 21:38 | WI080411-2 | .2 | .157   | .3569 | mg/L  | 100   | 90     | 110   |     |       |      |
| L68854-03DUP    | DUP  | 04/25/08 21:48 |            |    | .013   | .0136 | mg/L  |       |        |       | 4.5 | 20    | RA   |
| L68854-04LFM    | LFM  | 04/25/08 21:49 | WI080411-2 | .2 | U      | .2132 | mg/L  | 106.6 | 90     | 110   |     |       |      |
| L68842-01DUP    | DUP  | 04/25/08 22:00 |            |    | 1.65   | 1.647 | mg/L  |       |        |       | 0.2 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Fluoride** SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243727</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243727ICV     | ICV  | 05/01/08 12:12 | WC080416-1 | 2  |        | 1.95  | mg/L  | 97.5  | 90    | 110   |      |       |      |
| WG243727ICB     | ICB  | 05/01/08 12:19 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |      |       |      |
| WG243727LFB1    | LFB  | 05/01/08 12:30 | WC080226-1 | 5  |        | 5.24  | mg/L  | 104.8 | 90    | 110   |      |       |      |
| WG243727LFB2    | LFB  | 05/02/08 10:13 | WC080226-1 | 5  |        | 4.91  | mg/L  | 98.2  | 90    | 110   |      |       |      |
| L68830-09AS     | AS   | 05/02/08 10:20 | WC080226-1 | 5  | .2     | 3.08  | mg/L  | 57.6  | 90    | 110   |      |       | M2   |
| L68830-09DUP    | DUP  | 05/02/08 10:23 |            |    | .2     | .18   | mg/L  |       |       |       | 10.5 | 20    | RA   |
| <b>WG243936</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243936ICV     | ICV  | 05/06/08 14:42 | WC080502-2 | 2  |        | 1.97  | mg/L  | 98.5  | 90    | 110   |      |       |      |
| WG243936ICB     | ICB  | 05/06/08 14:49 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |      |       |      |
| WG243936LFB1    | LFB  | 05/06/08 14:55 | WC080226-1 | 5  |        | 4.75  | mg/L  | 95    | 90    | 110   |      |       |      |
| L68854-03AS     | AS   | 05/06/08 15:48 | WC080226-1 | 5  | .2     | 4.06  | mg/L  | 77.2  | 90    | 110   |      |       | M2   |
| L68854-03DUP    | DUP  | 05/06/08 15:52 |            |    | .2     | .18   | mg/L  |       |       |       | 10.5 | 20    | RA   |
| WG243936LFB2    | LFB  | 05/06/08 16:27 | WC080226-1 | 5  |        | 4.81  | mg/L  | 96.2  | 90    | 110   |      |       |      |

**Iron, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG243562ICV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.913 | mg/L  | 95.7  | 95    | 105   |      |       |      |
| WG243562ICB     | ICB  | 04/29/08 3:48 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243562LFB     | LFB  | 04/29/08 4:02 | II080423-4 | 1  |        | 1.064 | mg/L  | 106.4 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/29/08 4:09 | II080423-4 | 1  | U      | 1.118 | mg/L  | 111.8 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/29/08 4:13 | II080423-4 | 1  | U      | 1.103 | mg/L  | 110.3 | 85    | 115   | 1.35 | 20    |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | 1  | U      | 1.05  | mg/L  | 105   | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | 1  | U      | 1.026 | mg/L  | 102.6 | 85    | 115   | 2.31 | 20    |      |

**Lead, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243518</b> |      |               |            |     |        |        |       |      |         |        |      |       |      |
| WG243518ICV     | ICV  | 04/29/08 5:34 | MS080424-4 | .05 |        | .04961 | mg/L  | 99.2 | 90      | 110    |      |       |      |
| WG243518ICB     | ICB  | 04/29/08 5:40 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243518LFB     | LFB  | 04/29/08 5:51 | MS080424-2 | .05 |        | .04662 | mg/L  | 93.2 | 85      | 115    |      |       |      |
| L68832-03AS     | AS   | 04/29/08 6:15 | MS080424-2 | .05 | U      | .04392 | mg/L  | 87.8 | 70      | 130    |      |       |      |
| L68832-03ASD    | ASD  | 04/29/08 6:21 | MS080424-2 | .05 | U      | .04408 | mg/L  | 88.2 | 70      | 130    | 0.36 | 20    |      |
| L68854-02AS     | AS   | 04/29/08 7:26 | MS080424-2 | .05 | .0005  | .04391 | mg/L  | 86.8 | 70      | 130    |      |       |      |
| L68854-02ASD    | ASD  | 04/29/08 7:32 | MS080424-2 | .05 | .0005  | .04438 | mg/L  | 87.8 | 70      | 130    | 1.06 | 20    |      |
| <b>WG243742</b> |      |               |            |     |        |        |       |      |         |        |      |       |      |
| WG243742ICV     | ICV  | 05/02/08 2:16 | MS080424-4 | .05 |        | .04861 | mg/L  | 97.2 | 90      | 110    |      |       |      |
| WG243742ICB     | ICB  | 05/02/08 2:22 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243742LFB     | LFB  | 05/02/08 2:33 | MS080424-2 | .05 |        | .0487  | mg/L  | 97.4 | 85      | 115    |      |       |      |
| L68854-03AS     | AS   | 05/02/08 2:57 | MS080424-2 | .1  | .001   | .09932 | mg/L  | 98.3 | 70      | 130    |      |       |      |
| L68854-03ASD    | ASD  | 05/02/08 3:02 | MS080424-2 | .1  | .001   | .10034 | mg/L  | 99.3 | 70      | 130    | 1.02 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243454 CV     | ICV  | 04/25/08 23:30 | II080115-3 | 100      |        | 99.96  | mg/L  | 100   | 95    | 105   |      |       |      |
| WG243454 CB     | ICB  | 04/25/08 23:34 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243454 LFB    | LFB  | 04/25/08 23:47 | II080423-4 | 49.96908 |        | 52.76  | mg/L  | 105.6 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | 49.96908 | U      | 53.17  | mg/L  | 106.4 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | 49.96908 | U      | 52.86  | mg/L  | 105.8 | 85    | 115   | 0.58 | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 49.96908 | 91.6   | 135.3  | mg/L  | 87.5  | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 49.96908 | 91.6   | 135.51 | mg/L  | 87.9  | 85    | 115   | 0.16 | 20    |      |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243562</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG243562 CV     | ICV  | 04/29/08 3:45 | II080115-3 | 2  |        | 1.9074 | mg/L  | 95.4  | 95     | 105   |      |       |      |
| WG243562 CB     | ICB  | 04/29/08 3:48 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243562 LFB    | LFB  | 04/29/08 4:02 | II080423-4 | .5 |        | .5588  | mg/L  | 111.8 | 85     | 115   |      |       |      |
| L68836-01AS     | AS   | 04/29/08 4:09 | II080423-4 | .5 | .034   | .6139  | mg/L  | 116   | 85     | 115   |      |       | MA   |
| L68836-01ASD    | ASD  | 04/29/08 4:13 | II080423-4 | .5 | .034   | .6065  | mg/L  | 114.5 | 85     | 115   | 1.21 | 20    |      |
| L68854-05AS     | AS   | 04/29/08 4:58 | II080423-4 | .5 | U      | .5453  | mg/L  | 109.1 | 85     | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/29/08 5:01 | II080423-4 | .5 | U      | .5328  | mg/L  | 106.6 | 85     | 115   | 2.32 | 20    |      |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG243473</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243473 CV     | ICV  | 04/30/08 17:05 | II080405-1 | .00501 |        | .00515 | mg/L  | 102.8 | 95       | 105     |      |       |      |
| WG243473 CB     | ICB  | 04/30/08 17:08 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| <b>WG243658</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG243658 LRB    | LRB  | 04/30/08 18:48 |            |        |        | U      | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG243658 LFB    | LFB  | 04/30/08 18:51 | II080421-3 | .002   |        | .00187 | mg/L  | 93.5  | 85       | 115     |      |       |      |
| L68843-01 LFM   | LFM  | 04/30/08 18:55 | II080421-3 | .002   | U      | .00182 | mg/L  | 91    | 85       | 115     |      |       |      |
| L68843-01 LFMD  | LFMD | 04/30/08 18:57 | II080421-3 | .002   | U      | .00179 | mg/L  | 89.5  | 85       | 115     | 1.66 | 20    |      |

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243454 CV     | ICV  | 04/25/08 23:30 | II080115-3 | 2  |        | 2     | mg/L  | 100   | 95    | 105   |      |       |      |
| WG243454 CB     | ICB  | 04/25/08 23:34 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243454 LFB    | LFB  | 04/25/08 23:47 | II080423-4 | .5 |        | .505  | mg/L  | 101   | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | .5 | U      | .497  | mg/L  | 99.4  | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | .5 | U      | .504  | mg/L  | 100.8 | 85    | 115   | 1.4  | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | .5 | .1     | .596  | mg/L  | 99.2  | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | .5 | .1     | .61   | mg/L  | 102   | 85    | 115   | 2.32 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243611</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243611ICV     | ICV  | 05/01/08 10:19 | II080115-3 | 2  |        | 1.914 | mg/L  | 95.7  | 95    | 105   |      |       |      |
| WG243611ICB     | ICB  | 05/01/08 10:22 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243611LFB     | LFB  | 05/01/08 10:35 | II080423-4 | .5 |        | .501  | mg/L  | 100.2 | 85    | 115   |      |       |      |
| L68836-02AS     | AS   | 05/01/08 10:45 | II080423-4 | .5 | .02    | .544  | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L68836-02ASD    | ASD  | 05/01/08 10:48 | II080423-4 | .5 | .02    | .527  | mg/L  | 101.4 | 85    | 115   | 3.17 | 20    |      |
| L68854-06AS     | AS   | 05/01/08 11:31 | II080423-4 | .5 | U      | .483  | mg/L  | 96.6  | 85    | 115   |      |       |      |
| L68854-06ASD    | ASD  | 05/01/08 11:34 | II080423-4 | .5 | U      | .466  | mg/L  | 93.2  | 85    | 115   | 3.58 | 20    |      |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243635</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243635ICV     | ICV  | 04/29/08 18:37 | WI080312-1 | 2.416 |        | 2.405 | mg/L  | 99.5  | 90    | 110   |     |       |      |
| WG243635ICB     | ICB  | 04/29/08 18:38 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG243616</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243616ICV     | ICV  | 04/29/08 21:24 | WI080312-1 | 2.416 |        | 2.415 | mg/L  | 100   | 90    | 110   |     |       |      |
| WG243616ICB     | ICB  | 04/29/08 21:26 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| WG243616LFB1    | LFB  | 04/29/08 21:27 | WI080312-1 | 2     |        | 1.925 | mg/L  | 96.3  | 90    | 110   |     |       |      |
| L68832-08AS     | AS   | 04/29/08 21:48 | WI080312-1 | 2     | .05    | 2.198 | mg/L  | 107.4 | 90    | 110   |     |       |      |
| L68832-09DUP    | DUP  | 04/29/08 21:50 |            |       | .56    | .556  | mg/L  |       |       |       | 0.7 | 20    |      |
| WG243616LFB2    | LFB  | 04/29/08 22:05 | WI080312-1 | 2     |        | 1.987 | mg/L  | 99.4  | 90    | 110   |     |       |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243669</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG243669LCSW3   | LCSW | 04/30/08 13:34 | PCN27958 | 6  |        | 6.07  | units | 101.2 | 90    | 110   |     |       |      |
| WG243669LCSW6   | LCSW | 04/30/08 16:09 | PCN27958 | 6  |        | 6.08  | units | 101.3 | 90    | 110   |     |       |      |
| L68853-05DUP    | DUP  | 04/30/08 17:32 |          |    | 8.7    | 8.64  | units |       |       |       | 0.7 | 20    |      |
| L68855-02DUP    | DUP  | 04/30/08 18:59 |          |    | 7.8    | 7.81  | units |       |       |       | 0.1 | 20    |      |
| WG243669LCSW9   | LCSW | 04/30/08 19:19 | PCN27958 | 6  |        | 6.07  | units | 101.2 | 90    | 110   |     |       |      |
| WG243669LCSW12  | LCSW | 04/30/08 22:38 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG243669LCSW15  | LCSW | 05/01/08 1:25  | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 20       |        | 19.97  | mg/L  | 99.9  | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | 99.76186 |        | 105.4  | mg/L  | 105.7 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | 99.76186 | .6     | 105.29 | mg/L  | 104.9 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | 99.76186 | .6     | 103.73 | mg/L  | 103.4 | 85    | 115   | 1.49 | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 99.76186 | 10.4   | 113.81 | mg/L  | 103.7 | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 99.76186 | 10.4   | 117.96 | mg/L  | 107.8 | 85    | 115   | 3.58 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Residue, Filterable (TDS) @180C** 160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243470</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG243470PBW     | PBW  | 04/25/08 14:35 |          |     |        | U     | mg/L  |       | -20   | 20    |     |       |      |
| WG243470LCSW    | LCSW | 04/25/08 14:36 | PCN29263 | 260 |        | 284   | mg/L  | 109.2 | 80    | 120   |     |       |      |
| L68854-03DUP    | DUP  | 04/25/08 15:14 |          |     | 3060   | 3050  | mg/L  |       |       |       | 0.3 | 20    |      |
| <b>WG243531</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG243531PBW     | PBW  | 04/28/08 12:43 |          |     |        | U     | mg/L  |       | -20   | 20    |     |       |      |
| WG243531LCSW    | LCSW | 04/28/08 12:45 | PCN29263 | 260 |        | 278   | mg/L  | 106.9 | 80    | 120   |     |       |      |
| L68854-05DUP    | DUP  | 04/28/08 13:07 |          |     | 3030   | 3020  | mg/L  |       |       |       | 0.3 | 20    |      |
| L68877-07DUP    | DUP  | 04/28/08 13:30 |          |     | 710    | 696   | mg/L  |       |       |       | 2   | 20    |      |

**Selenium, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243518</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243518ICV     | ICV  | 04/29/08 5:34 | MS080424-4 | .05 |        | .05175 | mg/L  | 103.5 | 90      | 110    |      |       |      |
| WG243518ICB     | ICB  | 04/29/08 5:40 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243518LFB     | LFB  | 04/29/08 5:51 | MS080424-2 | .05 |        | .04777 | mg/L  | 95.5  | 85      | 115    |      |       |      |
| L68832-03AS     | AS   | 04/29/08 6:15 | MS080424-2 | .05 | U      | .0476  | mg/L  | 95.2  | 70      | 130    |      |       |      |
| L68832-03ASD    | ASD  | 04/29/08 6:21 | MS080424-2 | .05 | U      | .05043 | mg/L  | 100.9 | 70      | 130    | 5.77 | 20    |      |
| L68854-02AS     | AS   | 04/29/08 7:26 | MS080424-2 | .05 | .0009  | .05762 | mg/L  | 113.4 | 70      | 130    |      |       |      |
| L68854-02ASD    | ASD  | 04/29/08 7:32 | MS080424-2 | .05 | .0009  | .05634 | mg/L  | 110.9 | 70      | 130    | 2.25 | 20    |      |
| <b>WG243742</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243742ICV     | ICV  | 05/02/08 2:16 | MS080424-4 | .05 |        | .05463 | mg/L  | 109.3 | 90      | 110    |      |       |      |
| WG243742ICB     | ICB  | 05/02/08 2:22 |            |     |        | .00011 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243742LFB     | LFB  | 05/02/08 2:33 | MS080424-2 | .05 |        | .04846 | mg/L  | 96.9  | 85      | 115    |      |       |      |
| L68854-03AS     | AS   | 05/02/08 2:57 | MS080424-2 | .1  | .0017  | .10208 | mg/L  | 100.4 | 70      | 130    |      |       |      |
| L68854-03ASD    | ASD  | 05/02/08 3:02 | MS080424-2 | .1  | .0017  | .10292 | mg/L  | 101.2 | 70      | 130    | 0.82 | 20    |      |

**Sodium, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243454ICV     | ICV  | 04/25/08 23:30 | II080115-3 | 100      |        | 98.79  | mg/L  | 98.8  | 95    | 105   |      |       |      |
| WG243454ICB     | ICB  | 04/25/08 23:34 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243454LFB     | LFB  | 04/25/08 23:47 | II080423-4 | 98.21624 |        | 102.86 | mg/L  | 104.7 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | 98.21624 | .4     | 102.41 | mg/L  | 103.9 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | 98.21624 | .4     | 100.91 | mg/L  | 102.3 | 85    | 115   | 1.48 | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | 98.21624 | 193    | 265.47 | mg/L  | 73.8  | 85    | 115   |      |       | M2   |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | 98.21624 | 193    | 273.08 | mg/L  | 81.5  | 85    | 115   | 2.83 | 20    | M2   |

**Sulfate** SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|------|-------|------|
| <b>WG243705</b> |      |                |            |     |        |       |       |     |       |       |      |       |      |
| WG243705PBW     | PBW  | 04/30/08 16:20 |            |     |        | U     | mg/L  |     | -30   | 30    |      |       |      |
| WG243705LCSW    | LCSW | 04/30/08 16:22 | WC080430-2 | 100 |        | 100   | mg/L  | 100 | 80    | 120   |      |       |      |
| L68854-03DUP    | DUP  | 04/30/08 16:48 |            |     | 1470   | 1745  | mg/L  |     |       |       | 17.1 | 20    |      |
| L68859-02DUP    | DUP  | 04/30/08 17:14 |            |     | 1540   | 1553  | mg/L  |     |       |       | 0.8  | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

Project ID: OJ06DZ

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC    | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-------|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243518</b> |      |               |            |       |        |        |       |      |         |        |      |       |      |
| WG243518 CV     | ICV  | 04/29/08 5:34 | MS080424-4 | .05   |        | .05052 | mg/L  | 101  | 90      | 110    |      |       |      |
| WG243518 CB     | ICB  | 04/29/08 5:40 |            |       |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243518 LFB    | LFB  | 04/29/08 5:51 | MS080424-2 | .0501 |        | .04655 | mg/L  | 92.9 | 85      | 115    |      |       |      |
| L68832-03AS     | AS   | 04/29/08 6:15 | MS080424-2 | .0501 | U      | .0441  | mg/L  | 88   | 70      | 130    |      |       |      |
| L68832-03ASD    | ASD  | 04/29/08 6:21 | MS080424-2 | .0501 | U      | .04396 | mg/L  | 87.7 | 70      | 130    | 0.32 | 20    |      |
| L68854-02AS     | AS   | 04/29/08 7:26 | MS080424-2 | .0501 | U      | .04431 | mg/L  | 88.4 | 70      | 130    |      |       |      |
| L68854-02ASD    | ASD  | 04/29/08 7:32 | MS080424-2 | .0501 | U      | .04425 | mg/L  | 88.3 | 70      | 130    | 0.14 | 20    |      |

**WG243742**

|              |     |               |            |       |   |        |      |       |         |        |      |    |  |
|--------------|-----|---------------|------------|-------|---|--------|------|-------|---------|--------|------|----|--|
| WG243742 CV  | ICV | 05/02/08 2:16 | MS080424-4 | .05   |   | .05349 | mg/L | 107   | 90      | 110    |      |    |  |
| WG243742 CB  | ICB | 05/02/08 2:22 |            |       |   | U      | mg/L |       | -0.0003 | 0.0003 |      |    |  |
| WG243742 LFB | LFB | 05/02/08 2:33 | MS080424-2 | .0501 |   | .0518  | mg/L | 103.4 | 85      | 115    |      |    |  |
| L68854-03AS  | AS  | 05/02/08 2:57 | MS080424-2 | .1002 | U | .10668 | mg/L | 106.5 | 70      | 130    |      |    |  |
| L68854-03ASD | ASD | 05/02/08 3:02 | MS080424-2 | .1002 | U | .10752 | mg/L | 107.3 | 70      | 130    | 0.78 | 20 |  |

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243454</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243454 CV     | ICV  | 04/25/08 23:30 | II080115-3 | 2  |        | 1.937 | mg/L  | 96.9  | 95    | 105   |      |       |      |
| WG243454 CB     | ICB  | 04/25/08 23:34 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243454 LFB    | LFB  | 04/25/08 23:47 | II080423-4 | .5 |        | .516  | mg/L  | 103.2 | 85    | 115   |      |       |      |
| L68836-01AS     | AS   | 04/25/08 23:54 | II080423-4 | .5 | U      | .519  | mg/L  | 103.8 | 85    | 115   |      |       |      |
| L68836-01ASD    | ASD  | 04/25/08 23:58 | II080423-4 | .5 | U      | .514  | mg/L  | 102.8 | 85    | 115   | 0.97 | 20    |      |
| L68854-05AS     | AS   | 04/26/08 0:44  | II080423-4 | .5 | U      | .5    | mg/L  | 100   | 85    | 115   |      |       |      |
| L68854-05ASD    | ASD  | 04/26/08 0:48  | II080423-4 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   | 4.5  | 20    |      |

FMI Gold & Copper - Sierrita

ACZ Project ID: **L68854**

| ACZ ID           | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|----------------------|---------------------------------------|------|---|
| <b>L68854-01</b> | WG243518 | Antimony, dissolved  | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Arsenic, dissolved   | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Cadmium, dissolved   | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Lead, dissolved      | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  | WG243562 | Manganese, dissolved | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  | WG243518 | Selenium, dissolved  | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Thallium, dissolved  | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  | WG243727 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68854-02</b> | WG243562 | Aluminum, dissolved  | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  |          | Manganese, dissolved | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  | WG243454 | Sodium, dissolved    | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.       |
|                  | WG243727 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  |          |                      |                                       |      |   |
| <b>L68854-03</b> | WG243562 | Aluminum, dissolved  | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  |          | Manganese, dissolved | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  | WG243454 | Sodium, dissolved    | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.       |
|                  | WG243490 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243936 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68854-04</b> | WG243562 | Aluminum, dissolved  | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  |          | Manganese, dissolved | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  | WG243454 | Sodium, dissolved    | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.       |
|                  | WG243490 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243936 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |

FMI Gold & Copper - Sierrita

ACZ Project ID: **L68854**

| ACZ ID           | WORKNUM  | PARAMETER           | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|---------------------|---------------------------------------|------|---|
| <b>L68854-05</b> | WG243454 | Calcium, dissolved  | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Sodium, dissolved   | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.   |
|                  |          |                     | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243490 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243936 | Fluoride            | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                     | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68854-06</b> | WG243518 | Antimony, dissolved | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Arsenic, dissolved  | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Cadmium, dissolved  | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  | WG243454 | Calcium, dissolved  | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Lead, dissolved     | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  |          | Selenium, dissolved | M200.8 ICP-MS                         | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  | WG243454 | Sodium, dissolved   | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.   |
|                  |          |                     | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                     |                                       | DH   | Sample required dilution due to high TDS and/or EC value.   |
|                  | WG243518 | Thallium, dissolved | M200.8 ICP-MS                         | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243490 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  |          |                     |                                       | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                     |                                       | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243936 | Fluoride            | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                     | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68854-07</b> | WG243454 | Calcium, dissolved  | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Sodium, dissolved   | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.   |
|                  |          |                     | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243490 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243936 | Fluoride            | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                     | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

| ACZ ID           | WORKNUM  | PARAMETER          | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|--------------------|---------------------------------------|------|---|
| <b>L68854-08</b> | WG243454 | Calcium, dissolved | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  |          | Sodium, dissolved  | M200.7 ICP                            | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.   |
|                  |          |                    | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243490 | Cyanide, total     | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243936 | Fluoride           | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                    | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68854**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68854  
Date Received: 4/24/2008  
Received By:  
Date Printed: 4/24/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

No Cyanide Trip Blank.  
No VOA Trip Blank.

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted.

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 1565      | 3.7       | 15          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

Samples 7&8 had no times on samples.

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68854  
 Date Received: 4/24/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID  | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68854-01 | IW-5       |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-02 | IW-6A      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-03 | IW-10      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-04 | IW-11      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-05 | IW-22      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-06 | IW-23      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-07 | DUP042108A |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68854-08 | DUP042108B |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_





Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 02, 2008

Project ID: OJ06DZ  
ACZ Project ID: L68675 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 15, 2008. This project was assigned to ACZ's project number, L68675. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68675. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-12

ACZ Sample ID: **L68675-01**

Date Sampled: 04/11/08 13:35

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1580   |      |    | mg/L  | 10  | 50  | 04/29/08 14:56 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-13

ACZ Sample ID: **L68675-02**

Date Sampled: 04/11/08 13:10

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1800   |      |    | mg/L  | 10  | 50  | 04/29/08 13:45 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-14

ACZ Sample ID: **L68675-03**

Date Sampled: 04/11/08 12:45

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1810   |      |    | mg/L  | 10  | 50  | 04/29/08 13:50 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-15

ACZ Sample ID: **L68675-04**

Date Sampled: 04/11/08 11:00

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1670   |      |    | mg/L  | 10  | 50  | 04/29/08 13:56 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-16

ACZ Sample ID: **L68675-05**

Date Sampled: 04/11/08 10:00

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1770   |      |    | mg/L  | 20  | 100 | 04/29/08 14:01 | ear     |

**Arizona license number: AZ0102**

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

## Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG242969PBW2    | PBW  | 04/16/08 14:10 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW5   | LCSW | 04/16/08 14:22 | WC080324-1 | 820 |        | 778.6 | mg/L  | 95   | 90    | 110   |     |       |      |
| WG242969PBW3    | PBW  | 04/16/08 17:33 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW8   | LCSW | 04/16/08 17:45 | WC080324-1 | 820 |        | 781.3 | mg/L  | 95.3 | 90    | 110   |     |       |      |
| WG242969PBW4    | PBW  | 04/16/08 20:31 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW11  | LCSW | 04/16/08 20:43 | WC080324-1 | 820 |        | 783.6 | mg/L  | 95.6 | 90    | 110   |     |       |      |
| L68675-02DUP    | DUP  | 04/17/08 0:17  |            |     | 107    | 106.6 | mg/L  |      |       |       | 0.4 | 20    |      |
| WG242969LCSW14  | LCSW | 04/17/08 0:29  | WC080324-1 | 820 |        | 788   | mg/L  | 96.1 | 90    | 110   |     |       |      |
| <b>WG243263</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG243263PBW1    | PBW  | 04/22/08 17:39 |            |     |        | 12    | mg/L  |      | -20   | 20    |     |       |      |
| WG243263LCSW2   | LCSW | 04/22/08 17:53 | WC080324-1 | 820 |        | 739.3 | mg/L  | 90.2 | 90    | 110   |     |       |      |
| L68681-03DUP    | DUP  | 04/22/08 20:44 |            |     | 600    | 599.9 | mg/L  |      |       |       | 0   | 20    |      |
| WG243263PBW2    | PBW  | 04/22/08 20:50 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243263LCSW5   | LCSW | 04/22/08 21:02 | WC080324-1 | 820 |        | 780.2 | mg/L  | 95.1 | 90    | 110   |     |       |      |
| WG243263PBW3    | PBW  | 04/23/08 0:08  |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243263LCSW8   | LCSW | 04/23/08 0:20  | WC080324-1 | 820 |        | 782   | mg/L  | 95.4 | 90    | 110   |     |       |      |
| WG243263PBW4    | PBW  | 04/23/08 3:54  |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243263LCSW11  | LCSW | 04/23/08 4:06  | WC080324-1 | 820 |        | 791.8 | mg/L  | 96.6 | 90    | 110   |     |       |      |
| WG243263LCSW14  | LCSW | 04/23/08 7:05  | WC080324-1 | 820 |        | 796.6 | mg/L  | 97.1 | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.954 | mg/L  | 97.7  | 95    | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 1  |        | 1.021 | mg/L  | 102.1 | 85    | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | 1  | .03    | 1.089 | mg/L  | 105.9 | 85    | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | 1  | .03    | 1.091 | mg/L  | 106.1 | 85    | 115   | 0.18 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |        |        |        |       |       |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .02006 |        | .02076 | mg/L  | 103.5 | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .01    |        | .01016 | mg/L  | 101.6 | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .01    | U      | .00978 | mg/L  | 97.8  | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .01    | U      | .01019 | mg/L  | 101.9 | 70      | 130    | 4.11 | 20    |      |

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .05 |        | .04989 | mg/L  | 99.8  | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .05 |        | .04858 | mg/L  | 97.2  | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .05 | .0043  | .0545  | mg/L  | 100.4 | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .05 | .0043  | .05419 | mg/L  | 99.8  | 70      | 130    | 0.57 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.9746 | mg/L  | 98.7  | 95     | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | .5 |        | .4949  | mg/L  | 99    | 85     | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | .5 | .049   | .57    | mg/L  | 104.2 | 85     | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | .5 | .049   | .5685  | mg/L  | 103.9 | 85     | 115   | 0.26 | 20    |      |

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .05 |        | .04837 | mg/L  | 96.7  | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .05 |        | .05127 | mg/L  | 102.5 | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .05 | U      | .04843 | mg/L  | 96.9  | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .05 | U      | .04962 | mg/L  | 99.2  | 70      | 130    | 2.43 | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |     |        |        |       |      |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .05 |        | .04968 | mg/L  | 99.4 | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .05 |        | .04856 | mg/L  | 97.1 | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .05 | U      | .04554 | mg/L  | 91.1 | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .05 | U      | .04583 | mg/L  | 91.7 | 70      | 130    | 0.63 | 20    |      |

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|------|-------|-------|-----|-------|------|
| <b>WG243017</b> |      |                |            |          |        |        |       |      |       |       |     |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 100      |        | 95.68  | mg/L  | 95.7 | 95    | 105   |     |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |          |        | U      | mg/L  |      | -0.6  | 0.6   |     |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 67.97008 |        | 66.71  | mg/L  | 98.1 | 85    | 115   |     |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | 67.97008 | 463    | 520.32 | mg/L  | 84.3 | 85    | 115   |     |       | M3   |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | 67.97008 | 463    | 522.93 | mg/L  | 88.2 | 85    | 115   | 0.5 | 20    |      |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243279</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG243279ICB     | ICB  | 04/22/08 14:27 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG243279ICV     | ICV  | 04/22/08 14:27 | WI071212-1 | 54.945 |        | 57.5  | mg/L  | 104.7 | 90    | 110   |     |       |      |
| WG243279LFB1    | LFB  | 04/22/08 17:28 | WI071130-1 | 30     |        | 31.8  | mg/L  | 106   | 90    | 110   |     |       |      |
| WG243279LFB2    | LFB  | 04/22/08 17:36 | WI071130-1 | 30     |        | 32.4  | mg/L  | 108   | 90    | 110   |     |       |      |
| L68675-01DUP    | DUP  | 04/22/08 17:45 |            |        | 110    | 111   | mg/L  |       |       |       | 0.9 | 20    |      |
| L68673-01AS     | AS   | 04/22/08 17:50 | 20XCL      | 30     | 1840   | 1835  | mg/L  | -16.7 | 90    | 110   |     |       | M4   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.958 | mg/L  | 97.9  | 95    | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | .5 |        | .496  | mg/L  | 99.2  | 85    | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | .5 | U      | .502  | mg/L  | 100.4 | 85    | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | .5 | U      | .507  | mg/L  | 101.4 | 85    | 115   | 0.99 | 20    |      |

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.902 | mg/L  | 95.1 | 95    | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | .5 |        | .487  | mg/L  | 97.4 | 85    | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | .5 | U      | .483  | mg/L  | 96.6 | 85    | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | .5 | U      | .49   | mg/L  | 98   | 85    | 115   | 1.44 | 20    |      |

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units     | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|-----------|-------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |          |        |        |       |           |       |       |       |     |       |      |
| WG242969LCSW1   | LCSW | 04/16/08 11:01 | PCN28873 | 1408.8 |        | 1417  | µmhos/crr | 100.6 | 90    | 110   |     |       |      |
| WG242969LCSW4   | LCSW | 04/16/08 14:12 | PCN28873 | 1408.8 |        | 1418  | µmhos/crr | 100.7 | 90    | 110   |     |       |      |
| WG242969LCSW7   | LCSW | 04/16/08 17:34 | PCN28873 | 1408.8 |        | 1415  | µmhos/crr | 100.4 | 90    | 110   |     |       |      |
| WG242969LCSW10  | LCSW | 04/16/08 20:32 | PCN28873 | 1408.8 |        | 1416  | µmhos/crr | 100.5 | 90    | 110   |     |       |      |
| L68675-02DUP    | DUP  | 04/17/08 0:17  |          |        | 3300   | 3300  | µmhos/crr |       |       |       | 0   | 20    |      |
| WG242969LCSW13  | LCSW | 04/17/08 0:19  | PCN28873 | 1408.8 |        | 1417  | µmhos/crr | 100.6 | 90    | 110   |     |       |      |
| <b>WG243134</b> |      |                |          |        |        |       |           |       |       |       |     |       |      |
| WG243134LCSW1   | LCSW | 04/18/08 14:39 | PCN28873 | 1408.8 |        | 1442  | µmhos/crr | 102.4 | 90    | 110   |     |       |      |
| L68689-03DUP    | DUP  | 04/18/08 16:02 |          |        | 1700   | 1707  | µmhos/crr |       |       |       | 0.4 | 20    |      |
| WG243134LCSW4   | LCSW | 04/18/08 17:27 | PCN28873 | 1408.8 |        | 1446  | µmhos/crr | 102.6 | 90    | 110   |     |       |      |
| WG243134LCSW7   | LCSW | 04/18/08 20:17 | PCN28873 | 1408.8 |        | 1438  | µmhos/crr | 102.1 | 90    | 110   |     |       |      |
| WG243134LCSW10  | LCSW | 04/18/08 23:43 | PCN28873 | 1408.8 |        | 1438  | µmhos/crr | 102.1 | 90    | 110   |     |       |      |
| WG243134LCSW13  | LCSW | 04/19/08 4:20  | PCN28873 | 1408.8 |        | 1439  | µmhos/crr | 102.1 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243017</b> |      |                |            |    |        |       |       |       |       |       |     |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.896 | mg/L  | 94.8  | 95    | 105   |     |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |     |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | .5 |        | .494  | mg/L  | 98.8  | 85    | 115   |     |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   |     |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   | 0   | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG243154</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG243154ICV     | ICV  | 04/19/08 18:17 | WI080411-5 | .3 |        | .2905 | mg/L  | 96.8  | 90     | 110   |     |       |      |
| WG243154ICB     | ICB  | 04/19/08 18:18 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243047LRB     | LRB  | 04/19/08 18:18 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243047LFB     | LFB  | 04/19/08 18:19 | WI080411-2 | .2 |        | .1962 | mg/L  | 98.1  | 90     | 110   |     |       |      |
| L68674-04DUP    | DUP  | 04/19/08 18:22 |            |    | .009   | .0092 | mg/L  |       |        |       | 2.2 | 20    | RA   |
| L68675-05LFM    | LFM  | 04/19/08 18:30 | WI080411-2 | .2 | .035   | .2465 | mg/L  | 105.8 | 90     | 110   |     |       |      |

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243306</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243306ICV     | ICV  | 04/23/08 10:49 | WC080416-1 | 2  |        | 1.99  | mg/L  | 99.5  | 90    | 110   |      |       |      |
| WG243306ICB     | ICB  | 04/23/08 10:56 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |      |       |      |
| <b>WG243315</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243315ICV     | ICV  | 04/23/08 14:18 | WC080416-1 | 2  |        | 1.96  | mg/L  | 98    | 90    | 110   |      |       |      |
| WG243315ICB     | ICB  | 04/23/08 14:25 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |      |       |      |
| WG243315LFB1    | LFB  | 04/23/08 14:30 | WC080226-1 | 5  |        | 5.07  | mg/L  | 101.4 | 90    | 110   |      |       |      |
| L68674-01AS     | AS   | 04/23/08 14:37 | WC080226-1 | 5  | .3     | 3.7   | mg/L  | 68    | 90    | 110   |      |       | M2   |
| L68674-01DUP    | DUP  | 04/23/08 14:40 |            |    | .3     | .26   | mg/L  |       |       |       | 14.3 | 20    | RA   |
| L68675-05AS     | AS   | 04/23/08 15:19 | WC080226-1 | 5  | .3     | 3.96  | mg/L  | 73.2  | 90    | 110   |      |       | M2   |
| L68675-05DUP    | DUP  | 04/23/08 15:21 |            |    | .3     | .29   | mg/L  |       |       |       | 3.4  | 20    | RA   |
| WG243315LFB2    | LFB  | 04/23/08 15:59 | WC080226-1 | 5  |        | 4.77  | mg/L  | 95.4  | 90    | 110   |      |       |      |

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243017</b> |      |                |            |    |        |       |       |      |       |       |     |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.911 | mg/L  | 95.6 | 95    | 105   |     |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U     | mg/L  |      | -0.06 | 0.06  |     |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 1  |        | .995  | mg/L  | 99.5 | 85    | 115   |     |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | 1  | .04    | 1.029 | mg/L  | 98.9 | 85    | 115   |     |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | 1  | .04    | 1.028 | mg/L  | 98.8 | 85    | 115   | 0.1 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |     |        |        |       |      |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .05 |        | .04761 | mg/L  | 95.2 | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .05 |        | .0479  | mg/L  | 95.8 | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .05 | .0002  | .04891 | mg/L  | 97.4 | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .05 | .0002  | .04971 | mg/L  | 99   | 70      | 130    | 1.62 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243017</b> |      |                |            |          |        |        |       |       |       |       |     |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 100      |        | 95.4   | mg/L  | 95.4  | 95    | 105   |     |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |     |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 49.96908 |        | 49.46  | mg/L  | 99    | 85    | 115   |     |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | 49.96908 | 99.6   | 152.11 | mg/L  | 105.1 | 85    | 115   |     |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | 49.96908 | 99.6   | 151.65 | mg/L  | 104.2 | 85    | 115   | 0.3 | 20    |      |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.9225 | mg/L  | 96.1  | 95     | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | .5 |        | .5245  | mg/L  | 104.9 | 85     | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | .5 | U      | .5291  | mg/L  | 105.8 | 85     | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | .5 | U      | .5295  | mg/L  | 105.9 | 85     | 115   | 0.08 | 20    |      |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG242982</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG242982ICV     | ICV  | 04/17/08 16:04 | II080405-1 | .00501 |        | .00498 | mg/L  | 99.4  | 95       | 105     |      |       |      |
| WG242982ICB     | ICB  | 04/17/08 16:06 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| WG242982LRB     | LRB  | 04/17/08 16:20 |            |        |        | .00028 | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG242982LFB     | LFB  | 04/17/08 16:22 | II080328-2 | .002   |        | .00223 | mg/L  | 111.5 | 85       | 115     |      |       |      |
| L68673-01LFM    | LFM  | 04/17/08 16:29 | II080328-2 | .002   | .0002  | .00228 | mg/L  | 104   | 85       | 115     |      |       |      |
| L68673-01LFMD   | LFMD | 04/17/08 16:31 | II080328-2 | .002   | .0002  | .00229 | mg/L  | 104.5 | 85       | 115     | 0.44 | 20    |      |

**WG243069**

|               |      |                |            |        |       |        |      |       |          |         |      |    |  |
|---------------|------|----------------|------------|--------|-------|--------|------|-------|----------|---------|------|----|--|
| WG243069ICV   | ICV  | 04/21/08 13:52 | II080405-1 | .00501 |       | .00518 | mg/L | 103.4 | 95       | 105     |      |    |  |
| WG243069ICB   | ICB  | 04/21/08 13:54 |            |        |       | U      | mg/L |       | -0.0002  | 0.0002  |      |    |  |
| WG243069LRB   | LRB  | 04/21/08 13:57 |            |        |       | U      | mg/L |       | -0.00044 | 0.00044 |      |    |  |
| WG243069LFB   | LFB  | 04/21/08 13:59 | II080328-2 | .002   |       | .00222 | mg/L | 111   | 85       | 115     |      |    |  |
| L68675-04LFM  | LFM  | 04/21/08 14:05 | II080328-2 | .002   | .0003 | .00206 | mg/L | 88    | 85       | 115     |      |    |  |
| L68675-04LFMD | LFMD | 04/21/08 14:07 | II080328-2 | .002   | .0003 | .00202 | mg/L | 86    | 85       | 115     | 1.96 | 20 |  |

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243067</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243067ICV     | ICV  | 04/21/08 10:31 | II080115-3 | 2  |        | 1.95  | mg/L  | 97.5 | 95    | 105   |      |       |      |
| WG243067ICB     | ICB  | 04/21/08 10:34 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG243067LFB     | LFB  | 04/21/08 10:47 | II080401-3 | .5 |        | .5    | mg/L  | 100  | 85    | 115   |      |       |      |
| L68675-03AS     | AS   | 04/21/08 11:03 | II080401-3 | .5 | .06    | .513  | mg/L  | 90.6 | 85    | 115   |      |       |      |
| L68675-03ASD    | ASD  | 04/21/08 11:07 | II080401-3 | .5 | .06    | .522  | mg/L  | 92.4 | 85    | 115   | 1.74 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243199</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243199ICV     | ICV  | 04/22/08 16:33 | II080115-3 | 2  |        | 1.913 | mg/L  | 95.7 | 95    | 105   |      |       |      |
| WG243199ICB     | ICB  | 04/22/08 16:36 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG243199LFB     | LFB  | 04/22/08 16:50 | II080401-3 | .5 |        | .493  | mg/L  | 98.6 | 85    | 115   |      |       |      |
| L68675-03AS     | AS   | 04/22/08 17:09 | II080401-3 | 1  | U      | .953  | mg/L  | 95.3 | 85    | 115   |      |       |      |
| L68675-03ASD    | ASD  | 04/22/08 17:19 | II080401-3 | 1  | U      | .917  | mg/L  | 91.7 | 85    | 115   | 3.85 | 20    |      |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243360</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243360ICV     | ICV  | 04/23/08 19:33 | WI080312-1 | 2.416 |        | 2.525 | mg/L  | 104.5 | 90    | 110   |     |       |      |
| WG243360ICB     | ICB  | 04/23/08 19:34 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG243362</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243362ICV     | ICV  | 04/23/08 21:14 | WI080312-1 | 2.416 |        | 2.577 | mg/L  | 106.7 | 90    | 110   |     |       |      |
| WG243362ICB     | ICB  | 04/23/08 21:15 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| WG243362LFB1    | LFB  | 04/23/08 21:17 | WI080312-1 | 2     |        | 2.031 | mg/L  | 101.6 | 90    | 110   |     |       |      |
| L68665-01AS     | AS   | 04/23/08 21:19 | WI080312-1 | 2     | U      | 2.127 | mg/L  | 106.4 | 90    | 110   |     |       |      |
| L68673-01DUP    | DUP  | 04/23/08 21:22 |            |       | U      | U     | mg/L  |       |       |       | 0   | 20    | RA   |
| L68675-03AS     | AS   | 04/23/08 21:38 | WI080312-1 | 2     | 1.47   | 3.634 | mg/L  | 108.2 | 90    | 110   |     |       |      |
| L68675-04DUP    | DUP  | 04/23/08 21:40 |            |       | 1.9    | 1.907 | mg/L  |       |       |       | 0.4 | 20    |      |
| WG243362LFB2    | LFB  | 04/23/08 21:56 | WI080312-1 | 2     |        | 2.038 | mg/L  | 101.9 | 90    | 110   |     |       |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG242969LCSW3   | LCSW | 04/16/08 11:20 | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |
| WG242969LCSW6   | LCSW | 04/16/08 14:26 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG242969LCSW9   | LCSW | 04/16/08 17:49 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG242969LCSW12  | LCSW | 04/16/08 20:47 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| L68675-02DUP    | DUP  | 04/17/08 0:17  |          |    | 7.9    | 7.93  | units |       |       |       | 0.4 | 20    |      |
| <b>WG243134</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG243134LCSW3   | LCSW | 04/18/08 14:50 | PCN27958 | 6  |        | 6.07  | units | 101.2 | 90    | 110   |     |       |      |
| L68689-03DUP    | DUP  | 04/18/08 16:02 |          |    | 8.1    | 8.05  | units |       |       |       | 0.6 | 20    |      |
| WG243134LCSW6   | LCSW | 04/18/08 17:37 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG243134LCSW9   | LCSW | 04/18/08 20:32 | PCN27958 | 6  |        | 6.07  | units | 101.2 | 90    | 110   |     |       |      |
| WG243134LCSW12  | LCSW | 04/18/08 23:57 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG243134LCSW15  | LCSW | 04/19/08 4:34  | PCN27958 | 6  |        | 6.06  | units | 101   | 90    | 110   |     |       |      |

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 20       |        | 19.21  | mg/L  | 96.1  | 95    | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 99.76186 |        | 100.33 | mg/L  | 100.6 | 85    | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | 99.76186 | 7.9    | 122.69 | mg/L  | 115.1 | 85    | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | 99.76186 | 7.9    | 121.69 | mg/L  | 114.1 | 85    | 115   | 0.82 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Residue, Filterable (TDS) @180C** 160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243084</b> |      |                |          |     |        |       |       |      |       |       |     |       |      |
| WG243084PBW     | PBW  | 04/17/08 16:30 |          |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243084LCSW    | LCSW | 04/17/08 16:31 | PCN29268 | 260 |        | 252   | mg/L  | 96.9 | 80    | 120   |     |       |      |
| L68675-01DUP    | DUP  | 04/17/08 16:45 |          |     | 2800   | 3092  | mg/L  |      |       |       | 9.9 | 20    |      |
| L68724-01DUP    | DUP  | 04/17/08 16:59 |          |     | 4050   | 4024  | mg/L  |      |       |       | 0.6 | 20    |      |

**Selenium, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .05 |        | .0512  | mg/L  | 102.4 | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .05 |        | .0473  | mg/L  | 94.6  | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .05 | .001   | .05711 | mg/L  | 112.2 | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .05 | .001   | .058   | mg/L  | 114   | 70      | 130    | 1.55 | 20    |      |

**Sodium, dissolved** M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 100      |        | 95.8   | mg/L  | 95.8  | 95    | 105   |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 100      |        | 95.86  | mg/L  | 95.9  | 95    | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |          |        | U      | mg/L  |       | -6    | 6     |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 98.21624 |        | 97.4   | mg/L  | 99.2  | 85    | 115   |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | 98.21624 |        | 98.63  | mg/L  | 100.4 | 85    | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | 98.21624 | 186    | 295.01 | mg/L  | 111   | 85    | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | 98.21624 | 186    | 291.13 | mg/L  | 107   | 85    | 115   | 1.32 | 20    |      |

**Sulfate** SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|-----|-------|------|
| <b>WG243602</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243602PBW     | PBW  | 04/29/08 13:35 |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243602LCSW    | LCSW | 04/29/08 13:38 | WC080424-2 | 100 |        | 102   | mg/L  | 102 | 80    | 120   |     |       |      |
| L68675-01DUP    | DUP  | 04/29/08 15:00 |            |     | 1580   | 1634  | mg/L  |     |       |       | 3.4 | 20    |      |
| <b>WG243603</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243603PBW     | PBW  | 04/29/08 13:35 |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243603LCSW    | LCSW | 04/29/08 13:40 | WC080424-2 | 100 |        | 110   | mg/L  | 110 | 80    | 120   |     |       |      |
| L68681-05DUP    | DUP  | 04/29/08 14:38 |            |     | 130    | 129   | mg/L  |     |       |       | 0.8 | 20    |      |

**Thallium, dissolved** M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243027</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243027ICV     | ICV  | 04/17/08 20:21 | MS080401-2 | .05 |        | .05023 | mg/L  | 100.5 | 90      | 110    |      |       |      |
| WG243027ICB     | ICB  | 04/17/08 20:27 |            |     |        | .00014 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243027LFB     | LFB  | 04/17/08 20:39 | MS080407-2 | .05 |        | .04989 | mg/L  | 99.8  | 85      | 115    |      |       |      |
| L68675-02AS     | AS   | 04/17/08 21:03 | MS080407-2 | .05 | U      | .05086 | mg/L  | 101.7 | 70      | 130    |      |       |      |
| L68675-02ASD    | ASD  | 04/17/08 21:09 | MS080407-2 | .05 | U      | .05138 | mg/L  | 102.8 | 70      | 130    | 1.02 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

Project ID: OJ06DZ

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243017</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243017ICV     | ICV  | 04/17/08 11:33 | II080115-3 | 2  |        | 1.924 | mg/L  | 96.2  | 95    | 105   |      |       |      |
| WG243017ICB     | ICB  | 04/17/08 11:36 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243017LFB     | LFB  | 04/17/08 11:49 | II080401-3 | .5 |        | .495  | mg/L  | 99    | 85    | 115   |      |       |      |
| L68675-01AS     | AS   | 04/17/08 11:59 | II080401-3 | .5 | U      | .505  | mg/L  | 101   | 85    | 115   |      |       |      |
| L68675-01ASD    | ASD  | 04/17/08 12:03 | II080401-3 | .5 | U      | .513  | mg/L  | 102.6 | 85    | 115   | 1.57 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

| ACZ ID           | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|----------------------|---------------------------------------|------|---|
| <b>L68675-01</b> | WG243017 | Calcium, dissolved   | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243279 | Chloride             | 325.2 / SM4500CI-E                    | M4   | The spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The recovery of the associated control sample (LCS or LFB) was acceptable.        |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68675-02</b> | WG243017 | Calcium, dissolved   | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243279 | Chloride             | 325.2 / SM4500CI-E                    | M4   | The spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The recovery of the associated control sample (LCS or LFB) was acceptable.        |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68675-03</b> | WG243017 | Calcium, dissolved   | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243279 | Chloride             | 325.2 / SM4500CI-E                    | M4   | The spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The recovery of the associated control sample (LCS or LFB) was acceptable.        |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

| ACZ ID           | WORKNUM  | PARAMETER          | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|--------------------|---------------------------------------|------|---|
| <b>L68675-04</b> | WG243017 | Calcium, dissolved | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243279 | Chloride           | 325.2 / SM4500CI-E                    | M4   | The spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The recovery of the associated control sample (LCS or LFB) was acceptable.        |
|                  | WG243154 | Cyanide, total     | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243315 | Fluoride           | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                    | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| <b>L68675-05</b> | WG243017 | Calcium, dissolved | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|                  | WG243279 | Chloride           | 325.2 / SM4500CI-E                    | M4   | The spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The recovery of the associated control sample (LCS or LFB) was acceptable.        |
|                  | WG243154 | Cyanide, total     | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|                  | WG243315 | Fluoride           | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                    | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68675**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68675  
Date Received: 4/15/2008  
Received By:  
Date Printed: 4/16/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted.

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 2173      | 1.7       | 16          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68675  
 Date Received: 4/15/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|-----------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68675-01 | IW-12     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68675-02 | IW-13     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68675-03 | IW-14     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68675-04 | IW-15     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68675-05 | IW-16     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 02, 2008

Project ID: OJ06DZ  
ACZ Project ID: L68674 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 15, 2008. This project was assigned to ACZ's project number, L68674. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68674. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-17

ACZ Sample ID: **L68674-01**

Date Sampled: 04/11/08 09:40

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1730   |      |    | mg/L  | 10  | 50  | 04/19/08 11:42 | ear     |

**Arizona license number: AZ0102**



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-18

ACZ Sample ID: **L68674-02**

Date Sampled: 04/11/08 09:25

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1540   |      |    | mg/L  | 50  | 250 | 04/19/08 11:45 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-19

ACZ Sample ID: **L68674-03**

Date Sampled: 04/11/08 09:00

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1680   |      |    | mg/L  | 20  | 100 | 04/19/08 11:49 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-20

ACZ Sample ID: **L68674-04**

Date Sampled: 04/11/08 08:20

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1560   |      |    | mg/L  | 20  | 100 | 04/29/08 14:45 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-21

ACZ Sample ID: **L68674-05**

Date Sampled: 04/11/08 08:00

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1610   |      |    | mg/L  | 20  | 100 | 04/29/08 14:49 | ear     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: DUP041108A

ACZ Sample ID: **L68674-06**

Date Sampled: 04/11/08 00:00

Date Received: 04/15/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1610   |      |    | mg/L  | 10  | 50  | 04/29/08 14:52 | ear     |

**Arizona license number: AZ0102**

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

## Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG242969PBW2    | PBW  | 04/16/08 14:10 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW5   | LCSW | 04/16/08 14:22 | WC080324-1 | 820 |        | 778.6 | mg/L  | 95   | 90    | 110   |     |       |      |
| WG242969PBW3    | PBW  | 04/16/08 17:33 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW8   | LCSW | 04/16/08 17:45 | WC080324-1 | 820 |        | 781.3 | mg/L  | 95.3 | 90    | 110   |     |       |      |
| WG242969PBW4    | PBW  | 04/16/08 20:31 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW11  | LCSW | 04/16/08 20:43 | WC080324-1 | 820 |        | 783.6 | mg/L  | 95.6 | 90    | 110   |     |       |      |
| L68675-02DUP    | DUP  | 04/17/08 0:17  |            |     | 107    | 106.6 | mg/L  |      |       |       | 0.4 | 20    |      |
| WG242969LCSW14  | LCSW | 04/17/08 0:29  | WC080324-1 | 820 |        | 788   | mg/L  | 96.1 | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 2.036 | mg/L  | 101.8 | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | 1  |        | 1.074 | mg/L  | 107.4 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | 1  | U      | .996  | mg/L  | 99.6  | 85    | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | 1  | U      | .981  | mg/L  | 98.1  | 85    | 115   | 1.52 | 20    |      |

**WG243112**

|              |     |                |            |   |     |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|---|-----|-------|------|-------|-------|------|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 2 |     | 2     | mg/L | 100   | 95    | 105  |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |   |     | U     | mg/L |       | -0.09 | 0.09 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | 1 |     | 1.046 | mg/L | 104.6 | 85    | 115  |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | 1 | U   | 1.061 | mg/L | 106.1 | 85    | 115  |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | 1 | U   | 1.061 | mg/L | 106.1 | 85    | 115  | 0    | 20 |  |
| L68676-01AS  | AS  | 04/18/08 21:37 | II080401-3 | 1 | .64 | 1.685 | mg/L | 104.5 | 85    | 115  |      |    |  |
| L68676-01ASD | ASD | 04/18/08 21:40 | II080401-3 | 1 | .64 | 1.705 | mg/L | 106.5 | 85    | 115  | 1.18 | 20 |  |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG243025</b> |      |                |            |        |        |        |       |       |         |        |     |       |      |
| WG243025ICV     | ICV  | 04/17/08 16:18 | MS080401-2 | .02006 |        | .02062 | mg/L  | 102.8 | 90      | 110    |     |       |      |
| WG243025ICB     | ICB  | 04/17/08 16:24 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |     |       |      |
| WG243025LFB     | LFB  | 04/17/08 16:36 | MS080407-2 | .01    |        | .01044 | mg/L  | 104.4 | 85      | 115    |     |       |      |
| L68674-01AS     | AS   | 04/17/08 17:00 | MS080407-2 | .01    | U      | .00989 | mg/L  | 98.9  | 70      | 130    |     |       |      |
| L68674-01ASD    | ASD  | 04/17/08 17:06 | MS080407-2 | .01    | U      | .01008 | mg/L  | 100.8 | 70      | 130    | 1.9 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243025</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243025ICV     | ICV  | 04/17/08 16:18 | MS080401-2 | .05 |        | .04905 | mg/L  | 98.1  | 90      | 110    |      |       |      |
| WG243025ICB     | ICB  | 04/17/08 16:24 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243025LFB     | LFB  | 04/17/08 16:36 | MS080407-2 | .05 |        | .05001 | mg/L  | 100   | 85      | 115    |      |       |      |
| L68674-01AS     | AS   | 04/17/08 17:00 | MS080407-2 | .05 | .0042  | .05864 | mg/L  | 108.9 | 70      | 130    |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 17:06 | MS080407-2 | .05 | .0042  | .05992 | mg/L  | 111.4 | 70      | 130    | 2.16 | 20    |      |
| <b>WG243211</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243211ICV     | ICV  | 04/22/08 6:12  | MS080401-2 | .05 |        | .05359 | mg/L  | 107.2 | 90      | 110    |      |       |      |
| WG243211ICB     | ICB  | 04/22/08 6:18  |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG243211LFB     | LFB  | 04/22/08 6:30  | MS080407-2 | .05 |        | .05346 | mg/L  | 106.9 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/22/08 6:47  | MS080407-2 | .1  | .001   | .102   | mg/L  | 101   | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/22/08 6:53  | MS080407-2 | .1  | .001   | .1034  | mg/L  | 102.4 | 70      | 130    | 1.36 | 20    |      |

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 2.0381 | mg/L  | 101.9 | 95     | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | .5 |        | .5127  | mg/L  | 102.5 | 85     | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | .5 | .06    | .5264  | mg/L  | 93.3  | 85     | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | .5 | .06    | .5101  | mg/L  | 90    | 85     | 115   | 3.15 | 20    |      |
| <b>WG243112</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 2  |        | 2.0192 | mg/L  | 101   | 95     | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | .5 |        | .5082  | mg/L  | 101.6 | 85     | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | .5 | .003   | .5185  | mg/L  | 103.1 | 85     | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | .5 | .003   | .5214  | mg/L  | 103.7 | 85     | 115   | 0.56 | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | .5 | .016   | .5479  | mg/L  | 106.4 | 85     | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | .5 | .016   | .5507  | mg/L  | 106.9 | 85     | 115   | 0.51 | 20    |      |

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243025</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243025ICV     | ICV  | 04/17/08 16:18 | MS080401-2 | .05 |        | .04869 | mg/L  | 97.4  | 90      | 110    |      |       |      |
| WG243025ICB     | ICB  | 04/17/08 16:24 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243025LFB     | LFB  | 04/17/08 16:36 | MS080407-2 | .05 |        | .0547  | mg/L  | 109.4 | 85      | 115    |      |       |      |
| L68674-01AS     | AS   | 04/17/08 17:00 | MS080407-2 | .05 | U      | .04578 | mg/L  | 91.6  | 70      | 130    |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 17:06 | MS080407-2 | .05 | U      | .04622 | mg/L  | 92.4  | 70      | 130    | 0.96 | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243025</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243025ICV     | ICV  | 04/17/08 16:18 | MS080401-2 | .05 |        | .0495  | mg/L  | 99    | 90      | 110    |      |       |      |
| WG243025ICB     | ICB  | 04/17/08 16:24 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243025LFB     | LFB  | 04/17/08 16:36 | MS080407-2 | .05 |        | .05066 | mg/L  | 101.3 | 85      | 115    |      |       |      |
| L68674-01AS     | AS   | 04/17/08 17:00 | MS080407-2 | .05 | U      | .04726 | mg/L  | 94.5  | 70      | 130    |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 17:06 | MS080407-2 | .05 | U      | .04801 | mg/L  | 96    | 70      | 130    | 1.57 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243014</b> |      |                |            |          |        |        |       |       |       |       |     |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 100      |        | 97.38  | mg/L  | 97.4  | 95    | 105   |     |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |     |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | 67.97008 |        | 72.31  | mg/L  | 106.4 | 85    | 115   |     |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | 67.97008 | 527    | 530.7  | mg/L  | 5.4   | 85    | 115   |     |       | M3   |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | 67.97008 | 527    | 531.24 | mg/L  | 6.2   | 85    | 115   | 0.1 | 20    | M3   |

**WG243112**

|              |     |                |            |          |      |        |      |       |      |     |      |    |  |
|--------------|-----|----------------|------------|----------|------|--------|------|-------|------|-----|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 100      |      | 101.75 | mg/L | 101.8 | 95   | 105 |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |          |      | U      | mg/L |       | -0.6 | 0.6 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | 67.97008 |      | 71.67  | mg/L | 105.4 | 85   | 115 |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | 67.97008 | 27.7 | 95.96  | mg/L | 100.4 | 85   | 115 |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | 67.97008 | 27.7 | 96.98  | mg/L | 101.9 | 85   | 115 | 1.06 | 20 |  |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243248</b> |      |                |            |        |        |       |       |       |       |       |      |       |      |
| WG243248ICV     | ICV  | 04/22/08 13:35 | WI071212-1 | 54.945 |        | 57.7  | mg/L  | 105   | 90    | 110   |      |       |      |
| WG243248ICB     | ICB  | 04/22/08 13:36 |            |        |        | 1.3   | mg/L  |       | -3    | 3     |      |       |      |
| WG243248LFB     | LFB  | 04/22/08 13:37 | WI071130-1 | 30     |        | 30.1  | mg/L  | 100.3 | 90    | 110   |      |       |      |
| L68668-01AS     | AS   | 04/22/08 13:39 | WI071130-1 | 30     | 2      | 31.6  | mg/L  | 98.7  | 90    | 110   |      |       |      |
| L68668-02DUP    | DUP  | 04/22/08 13:41 |            |        | 3      | 2.5   | mg/L  |       |       |       | 18.2 | 20    | RA   |

**WG243617**

|              |     |                |            |        |     |      |      |       |    |     |     |    |  |
|--------------|-----|----------------|------------|--------|-----|------|------|-------|----|-----|-----|----|--|
| WG243617ICB  | ICB | 04/29/08 13:25 |            |        |     | U    | mg/L |       | -3 | 3   |     |    |  |
| WG243617ICV  | ICV | 04/29/08 13:25 | WI071212-1 | 54.945 |     | 58   | mg/L | 105.6 | 90 | 110 |     |    |  |
| WG243617LFB1 | LFB | 04/29/08 14:22 | WI071130-1 | 30     |     | 29.5 | mg/L | 98.3  | 90 | 110 |     |    |  |
| WG243617LFB2 | LFB | 04/29/08 14:30 | WI071130-1 | 30     |     | 32.7 | mg/L | 109   | 90 | 110 |     |    |  |
| L68674-05AS  | AS  | 04/29/08 14:36 | CL10X      | 30     | 130 | 163  | mg/L | 110   | 90 | 110 |     |    |  |
| L68674-06DUP | DUP | 04/29/08 14:36 |            |        | 130 | 132  | mg/L |       |    |     | 1.5 | 20 |  |

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 1.978 | mg/L  | 98.9  | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | .5 |        | .524  | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | .5 | U      | .468  | mg/L  | 93.6  | 85    | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | .5 | U      | .469  | mg/L  | 93.8  | 85    | 115   | 0.21 | 20    |      |

**WG243112**

|              |     |                |            |    |   |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|---|-------|------|-------|-------|------|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 2  |   | 2.025 | mg/L | 101.3 | 95    | 105  |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |    |   | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | .5 |   | .518  | mg/L | 103.6 | 85    | 115  |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | .5 | U | .522  | mg/L | 104.4 | 85    | 115  |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | .5 | U | .527  | mg/L | 105.4 | 85    | 115  | 0.95 | 20 |  |
| L68676-01AS  | AS  | 04/18/08 21:37 | II080401-3 | .5 | U | .524  | mg/L | 104.8 | 85    | 115  |      |    |  |
| L68676-01ASD | ASD | 04/18/08 21:40 | II080401-3 | .5 | U | .518  | mg/L | 103.6 | 85    | 115  | 1.15 | 20 |  |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243112</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 2  |        | 1.911 | mg/L  | 95.6  | 95    | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | .5 |        | .501  | mg/L  | 100.2 | 85    | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | .5 | U      | .503  | mg/L  | 100.6 | 85    | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | .5 | U      | .512  | mg/L  | 102.4 | 85    | 115   | 1.77 | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | .5 | U      | .524  | mg/L  | 104.8 | 85    | 115   | 0.19 | 20    |      |

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units     | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|-----------|-------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |          |        |        |       |           |       |       |       |     |       |      |
| WG242969LCSW1   | LCSW | 04/16/08 11:01 | PCN28873 | 1408.8 |        | 1417  | µmhos/crr | 100.6 | 90    | 110   |     |       |      |
| WG242969LCSW4   | LCSW | 04/16/08 14:12 | PCN28873 | 1408.8 |        | 1418  | µmhos/crr | 100.7 | 90    | 110   |     |       |      |
| WG242969LCSW7   | LCSW | 04/16/08 17:34 | PCN28873 | 1408.8 |        | 1415  | µmhos/crr | 100.4 | 90    | 110   |     |       |      |
| WG242969LCSW10  | LCSW | 04/16/08 20:32 | PCN28873 | 1408.8 |        | 1416  | µmhos/crr | 100.5 | 90    | 110   |     |       |      |
| L68675-02DUP    | DUP  | 04/17/08 0:17  |          |        | 3300   | 3300  | µmhos/crr |       |       |       | 0   | 20    |      |
| WG242969LCSW13  | LCSW | 04/17/08 0:19  | PCN28873 | 1408.8 |        | 1417  | µmhos/crr | 100.6 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243112</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 2  |        | 1.93  | mg/L  | 96.5  | 95    | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |    |        | .012  | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | .5 |        | .512  | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | .5 | U      | .502  | mg/L  | 100.4 | 85    | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | .5 | U      | .507  | mg/L  | 101.4 | 85    | 115   | 0.99 | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | .5 | U      | .521  | mg/L  | 104.2 | 85    | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | .5 | U      | .524  | mg/L  | 104.8 | 85    | 115   | 0.57 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG243154</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG243154ICV     | ICV  | 04/19/08 18:17 | WI080411-5 | .3 |        | .2905 | mg/L  | 96.8  | 90     | 110   |     |       |      |
| WG243154ICB     | ICB  | 04/19/08 18:18 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243047LRB     | LRB  | 04/19/08 18:18 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243047LFB     | LFB  | 04/19/08 18:19 | WI080411-2 | .2 |        | .1962 | mg/L  | 98.1  | 90     | 110   |     |       |      |
| L68674-04DUP    | DUP  | 04/19/08 18:22 |            |    | .009   | .0092 | mg/L  |       |        |       | 2.2 | 20    | RA   |
| L68675-05LFM    | LFM  | 04/19/08 18:30 | WI080411-2 | .2 | .035   | .2465 | mg/L  | 105.8 | 90     | 110   |     |       |      |
| <b>WG243253</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG243253ICV     | ICV  | 04/22/08 11:25 | WI080411-5 | .3 |        | .2885 | mg/L  | 96.2  | 90     | 110   |     |       |      |
| WG243253ICB     | ICB  | 04/22/08 11:25 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG243000LRB     | LRB  | 04/22/08 12:15 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| L68673-01DUP    | DUP  | 04/22/08 12:15 |            |    | U      | U     | mg/L  |       |        |       | 0   | 20    | RA   |
| WG243000LFB     | LFB  | 04/22/08 12:19 | WI080411-2 | .2 |        | .1982 | mg/L  | 99.1  | 90     | 110   |     |       |      |
| L68698-02LFM    | LFM  | 04/22/08 12:19 | WI080411-2 | .2 | U      | .1972 | mg/L  | 98.6  | 90     | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243306</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243306ICV     | ICV  | 04/23/08 10:49 | WC080416-1 | 2  |        | 1.99  | mg/L  | 99.5  | 90    | 110   |      |       |      |
| WG243306ICB     | ICB  | 04/23/08 10:56 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |      |       |      |
| <b>WG243315</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243315ICV     | ICV  | 04/23/08 14:18 | WC080416-1 | 2  |        | 1.96  | mg/L  | 98    | 90    | 110   |      |       |      |
| WG243315ICB     | ICB  | 04/23/08 14:25 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |      |       |      |
| WG243315LFB1    | LFB  | 04/23/08 14:30 | WC080226-1 | 5  |        | 5.07  | mg/L  | 101.4 | 90    | 110   |      |       |      |
| L68674-01AS     | AS   | 04/23/08 14:37 | WC080226-1 | 5  | .3     | 3.7   | mg/L  | 68    | 90    | 110   |      |       | M2   |
| L68674-01DUP    | DUP  | 04/23/08 14:40 |            |    | .3     | .26   | mg/L  |       |       |       | 14.3 | 20    | RA   |
| WG243315LFB2    | LFB  | 04/23/08 15:59 | WC080226-1 | 5  |        | 4.77  | mg/L  | 95.4  | 90    | 110   |      |       |      |

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 1.969 | mg/L  | 98.5  | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | 1  |        | 1.072 | mg/L  | 107.2 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | 1  | .66    | 1.546 | mg/L  | 88.6  | 85    | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | 1  | .66    | 1.53  | mg/L  | 87    | 85    | 115   | 1.04 | 20    |      |
| <b>WG243112</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 2  |        | 1.946 | mg/L  | 97.3  | 95    | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | 1  |        | 1.041 | mg/L  | 104.1 | 85    | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | 1  | .02    | 1.049 | mg/L  | 102.9 | 85    | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | 1  | .02    | 1.06  | mg/L  | 104   | 85    | 115   | 1.04 | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | 1  | U      | 1.048 | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | 1  | U      | 1.042 | mg/L  | 104.2 | 85    | 115   | 0.57 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243025</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243025ICV     | ICV  | 04/17/08 16:18 | MS080401-2 | .05 |        | .04972 | mg/L  | 99.4  | 90      | 110    |      |       |      |
| WG243025ICB     | ICB  | 04/17/08 16:24 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243025LFB     | LFB  | 04/17/08 16:36 | MS080407-2 | .05 |        | .05257 | mg/L  | 105.1 | 85      | 115    |      |       |      |
| L68674-01AS     | AS   | 04/17/08 17:00 | MS080407-2 | .05 | .0042  | .05494 | mg/L  | 101.5 | 70      | 130    |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 17:06 | MS080407-2 | .05 | .0042  | .05493 | mg/L  | 101.5 | 70      | 130    | 0.02 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 100      |        | 99.96  | mg/L  | 100   | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | 49.96908 |        | 52.87  | mg/L  | 105.8 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | 49.96908 | 135    | 171.58 | mg/L  | 73.2  | 85    | 115   |      |       | M2   |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | 49.96908 | 135    | 168.16 | mg/L  | 66.4  | 85    | 115   | 2.01 | 20    | M2   |

**WG243112**

|              |     |                |            |          |     |        |      |       |      |     |      |    |  |
|--------------|-----|----------------|------------|----------|-----|--------|------|-------|------|-----|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 100      |     | 101.46 | mg/L | 101.5 | 95   | 105 |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |          |     | U      | mg/L |       | -0.6 | 0.6 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | 49.96908 |     | 51.48  | mg/L | 103   | 85   | 115 |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | 49.96908 | 5.4 | 56.82  | mg/L | 102.9 | 85   | 115 |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | 49.96908 | 5.4 | 57.82  | mg/L | 104.9 | 85   | 115 | 1.74 | 20 |  |
| L68676-01AS  | AS  | 04/18/08 21:37 | II080401-3 | 49.96908 | 37  | 89.9   | mg/L | 105.9 | 85   | 115 |      |    |  |
| L68676-01ASD | ASD | 04/18/08 21:40 | II080401-3 | 49.96908 | 37  | 88.48  | mg/L | 103   | 85   | 115 | 1.59 | 20 |  |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |        |       |       |        |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 1.9388 | mg/L  | 96.9  | 95     | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | .5 |        | .5538  | mg/L  | 110.8 | 85     | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | .5 | .016   | .5058  | mg/L  | 98    | 85     | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | .5 | .016   | .5041  | mg/L  | 97.6  | 85     | 115   | 0.34 | 20    |      |

**WG243112**

|              |     |                |            |    |      |        |      |       |        |       |      |    |  |
|--------------|-----|----------------|------------|----|------|--------|------|-------|--------|-------|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 2  |      | 1.9546 | mg/L | 97.7  | 95     | 105   |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |    |      | U      | mg/L |       | -0.015 | 0.015 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | .5 |      | .5474  | mg/L | 109.5 | 85     | 115   |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | .5 | .017 | .5621  | mg/L | 109   | 85     | 115   |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | .5 | .017 | .5678  | mg/L | 110.2 | 85     | 115   | 1.01 | 20 |  |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG242982</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG242982ICV     | ICV  | 04/17/08 16:04 | II080405-1 | .00501 |        | .00498 | mg/L  | 99.4  | 95       | 105     |      |       |      |
| WG242982ICB     | ICB  | 04/17/08 16:06 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| WG242982LRB     | LRB  | 04/17/08 16:20 |            |        |        | .00028 | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG242982LFB     | LFB  | 04/17/08 16:22 | II080328-2 | .002   |        | .00223 | mg/L  | 111.5 | 85       | 115     |      |       |      |
| L68673-01LFM    | LFM  | 04/17/08 16:29 | II080328-2 | .002   | .0002  | .00228 | mg/L  | 104   | 85       | 115     |      |       |      |
| L68673-01LFMD   | LFMD | 04/17/08 16:31 | II080328-2 | .002   | .0002  | .00229 | mg/L  | 104.5 | 85       | 115     | 0.44 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 1.984 | mg/L  | 99.2  | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | .5 |        | .533  | mg/L  | 106.6 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | .5 | .03    | .501  | mg/L  | 94.2  | 85    | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | .5 | .03    | .485  | mg/L  | 91    | 85    | 115   | 3.25 | 20    |      |

**WG243112**

|              |     |                |            |    |     |       |      |       |       |      |      |    |  |
|--------------|-----|----------------|------------|----|-----|-------|------|-------|-------|------|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 2  |     | 2.031 | mg/L | 101.6 | 95    | 105  |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |    |     | U     | mg/L |       | -0.03 | 0.03 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | .5 |     | .508  | mg/L | 101.6 | 85    | 115  |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | .5 | .06 | .56   | mg/L | 100   | 85    | 115  |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | .5 | .06 | .564  | mg/L | 100.8 | 85    | 115  | 0.71 | 20 |  |
| L68676-01AS  | AS  | 04/18/08 21:37 | II080401-3 | .5 | .85 | 1.378 | mg/L | 105.6 | 85    | 115  |      |    |  |
| L68676-01ASD | ASD | 04/18/08 21:40 | II080401-3 | .5 | .85 | 1.385 | mg/L | 107   | 85    | 115  | 0.51 | 20 |  |

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243112</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 2  |        | 1.925 | mg/L  | 96.3  | 95    | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | .5 |        | .511  | mg/L  | 102.2 | 85    | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | .5 | U      | .498  | mg/L  | 99.6  | 85    | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | .5 | U      | .502  | mg/L  | 100.4 | 85    | 115   | 0.8  | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | .5 | U      | .519  | mg/L  | 103.8 | 85    | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | .5 | U      | .514  | mg/L  | 102.8 | 85    | 115   | 0.97 | 20    |      |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243360</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243360ICV     | ICV  | 04/23/08 19:33 | WI080312-1 | 2.416 |        | 2.525 | mg/L  | 104.5 | 90    | 110   |     |       |      |
| WG243360ICB     | ICB  | 04/23/08 19:34 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG243362</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG243362ICV     | ICV  | 04/23/08 21:14 | WI080312-1 | 2.416 |        | 2.577 | mg/L  | 106.7 | 90    | 110   |     |       |      |
| WG243362ICB     | ICB  | 04/23/08 21:15 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| WG243362LFB1    | LFB  | 04/23/08 21:17 | WI080312-1 | 2     |        | 2.031 | mg/L  | 101.6 | 90    | 110   |     |       |      |
| L68665-01AS     | AS   | 04/23/08 21:19 | WI080312-1 | 2     | U      | 2.127 | mg/L  | 106.4 | 90    | 110   |     |       |      |
| L68673-01DUP    | DUP  | 04/23/08 21:22 |            |       | U      | U     | mg/L  |       |       |       | 0   | 20    | RA   |
| WG243362LFB2    | LFB  | 04/23/08 21:56 | WI080312-1 | 2     |        | 2.038 | mg/L  | 101.9 | 90    | 110   |     |       |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG242969LCSW3   | LCSW | 04/16/08 11:20 | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |
| WG242969LCSW6   | LCSW | 04/16/08 14:26 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG242969LCSW9   | LCSW | 04/16/08 17:49 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG242969LCSW12  | LCSW | 04/16/08 20:47 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| L68675-02DUP    | DUP  | 04/17/08 0:17  |          |    | 7.9    | 7.93  | units |       |       |       | 0.4 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243112</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 20       |        | 20.35  | mg/L  | 101.8 | 95    | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | 99.76186 |        | 102.44 | mg/L  | 102.7 | 85    | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | 99.76186 | 1.1    | 104.06 | mg/L  | 103.2 | 85    | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | 99.76186 | 1.1    | 105.11 | mg/L  | 104.3 | 85    | 115   | 1    | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | 99.76186 | 68.7   | 173.15 | mg/L  | 104.7 | 85    | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | 99.76186 | 68.7   | 173.28 | mg/L  | 104.8 | 85    | 115   | 0.08 | 20    |      |

**Residue, Filterable (TDS) @180C**

160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243084</b> |      |                |          |     |        |       |       |      |       |       |     |       |      |
| WG243084PBW     | PBW  | 04/17/08 16:30 |          |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG243084LCSW    | LCSW | 04/17/08 16:31 | PCN29268 | 260 |        | 252   | mg/L  | 96.9 | 80    | 120   |     |       |      |
| L68675-01DUP    | DUP  | 04/17/08 16:45 |          |     | 2800   | 3092  | mg/L  |      |       |       | 9.9 | 20    |      |

**Selenium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243190</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243190ICV     | ICV  | 04/22/08 0:34 | MS080401-2 | .05 |        | .05205 | mg/L  | 104.1 | 90      | 110    |      |       |      |
| WG243190ICB     | ICB  | 04/22/08 0:39 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243190LFB     | LFB  | 04/22/08 0:51 | MS080407-2 | .05 |        | .05147 | mg/L  | 102.9 | 85      | 115    |      |       |      |
| L68500-04AS     | AS   | 04/22/08 1:08 | MS080407-2 | .05 | .0006  | .05958 | mg/L  | 118   | 70      | 130    |      |       |      |
| L68500-04ASD    | ASD  | 04/22/08 1:14 | MS080407-2 | .05 | .0006  | .05952 | mg/L  | 117.8 | 70      | 130    | 0.1  | 20    |      |
| L68674-05AS     | AS   | 04/22/08 2:24 | MS080407-2 | .1  | .0011  | .1098  | mg/L  | 108.7 | 70      | 130    |      |       |      |
| L68674-05ASD    | ASD  | 04/22/08 2:30 | MS080407-2 | .1  | .0011  | .11126 | mg/L  | 110.2 | 70      | 130    | 1.32 | 20    |      |
| <b>WG243211</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243211ICV     | ICV  | 04/22/08 6:12 | MS080401-2 | .05 |        | .05219 | mg/L  | 104.4 | 90      | 110    |      |       |      |
| WG243211ICB     | ICB  | 04/22/08 6:18 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243211LFB     | LFB  | 04/22/08 6:30 | MS080407-2 | .05 |        | .05201 | mg/L  | 104   | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/22/08 6:47 | MS080407-2 | .1  | .0002  | .1032  | mg/L  | 103   | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/22/08 6:53 | MS080407-2 | .1  | .0002  | .1042  | mg/L  | 104   | 70      | 130    | 0.96 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Sodium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 100      |        | 99.8   | mg/L  | 99.8  | 95    | 105   |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 100      |        | 101.76 | mg/L  | 101.8 | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |          |        | U      | mg/L  |       | -6    | 6     |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | 98.21624 |        | 102.5  | mg/L  | 104.4 | 85    | 115   |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | 98.21624 |        | 104.3  | mg/L  | 106.2 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | 98.21624 | 127    | 217.47 | mg/L  | 92.1  | 85    | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | 98.21624 | 127    | 211.39 | mg/L  | 85.9  | 85    | 115   | 2.84 | 20    |      |

**WG243112**

|              |     |                |            |          |      |        |      |       |      |     |      |    |  |
|--------------|-----|----------------|------------|----------|------|--------|------|-------|------|-----|------|----|--|
| WG243112ICV  | ICV | 04/18/08 20:27 | II080115-3 | 100      |      | 100.9  | mg/L | 100.9 | 95   | 105 |      |    |  |
| WG243112ICB  | ICB | 04/18/08 20:30 |            |          |      | U      | mg/L |       | -0.9 | 0.9 |      |    |  |
| WG243112LFB  | LFB | 04/18/08 20:43 | II080401-3 | 98.21624 |      | 101.25 | mg/L | 103.1 | 85   | 115 |      |    |  |
| L68590-02AS  | AS  | 04/18/08 20:52 | II080401-3 | 98.21624 | 3.8  | 104.9  | mg/L | 102.9 | 85   | 115 |      |    |  |
| L68590-02ASD | ASD | 04/18/08 20:55 | II080401-3 | 98.21624 | 3.8  | 106.18 | mg/L | 104.2 | 85   | 115 | 1.21 | 20 |  |
| L68676-01AS  | AS  | 04/18/08 21:37 | II080401-3 | 98.21624 | 40.8 | 143.73 | mg/L | 104.8 | 85   | 115 |      |    |  |
| L68676-01ASD | ASD | 04/18/08 21:40 | II080401-3 | 98.21624 | 40.8 | 144.78 | mg/L | 105.9 | 85   | 115 | 0.73 | 20 |  |

**Sulfate**

SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|-----|-------|------|
| <b>WG243148</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243148PBW     | PBW  | 04/19/08 10:30 |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243148LCSW    | LCSW | 04/19/08 10:33 | WC071121-2 | 100 |        | 100   | mg/L  | 100 | 80    | 120   |     |       |      |
| L68674-03DUP    | DUP  | 04/19/08 11:53 |            |     | 1680   | 1645  | mg/L  |     |       |       | 2.1 | 20    |      |
| <b>WG243602</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243602PBW     | PBW  | 04/29/08 13:35 |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243602LCSW    | LCSW | 04/29/08 13:38 | WC080424-2 | 100 |        | 102   | mg/L  | 102 | 80    | 120   |     |       |      |
| L68675-01DUP    | DUP  | 04/29/08 15:00 |            |     | 1580   | 1634  | mg/L  |     |       |       | 3.4 | 20    |      |

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243025</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243025ICV     | ICV  | 04/17/08 16:18 | MS080401-2 | .05 |        | .05202 | mg/L  | 104   | 90      | 110    |      |       |      |
| WG243025ICB     | ICB  | 04/17/08 16:24 |            |     |        | .00011 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243025LFB     | LFB  | 04/17/08 16:36 | MS080407-2 | .05 |        | .05429 | mg/L  | 108.6 | 85      | 115    |      |       |      |
| L68674-01AS     | AS   | 04/17/08 17:00 | MS080407-2 | .05 | U      | .05247 | mg/L  | 104.9 | 70      | 130    |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 17:06 | MS080407-2 | .05 | U      | .05196 | mg/L  | 103.9 | 70      | 130    | 0.98 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

Project ID: OJ06DZ

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG243014</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243014ICV     | ICV  | 04/17/08 14:24 | II080115-3 | 2  |        | 1.94  | mg/L  | 97    | 95    | 105   |      |       |      |
| WG243014ICB     | ICB  | 04/17/08 14:27 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243014LFB     | LFB  | 04/17/08 14:41 | II080401-3 | .5 |        | .527  | mg/L  | 105.4 | 85    | 115   |      |       |      |
| L68674-01AS     | AS   | 04/17/08 15:33 | II080401-3 | .5 | .13    | .589  | mg/L  | 91.8  | 85    | 115   |      |       |      |
| L68674-01ASD    | ASD  | 04/17/08 15:36 | II080401-3 | .5 | .13    | .596  | mg/L  | 93.2  | 85    | 115   | 1.18 | 20    |      |
| <b>WG243112</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243112ICV     | ICV  | 04/18/08 20:27 | II080115-3 | 2  |        | 1.98  | mg/L  | 99    | 95    | 105   |      |       |      |
| WG243112ICB     | ICB  | 04/18/08 20:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243112LFB     | LFB  | 04/18/08 20:43 | II080401-3 | .5 |        | .513  | mg/L  | 102.6 | 85    | 115   |      |       |      |
| L68590-02AS     | AS   | 04/18/08 20:52 | II080401-3 | .5 | U      | .521  | mg/L  | 104.2 | 85    | 115   |      |       |      |
| L68590-02ASD    | ASD  | 04/18/08 20:55 | II080401-3 | .5 | U      | .523  | mg/L  | 104.6 | 85    | 115   | 0.38 | 20    |      |
| L68676-01AS     | AS   | 04/18/08 21:37 | II080401-3 | .5 | U      | .517  | mg/L  | 103.4 | 85    | 115   |      |       |      |
| L68676-01ASD    | ASD  | 04/18/08 21:40 | II080401-3 | .5 | U      | .516  | mg/L  | 103.2 | 85    | 115   | 0.19 | 20    |      |



FMI Gold & Copper - Sierrita

ACZ Project ID: **L68674**

| ACZ ID    | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|-----------|----------|----------------------|---------------------------------------|------|---|
| L68674-01 | WG243025 | Antimony, dissolved  | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.  |
|           |          | Beryllium, dissolved | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.  |
|           |          | Cadmium, dissolved   | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.  |
|           | WG243014 | Calcium, dissolved   | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|           |          | Magnesium, dissolved | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|           | WG243248 | Chloride             | 325.2 / SM4500Cl-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           | WG243253 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|           |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
| L68674-02 | WG243025 | Antimony, dissolved  | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.  |
|           |          | Beryllium, dissolved | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.  |
|           |          | Cadmium, dissolved   | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.  |
|           | WG243014 | Calcium, dissolved   | M200.7 ICP                            | M3   | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
|           |          | Magnesium, dissolved | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|           | WG243248 | Chloride             | 325.2 / SM4500Cl-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           | WG243253 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|           |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

| ACZ ID           | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|----------------------|---------------------------------------|------|---|
| <b>L68674-03</b> | WG243248 | Chloride             | 325.2 / SM4500Cl-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68674-04</b> | WG243025 | Beryllium, dissolved | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.                    |
|                  |          | Thallium, dissolved  | M200.8 ICP-MS                         | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  | WG243248 | Chloride             | 325.2 / SM4500Cl-E                    | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  |          |                      | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  | WG243315 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68674-05</b> | WG243025 | Beryllium, dissolved | M200.8 ICP-MS                         | IA   | Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.                    |
|                  |          | Thallium, dissolved  | M200.8 ICP-MS                         | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  |          |                      | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68674-06</b> | WG243025 | Thallium, dissolved  | M200.8 ICP-MS                         | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].  |
|                  | WG243154 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243315 | Fluoride             | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.   |
|                  |          |                      | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243362 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68674**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68674  
Date Received: 4/15/2008  
Received By:  
Date Printed: 4/15/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        |     | X  |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

The following vials contain headspace: 2-3/3, 4-1/3, 5-1/3.

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted.

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 2149      | 4.2       | 14          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68674  
 Date Received: 4/15/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID  | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68674-01 | IW-17      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68674-02 | IW-18      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68674-03 | IW-19      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68674-04 | IW-20      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68674-05 | IW-21      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68674-06 | DUP041108A |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

April 30, 2008

Project ID: QJ06DZ  
ACZ Project ID: L68596 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 10, 2008. This project was assigned to ACZ's project number, L68596. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68596. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-30

ACZ Sample ID: **L68596-01**

Date Sampled: 04/08/08 07:40

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1830   |      |    | mg/L  | 10  | 50  | 04/25/08 10:49 | ear     |

**Arizona license number: AZ0102**



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: PZ-8

ACZ Sample ID: **L68596-02**

Date Sampled: 04/08/08 13:12

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 500    |      |    | mg/L  | 10  | 50  | 04/25/08 10:53 | ear     |

**Arizona license number: AZ0102**

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

## Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG242969PBW2    | PBW  | 04/16/08 14:10 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW5   | LCSW | 04/16/08 14:22 | WC080324-1 | 820 |        | 778.6 | mg/L  | 95   | 90    | 110   |     |       |      |
| L68597-01DUP    | DUP  | 04/16/08 15:52 |            |     | 65     | 62.7  | mg/L  |      |       |       | 3.6 | 20    |      |
| WG242969PBW3    | PBW  | 04/16/08 17:33 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW8   | LCSW | 04/16/08 17:45 | WC080324-1 | 820 |        | 781.3 | mg/L  | 95.3 | 90    | 110   |     |       |      |
| WG242969PBW4    | PBW  | 04/16/08 20:31 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242969LCSW11  | LCSW | 04/16/08 20:43 | WC080324-1 | 820 |        | 783.6 | mg/L  | 95.6 | 90    | 110   |     |       |      |
| WG242969LCSW14  | LCSW | 04/17/08 0:29  | WC080324-1 | 820 |        | 788   | mg/L  | 96.1 | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 2.012 | mg/L  | 100.6 | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 1  |        | 1.023 | mg/L  | 102.3 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | 1  | U      | 1.045 | mg/L  | 104.5 | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | 1  | U      | 1.028 | mg/L  | 102.8 | 85    | 115   | 1.64 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |        |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .02006 |        | .0209  | mg/L  | 104.2 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .01    |        | .01036 | mg/L  | 103.6 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .01    | U      | .00899 | mg/L  | 89.9  | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .01    | U      | .00901 | mg/L  | 90.1  | 70      | 130    | 0.22 | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .01    | U      | .0097  | mg/L  | 97    | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .01    | U      | .00988 | mg/L  | 98.8  | 70      | 130    | 1.84 | 20    |      |

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05146 | mg/L  | 102.9 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .05101 | mg/L  | 102   | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | .0012  | .04943 | mg/L  | 96.5  | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | .0012  | .04856 | mg/L  | 94.7  | 70      | 130    | 1.78 | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .05 | .0011  | .05376 | mg/L  | 105.3 | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .05 | .0011  | .05414 | mg/L  | 106.1 | 70      | 130    | 0.7  | 20    |      |

**WG243140**

|              |     |                |            |     |      |        |      |       |         |        |     |    |  |
|--------------|-----|----------------|------------|-----|------|--------|------|-------|---------|--------|-----|----|--|
| WG243140ICV  | ICV | 04/18/08 17:35 | MS080401-2 | .05 |      | .05088 | mg/L | 101.8 | 90      | 110    |     |    |  |
| WG243140ICB  | ICB | 04/18/08 17:40 |            |     |      | U      | mg/L |       | -0.0015 | 0.0015 |     |    |  |
| WG243140LFB  | LFB | 04/18/08 17:52 | MS080407-2 | .05 |      | .04818 | mg/L | 96.4  | 85      | 115    |     |    |  |
| L68593-04AS  | AS  | 04/18/08 19:24 | MS080407-2 | .1  | .003 | .1059  | mg/L | 102.9 | 70      | 130    |     |    |  |
| L68593-04ASD | ASD | 04/18/08 19:29 | MS080407-2 | .1  | .003 | .1088  | mg/L | 105.8 | 70      | 130    | 2.7 | 20 |  |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found  | Units | Rec  | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|------|--------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |    |        |        |       |      |        |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.9999 | mg/L  | 100  | 95     | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U      | mg/L  |      | -0.009 | 0.009 |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | .5 |        | .4988  | mg/L  | 99.8 | 85     | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | .5 | .066   | .5549  | mg/L  | 97.8 | 85     | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | .5 | .066   | .5537  | mg/L  | 97.5 | 85     | 115   | 0.22 | 20    |      |

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .04795 | mg/L  | 95.9  | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .04738 | mg/L  | 94.8  | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | U      | .04444 | mg/L  | 88.9  | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | U      | .04221 | mg/L  | 84.4  | 70      | 130    | 5.15 | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .05 | U      | .05162 | mg/L  | 103.2 | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .05 | U      | .05214 | mg/L  | 104.3 | 70      | 130    | 1    | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05022 | mg/L  | 100.4 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .04978 | mg/L  | 99.6  | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | .0002  | .04385 | mg/L  | 87.3  | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | .0002  | .04247 | mg/L  | 84.5  | 70      | 130    | 3.2  | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .05 | U      | .04892 | mg/L  | 97.8  | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .05 | U      | .04967 | mg/L  | 99.3  | 70      | 130    | 1.52 | 20    |      |

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |          |        |        |       |      |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 100      |        | 95.59  | mg/L  | 95.6 | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |          |        | U      | mg/L  |      | -0.6  | 0.6   |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 67.97008 |        | 67.44  | mg/L  | 99.2 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | 67.97008 | 173    | 228.85 | mg/L  | 82.2 | 85    | 115   |      |       | M2   |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | 67.97008 | 173    | 228.5  | mg/L  | 81.7 | 85    | 115   | 0.15 | 20    | M2   |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243045</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG243045ICB     | ICB  | 04/18/08 8:49  |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG243045ICV     | ICV  | 04/18/08 8:49  | WI071212-1 | 54.945 |        | 57.9  | mg/L  | 105.4 | 90    | 110   |     |       |      |
| WG243045LFB1    | LFB  | 04/18/08 9:12  | WI071130-1 | 30     |        | 32.4  | mg/L  | 108   | 90    | 110   |     |       |      |
| L68596-02DUP    | DUP  | 04/18/08 10:09 |            |        | 58     | 58.3  | mg/L  |       |       |       | 0.5 | 20    |      |
| L68596-01AS     | AS   | 04/18/08 10:18 | 10XCL      | 30     | 130    | 161   | mg/L  | 103.3 | 90    | 110   |     |       |      |
| WG243045LFB2    | LFB  | 04/18/08 10:51 | WI071130-1 | 30     |        | 32.1  | mg/L  | 107   | 90    | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.926 | mg/L  | 96.3 | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | .5 |        | .493  | mg/L  | 98.6 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | .5 | U      | .485  | mg/L  | 97   | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | .5 | U      | .48   | mg/L  | 96   | 85    | 115   | 1.04 | 20    |      |

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242892</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG242892ICV     | ICV  | 04/16/08 11:27 | II080115-3 | 2  |        | 1.96  | mg/L  | 98    | 95    | 105   |      |       |      |
| WG242892ICB     | ICB  | 04/16/08 11:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| <b>WG242994</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG242994LFB     | LFB  | 04/16/08 12:37 | II080401-3 | .5 |        | .495  | mg/L  | 99    | 85    | 115   |      |       |      |
| L68596-02AS     | AS   | 04/16/08 13:28 | II080401-3 | .5 | U      | .543  | mg/L  | 108.6 | 85    | 115   |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 13:31 | II080401-3 | .5 | U      | .537  | mg/L  | 107.4 | 85    | 115   | 1.11 | 20    |      |

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units     | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|-----------|-------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |          |        |        |       |           |       |       |       |     |       |      |
| WG242969LCSW1   | LCSW | 04/16/08 11:01 | PCN28873 | 1408.8 |        | 1417  | µmhos/crr | 100.6 | 90    | 110   |     |       |      |
| WG242969LCSW4   | LCSW | 04/16/08 14:12 | PCN28873 | 1408.8 |        | 1418  | µmhos/crr | 100.7 | 90    | 110   |     |       |      |
| L68597-01DUP    | DUP  | 04/16/08 15:52 |          |        | 163    | 162.8 | µmhos/crr |       |       |       | 0.1 | 20    |      |
| WG242969LCSW7   | LCSW | 04/16/08 17:34 | PCN28873 | 1408.8 |        | 1415  | µmhos/crr | 100.4 | 90    | 110   |     |       |      |
| WG242969LCSW10  | LCSW | 04/16/08 20:32 | PCN28873 | 1408.8 |        | 1416  | µmhos/crr | 100.5 | 90    | 110   |     |       |      |
| WG242969LCSW13  | LCSW | 04/17/08 0:19  | PCN28873 | 1408.8 |        | 1417  | µmhos/crr | 100.6 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.917 | mg/L  | 95.9 | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | .5 |        | .497  | mg/L  | 99.4 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | .5 | U      | .494  | mg/L  | 98.8 | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | .5 | U      | .491  | mg/L  | 98.2 | 85    | 115   | 0.61 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG243005</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG243005ICV     | ICV  | 04/16/08 14:30 | WI080411-5 | .3 |        | .2994 | mg/L  | 99.8  | 90     | 110   |     |       |      |
| WG243005ICB     | ICB  | 04/16/08 14:30 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG242921LRB     | LRB  | 04/16/08 16:10 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG242921LFB     | LFB  | 04/16/08 16:11 | WI080411-2 | .2 |        | .2096 | mg/L  | 104.8 | 90     | 110   |     |       |      |
| L68593-02DUP    | DUP  | 04/16/08 16:13 |            |    | U      | U     | mg/L  |       |        |       | 0   | 20    | RA   |
| L68594-02LFM    | LFM  | 04/16/08 16:19 | WI080411-2 | .2 | .008   | .2169 | mg/L  | 104.5 | 90     | 110   |     |       |      |
| L68596-02DUP    | DUP  | 04/16/08 16:22 |            |    | U      | U     | mg/L  |       |        |       | 0   | 20    | RA   |
| L68605-04LFM    | LFM  | 04/16/08 16:26 | WI080411-2 | .2 | U      | .2161 | mg/L  | 108.1 | 90     | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243235</b> |      |                |            |    |        |       |       |       |       |       |     |       |      |
| WG243235ICV     | ICV  | 04/22/08 11:27 | WC080416-1 | 2  |        | 1.96  | mg/L  | 98    | 90    | 110   |     |       |      |
| WG243235ICB     | ICB  | 04/22/08 11:34 |            |    |        | U     | mg/L  |       | -0.3  | 0.3   |     |       |      |
| WG243235LFB1    | LFB  | 04/22/08 11:39 | WC080226-1 | 5  |        | 5.2   | mg/L  | 104   | 90    | 110   |     |       |      |
| L68591-01AS     | AS   | 04/22/08 11:52 | WC080226-1 | 5  | .2     | 5.25  | mg/L  | 101   | 90    | 110   |     |       |      |
| L68591-01DUP    | DUP  | 04/22/08 11:55 |            |    | .2     | .2    | mg/L  |       |       |       | 0   | 20    | RA   |
| L68596-02AS     | AS   | 04/22/08 12:33 | WC080226-1 | 5  | .9     | 6.24  | mg/L  | 106.8 | 90    | 110   |     |       |      |
| L68596-02DUP    | DUP  | 04/22/08 12:37 |            |    | .9     | .86   | mg/L  |       |       |       | 4.5 | 20    | RA   |
| WG243235LFB2    | LFB  | 04/22/08 13:20 | WC080226-1 | 5  |        | 4.76  | mg/L  | 95.2  | 90    | 110   |     |       |      |

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.934 | mg/L  | 96.7  | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 1  |        | 1.019 | mg/L  | 101.9 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | 1  | .04    | 1.031 | mg/L  | 99.1  | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | 1  | .04    | 1.029 | mg/L  | 98.9  | 85    | 115   | 0.19 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .0511  | mg/L  | 102.2 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .05031 | mg/L  | 100.6 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | U      | .05162 | mg/L  | 103.2 | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | U      | .05173 | mg/L  | 103.5 | 70      | 130    | 0.21 | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .05 | .0004  | .05159 | mg/L  | 102.4 | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .05 | .0004  | .05151 | mg/L  | 102.2 | 70      | 130    | 0.16 | 20    |      |

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 100      |        | 98.47  | mg/L  | 98.5  | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 49.96908 |        | 50.8   | mg/L  | 101.7 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | 49.96908 | 129    | 172.16 | mg/L  | 86.4  | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | 49.96908 | 129    | 172.63 | mg/L  | 87.3  | 85    | 115   | 0.27 | 20    |      |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |       |        |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.902 | mg/L  | 95.1  | 95     | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | .5 |        | .5235 | mg/L  | 104.7 | 85     | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | .5 | .143   | .6468 | mg/L  | 100.8 | 85     | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | .5 | .143   | .6454 | mg/L  | 100.5 | 85     | 115   | 0.22 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec  | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|----------|---------|------|-------|------|
| <b>WG242863</b> |      |                |            |        |        |        |       |      |          |         |      |       |      |
| WG242863ICV     | ICV  | 04/16/08 10:35 | II080405-1 | .00501 |        | .00496 | mg/L  | 99   | 95       | 105     |      |       |      |
| WG242863ICB     | ICB  | 04/16/08 10:38 |            |        |        | U      | mg/L  |      | -0.0002  | 0.0002  |      |       |      |
| WG242863LRB     | LRB  | 04/16/08 10:40 |            |        |        | U      | mg/L  |      | -0.00044 | 0.00044 |      |       |      |
| WG242863LFB     | LFB  | 04/16/08 10:42 | II080328-2 | .002   |        | .002   | mg/L  | 100  | 85       | 115     |      |       |      |
| L68500-08LFM    | LFM  | 04/16/08 10:47 | II080328-2 | .002   | U      | .00197 | mg/L  | 98.5 | 85       | 115     |      |       |      |
| L68500-08LFMD   | LFMD | 04/16/08 10:49 | II080328-2 | .002   | U      | .00193 | mg/L  | 96.5 | 85       | 115     | 2.05 | 20    |      |
| L68596-02LFM    | LFM  | 04/16/08 11:20 | II080328-2 | .002   | U      | .00196 | mg/L  | 98   | 85       | 115     |      |       |      |
| L68596-02LFMD   | LFMD | 04/16/08 11:22 | II080328-2 | .002   | U      | .00199 | mg/L  | 99.5 | 85       | 115     | 1.52 | 20    |      |

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |      |       |       |     |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.933 | mg/L  | 96.7 | 95    | 105   |     |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |     |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | .5 |        | .498  | mg/L  | 99.6 | 85    | 115   |     |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | .5 | .01    | .503  | mg/L  | 98.6 | 85    | 115   |     |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | .5 | .01    | .503  | mg/L  | 98.6 | 85    | 115   | 0   | 20    |      |

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242892</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG242892ICV     | ICV  | 04/16/08 11:27 | II080115-3 | 2  |        | 1.965 | mg/L  | 98.3  | 95    | 105   |      |       |      |
| WG242892ICB     | ICB  | 04/16/08 11:30 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| <b>WG242994</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG242994LFB     | LFB  | 04/16/08 12:37 | II080401-3 | .5 |        | .501  | mg/L  | 100.2 | 85    | 115   |      |       |      |
| L68596-02AS     | AS   | 04/16/08 13:28 | II080401-3 | .5 | U      | .547  | mg/L  | 109.4 | 85    | 115   |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 13:31 | II080401-3 | .5 | U      | .54   | mg/L  | 108   | 85    | 115   | 1.29 | 20    |      |
| <b>WG243199</b> |      |                |            |    |        |       |       |       |       |       |      |       |      |
| WG243199ICV     | ICV  | 04/22/08 16:33 | II080115-3 | 2  |        | 1.913 | mg/L  | 95.7  | 95    | 105   |      |       |      |
| WG243199ICB     | ICB  | 04/22/08 16:36 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG243199LFB     | LFB  | 04/22/08 16:50 | II080401-3 | .5 |        | .493  | mg/L  | 98.6  | 85    | 115   |      |       |      |
| L68675-03AS     | AS   | 04/22/08 17:09 | II080401-3 | 1  | U      | .953  | mg/L  | 95.3  | 85    | 115   |      |       |      |
| L68675-03ASD    | ASD  | 04/22/08 17:19 | II080401-3 | 1  | U      | .917  | mg/L  | 91.7  | 85    | 115   | 3.85 | 20    |      |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242910</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG242910ICV     | ICV  | 04/15/08 11:39 | WI080312-1 | 2.416 |        | 2.48  | mg/L  | 102.6 | 90    | 110   |     |       |      |
| WG242910ICB     | ICB  | 04/15/08 11:41 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG242855</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG242855LFB1    | LFB  | 04/15/08 17:46 | WI080312-1 | 2     |        | 2.077 | mg/L  | 103.9 | 90    | 110   |     |       |      |
| WG242855LFB2    | LFB  | 04/15/08 18:25 | WI080312-1 | 2     |        | 2.036 | mg/L  | 101.8 | 90    | 110   |     |       |      |
| L68594-01AS     | AS   | 04/15/08 18:27 | WI080312-1 | 2     | 2.06   | 3.937 | mg/L  | 93.9  | 90    | 110   |     |       |      |
| L68594-02DUP    | DUP  | 04/15/08 18:30 |            |       | .43    | .439  | mg/L  |       |       |       | 2.1 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242969</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG242969LCSW3   | LCSW | 04/16/08 11:20 | PCN27958 | 6  |        | 6.04  | units | 100.7 | 90    | 110   |     |       |      |
| WG242969LCSW6   | LCSW | 04/16/08 14:26 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| L68597-01DUP    | DUP  | 04/16/08 15:52 |          |    | 8.1    | 8.14  | units |       |       |       | 0.5 | 20    |      |
| WG242969LCSW9   | LCSW | 04/16/08 17:49 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG242969LCSW12  | LCSW | 04/16/08 20:47 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 20       |        | 20.3   | mg/L  | 101.5 | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 99.76186 |        | 103.76 | mg/L  | 104   | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | 99.76186 | 7      | 115.48 | mg/L  | 108.7 | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | 99.76186 | 7      | 115.41 | mg/L  | 108.7 | 85    | 115   | 0.06 | 20    |      |

**Residue, Filterable (TDS) @180C**

160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242937</b> |      |                |          |     |        |       |       |      |       |       |     |       |      |
| WG242937PBW     | PBW  | 04/15/08 14:20 |          |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242937LCSW    | LCSW | 04/15/08 14:21 | PCN29268 | 260 |        | 254   | mg/L  | 97.7 | 80    | 120   |     |       |      |
| L68615-01DUP    | DUP  | 04/15/08 14:40 |          |     | 970    | 958   | mg/L  |      |       |       | 1.2 | 20    |      |

**Selenium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05243 | mg/L  | 104.9 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .05053 | mg/L  | 101.1 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | .0001  | .05447 | mg/L  | 108.7 | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | .0001  | .05573 | mg/L  | 111.3 | 70      | 130    | 2.29 | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .05 | .0081  | .06518 | mg/L  | 114.2 | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .05 | .0081  | .06622 | mg/L  | 116.2 | 70      | 130    | 1.58 | 20    |      |
| <b>WG243190</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG243190ICV     | ICV  | 04/22/08 0:34  | MS080401-2 | .05 |        | .05205 | mg/L  | 104.1 | 90      | 110    |      |       |      |
| WG243190ICB     | ICB  | 04/22/08 0:39  |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243190LFB     | LFB  | 04/22/08 0:51  | MS080407-2 | .05 |        | .05147 | mg/L  | 102.9 | 85      | 115    |      |       |      |
| L68500-04AS     | AS   | 04/22/08 1:08  | MS080407-2 | .05 | .0006  | .05958 | mg/L  | 118   | 70      | 130    |      |       |      |
| L68500-04ASD    | ASD  | 04/22/08 1:14  | MS080407-2 | .05 | .0006  | .05952 | mg/L  | 117.8 | 70      | 130    | 0.1  | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

Project ID: OJ06DZ

**Sodium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242894</b> |      |                |            |          |        |        |       |       |       |       |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 100      |        | 100.42 | mg/L  | 100.4 | 95    | 105   |      |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 100      |        | 99.4   | mg/L  | 99.4  | 95    | 105   |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |          |        | U      | mg/L  |       | -6    | 6     |      |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 98.21624 |        | 100.4  | mg/L  | 102.2 | 85    | 115   |      |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | 98.21624 |        | 101.45 | mg/L  | 103.3 | 85    | 115   |      |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | 98.21624 | 217    | 307.4  | mg/L  | 92    | 85    | 115   |      |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | 98.21624 | 217    | 308.12 | mg/L  | 92.8  | 85    | 115   | 0.23 | 20    |      |

**Sulfate**

SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|-----|-------|------|
| <b>WG243440</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243440PBW     | PBW  | 04/25/08 9:50  |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243440LCSW    | LCSW | 04/25/08 9:53  | WC080424-2 | 100 |        | 86    | mg/L  | 86  | 80    | 120   |     |       |      |
| L68601-01DUP    | DUP  | 04/25/08 11:08 |            |     | 2560   | 2428  | mg/L  |     |       |       | 5.3 | 20    |      |

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05307 | mg/L  | 106.1 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | .00011 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .0504  | mg/L  | 100.8 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | U      | .05294 | mg/L  | 105.9 | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | U      | .05182 | mg/L  | 103.6 | 70      | 130    | 2.14 | 20    |      |
| L68596-02AS     | AS   | 04/16/08 19:55 | MS080407-2 | .05 | U      | .05265 | mg/L  | 105.3 | 70      | 130    |      |       |      |
| L68596-02ASD    | ASD  | 04/16/08 20:00 | MS080407-2 | .05 | U      | .05249 | mg/L  | 105   | 70      | 130    | 0.3  | 20    |      |

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242894</b> |      |                |            |    |        |       |       |      |       |       |     |       |      |
| WG242894ICV     | ICV  | 04/14/08 17:34 | II080115-3 | 2  |        | 1.904 | mg/L  | 95.2 | 95    | 105   |     |       |      |
| WG242894ICB     | ICB  | 04/14/08 17:37 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |     |       |      |
| WG242894LFB     | LFB  | 04/14/08 17:52 | II080401-3 | .5 |        | .492  | mg/L  | 98.4 | 85    | 115   |     |       |      |
| L68576-05AS     | AS   | 04/14/08 17:59 | II080401-3 | .5 | .01    | .499  | mg/L  | 97.8 | 85    | 115   |     |       |      |
| L68576-05ASD    | ASD  | 04/14/08 18:03 | II080401-3 | .5 | .01    | .495  | mg/L  | 97   | 85    | 115   | 0.8 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

| ACZ ID           | WORKNUM  | PARAMETER           | METHOD                                | QUAL | DESCRIPTION  |
|------------------|----------|---------------------|---------------------------------------|------|--|
| <b>L68596-01</b> | WG242894 | Calcium, dissolved  | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  | WG242994 | Cobalt, dissolved   | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].  |
|                  | WG243005 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL). |
|                  | WG243235 | Fluoride            | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL). |
| <b>L68596-02</b> | WG242894 | Calcium, dissolved  | M200.7 ICP                            | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  | WG242994 | Cobalt, dissolved   | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].  |
|                  |          | Nickel, dissolved   | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $<$ MDL].  |
|                  | WG242903 | Selenium, dissolved | M200.8 ICP-MS                         | BB   | Target analyte detected in calibration blank at or above acceptance limit. Sample value was $>$ 10X the concentration in the calibration blank.        |
|                  | WG243005 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL). |
|                  | WG243235 | Fluoride            | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $<$ 10x MDL). |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68596**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68596  
 Date Received: 4/10/2008  
 Received By:  
 Date Printed: 4/10/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 2034      | 2.5       | 15          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68596  
Date Received: 4/10/2008  
Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|-----------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68596-01 | MH-30     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68596-02 | PZ-8      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

**ACZ****Laboratories, Inc.** L68596

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

**CHAIN of CUSTODY**

## Report to:

Name: Billy Darris  
Company: Freemont McMoran Sierrita  
E-mail: billy-darris@fmi.com

Address: 6200 W. Duval Mine Rd  
Green Valley AZ 85614  
Telephone: 520-648-8873

## Copy of Report to:

Name: Dan Simpson  
Company: Hydro Geo Chem

E-mail: dans@hgcinc.com  
Telephone: 520-293-1500 Ext 133

## Invoice to:

Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_

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

YES ☐  
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

## PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:

Project/PO #: OJ06DZ

Reporting state for compliance testing:

Sampler's Name:

Are any samples NRC licensable material?

# of Containers

SAMPLE IDENTIFICATION

DATE:TIME

Matrix

MH-30

4-8-08 / 7:40

GW

8

2 AMBIENT

PZ-8

4-8-08 / 13:12

GW

8

5 SUITE

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

## REMARKS/ SAMPLE DISCLOSURES

"Copy of Report" to Dan Simpson contains only SD4 results with QC Summary.

PAGE

of

UPS TRACKING # 1Z 867 7E4 23 1000 4486

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

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

Billy F. Darris4-9-08 / 15:00LRL4-10-08 10:27

Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

April 30, 2008

Project ID: QJ06DZ  
ACZ Project ID: L68591 – SULFATE ONLY

Dan Simpson:

Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 10, 2008. This project was assigned to ACZ's project number, L68591. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68591. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-28

ACZ Sample ID: **L68591-01**

Date Sampled: 04/08/08 10:05

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1900   |      |    | mg/L  | 10  | 50  | 04/25/08 10:16 | ear     |

**Arizona license number: AZ0102**



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-29

ACZ Sample ID: **L68591-02**

Date Sampled: 04/08/08 12:18

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 1700   |      |    | mg/L  | 10  | 50  | 04/25/08 10:19 | ear     |

**Arizona license number: AZ0102**

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

## Comments

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Alkalinity as CaCO3**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242814</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG242814PBW1    | PBW  | 04/11/08 10:38 |            |     |        | 15.7  | mg/L  |      | -20   | 20    |     |       |      |
| WG242814LCSW2   | LCSW | 04/11/08 11:05 | WC080314-1 | 820 |        | 791.5 | mg/L  | 96.5 | 90    | 110   |     |       |      |
| WG242814PBW2    | PBW  | 04/11/08 13:37 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242814LCSW5   | LCSW | 04/11/08 13:49 | WC080314-1 | 820 |        | 791.3 | mg/L  | 96.5 | 90    | 110   |     |       |      |
| WG242814PBW3    | PBW  | 04/11/08 16:37 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242814LCSW8   | LCSW | 04/11/08 16:49 | WC080314-1 | 820 |        | 796.1 | mg/L  | 97.1 | 90    | 110   |     |       |      |
| WG242814PBW4    | PBW  | 04/11/08 19:53 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242814LCSW11  | LCSW | 04/11/08 20:05 | WC080314-1 | 820 |        | 800.1 | mg/L  | 97.6 | 90    | 110   |     |       |      |
| L68591-02DUP    | DUP  | 04/11/08 22:58 |            |     | 317    | 318.6 | mg/L  |      |       |       | 0.5 | 20    |      |
| WG242814LCSW14  | LCSW | 04/11/08 23:10 | WC080314-1 | 820 |        | 812.2 | mg/L  | 99   | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 2.018 | mg/L  | 100.9 | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 1  |        | 1.024 | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | 1  | .09    | 1.155 | mg/L  | 106.5 | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | 1  | .09    | 1.184 | mg/L  | 109.4 | 85    | 115   | 2.48 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |        |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .02006 |        | .0209  | mg/L  | 104.2 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |        |        | U      | mg/L  |       | -0.0012 | 0.0012 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .01    |        | .01036 | mg/L  | 103.6 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .01    | U      | .00899 | mg/L  | 89.9  | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .01    | U      | .00901 | mg/L  | 90.1  | 70      | 130    | 0.22 | 20    |      |

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05146 | mg/L  | 102.9 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .05101 | mg/L  | 102   | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | .0012  | .04943 | mg/L  | 96.5  | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | .0012  | .04856 | mg/L  | 94.7  | 70      | 130    | 1.78 | 20    |      |

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 2.0277 | mg/L  | 101.4 | 95     | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .4984  | mg/L  | 99.7  | 85     | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | .165   | .6646  | mg/L  | 99.9  | 85     | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | .165   | .6797  | mg/L  | 102.9 | 85     | 115   | 2.25 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |      |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .04795 | mg/L  | 95.9 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |      | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .04738 | mg/L  | 94.8 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | U      | .04444 | mg/L  | 88.9 | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | U      | .04221 | mg/L  | 84.4 | 70      | 130    | 5.15 | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |     |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05022 | mg/L  | 100.4 | 90      | 110    |     |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .04978 | mg/L  | 99.6  | 85      | 115    |     |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | .0002  | .04385 | mg/L  | 87.3  | 70      | 130    |     |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | .0002  | .04247 | mg/L  | 84.5  | 70      | 130    | 3.2 | 20    |      |

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 100      |        | 96.27  | mg/L  | 96.3  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 67.97008 |        | 68.07  | mg/L  | 100.1 | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | 67.97008 | 203    | 256.13 | mg/L  | 78.2  | 85    | 115   |      |       | MA   |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | 67.97008 | 203    | 262.28 | mg/L  | 87.2  | 85    | 115   | 2.37 | 20    |      |

**Chloride**

325.2 / SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243010</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG243010ICB     | ICB  | 04/16/08 14:51 |            |        |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG243010ICV     | ICV  | 04/16/08 14:51 | WI071212-1 | 54.945 |        | 58.3  | mg/L  | 106.1 | 90    | 110   |     |       |      |
| WG243010LFB1    | LFB  | 04/16/08 15:54 | WI071130-1 | 30     |        | 31.9  | mg/L  | 106.3 | 90    | 110   |     |       |      |
| WG243010LFB2    | LFB  | 04/16/08 16:13 | WI071130-1 | 30     |        | 31.6  | mg/L  | 105.3 | 90    | 110   |     |       |      |
| L68568-01DUP    | DUP  | 04/16/08 16:34 |            |        | 74     | 73.9  | mg/L  |       |       |       | 0.1 | 20    |      |
| L68567-06AS     | AS   | 04/16/08 16:43 | 10XCL      | 30     | 120    | 155   | mg/L  | 116.7 | 90    | 110   |     |       | M1   |

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |     |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.947 | mg/L  | 97.4  | 95    | 105   |     |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |     |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .515  | mg/L  | 103   | 85    | 115   |     |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | U      | .516  | mg/L  | 103.2 | 85    | 115   |     |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | U      | .528  | mg/L  | 105.6 | 85    | 115   | 2.3 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.897 | mg/L  | 94.9  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .498  | mg/L  | 99.6  | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | U      | .505  | mg/L  | 101   | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | U      | .518  | mg/L  | 103.6 | 85    | 115   | 2.54 | 20    |      |

**Conductivity @25C**

120.1 / SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units    | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|----------|-------|-------|-------|-----|-------|------|
| <b>WG242814</b> |      |                |          |        |        |       |          |       |       |       |     |       |      |
| WG242814LCSW1   | LCSW | 04/11/08 10:55 | PCN28873 | 1408.8 |        | 1414  | µmhos/cm | 100.4 | 90    | 110   |     |       |      |
| WG242814LCSW4   | LCSW | 04/11/08 13:38 | PCN28873 | 1408.8 |        | 1416  | µmhos/cm | 100.5 | 90    | 110   |     |       |      |
| WG242814LCSW7   | LCSW | 04/11/08 16:38 | PCN28873 | 1408.8 |        | 1421  | µmhos/cm | 100.9 | 90    | 110   |     |       |      |
| WG242814LCSW10  | LCSW | 04/11/08 19:54 | PCN28873 | 1408.8 |        | 1424  | µmhos/cm | 101.1 | 90    | 110   |     |       |      |
| L68591-02DUP    | DUP  | 04/11/08 22:58 |          |        | 4990   | 5010  | µmhos/cm |       |       |       | 0.4 | 20    |      |
| WG242814LCSW13  | LCSW | 04/11/08 23:00 | PCN28873 | 1408.8 |        | 1425  | µmhos/cm | 101.1 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.94  | mg/L  | 97    | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .495  | mg/L  | 99    | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | U      | .513  | mg/L  | 102.6 | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | U      | .525  | mg/L  | 105   | 85    | 115   | 2.31 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG242883</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG242883ICV     | ICV  | 04/14/08 13:43 | WI080411-5 | .3 |        | .2926 | mg/L  | 97.5  | 90     | 110   |     |       |      |
| WG242883ICB     | ICB  | 04/14/08 13:44 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG242883ICV1    | ICV  | 04/14/08 16:16 | WI080411-5 | .3 |        | .2874 | mg/L  | 95.8  | 90     | 110   |     |       |      |
| WG242883ICB1    | ICB  | 04/14/08 16:17 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| <b>WG242885</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG242837LRB     | LRB  | 04/14/08 14:13 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG242837LFB     | LFB  | 04/14/08 14:14 | WI080411-2 | .2 |        | .1968 | mg/L  | 98.4  | 90     | 110   |     |       |      |
| L68590-02DUP    | DUP  | 04/14/08 14:27 |            |    | U      | U     | mg/L  |       |        |       | 0   | 20    | RA   |
| L68591-01LFM    | LFM  | 04/14/08 14:30 | WI080411-2 | .2 | .034   | .2354 | mg/L  | 100.7 | 90     | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG243235</b> |      |                |            |    |        |       |       |      |       |       |     |       |      |
| WG243235ICV     | ICV  | 04/22/08 11:27 | WC080416-1 | 2  |        | 1.96  | mg/L  | 98   | 90    | 110   |     |       |      |
| WG243235ICB     | ICB  | 04/22/08 11:34 |            |    |        | U     | mg/L  |      | -0.3  | 0.3   |     |       |      |
| WG243235LFB1    | LFB  | 04/22/08 11:39 | WC080226-1 | 5  |        | 5.2   | mg/L  | 104  | 90    | 110   |     |       |      |
| L68591-01AS     | AS   | 04/22/08 11:52 | WC080226-1 | 5  | .2     | 5.25  | mg/L  | 101  | 90    | 110   |     |       |      |
| L68591-01DUP    | DUP  | 04/22/08 11:55 |            |    | .2     | .2    | mg/L  |      |       |       | 0   | 20    | RA   |
| WG243235LFB2    | LFB  | 04/22/08 13:20 | WC080226-1 | 5  |        | 4.76  | mg/L  | 95.2 | 90    | 110   |     |       |      |

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.963 | mg/L  | 98.2  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 1  |        | 1.025 | mg/L  | 102.5 | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | 1  | U      | 1.045 | mg/L  | 104.5 | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | 1  | U      | 1.071 | mg/L  | 107.1 | 85    | 115   | 2.46 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .0511  | mg/L  | 102.2 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .05031 | mg/L  | 100.6 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | U      | .05162 | mg/L  | 103.2 | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | U      | .05173 | mg/L  | 103.5 | 70      | 130    | 0.21 | 20    |      |

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 100      |        | 98.91  | mg/L  | 98.9  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 49.96908 |        | 50.66  | mg/L  | 101.4 | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | 49.96908 | 78.4   | 125.88 | mg/L  | 95    | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | 49.96908 | 78.4   | 128.58 | mg/L  | 100.4 | 85    | 115   | 2.12 | 20    |      |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|-----|-------|------|
| <b>WG242789</b> |      |               |            |    |        |        |       |       |        |       |     |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.9288 | mg/L  | 96.4  | 95     | 105   |     |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .5298  | mg/L  | 106   | 85     | 115   |     |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | .063   | .6011  | mg/L  | 107.6 | 85     | 115   |     |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | .063   | .612   | mg/L  | 109.8 | 85     | 115   | 1.8 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec  | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|----------|---------|------|-------|------|
| <b>WG242863</b> |      |                |            |        |        |        |       |      |          |         |      |       |      |
| WG242863ICV     | ICV  | 04/16/08 10:35 | II080405-1 | .00501 |        | .00496 | mg/L  | 99   | 95       | 105     |      |       |      |
| WG242863ICB     | ICB  | 04/16/08 10:38 |            |        |        | U      | mg/L  |      | -0.0002  | 0.0002  |      |       |      |
| WG242863LRB     | LRB  | 04/16/08 10:40 |            |        |        | U      | mg/L  |      | -0.00044 | 0.00044 |      |       |      |
| WG242863LFB     | LFB  | 04/16/08 10:42 | II080328-2 | .002   |        | .002   | mg/L  | 100  | 85       | 115     |      |       |      |
| L68500-08LFM    | LFM  | 04/16/08 10:47 | II080328-2 | .002   | U      | .00197 | mg/L  | 98.5 | 85       | 115     |      |       |      |
| L68500-08LFMD   | LFMD | 04/16/08 10:49 | II080328-2 | .002   | U      | .00193 | mg/L  | 96.5 | 85       | 115     | 2.05 | 20    |      |

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.971 | mg/L  | 98.6  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .518  | mg/L  | 103.6 | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | .02    | .528  | mg/L  | 101.6 | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | .02    | .547  | mg/L  | 105.4 | 85    | 115   | 3.53 | 20    |      |

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|------|-------|------|
| <b>WG243199</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243199ICV     | ICV  | 04/22/08 16:33 | II080115-3 | 2  |        | 1.913 | mg/L  | 95.7 | 95    | 105   |      |       |      |
| WG243199ICB     | ICB  | 04/22/08 16:36 |            |    |        | U     | mg/L  |      | -0.03 | 0.03  |      |       |      |
| <b>WG243237</b> |      |                |            |    |        |       |       |      |       |       |      |       |      |
| WG243237LFB     | LFB  | 04/22/08 17:54 | II080401-3 | .5 |        | .49   | mg/L  | 98   | 85    | 115   |      |       |      |
| L68751-04AS     | AS   | 04/22/08 18:36 | II080401-3 | .5 | U      | .491  | mg/L  | 98.2 | 85    | 115   |      |       |      |
| L68751-04ASD    | ASD  | 04/22/08 18:40 | II080401-3 | .5 | U      | .487  | mg/L  | 97.4 | 85    | 115   | 0.82 | 20    |      |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242910</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG242910ICV     | ICV  | 04/15/08 11:39 | WI080312-1 | 2.416 |        | 2.48  | mg/L  | 102.6 | 90    | 110   |     |       |      |
| WG242910ICB     | ICB  | 04/15/08 11:41 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG242855</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG242855LFB1    | LFB  | 04/15/08 17:46 | WI080312-1 | 2     |        | 2.077 | mg/L  | 103.9 | 90    | 110   |     |       |      |
| L68441-01AS     | AS   | 04/15/08 18:07 | WI080312-1 | 2     | U      | 2.222 | mg/L  | 111.1 | 90    | 110   |     |       | M1   |
| L68576-05DUP    | DUP  | 04/15/08 18:10 |            |       | .61    | .613  | mg/L  |       |       |       | 0.5 | 20    |      |
| WG242855LFB2    | LFB  | 04/15/08 18:25 | WI080312-1 | 2     |        | 2.036 | mg/L  | 101.8 | 90    | 110   |     |       |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG242814</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG242814LCSW3   | LCSW | 04/11/08 11:08 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG242814LCSW6   | LCSW | 04/11/08 13:52 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| WG242814LCSW9   | LCSW | 04/11/08 16:52 | PCN27958 | 6  |        | 6.03  | units | 100.5 | 90    | 110   |     |       |      |
| WG242814LCSW12  | LCSW | 04/11/08 20:08 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |
| L68591-02DUP    | DUP  | 04/11/08 22:58 |          |    | 8.5    | 8.47  | units |       |       |       | 0.4 | 20    |      |
| WG242814LCSW15  | LCSW | 04/11/08 23:14 | PCN27958 | 6  |        | 6.05  | units | 100.8 | 90    | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 20       |        | 20.08  | mg/L  | 100.4 | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 99.76186 |        | 101.85 | mg/L  | 102.1 | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | 99.76186 | 8.5    | 120.85 | mg/L  | 112.6 | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | 99.76186 | 8.5    | 122.93 | mg/L  | 114.7 | 85    | 115   | 1.71 | 20    |      |

**Residue, Filterable (TDS) @180C**

160.1 / SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG242936</b> |      |                |          |     |        |       |       |      |       |       |     |       |      |
| WG242936PBW     | PBW  | 04/15/08 14:03 |          |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG242936LCSW    | LCSW | 04/15/08 14:05 | PCN29268 | 260 |        | 258   | mg/L  | 99.2 | 80    | 120   |     |       |      |
| L68594-02DUP    | DUP  | 04/15/08 15:03 |          |     | 2940   | 2934  | mg/L  |      |       |       | 0.2 | 20    |      |

**Selenium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG243190</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243190ICV     | ICV  | 04/22/08 0:34 | MS080401-2 | .05 |        | .05205 | mg/L  | 104.1 | 90      | 110    |      |       |      |
| WG243190ICB     | ICB  | 04/22/08 0:39 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243190LFB     | LFB  | 04/22/08 0:51 | MS080407-2 | .05 |        | .05147 | mg/L  | 102.9 | 85      | 115    |      |       |      |
| L68500-04AS     | AS   | 04/22/08 1:08 | MS080407-2 | .05 | .0006  | .05958 | mg/L  | 118   | 70      | 130    |      |       |      |
| L68500-04ASD    | ASD  | 04/22/08 1:14 | MS080407-2 | .05 | .0006  | .05952 | mg/L  | 117.8 | 70      | 130    | 0.1  | 20    |      |
| <b>WG243211</b> |      |               |            |     |        |        |       |       |         |        |      |       |      |
| WG243211ICV     | ICV  | 04/22/08 6:12 | MS080401-2 | .05 |        | .05219 | mg/L  | 104.4 | 90      | 110    |      |       |      |
| WG243211ICB     | ICB  | 04/22/08 6:18 |            |     |        | U      | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG243211LFB     | LFB  | 04/22/08 6:30 | MS080407-2 | .05 |        | .05201 | mg/L  | 104   | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/22/08 6:47 | MS080407-2 | .1  | .0002  | .1032  | mg/L  | 103   | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/22/08 6:53 | MS080407-2 | .1  | .0002  | .1042  | mg/L  | 104   | 70      | 130    | 0.96 | 20    |      |

**Sodium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 100      |        | 100.43 | mg/L  | 100.4 | 95    | 105   |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 100      |        | 97.9   | mg/L  | 97.9  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |          |        | U      | mg/L  |       | -6    | 6     |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 98.21624 |        | 100.09 | mg/L  | 101.9 | 85    | 115   |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | 98.21624 |        | 98     | mg/L  | 99.8  | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | 98.21624 | 253    | 340.77 | mg/L  | 89.4  | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | 98.21624 | 253    | 347.95 | mg/L  | 96.7  | 85    | 115   | 2.09 | 20    |      |

**Sulfate**

SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|-----|-------|------|
| <b>WG243440</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG243440PBW     | PBW  | 04/25/08 9:50  |            |     |        | U     | mg/L  |     | -30   | 30    |     |       |      |
| WG243440LCSW    | LCSW | 04/25/08 9:53  | WC080424-2 | 100 |        | 86    | mg/L  | 86  | 80    | 120   |     |       |      |
| L68593-01DUP    | DUP  | 04/25/08 10:27 |            |     | 1720   | 1739  | mg/L  |     |       |       | 1.1 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

Project ID: OJ06DZ

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG242903</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG242903ICV     | ICV  | 04/16/08 18:07 | MS080401-2 | .05 |        | .05307 | mg/L  | 106.1 | 90      | 110    |      |       |      |
| WG242903ICB     | ICB  | 04/16/08 18:12 |            |     |        | .00011 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG242903LFB     | LFB  | 04/16/08 18:24 | MS080407-2 | .05 |        | .0504  | mg/L  | 100.8 | 85      | 115    |      |       |      |
| L68593-01AS     | AS   | 04/16/08 18:52 | MS080407-2 | .05 | U      | .05294 | mg/L  | 105.9 | 70      | 130    |      |       |      |
| L68593-01ASD    | ASD  | 04/16/08 18:58 | MS080407-2 | .05 | U      | .05182 | mg/L  | 103.6 | 70      | 130    | 2.14 | 20    |      |

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG242789</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG242789ICV     | ICV  | 04/12/08 2:24 | II080115-3 | 2  |        | 1.929 | mg/L  | 96.5  | 95    | 105   |      |       |      |
| WG242789ICB     | ICB  | 04/12/08 2:28 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG242789LFB     | LFB  | 04/12/08 2:41 | II080401-3 | .5 |        | .5    | mg/L  | 100   | 85    | 115   |      |       |      |
| L68568-03AS     | AS   | 04/12/08 3:33 | II080401-3 | .5 | U      | .539  | mg/L  | 107.8 | 85    | 115   |      |       |      |
| L68568-03ASD    | ASD  | 04/12/08 3:37 | II080401-3 | .5 | U      | .54   | mg/L  | 108   | 85    | 115   | 0.19 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

| ACZ ID           | WORKNUM  | PARAMETER            | METHOD                                | QUAL | DESCRIPTION   |
|------------------|----------|----------------------|---------------------------------------|------|---|
| <b>L68591-01</b> | WG242789 | Calcium, dissolved   | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  | WG243010 | Chloride             | 325.2 / SM4500Cl-E                    | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  | WG242885 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243235 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG242855 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
| <b>L68591-02</b> | WG242789 | Calcium, dissolved   | M200.7 ICP                            | MA   | Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.                    |
|                  | WG243010 | Chloride             | 325.2 / SM4500Cl-E                    | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  | WG242885 | Cyanide, total       | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG243235 | Fluoride             | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
|                  | WG242855 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved              | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68591**

GC/MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Volatile Organics by GC/MS

M8260B GC/MS

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L68591  
Date Received: 4/10/2008  
Received By:  
Date Printed: 4/10/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted.

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 1828      | 0.9       | 13          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L68591  
 Date Received: 4/10/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|-----------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68591-01 | MH-28     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L68591-02 | MH-29     |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



June 02, 2008

## Report to:

Bill Dorris

FMI Gold &amp; Copper - Sierrita

P.O. Box 527

Green Valley, AZ 85622-0527

## Bill to:

Accounts Payable

FMI Gold &amp; Copper - Sierrita

P.O. Box 2671

Phoenix, AZ 85002-2671

cc: Dan Simpson

Project ID: OJ06DZ

ACZ Project ID: L68801

Bill Dorris:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 22, 2008. This project has been assigned to ACZ's project number, L68801. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68801. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after July 02, 2008. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

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



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: M-9

ACZ Sample ID: **L68801-01**

Date Sampled: 04/14/08 11:14

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 67.2   |      |    | mg/L  | 0.5 | 3   | 05/09/08 12:26 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: I-10

ACZ Sample ID: **L68801-02**

Date Sampled: 04/14/08 12:04

Date Received: 04/22/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 490    |      |    | mg/L  | 10  | 50  | 05/10/08 13:02 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: M-8

ACZ Sample ID: **L68801-03**

Date Sampled: 04/14/08 09:54

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 28.7   |      |    | mg/L  | 0.5 | 3   | 05/09/08 13:38 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: M-20

ACZ Sample ID: **L68801-04**

Date Sampled: 04/14/08 14:10

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 1550   |      |    | mg/L  | 30  | 100 | 05/10/08 13:38 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: M-10

ACZ Sample ID: **L68801-05**

Date Sampled: 04/15/08 11:02

Date Received: 04/22/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 81.0   |      |    | mg/L  | 0.5 | 3   | 05/09/08 14:14 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-3C

ACZ Sample ID: **L68801-06**

Date Sampled: 04/15/08 14:35

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 127    |      |    | mg/L  | 1   | 5   | 05/10/08 13:56 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-3B

ACZ Sample ID: **L68801-07**

Date Sampled: 04/16/08 09:26

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 37.0   |      |    | mg/L  | 0.5 | 3   | 05/09/08 15:27 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-4A

ACZ Sample ID: **L68801-08**

Date Sampled: 04/16/08 14:13

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 33.1   |      |    | mg/L  | 0.5 | 3   | 05/09/08 15:45 | aml     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-4B

ACZ Sample ID: **L68801-09**

Date Sampled: 04/16/08 11:18

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 33.6   |      |    | mg/L  | 0.5 | 3   | 05/09/08 16:03 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-4C

ACZ Sample ID: **L68801-10**

Date Sampled: 04/16/08 13:27

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 80     |      | *  | mg/L  | 1   | 5   | 05/10/08 14:14 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-2

ACZ Sample ID: **L68801-11**

Date Sampled: 04/17/08 08:14

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 473    |      | *  | mg/L  | 5   | 30  | 05/10/08 15:08 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-5B

ACZ Sample ID: **L68801-12**

Date Sampled: 04/17/08 09:55

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 390    |      | *  | mg/L  | 5   | 30  | 05/10/08 15:27 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-5C

ACZ Sample ID: **L68801-13**

Date Sampled: 04/17/08 12:18

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 259    |      | *  | mg/L  | 5   | 30  | 05/10/08 15:45 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-6B

ACZ Sample ID: **L68801-14**

Date Sampled: 04/17/08 14:08

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 90.4   |      |    | mg/L  | 0.5 | 3   | 05/09/08 18:10 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MO-2007-6A

ACZ Sample ID: **L68801-15**

Date Sampled: 04/18/08 08:09

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 20.5   | H    | *  | mg/L  | 0.5 | 3   | 05/22/08 18:45 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: ESP-1

ACZ Sample ID: **L68801-16**

Date Sampled: 04/18/08 10:48

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 102    |      | *  | mg/L  | 1   | 5   | 05/10/08 16:39 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: ESP-2

ACZ Sample ID: **L68801-17**

Date Sampled: 04/18/08 09:03

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 27.6   | H    | *  | mg/L  | 0.5 | 3   | 05/22/08 19:40 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: ESP-3

ACZ Sample ID: **L68801-18**

Date Sampled: 04/18/08 10:05

Date Received: 04/22/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 35.7   | H    | *  | mg/L  | 0.5 | 3   | 05/22/08 19:58 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: ESP-4

ACZ Sample ID: **L68801-19**

Date Sampled: 04/18/08 11:33

Date Received: 04/22/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 462    | H    | *  | mg/L  | 5   | 30  | 05/27/08 15:00 | aml     |

Arizona license number: AZ0102

**Report Header Explanations**

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

**QC Sample Types**

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

**QC Sample Type Explanations**

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

**ACZ Qualifiers (Qual)**

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68801**

Project ID: OJ06DZ

**Sulfate**

300.0 - Ion Chromatography

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC   | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244006</b> |      |                |            |      |        |       |       |       |       |       |     |       |      |
| WG244006ICV     | ICV  | 05/07/08 10:25 | WI080428-9 | 50.1 |        | 51.68 | mg/L  | 103.2 | 90    | 110   |     |       |      |
| WG244006ICB     | ICB  | 05/07/08 10:43 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |
| <b>WG244170</b> |      |                |            |      |        |       |       |       |       |       |     |       |      |
| WG244170ICV     | ICV  | 05/09/08 11:13 | WI080428-9 | 50.1 |        | 51.93 | mg/L  | 103.7 | 90    | 110   |     |       |      |
| WG244170ICB     | ICB  | 05/09/08 11:31 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |
| WG244170LFB     | LFB  | 05/09/08 11:50 | WI080425-3 | 30   |        | 32.8  | mg/L  | 109.3 | 90    | 110   |     |       |      |
| L68801-01DUP    | DUP  | 05/09/08 12:44 |            |      | 67.2   | 66.84 | mg/L  |       |       |       | 0.5 | 20    |      |
| WG244170ICV1    | ICV  | 05/10/08 12:25 | WI080428-9 | 50.1 |        | 48.62 | mg/L  | 97    | 90    | 110   |     |       |      |
| WG244170ICB1    | ICB  | 05/10/08 12:44 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |
| L68801-02AS     | AS   | 05/10/08 13:20 | WI080425-3 | 600  | 490    | 1056  | mg/L  | 94.3  | 90    | 110   |     |       |      |
| L68801-10AS     | AS   | 05/10/08 14:32 | WI080425-3 | 60   | 80     | 150.8 | mg/L  | 118   | 90    | 110   |     |       | M1   |
| L68801-10DUP    | DUP  | 05/10/08 14:50 |            |      | 80     | 81.1  | mg/L  |       |       |       | 1.4 | 20    |      |
| <b>WG244855</b> |      |                |            |      |        |       |       |       |       |       |     |       |      |
| WG244855ICV     | ICV  | 05/22/08 15:26 | WI080521-1 | 50.1 |        | 51.23 | mg/L  | 102.3 | 90    | 110   |     |       |      |
| WG244855ICB     | ICB  | 05/22/08 15:44 |            |      |        | 1.39  | mg/L  |       | -1.5  | 1.5   |     |       |      |
| WG244855LFB1    | LFB  | 05/22/08 16:02 | WI080521-3 | 30   |        | 30.83 | mg/L  | 102.8 | 90    | 110   |     |       |      |
| L68756-01AS     | AS   | 05/22/08 16:39 | WI080521-3 | 3000 | 340    | 3118  | mg/L  | 92.6  | 90    | 110   |     |       |      |
| L68756-01DUP    | DUP  | 05/22/08 16:57 |            |      | 340    | 321   | mg/L  |       |       |       | 5.7 | 20    | RA   |
| WG244855LFB2    | LFB  | 05/23/08 0:48  | WI080521-3 | 30   |        | 32.24 | mg/L  | 107.5 | 90    | 110   |     |       |      |
| WG244855ICV1    | ICV  | 05/27/08 11:05 | WI080521-1 | 50.1 |        | 51.67 | mg/L  | 103.1 | 90    | 110   |     |       |      |
| WG244855ICB1    | ICB  | 05/27/08 11:23 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68801**

| ACZ ID    | WORKNUM  | PARAMETER | METHOD                     | QUAL | DESCRIPTION   |
|-----------|----------|-----------|----------------------------|------|---|
| L68801-10 | WG244170 | Sulfate   | 300.0 - Ion Chromatography | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
| L68801-11 | WG244170 | Sulfate   | 300.0 - Ion Chromatography | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
| L68801-12 | WG244170 | Sulfate   | 300.0 - Ion Chromatography | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
| L68801-13 | WG244170 | Sulfate   | 300.0 - Ion Chromatography | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
| L68801-15 | WG244855 | Sulfate   | 300.0 - Ion Chromatography | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 300.0 - Ion Chromatography | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68801-16 | WG244170 | Sulfate   | 300.0 - Ion Chromatography | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
| L68801-17 | WG244855 | Sulfate   | 300.0 - Ion Chromatography | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 300.0 - Ion Chromatography | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68801-18 | WG244855 | Sulfate   | 300.0 - Ion Chromatography | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 300.0 - Ion Chromatography | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68801-19 | WG244855 | Sulfate   | 300.0 - Ion Chromatography | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 300.0 - Ion Chromatography | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68801**

No certification qualifiers associated with this analysis

**FMI Gold & Copper - Sierrita**  
 OJ069R

ACZ Project ID: L68801  
 Date Received: 4/22/2008  
 Received By:  
 Date Printed: 4/22/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     |    | X  |
| 12) Are samples requiring no headspace, headspace free?                        |     |    | X  |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 2074      | 2.0       | 18          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
OJ069R

ACZ Project ID: L68801  
Date Received: 4/22/2008  
Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID  | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68801-01 | M-9        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-02 | I-10       |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-03 | M-8        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-04 | M-20       |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-05 | M-10       |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-06 | MO-2007-3C |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-07 | MO-2007-3B |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-08 | MO-2007-4A |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-09 | MO-2007-4B |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-10 | MO-2007-4C |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-11 | MO-2007-2  |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-12 | MO-2007-5B |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-13 | MO-2007-5C |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-14 | MO-2007-6B |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-15 | MO-2007-6A |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-16 | ESP-1      |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-17 | ESP-2      |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-18 | ESP-3      |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68801-19 | ESP-4      |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



**Laboratories, Inc.**

LL68801

**CHAIN of CUSTODY**

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

Report to:

Name: Bill Dorris  
Company: Freeport McMoran Sierita  
E-mail: billy-dorris@fmi.com

Address: 6200 W. Duval Mine Rd  
Green Valley AZ 85614  
Telephone: 520-648-8873

Copy of Report to:

Name: Dan Simpson  
Company: Hydro Geo Chem

E-mail: dans@hginc.com  
Telephone: 520-293-1500 EXT 133

Invoice to:

Name:  
Company:  
E-mail:

Address:  
Telephone:

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

YES ☐  
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION**

ANALYSES REQUESTED (attach list or use quote number)

| Quote #: | Project/PO #:    | Reporting state for compliance testing: | Sampler's Name: | Are any samples NRC licensable material? | SAMPLE IDENTIFICATION | DATE:TIME              | Matrix    | # of Containers |  |  |  |  |  |  |  |  |  |  |
|----------|------------------|---|-----------------|--|-----------------------|------------------------|-----------|-----------------|--|--|--|--|--|--|--|--|--|--|
|          | <u>PO 05069R</u> |   |                 |  | <u>M-9</u>            | <u>4-14-08 / 11:14</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>I-10</u>           | <u>4-14-08 / 12:04</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>M-8</u>            | <u>4-14-08 / 9:54</u>  | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>M-20</u>           | <u>4-14-08 / 14:10</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>M-10</u>           | <u>4-15-08 / 11:02</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>MD-2007-3C</u>     | <u>4-15-08 / 14:35</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>MD-2007-3B</u>     | <u>4-16-08 / 9:26</u>  | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>MD-2007-4A</u>     | <u>4-16-08 / 14:13</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>MD-2007-4B</u>     | <u>4-16-08 / 11:18</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |
|          |                  |   |                 |  | <u>MD-2007-4C</u>     | <u>4-16-08 / 13:27</u> | <u>GW</u> | <u>1</u>        |  |  |  |  |  |  |  |  |  |  |

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

**REMARKS/ SAMPLE DISCLOSURES**

"Copy of Report" to Dan Simpson please!

PAGE

of

UPS TRACKING # 1Z 867 7E4 23 1000 4584

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

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

Billy F. Dorris4-21-08 / 15:00WPL4-22-08 10:00

**Laboratories, Inc.****L68801****CHAIN of CUSTODY**

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

**Report to:**Name: **Bill Dorris**Company: **Freeport McMoran Sierrita**E-mail: **billy-dorris@fmi.com**Address: **6200 W. Dural Mine Rd****Green Valley Az 85614**Telephone: **520-648-8873****Copy of Report to:**Name: **Dan Simpson**Company: **Hydro Geo Chem**E-mail: **dans@hginc.com**Telephone: **520-293-1500 EXT 133****Invoice to:**

Name:

Company:

E-mail:

Address:

Telephone:

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

YES

NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION****ANALYSES REQUESTED (attach list or use quote number)**

Quote #:

Project/PO #: **PO 05069R**

Reporting state for compliance testing:

Sampler's Name:

Are any samples NRC licensable material?

| SAMPLE IDENTIFICATION | DATE:TIME      | Matrix | # of Containers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|----------------|--------|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| MD-2007-2             | 4-17-08/ 8:14  | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MD-2007-5B            | 4-17-08/ 9:55  | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MD-2007-5C            | 4-17-08/ 12:18 | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MD-2007-6B            | 4-17-08/ 14:08 | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MD-2007-6A            | 4-18-08/ 8:09  | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ESP-1                 | 4-18-08/ 10:48 | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ESP-2                 | 4-18-08/ 9:03  | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ESP-3                 | 4-18-08/ 10:05 | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ESP-4                 | 4-18-08/ 11:33 | GW     | 1               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

**REMARKS/ SAMPLE DISCLOSURES****"Copy of Report" to Dan Simpson please!**

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**UPS TRACKING # 1Z 867 7E4 23 1000 4584**

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

**RELINQUISHED BY:****DATE:TIME****RECEIVED BY:****DATE:TIME****Billy F. Dorris****4-21-08/ 15:00****WZL****4-22-08 10:07**

May 21, 2008

## Report to:

Dan Simpson  
Hydro Geo Chem Inc.  
51 W. Wetmore Rd.  
Tucson, AZ 85705

## Bill to:

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

cc: Ned Hall, Bill Dorris, Jim Norris

Project ID: OJ03Z5

ACZ Project ID: L68784

Dan Simpson:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 21, 2008. This project has been assigned to ACZ's project number, L68784. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68784. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 21, 2008. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

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



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: SI-F

ACZ Sample ID: **L68784-01**

Date Sampled: 04/16/08 09:10

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 2      | BH   | *  | mg/L  | 1   | 5   | 05/16/08 16:03 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: SI

ACZ Sample ID: **L68784-02**

Date Sampled: 04/16/08 09:10

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 2      | BH   | *  | mg/L  | 1   | 5   | 05/16/08 16:03 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: GV-2F

ACZ Sample ID: **L68784-03**

Date Sampled: 04/16/08 10:20

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 97     | H    | *  | mg/L  | 5   | 30  | 05/16/08 16:10 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: GV-2

ACZ Sample ID: **L68784-04**

Date Sampled: 04/16/08 10:20

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 99     | H    | *  | mg/L  | 5   | 30  | 05/16/08 16:10 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: GV-1F

ACZ Sample ID: **L68784-05**

Date Sampled: 04/16/08 11:10

Date Received: 04/21/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 44.1   |      |    | mg/L  | 0.5 | 3   | 05/07/08 11:55 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: GV-1

ACZ Sample ID: **L68784-06**

Date Sampled: 04/16/08 11:10

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 43.9   |      | *  | mg/L  | 0.5 | 3   | 05/07/08 12:31 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: CC OF GV-F

ACZ Sample ID: **L68784-07**

Date Sampled: 04/16/08 12:15

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 69.4   |      |    | mg/L  | 0.5 | 3   | 05/07/08 12:50 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: CC OF GV

ACZ Sample ID: **L68784-08**

Date Sampled: 04/16/08 12:15

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 69.0   |      | *  | mg/L  | 0.5 | 3   | 05/07/08 13:08 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: CW-3F

ACZ Sample ID: **L68784-09**

Date Sampled: 04/17/08 10:45

Date Received: 04/21/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 54.1   |      |    | mg/L  | 0.5 | 3   | 05/07/08 13:26 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: CW-3

ACZ Sample ID: **L68784-10**

Date Sampled: 04/17/08 10:45

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 54.0   |      | *  | mg/L  | 0.5 | 3   | 05/07/08 13:44 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5  
Sample ID: EQB-041708

ACZ Sample ID: **L68784-11**  
Date Sampled: 04/17/08 11:00  
Date Received: 04/21/08  
Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography |        | U    |    | mg/L  | 0.5 | 3   | 05/07/08 14:38 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: FB-041708

ACZ Sample ID: **L68784-12**

Date Sampled: 04/17/08 11:00

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography |        | U    | *  | mg/L  | 0.5 | 3   | 05/07/08 14:56 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: NP-2F

ACZ Sample ID: **L68784-13**

Date Sampled: 04/17/08 13:15

Date Received: 04/21/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 40.0   |      |    | mg/L  | 0.5 | 3   | 05/07/08 15:14 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: NP-2

ACZ Sample ID: **L68784-14**

Date Sampled: 04/17/08 13:15

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 34     | H    | *  | mg/L  | 5   | 30  | 05/16/08 16:10 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: TMM-1F

ACZ Sample ID: **L68784-15**

Date Sampled: 04/18/08 10:30

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric |        | U    | *  | mg/L  | 1   | 5   | 05/16/08 16:04 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: TMM-1

ACZ Sample ID: **L68784-16**

Date Sampled: 04/18/08 10:30

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric |        | U    | *  | mg/L  | 1   | 5   | 05/16/08 16:04 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: DUP-041708-F

ACZ Sample ID: **L68784-17**

Date Sampled: 04/17/08 00:00

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 33     | H    | *  | mg/L  | 5   | 30  | 05/16/08 16:11 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ03Z5

Sample ID: DUP-041708

ACZ Sample ID: **L68784-18**

Date Sampled: 04/17/08 00:00

Date Received: 04/21/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 33     | H    | *  | mg/L  | 5   | 30  | 05/16/08 16:11 | lbn     |

Arizona license number: AZ0102

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

## Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68784**

Project ID: OJ03Z5

**Sulfate** 300.0 - Ion Chromatography

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC   | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244006</b> |      |                |            |      |        |       |       |       |       |       |     |       |      |
| WG244006ICV     | ICV  | 05/07/08 10:25 | WI080428-9 | 50.1 |        | 51.68 | mg/L  | 103.2 | 90    | 110   |     |       |      |
| WG244006ICB     | ICB  | 05/07/08 10:43 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |
| WG244006LFB     | LFB  | 05/07/08 11:01 | WI080425-3 | 30   |        | 30.67 | mg/L  | 102.2 | 90    | 110   |     |       |      |
| L68505-03DUP    | DUP  | 05/07/08 11:37 |            |      | 967    | 995.2 | mg/L  |       |       |       | 2.9 | 20    |      |
| L68784-05AS     | AS   | 05/07/08 12:13 | WI080425-3 | 30   | 44.1   | 71.24 | mg/L  | 90.5  | 90    | 110   |     |       |      |

**Sulfate** 375.4 - Turbidimetric

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244569</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG244569ICB     | ICB  | 05/16/08 11:36 |            |       |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG244569ICV     | ICV  | 05/16/08 11:36 | WI080402-2 | 20.04 |        | 20.2  | mg/L  | 100.8 | 90    | 110   |     |       |      |
| WG244569LFB     | LFB  | 05/16/08 16:03 | WI080211-1 | 10    |        | 9.3   | mg/L  | 93    | 90    | 110   |     |       |      |
| L68784-01DUP    | DUP  | 05/16/08 16:03 |            |       | 2      | 2.3   | mg/L  |       |       |       | 14  | 20    | RA   |
| L68784-02AS     | AS   | 05/16/08 16:03 | WI080211-1 | 10    | 2      | 17.6  | mg/L  | 156   | 90    | 110   |     |       | M1   |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68784**

| ACZ ID    | WORKNUM  | PARAMETER | METHOD                     | QUAL | DESCRIPTION   |
|-----------|----------|-----------|----------------------------|------|---|
| L68784-01 | WG244569 | Sulfate   | 375.4 - Turbidimetric      | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 375.4 - Turbidimetric      | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|           |          |           | 375.4 - Turbidimetric      | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68784-02 | WG244569 | Sulfate   | 375.4 - Turbidimetric      | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 375.4 - Turbidimetric      | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|           |          |           | 375.4 - Turbidimetric      | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68784-03 | WG244569 | Sulfate   | 375.4 - Turbidimetric      | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 375.4 - Turbidimetric      | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|           |          |           | 375.4 - Turbidimetric      | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68784-04 | WG244569 | Sulfate   | 375.4 - Turbidimetric      | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 375.4 - Turbidimetric      | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|           |          |           | 375.4 - Turbidimetric      | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68784-06 | WG244006 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.                |
| L68784-08 | WG244006 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.                |
| L68784-10 | WG244006 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.                |
| L68784-12 | WG244006 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.                |
| L68784-14 | WG244569 | Sulfate   | 375.4 - Turbidimetric      | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|           |          |           | 375.4 - Turbidimetric      | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|           |          |           | 375.4 - Turbidimetric      | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| L68784-15 | WG244569 | Sulfate   | 375.4 - Turbidimetric      | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|           |          |           | 375.4 - Turbidimetric      | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68784**

| ACZ ID           | WORKNUM  | PARAMETER | METHOD                | QUAL | DESCRIPTION   |
|------------------|----------|-----------|-----------------------|------|---|
| <b>L68784-16</b> | WG244569 | Sulfate   | 375.4 - Turbidimetric | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  |          |           | 375.4 - Turbidimetric | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68784-17</b> | WG244569 | Sulfate   | 375.4 - Turbidimetric | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|                  |          |           | 375.4 - Turbidimetric | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  |          |           | 375.4 - Turbidimetric | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |
| <b>L68784-18</b> | WG244569 | Sulfate   | 375.4 - Turbidimetric | HC   | Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.         |
|                  |          |           | 375.4 - Turbidimetric | M1   | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  |          |           | 375.4 - Turbidimetric | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL). |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68784**

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Sulfate

375.4 - Turbidimetric

**FMI Gold & Copper - Sierrita**  
 OJ03Z5

ACZ Project ID: L68784  
 Date Received: 4/21/2008  
 Received By:  
 Date Printed: 4/22/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 |     |    | X  |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     |    | X  |
| 12) Are samples requiring no headspace, headspace free?                        |     |    | X  |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 1841      | 2.9       | 16          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ03Z5

ACZ Project ID: L68784  
 Date Received: 4/21/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID    | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|--------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68784-01 | SI-F         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-02 | SI           |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-03 | GV-2F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-04 | GV-2         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-05 | GV-1F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-06 | GV-1         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-07 | CC OF GV-F   |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-08 | CC OF GV     |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-09 | CW-3F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-10 | CW-3         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-11 | EQB-041708   |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-12 | FB-041708    |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-13 | NP-2F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-14 | NP-2         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-15 | TMM-1F       |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-16 | TMM-1        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-17 | DUP-041708-F |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68784-18 | DUP-041708   |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

**ACZ****Laboratories, Inc.**

L68784

**CHAIN of CUSTODY**

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

**Report to:**

Name: Dan Simpson  
Company: Hydro Geo Chem Inc.  
E-mail: dans@hgcinc.com

Address: 51 W. Wetmore Rd  
Tucson, AZ 85705  
Telephone: (520) 293-1500 x133

**Copy of Report to:**

Name: Ned Hall/Billy Dorris/Jim Norris  
Company: FMI/HGC

E-mail: JimN@hgcinc.com/billy.dorris@fmi.com  
Telephone: (520) 293-1500 x112 / (520) 648-9973

**Invoice to:**

Name: Ned Hall  
Company: FMI  
E-mail: ned.hall@fmi.com

Address: 6200 W. Duval Mine Rd.  
PO Box 527 Green Valley, AZ 85622  
Telephone: (520) 648-8857

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

YES ☒  
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION****ANALYSES REQUESTED (attach list or use quote number)**Quote #: Sierrita SulfateProject/PO #: OJ0325Reporting state for compliance testing: AZSampler's Name: Mark ArnesonAre any samples NRC licensable material? No

| SAMPLE IDENTIFICATION |  |  | DATE:TIME      | Matrix | # of Containers |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|----------------|--------|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| SI-F                  |  |  | 4/16/08: 9:10  | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SI                    |  |  | 4/16/08: 9:10  | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GV-2F                 |  |  | 4/16/08: 10:20 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GV-2                  |  |  | 4/16/08: 10:20 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GV-1F                 |  |  | 4/16/08: 11:10 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| GV-1                  |  |  | 4/16/08: 11:10 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CC of GV-F            |  |  | 4/16/08: 12:15 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CC of GV              |  |  | 4/16/08: 12:15 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-3F                 |  |  | 4/17/08: 10:45 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-3                  |  |  | 4/17/08: 10:45 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

**REMARKS/ SAMPLE DISCLOSURES**

PAGE

1 of 2

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

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

[Signature] 4/18/08: 11:00 [Signature] 4-2-08 10:40

**ACZ****Laboratories, Inc.**

L68784

**CHAIN of CUSTODY**

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

**Report to:**

Name:

Same as Page 1

Address:

Company:

E-mail:

Telephone:

**Copy of Report to:**

Name:

E-mail:

Company:

Telephone:

**Invoice to:**

Name:

Same as Page 1

Address:

Company:

E-mail:

Telephone:

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

YES  
NO☒  
☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION****ANALYSES REQUESTED (attach list or use quote number)**

Quote #:

Sierrita Sulfate

Project/PO #:

0J0325

Reporting state for compliance testing:

AZ

Sampler's Name:

Mark Arneson

Are any samples NRC licensable material?

No

# of Containers

504

**SAMPLE IDENTIFICATION****DATE:TIME****Matrix**

EQB-041708

4/17/08: 11:00

GW

1

X

FB-041708

4/17/08: 11:00

GW

1

X

NP-2F

4/17/08: 13:15

GW

1

X

NP-2

4/17/08: 13:15

GW

1

X

TMM-1F

4/18/08: 10:30

GW

1

X

TMM-1

4/18/08: 10:30

GW

1

X

DUP-041708-F

4/17/08

GW

1

X

DUP-041708

4/17/08

GW

1

X

Matrix

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

**REMARKS/ SAMPLE DISCLOSURES**

PAGE

2 of 2

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

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

[Signature]

4/18/08: 11:00

[Signature]

4-21-08 10:46

May 15, 2008

## Report to:

Dan Simpson  
Hydro Geo Chem Inc.  
51 W. Wetmore Rd.  
Tucson, AZ 85705

## Bill to:

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

cc: Bill Dorris, Jim Norris, Ned Hall

Project ID: OJ0325

ACZ Project ID: L68705

Dan Simpson:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 16, 2008. This project has been assigned to ACZ's project number, L68705. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68705. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 15, 2008. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

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



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-6F

ACZ Sample ID: **L68705-01**

Date Sampled: 04/15/08 09:10

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 51.2   |      | *  | mg/L  | 0.5 | 3   | 04/29/08 22:08 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-6

ACZ Sample ID: **L68705-02**

Date Sampled: 04/15/08 09:10

Date Received: 04/16/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 51.9   |      | *  | mg/L  | 0.5 | 3   | 04/30/08 1:28 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-9F

ACZ Sample ID: **L68705-03**

Date Sampled: 04/15/08 09:40

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 43.7   |      |    | mg/L  | 0.5 | 3   | 04/30/08 1:46 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-9

ACZ Sample ID: **L68705-04**

Date Sampled: 04/15/08 09:40

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 43.5   |      | *  | mg/L  | 0.5 | 3   | 04/30/08 2:04 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-7F

ACZ Sample ID: **L68705-05**

Date Sampled: 04/15/08 10:25

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 900    |      |    | mg/L  | 10  | 50  | 04/30/08 20:18 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-7

ACZ Sample ID: **L68705-06**

Date Sampled: 04/15/08 10:25

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 900    |      | *  | mg/L  | 10  | 50  | 04/30/08 20:36 | aml     |

**Arizona license number: AZ0102**

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-8F

ACZ Sample ID: **L68705-07**

Date Sampled: 04/15/08 11:10

Date Received: 04/16/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 441    |      |    | mg/L  | 5   | 30  | 04/30/08 21:31 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-8

ACZ Sample ID: **L68705-08**

Date Sampled: 04/15/08 11:10

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 440    |      | *  | mg/L  | 5   | 30  | 04/30/08 21:49 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-10F

ACZ Sample ID: **L68705-09**

Date Sampled: 04/15/08 11:45

Date Received: 04/16/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 50.8   |      |    | mg/L  | 0.5 | 3   | 04/30/08 4:11 | aml     |

Arizona license number: AZ0102



**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: CW-10

ACZ Sample ID: **L68705-10**

Date Sampled: 04/15/08 11:45

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date          | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|---------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 50.3   |      | *  | mg/L  | 0.5 | 3   | 04/30/08 5:05 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325  
Sample ID: HAVEN GOLF-F

ACZ Sample ID: **L68705-11**  
Date Sampled: 04/15/08 13:12  
Date Received: 04/16/08  
Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 106    |      |    | mg/L  | 1   | 5   | 04/30/08 22:07 | aml     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ0325

Sample ID: HAVEN GOLF

ACZ Sample ID: **L68705-12**

Date Sampled: 04/15/08 13:12

Date Received: 04/16/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method                 | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|----------------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 300.0 - Ion Chromatography | 112    |      | *  | mg/L  | 1   | 5   | 04/30/08 22:25 | aml     |

Arizona license number: AZ0102

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

## Comments

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68705**

Project ID: OJ0325

**Sulfate**

300.0 - Ion Chromatography

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC   | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG243374</b> |      |                |            |      |        |       |       |       |       |       |     |       |      |
| WG243374ICV     | ICV  | 04/29/08 13:05 | WI080428-9 | 50.1 |        | 48.43 | mg/L  | 96.7  | 90    | 110   |     |       |      |
| WG243374ICB     | ICB  | 04/29/08 13:23 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |
| L68505-06AS     | AS   | 04/29/08 18:31 | WI080306-2 | 600  | 1060   | 1540  | mg/L  | 80    | 90    | 110   |     |       | M2   |
| L68505-06DUP    | DUP  | 04/29/08 18:49 |            |      | 1060   | 1128  | mg/L  |       |       |       | 6.2 | 20    |      |
| WG243374LFB2    | LFB  | 04/29/08 20:56 | WI080306-2 | 30   |        | 29.56 | mg/L  | 98.5  | 90    | 110   |     |       |      |
| <b>WG243419</b> |      |                |            |      |        |       |       |       |       |       |     |       |      |
| WG243419ICV     | ICV  | 04/29/08 23:03 | WI080318-6 | 50.1 |        | 49.38 | mg/L  | 98.6  | 90    | 110   |     |       |      |
| WG243419ICB     | ICB  | 04/29/08 23:21 |            |      |        | U     | mg/L  |       | -1.5  | 1.5   |     |       |      |
| WG243419LFB     | LFB  | 04/29/08 23:39 | WI080306-2 | 30   |        | 29.59 | mg/L  | 98.6  | 90    | 110   |     |       |      |
| L68705-09AS     | AS   | 04/30/08 4:29  | WI080306-2 | 30   | 50.8   | 78.64 | mg/L  | 92.8  | 90    | 110   |     |       |      |
| L68705-09DUP    | DUP  | 04/30/08 4:47  |            |      | 50.8   | 50.33 | mg/L  |       |       |       | 0.9 | 20    |      |
| L68702-01AS     | AS   | 04/30/08 19:42 | WI080306-2 | 3000 | 3730   | 6800  | mg/L  | 102.3 | 90    | 110   |     |       |      |
| L68702-01DUP    | DUP  | 04/30/08 20:00 |            |      | 3730   | 3602  | mg/L  |       |       |       | 3.5 | 20    |      |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L68705**

| ACZ ID    | WORKNUM  | PARAMETER | METHOD                     | QUAL | DESCRIPTION  |
|-----------|----------|-----------|----------------------------|------|--|
| L68705-01 | WG243374 | Sulfate   | 300.0 - Ion Chromatography | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.                                |
| L68705-02 | WG243419 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.     |
|           |          |           | 300.0 - Ion Chromatography | ZU   | Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup. |
| L68705-04 | WG243419 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.     |
|           |          |           | 300.0 - Ion Chromatography | ZU   | Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup. |
| L68705-06 | WG243419 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.     |
|           |          |           | 300.0 - Ion Chromatography | ZU   | Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup. |
| L68705-08 | WG243419 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.     |
|           |          |           | 300.0 - Ion Chromatography | ZU   | Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup. |
| L68705-10 | WG243419 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.     |
|           |          |           | 300.0 - Ion Chromatography | ZU   | Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup. |
| L68705-12 | WG243419 | Sulfate   | 300.0 - Ion Chromatography | QA   | Sample container with preservation type specified by the method was not available for analysis. Alternate sample container was used.     |
|           |          |           | 300.0 - Ion Chromatography | ZU   | Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup. |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68705**

No certification qualifiers associated with this analysis

**FMI Gold & Copper - Sierrita**  
 OJ0325

ACZ Project ID: L68705  
 Date Received: 4/16/2008  
 Received By:  
 Date Printed: 4/17/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 |     |    | X  |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     |    | X  |
| 12) Are samples requiring no headspace, headspace free?                        |     |    | X  |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| NA5856    | 3.7       | 15          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**



**FMI Gold & Copper - Sierrita**  
 OJ0325

ACZ Project ID: L68705  
 Date Received: 4/16/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID    | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|--------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68705-01 | CW-6F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-02 | CW-6         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-03 | CW-9F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-04 | CW-9         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-05 | CW-7F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-06 | CW-7         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-07 | CW-8F        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-08 | CW-8         |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-09 | CW-10F       |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-10 | CW-10        |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-11 | HAVEN GOLF-F |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68705-12 | HAVEN GOLF   |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_

**ACZ****Laboratories, Inc.**

LL8705

**CHAIN of CUSTODY**

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

**Report to:**

Name: Dan Simpson  
Company: Hydro Geo Chem Inc.  
E-mail: dans@hgcinc.com

Address: 51 W. Wetmore Rd.  
Tucson, AZ 85705  
Telephone: (520) 293-1504

**Copy of Report to:**

Name: Ned Hall/Billy Dorris/Jim Norris  
Company: FMI/HGL

E-mail: Jimn@hgcinc.com/billy\_dorris@Fmi.com  
Telephone: 520/293-1500x112/520/648-8823

**Invoice to:**

Name: Ned Hall  
Company: FMI  
E-mail: ned-hall@Fmi.com

Address: 6200 W. Duck Mine Rd.  
PO Box 527 Green Valley, AZ 85622  
Telephone: 520/648-8857

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

YES ☒  
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION****ANALYSES REQUESTED (attach list or use quote number)**

Quote #: Sierrita Sulfate  
Project/PO #: 050325  
Reporting state for compliance testing: AZ  
Sampler's Name: Mark Agneson  
Are any samples NRC licensable material? No

# of Containers

SO<sub>4</sub>

| SAMPLE IDENTIFICATION | DATE:TIME      | Matrix | # of Containers |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|----------------|--------|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1 < CW-6F             | 4/15/08: 9:10  | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-6                  | 4/15/08: 9:10  | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 < CW-9F             | 4/15/08: 9:40  | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-9                  | 4/15/08: 9:40  | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 < CW-7F             | 4/15/08: 10:25 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-7                  | 4/15/08: 10:25 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 < CW-8F             | 4/15/08: 11:10 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-8                  | 4/15/08: 11:10 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 < CW-10F            | 4/15/08: 11:45 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CW-10                 | 4/15/08: 11:45 | GW     | 1               | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

**REMARKS/ SAMPLE DISCLOSURES**

PAGE

1 of 2

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

**RELINQUISHED BY:****DATE:TIME****RECEIVED BY:****DATE:TIME**

[Signature] 4/15/08: 1:40 WPL 4/16/08 9:46



Laboratories, Inc.

LL08705

CHAIN of CUSTODY

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

Report to:

Name: Same as Page 1  
Company:  
E-mail:

Address:  
Telephone:

Copy of Report to:

Name:  
Company:

E-mail:  
Telephone:

Invoice to:

Name: Same as Page 1  
Company:  
E-mail:

Address:  
Telephone:

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

YES ☐  
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:  
Project/PO #:  
Reporting state for compliance testing:  
Sampler's Name:  
Are any samples NRC licensable material?

# of Containers

504

SAMPLE IDENTIFICATION DATE:TIME Matrix

HAVEN GOLF-F 4/15/08: 13:12 GW  
HAVEN GOLF 4/15/08: 13:12 GW

1 1

X X

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

REMARKS/ SAMPLE DISCLOSURES

PAGE

2 of 2

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

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

[Signature]

4/15/08: 1400

WPL

4-16-08 9:46

May 14, 2008

## Report to:

Bill Dorris

FMI Gold &amp; Copper - Sierrita

P.O. Box 527

Green Valley, AZ 85622-0527

## Bill to:

Accounts Payable

FMI Gold &amp; Copper - Sierrita

P.O. Box 2671

Phoenix, AZ 85002-2671

cc: Dan Simpson

Project ID: OJ069R

ACZ Project ID: L68595

Bill Dorris:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 10, 2008. This project has been assigned to ACZ's project number, L68595. Please reference this number in all future inquiries.


All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L68595. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 14, 2008. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

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



Scott Habermehl has reviewed  
and approved this report.



**FMI Gold & Copper - Sierrita**

Project ID: OJ069R

Sample ID: MO-2007-1A

ACZ Sample ID: **L68595-01**

Date Sampled: 04/09/08 09:42

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 21     |      | *  | mg/L  | 1   | 5   | 05/07/08 11:47 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ069R

Sample ID: MO-2007-1B

ACZ Sample ID: **L68595-02**

Date Sampled: 04/09/08 09:08

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 35     |      | *  | mg/L  | 1   | 5   | 05/07/08 11:47 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ069R

Sample ID: MO-2007-1C

ACZ Sample ID: **L68595-03**

Date Sampled: 04/09/08 11:45

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 149    |      | *  | mg/L  | 5   | 30  | 05/07/08 11:55 | lbn     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ069R

Sample ID: DUP040908A

ACZ Sample ID: **L68595-04**

Date Sampled: 04/09/08 00:00

Date Received: 04/10/08

Sample Matrix: Ground Water

## Wet Chemistry

| Parameter | EPA Method            | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|-----------------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | 375.4 - Turbidimetric | 153    |      | *  | mg/L  | 5   | 30  | 05/07/08 11:56 | lbn     |

Arizona license number: AZ0102



**Report Header Explanations**

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

**QC Sample Types**

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

**QC Sample Type Explanations**

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

**ACZ Qualifiers (Qual)**

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

**Method References**

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

**Comments**

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68595**

Project ID: OJ069R

**Sulfate**

375.4 - Turbidimetric

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244020</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG244020ICB     | ICB  | 05/07/08 9:22  |            |       |        | U     | mg/L  |       | -3    | 3     |     |       |      |
| WG244020ICV     | ICV  | 05/07/08 9:22  | WI080402-2 | 20.04 |        | 20.1  | mg/L  | 100.3 | 90    | 110   |     |       |      |
| WG244020LFB     | LFB  | 05/07/08 11:47 | WI080211-1 | 10    |        | 9.2   | mg/L  | 92    | 90    | 110   |     |       |      |
| L68595-01AS     | AS   | 05/07/08 11:47 | WI080211-1 | 10    | 21     | 31.4  | mg/L  | 104   | 90    | 110   |     |       |      |
| WG244020LFB2    | LFB  | 05/07/08 12:35 | WI080211-1 | 10    |        | 9.5   | mg/L  | 95    | 90    | 110   |     |       |      |
| L69006-01DUP    | DUP  | 05/07/08 12:42 |            |       | 910    | 922   | mg/L  |       |       |       | 1.3 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68595**

| ACZ ID | WORKNUM | PARAMETER | METHOD | QUAL | DESCRIPTION |
|--------|---------|-----------|--------|------|-------------|
|--------|---------|-----------|--------|------|-------------|

No extended qualifiers associated with this analysis

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L68595**

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Sulfate

375.4 - Turbidimetric

**FMI Gold & Copper - Sierrita**  
OJ069R

ACZ Project ID: L68595  
Date Received: 4/10/2008  
Received By:  
Date Printed: 4/10/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     |    | X  |
| 12) Are samples requiring no headspace, headspace free?                        |     |    | X  |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

N/A

**Contact (For any discrepancies, the client must be contacted)**

N/A

**Shipping Containers**

| Cooler Id | Temp (°C) | Rad (μR/hr) |
|-----------|-----------|-------------|
| 1030      | 1.0       | 16          |
|           |           |             |
|           |           |             |
|           |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ069R

ACZ Project ID: L68595  
 Date Received: 4/10/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID  | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|------------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L68595-01 | MO-2007-1A |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68595-02 | MO-2007-1B |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68595-03 | MO-2007-1C |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |
| L68595-04 | DUP040908A |       |       |        |       |        |       |       |        | X   |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: \_\_\_\_\_



Dan Simpson  
Phelps Dodge Sierrita  
P.O. Box 527  
6200 West Duval Mine Road  
Green Valley, AZ 85622-0527

May 30, 2008

Project ID: OJ06DZ  
ACZ Project ID: L69144 – SULFATE ONLY

Dan Simpson:

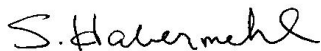
Enclosed are analytical reports for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 09, 2008. This project was assigned to ACZ's project number, L69144. Please reference this number in all future inquiries.

At the request of Phelps Dodge Sierrita, Inc. (PDSI), this laboratory report has been prepared to contain only information specific to samples and analytes identified by PDSI as evaluated pursuant to Mitigation Order No. P-500-06 with Arizona Department of Environmental Quality. Samples and analytes unrelated to the Mitigation Order, but which may be identified on the chain of custody and sample receipt, have been reported to PDSI in a separate report.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L69144. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute. Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all the requirements of NELAC.

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

ACZ disposes of samples and sub-samples thirty days after the analytical results are reported to the client. That time frame has elapsed for this project. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years. Please notify your Project Manager if you have other needs. If you have any questions, please contact your Project Manager or Customer Service Representative.



Scott Habermehl has reviewed  
and approved this report.





**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: IW-1

ACZ Sample ID: **L69144-01**

Date Sampled: 05/07/08 12:00

Date Received: 05/09/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 610    |      |    | mg/L  | 10  | 50  | 05/23/08 15:06 | ear     |

Arizona license number: AZ0102

**FMI Gold & Copper - Sierrita**

Project ID: OJ06DZ

Sample ID: MH-13C

ACZ Sample ID: **L69144-02**

Date Sampled: 05/07/08 11:03

Date Received: 05/09/08

Sample Matrix: Ground Water

Wet Chemistry

| Parameter | EPA Method   | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------|--------------|--------|------|----|-------|-----|-----|----------------|---------|
| Sulfate   | SM4500 SO4-D | 40     | B    |    | mg/L  | 10  | 50  | 05/23/08 15:11 | ear     |

Arizona license number: AZ0102

## Report Header Explanations

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

## QC Sample Types

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

## QC Sample Type Explanations

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

## ACZ Qualifiers (Qual)

|   |   |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL.                      |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| U | Analyte was analyzed for but not detected at the indicated MDL                      |

## Method References

|     |  |
|-----|--|
| (1) | EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.                               |
| (2) | EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993. |
| (3) | EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.   |
| (5) | EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.             |
| (6) | Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.                              |

## Comments

|     |  |
|-----|--|
| (1) | QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations. |
| (2) | Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.                        |
| (3) | Animal matrices for Inorganic analyses are reported on an "as received" basis.                                     |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Alkalinity as CaCO<sub>3</sub>**

SM2320B - Titration

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG244409</b> |      |                |            |     |        |       |       |      |       |       |     |       |      |
| WG244409PBW1    | PBW  | 05/14/08 16:25 |            |     |        | 15.7  | mg/L  |      | -20   | 20    |     |       |      |
| WG244409LCSW2   | LCSW | 05/14/08 16:37 | WC080506-2 | 820 |        | 791.6 | mg/L  | 96.5 | 90    | 110   |     |       |      |
| WG244409PBW2    | PBW  | 05/14/08 19:29 |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG244409LCSW5   | LCSW | 05/14/08 19:42 | WC080506-2 | 820 |        | 791.1 | mg/L  | 96.5 | 90    | 110   |     |       |      |
| L69150-01DUP    | DUP  | 05/14/08 21:14 |            |     | 168    | 168.1 | mg/L  |      |       |       | 0.1 | 20    |      |
| WG244409PBW3    | PBW  | 05/14/08 22:50 |            |     |        | 6.1   | mg/L  |      | -20   | 20    |     |       |      |
| WG244409LCSW8   | LCSW | 05/14/08 23:02 | WC080506-2 | 820 |        | 790.4 | mg/L  | 96.4 | 90    | 110   |     |       |      |
| WG244409PBW4    | PBW  | 05/15/08 2:02  |            |     |        | U     | mg/L  |      | -20   | 20    |     |       |      |
| WG244409LCSW11  | LCSW | 05/15/08 2:15  | WC080506-2 | 820 |        | 772.3 | mg/L  | 94.2 | 90    | 110   |     |       |      |
| WG244409LCSW14  | LCSW | 05/15/08 5:09  | WC080506-2 | 820 |        | 799.5 | mg/L  | 97.5 | 90    | 110   |     |       |      |

**Aluminum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 2.085 | mg/L  | 104.3 | 95    | 105   |      |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.09 | 0.09  |      |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | 1  |        | 1.038 | mg/L  | 103.8 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | 1  | .04    | 1.102 | mg/L  | 106.2 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | 1  | .04    | 1.125 | mg/L  | 108.5 | 85    | 115   | 2.07 | 20    |      |

**Antimony, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec  | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|---------|--------|-----|-------|------|
| <b>WG244685</b> |      |                |            |        |        |        |       |      |         |        |     |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .02006 |        | .02066 | mg/L  | 103  | 90      | 110    |     |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |        |        | .00049 | mg/L  |      | -0.0012 | 0.0012 |     |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .01    |        | .00972 | mg/L  | 97.2 | 85      | 115    |     |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .01    | U      | .00886 | mg/L  | 88.6 | 70      | 130    |     |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .01    | U      | .00903 | mg/L  | 90.3 | 70      | 130    | 1.9 | 20    |      |

**Arsenic, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG244685</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .05 |        | .05226 | mg/L  | 104.5 | 90      | 110    |      |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |     |        | .00051 | mg/L  |       | -0.0015 | 0.0015 |      |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .05 |        | .05186 | mg/L  | 103.7 | 85      | 115    |      |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .05 | .0012  | .05215 | mg/L  | 101.9 | 70      | 130    |      |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .05 | .0012  | .05302 | mg/L  | 103.6 | 70      | 130    | 1.65 | 20    |      |

**Barium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 2.0808 | mg/L  | 104   | 95     | 105   |      |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U      | mg/L  |       | -0.009 | 0.009 |      |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | .5 |        | .5212  | mg/L  | 104.2 | 85     | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | .5 | .053   | .559   | mg/L  | 101.2 | 85     | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | .5 | .053   | .5622  | mg/L  | 101.8 | 85     | 115   | 0.57 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Beryllium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG244685</b> |      |                |            |        |        |        |       |       |         |        |      |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .05    |        | .04928 | mg/L  | 98.6  | 90      | 110    |      |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |        |        | .00015 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .05005 |        | .05383 | mg/L  | 107.6 | 85      | 115    |      |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .05005 | U      | .04758 | mg/L  | 95.1  | 70      | 130    |      |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .05005 | U      | .04776 | mg/L  | 95.4  | 70      | 130    | 0.38 | 20    |      |

**Cadmium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG244685</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .05 |        | .04965 | mg/L  | 99.3  | 90      | 110    |      |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |     |        | .00012 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .05 |        | .05105 | mg/L  | 102.1 | 85      | 115    |      |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .05 | U      | .04896 | mg/L  | 97.9  | 70      | 130    |      |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .05 | U      | .05041 | mg/L  | 100.8 | 70      | 130    | 2.92 | 20    |      |

**Calcium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG244345</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG244345ICV     | ICV  | 05/14/08 0:18 | II080115-3 | 100      |        | 100.33 | mg/L  | 100.3 | 95    | 105   |      |       |      |
| WG244345ICB     | ICB  | 05/14/08 0:22 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG244345LFB     | LFB  | 05/14/08 0:34 | II080423-4 | 67.97008 |        | 71.94  | mg/L  | 105.8 | 85    | 115   |      |       |      |
| L69153-01AS     | AS   | 05/14/08 1:41 | II080423-4 | 67.97008 | 48.5   | 116.87 | mg/L  | 100.6 | 85    | 115   |      |       |      |
| L69153-01ASD    | ASD  | 05/14/08 1:51 | II080423-4 | 67.97008 | 48.5   | 116.58 | mg/L  | 100.2 | 85    | 115   | 0.25 | 20    |      |

**Chloride**

SM4500Cl-E

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244989</b> |      |                |            |        |        |       |       |       |       |       |     |       |      |
| WG244989ICV     | ICV  | 05/23/08 21:08 | WI071212-1 | 54.945 |        | 56.1  | mg/L  | 102.1 | 90    | 110   |     |       |      |
| WG244989ICB     | ICB  | 05/23/08 21:09 |            |        |        | 1     | mg/L  |       | -3    | 3     |     |       |      |
| WG244989LFB1    | LFB  | 05/23/08 21:10 | WI071130-1 | 30     |        | 30.2  | mg/L  | 100.7 | 90    | 110   |     |       |      |
| L69144-01AS     | AS   | 05/23/08 21:24 | WI071130-1 | 30     | 62     | 89.8  | mg/L  | 92.7  | 90    | 110   |     |       |      |
| L69144-02DUP    | DUP  | 05/23/08 21:26 |            |        | 8      | 7.9   | mg/L  |       |       |       | 1.3 | 20    | RA   |
| WG244989LFB2    | LFB  | 05/23/08 21:36 | WI071130-1 | 30     |        | 30.2  | mg/L  | 100.7 | 90    | 110   |     |       |      |

**Chromium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 2.061 | mg/L  | 103.1 | 95    | 105   |      |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | .5 |        | .526  | mg/L  | 105.2 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | .5 | U      | .564  | mg/L  | 112.8 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | .5 | U      | .56   | mg/L  | 112   | 85    | 115   | 0.71 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Cobalt, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 1.948 | mg/L  | 97.4  | 95    | 105   |      |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | .5 |        | .514  | mg/L  | 102.8 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | .5 | U      | .554  | mg/L  | 110.8 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | .5 | U      | .551  | mg/L  | 110.2 | 85    | 115   | 0.54 | 20    |      |

**Conductivity @25C**

SM2510B

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC     | Sample | Found | Units    | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|--------|--------|-------|----------|-------|-------|-------|-----|-------|------|
| <b>WG244409</b> |      |                |          |        |        |       |          |       |       |       |     |       |      |
| WG244409LCSW1   | LCSW | 05/14/08 16:26 | PCN28873 | 1408.8 |        | 1423  | µmhos/cm | 101   | 90    | 110   |     |       |      |
| WG244409LCSW4   | LCSW | 05/14/08 19:30 | PCN28873 | 1408.8 |        | 1424  | µmhos/cm | 101.1 | 90    | 110   |     |       |      |
| L69150-01DUP    | DUP  | 05/14/08 21:14 |          |        | 412    | 412   | µmhos/cm |       |       |       | 0   | 20    |      |
| WG244409LCSW7   | LCSW | 05/14/08 22:52 | PCN28873 | 1408.8 |        | 1419  | µmhos/cm | 100.7 | 90    | 110   |     |       |      |
| WG244409LCSW10  | LCSW | 05/15/08 2:04  | PCN28873 | 1408.8 |        | 1418  | µmhos/cm | 100.7 | 90    | 110   |     |       |      |
| WG244409LCSW13  | LCSW | 05/15/08 4:58  | PCN28873 | 1408.8 |        | 1410  | µmhos/cm | 100.1 | 90    | 110   |     |       |      |

**Copper, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 1.952 | mg/L  | 97.6  | 95    | 105   |      |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | .5 |        | .512  | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | .5 | U      | .503  | mg/L  | 100.6 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | .5 | U      | .507  | mg/L  | 101.4 | 85    | 115   | 0.79 | 20    |      |

**Cyanide, total**

M335.4 - Colorimetric w/ distillation

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower  | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|-------|--------|-------|-----|-------|------|
| <b>WG244597</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG244597ICV     | ICV  | 05/17/08 18:22 | WI080513-1 | .3 |        | .2992 | mg/L  | 99.7  | 90     | 110   |     |       |      |
| <b>WG244599</b> |      |                |            |    |        |       |       |       |        |       |     |       |      |
| WG244596LRB     | LRB  | 05/17/08 19:39 |            |    |        | U     | mg/L  |       | -0.015 | 0.015 |     |       |      |
| WG244596LFB     | LFB  | 05/17/08 19:39 | WI080513-1 | .2 |        | .2031 | mg/L  | 101.6 | 90     | 110   |     |       |      |
| L69144-01DUP    | DUP  | 05/17/08 19:41 |            |    | .013   | .0118 | mg/L  |       |        |       | 9.7 | 20    | RA   |
| L69144-02LFM    | LFM  | 05/17/08 19:43 | WI080513-1 | .2 | U      | .1867 | mg/L  | 93.4  | 90     | 110   |     |       |      |

**Fluoride**

SM4500F-C

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC | Sample | Found | Units | Rec  | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|-------|-------|-----|-------|------|
| <b>WG244784</b> |      |                |            |    |        |       |       |      |       |       |     |       |      |
| WG244784ICV     | ICV  | 05/21/08 9:27  | WC080502-2 | 2  |        | 1.91  | mg/L  | 95.5 | 90    | 110   |     |       |      |
| WG244784ICB     | ICB  | 05/21/08 9:34  |            |    |        | U     | mg/L  |      | -0.3  | 0.3   |     |       |      |
| WG244784LFB1    | LFB  | 05/21/08 9:39  | WC080515-3 | 5  |        | 4.71  | mg/L  | 94.2 | 90    | 110   |     |       |      |
| L69135-02AS     | AS   | 05/21/08 9:44  | WC080515-3 | 5  | .5     | 4.6   | mg/L  | 82   | 90    | 110   |     |       | M2   |
| L69135-02DUP    | DUP  | 05/21/08 9:47  |            |    | .5     | .49   | mg/L  |      |       |       | 2   | 20    | RA   |
| WG244784LFB2    | LFB  | 05/21/08 11:04 | WC080515-3 | 5  |        | 4.49  | mg/L  | 89.8 | 90    | 110   |     |       |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Iron, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 1.939 | mg/L  | 97    | 95    | 105   |      |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.06 | 0.06  |      |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | 1  |        | 1.048 | mg/L  | 104.8 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | 1  | U      | 1.105 | mg/L  | 110.5 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | 1  | U      | 1.103 | mg/L  | 110.3 | 85    | 115   | 0.18 | 20    |      |

**Lead, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG244685</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .05 |        | .0509  | mg/L  | 101.8 | 90      | 110    |      |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |     |        | .00023 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .05 |        | .05097 | mg/L  | 101.9 | 85      | 115    |      |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .05 | U      | .04906 | mg/L  | 98.1  | 70      | 130    |      |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .05 | U      | .05023 | mg/L  | 100.5 | 70      | 130    | 2.36 | 20    |      |

**Magnesium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG244345</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG244345ICV     | ICV  | 05/14/08 0:18 | II080115-3 | 100      |        | 100.31 | mg/L  | 100.3 | 95    | 105   |      |       |      |
| WG244345ICB     | ICB  | 05/14/08 0:22 |            |          |        | U      | mg/L  |       | -0.6  | 0.6   |      |       |      |
| WG244345LFB     | LFB  | 05/14/08 0:34 | II080423-4 | 49.96908 |        | 52.84  | mg/L  | 105.7 | 85    | 115   |      |       |      |
| L69153-01AS     | AS   | 05/14/08 1:41 | II080423-4 | 49.96908 | 21.7   | 76.02  | mg/L  | 108.7 | 85    | 115   |      |       |      |
| L69153-01ASD    | ASD  | 05/14/08 1:51 | II080423-4 | 49.96908 | 21.7   | 75.63  | mg/L  | 107.9 | 85    | 115   | 0.51 | 20    |      |

**Manganese, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found  | Units | Rec   | Lower  | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|--------|-------|-------|--------|-------|------|-------|------|
| <b>WG244345</b> |      |               |            |    |        |        |       |       |        |       |      |       |      |
| WG244345ICV     | ICV  | 05/14/08 0:18 | II080115-3 | 2  |        | 1.9411 | mg/L  | 97.1  | 95     | 105   |      |       |      |
| WG244345ICB     | ICB  | 05/14/08 0:22 |            |    |        | U      | mg/L  |       | -0.015 | 0.015 |      |       |      |
| WG244345LFB     | LFB  | 05/14/08 0:34 | II080423-4 | .5 |        | .5667  | mg/L  | 113.3 | 85     | 115   |      |       |      |
| L69153-01AS     | AS   | 05/14/08 1:41 | II080423-4 | .5 | U      | .5604  | mg/L  | 112.1 | 85     | 115   |      |       |      |
| L69153-01ASD    | ASD  | 05/14/08 1:51 | II080423-4 | .5 | U      | .559   | mg/L  | 111.8 | 85     | 115   | 0.25 | 20    |      |

**Mercury, dissolved**

M245.1 CVAA

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC     | Sample | Found  | Units | Rec   | Lower    | Upper   | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|-------|----------|---------|------|-------|------|
| <b>WG244297</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG244297ICV     | ICV  | 05/14/08 13:53 | II080512-3 | .00501 |        | .00508 | mg/L  | 101.4 | 95       | 105     |      |       |      |
| WG244297ICB     | ICB  | 05/14/08 13:56 |            |        |        | U      | mg/L  |       | -0.0002  | 0.0002  |      |       |      |
| <b>WG244384</b> |      |                |            |        |        |        |       |       |          |         |      |       |      |
| WG244384LRB     | LRB  | 05/14/08 17:03 |            |        |        | U      | mg/L  |       | -0.00044 | 0.00044 |      |       |      |
| WG244384LFB     | LFB  | 05/14/08 17:05 | II080508-2 | .002   |        | .0022  | mg/L  | 110   | 85       | 115     |      |       |      |
| L69144-01LFM    | LFM  | 05/14/08 17:42 | II080508-2 | .002   | U      | .00221 | mg/L  | 110.5 | 85       | 115     |      |       |      |
| L69144-01LFMD   | LFMD | 05/14/08 17:44 | II080508-2 | .002   | U      | .00212 | mg/L  | 106   | 85       | 115     | 4.16 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Molybdenum, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244345</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244345 CV     | ICV  | 05/14/08 0:18 | II080115-3 | 2  |        | 2.012 | mg/L  | 100.6 | 95    | 105   |      |       |      |
| WG244345 CB     | ICB  | 05/14/08 0:22 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG244345 LFB    | LFB  | 05/14/08 0:34 | II080423-4 | .5 |        | .522  | mg/L  | 104.4 | 85    | 115   |      |       |      |
| L69153-01AS     | AS   | 05/14/08 1:41 | II080423-4 | .5 | U      | .519  | mg/L  | 103.8 | 85    | 115   |      |       |      |
| L69153-01ASD    | ASD  | 05/14/08 1:51 | II080423-4 | .5 | U      | .52   | mg/L  | 104   | 85    | 115   | 0.19 | 20    |      |

**Nickel, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |      |       |      |
| WG244276 CV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 1.904 | mg/L  | 95.2  | 95    | 105   |      |       |      |
| WG244276 CB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |      |       |      |
| WG244276 LFB    | LFB  | 05/13/08 0:32 | II080423-4 | .5 |        | .507  | mg/L  | 101.4 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | .5 | U      | .551  | mg/L  | 110.2 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | .5 | U      | .545  | mg/L  | 109   | 85    | 115   | 1.09 | 20    |      |

**Nitrate/Nitrite as N**

M353.2 - H2SO4 preserved

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244580</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG244580 CV     | ICV  | 05/16/08 21:14 | WI080312-1 | 2.416 |        | 2.336 | mg/L  | 96.7  | 90    | 110   |     |       |      |
| WG244580 CB     | ICB  | 05/16/08 21:15 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| <b>WG244582</b> |      |                |            |       |        |       |       |       |       |       |     |       |      |
| WG244582 CV     | ICV  | 05/16/08 21:58 | WI080312-1 | 2.416 |        | 2.328 | mg/L  | 96.4  | 90    | 110   |     |       |      |
| WG244582 CB     | ICB  | 05/16/08 21:59 |            |       |        | U     | mg/L  |       | -0.06 | 0.06  |     |       |      |
| WG244582 LFB    | LFB  | 05/16/08 22:01 | WI080312-1 | 2     |        | 1.933 | mg/L  | 96.7  | 90    | 110   |     |       |      |
| L69083-05AS     | AS   | 05/16/08 22:22 | WI080312-1 | 2     | .24    | 2.296 | mg/L  | 102.8 | 90    | 110   |     |       |      |
| L69083-06DUP    | DUP  | 05/16/08 22:25 |            |       | .21    | .216  | mg/L  |       |       |       | 2.8 | 20    |      |

**pH (lab)**

M150.1 - Electrometric

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244409</b> |      |                |          |    |        |       |       |       |       |       |     |       |      |
| WG244409 LCSW3  | LCSW | 05/14/08 16:39 | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |
| WG244409 LCSW6  | LCSW | 05/14/08 19:45 | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |
| L69150-01DUP    | DUP  | 05/14/08 21:14 |          |    | 8.5    | 8.47  | units |       |       |       | 0.4 | 20    |      |
| WG244409 LCSW9  | LCSW | 05/14/08 23:05 | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |
| WG244409 LCSW12 | LCSW | 05/15/08 2:17  | PCN27958 | 6  |        | 6.01  | units | 100.2 | 90    | 110   |     |       |      |
| WG244409 LCSW15 | LCSW | 05/15/08 5:12  | PCN27958 | 6  |        | 6.02  | units | 100.3 | 90    | 110   |     |       |      |

**Potassium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG244276</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG244276 CV     | ICV  | 05/13/08 0:15 | II080115-3 | 20       |        | 20.67  | mg/L  | 103.4 | 95    | 105   |      |       |      |
| WG244276 CB     | ICB  | 05/13/08 0:19 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG244276 LFB    | LFB  | 05/13/08 0:32 | II080423-4 | 99.76186 |        | 102.17 | mg/L  | 102.4 | 85    | 115   |      |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | 99.76186 | .3     | 106.12 | mg/L  | 106.1 | 85    | 115   |      |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | 99.76186 | .3     | 106.41 | mg/L  | 106.4 | 85    | 115   | 0.27 | 20    |      |



**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Residue, Filterable (TDS) @180C**

SM2540C

| ACZ ID          | Type | Analyzed       | PCN/SCN  | QC  | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|-----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244373</b> |      |                |          |     |        |       |       |       |       |       |     |       |      |
| WG244373PBW     | PBW  | 05/14/08 9:35  |          |     |        | U     | mg/L  |       | -20   | 20    |     |       |      |
| WG244373LCSW    | LCSW | 05/14/08 9:36  | PCN29260 | 260 |        | 270   | mg/L  | 103.8 | 80    | 120   |     |       |      |
| L69171-01DUP    | DUP  | 05/14/08 10:04 |          |     | 2620   | 2660  | mg/L  |       |       |       | 1.5 | 20    |      |

**Selenium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD  | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|-------|---------|--------|------|-------|------|
| <b>WG244685</b> |      |                |            |     |        |        |       |       |         |        |      |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .05 |        | .05321 | mg/L  | 106.4 | 90      | 110    |      |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |     |        | .00019 | mg/L  |       | -0.0003 | 0.0003 |      |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .05 |        | .04948 | mg/L  | 99    | 85      | 115    |      |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .05 | .0006  | .05668 | mg/L  | 112.2 | 70      | 130    |      |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .05 | .0006  | .05645 | mg/L  | 111.7 | 70      | 130    | 0.41 | 20    |      |

**WG244947**

|              |     |                |            |     |       |        |      |       |         |        |      |    |  |
|--------------|-----|----------------|------------|-----|-------|--------|------|-------|---------|--------|------|----|--|
| WG244947ICV  | ICV | 05/26/08 13:00 | MS080424-4 | .05 |       | .05119 | mg/L | 102.4 | 90      | 110    |      |    |  |
| WG244947ICB  | ICB | 05/26/08 13:06 |            |     |       | U      | mg/L |       | -0.0003 | 0.0003 |      |    |  |
| WG244947LFB  | LFB | 05/26/08 13:18 | MS080519-2 | .05 |       | .04726 | mg/L | 94.5  | 85      | 115    |      |    |  |
| L69144-01AS  | AS  | 05/26/08 13:41 | MS080519-2 | .05 | .0011 | .05466 | mg/L | 107.1 | 70      | 130    |      |    |  |
| L69144-01ASD | ASD | 05/26/08 13:47 | MS080519-2 | .05 | .0011 | .05648 | mg/L | 110.8 | 70      | 130    | 3.28 | 20 |  |

**Sodium, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC       | Sample | Found  | Units | Rec   | Lower | Upper | RPD  | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|--------|-------|-------|-------|-------|------|-------|------|
| <b>WG244345</b> |      |               |            |          |        |        |       |       |       |       |      |       |      |
| WG244345ICV     | ICV  | 05/14/08 0:18 | II080115-3 | 100      |        | 99.86  | mg/L  | 99.9  | 95    | 105   |      |       |      |
| WG244345ICB     | ICB  | 05/14/08 0:22 |            |          |        | U      | mg/L  |       | -0.9  | 0.9   |      |       |      |
| WG244345LFB     | LFB  | 05/14/08 0:34 | II080423-4 | 98.21624 |        | 101.69 | mg/L  | 103.5 | 85    | 115   |      |       |      |
| L69153-01AS     | AS   | 05/14/08 1:41 | II080423-4 | 98.21624 | 15     | 116.95 | mg/L  | 103.8 | 85    | 115   |      |       |      |
| L69153-01ASD    | ASD  | 05/14/08 1:51 | II080423-4 | 98.21624 | 15     | 116.33 | mg/L  | 103.2 | 85    | 115   | 0.53 | 20    |      |

**Sulfate**

SM4500 SO4-D

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC  | Sample | Found | Units | Rec | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|-------|-------|-----|-------|-------|-----|-------|------|
| <b>WG244967</b> |      |                |            |     |        |       |       |     |       |       |     |       |      |
| WG244967PBW     | PBW  | 05/23/08 14:40 |            |     |        | 12    | mg/L  |     | -30   | 30    |     |       |      |
| WG244967LCSW    | LCSW | 05/23/08 14:45 | WC080514-1 | 100 |        | 107   | mg/L  | 107 | 80    | 120   |     |       |      |
| L69151-01DUP    | DUP  | 05/23/08 15:43 |            |     | 880    | 892   | mg/L  |     |       |       | 1.4 | 20    |      |

**Thallium, dissolved**

M200.8 ICP-MS

| ACZ ID          | Type | Analyzed       | PCN/SCN    | QC    | Sample | Found  | Units | Rec   | Lower   | Upper  | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|--------|-------|-------|---------|--------|-----|-------|------|
| <b>WG244685</b> |      |                |            |       |        |        |       |       |         |        |     |       |      |
| WG244685ICV     | ICV  | 05/20/08 11:14 | MS080424-4 | .05   |        | .05147 | mg/L  | 102.9 | 90      | 110    |     |       |      |
| WG244685ICB     | ICB  | 05/20/08 11:20 |            |       |        | .00016 | mg/L  |       | -0.0003 | 0.0003 |     |       |      |
| WG244685LFB     | LFB  | 05/20/08 11:33 | MS080424-2 | .0501 |        | .05111 | mg/L  | 102   | 85      | 115    |     |       |      |
| L69141-03AS     | AS   | 05/20/08 11:52 | MS080424-2 | .0501 | U      | .04948 | mg/L  | 98.8  | 70      | 130    |     |       |      |
| L69141-03ASD    | ASD  | 05/20/08 11:58 | MS080424-2 | .0501 | U      | .05053 | mg/L  | 100.9 | 70      | 130    | 2.1 | 20    |      |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

Project ID: OJ06DZ

**Zinc, dissolved**

M200.7 ICP

| ACZ ID          | Type | Analyzed      | PCN/SCN    | QC | Sample | Found | Units | Rec   | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----|--------|-------|-------|-------|-------|-------|-----|-------|------|
| <b>WG244276</b> |      |               |            |    |        |       |       |       |       |       |     |       |      |
| WG244276ICV     | ICV  | 05/13/08 0:15 | II080115-3 | 2  |        | 2.001 | mg/L  | 100.1 | 95    | 105   |     |       |      |
| WG244276ICB     | ICB  | 05/13/08 0:19 |            |    |        | U     | mg/L  |       | -0.03 | 0.03  |     |       |      |
| WG244276LFB     | LFB  | 05/13/08 0:32 | II080423-4 | .5 |        | .522  | mg/L  | 104.4 | 85    | 115   |     |       |      |
| L69138-01AS     | AS   | 05/13/08 1:11 | II080423-4 | .5 | .47    | .989  | mg/L  | 103.8 | 85    | 115   |     |       |      |
| L69138-01ASD    | ASD  | 05/13/08 1:14 | II080423-4 | .5 | .47    | .987  | mg/L  | 103.4 | 85    | 115   | 0.2 | 20    |      |

**FMI Gold & Copper - Sierrita**

**ACZ Project ID: L69144**

| ACZ ID           | WORKNUM  | PARAMETER           | METHOD                                | QUAL | DESCRIPTION  |
|------------------|----------|---------------------|---------------------------------------|------|--|
| <b>L69144-01</b> | WG244276 | Nickel, dissolved   | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $< \text{MDL}$ ].  |
|                  | WG244989 | Chloride            | SM4500CI-E                            | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10 \times \text{MDL}$ ). |
|                  | WG244599 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10 \times \text{MDL}$ ). |
|                  | WG244784 | Fluoride            | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  |          |                     | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10 \times \text{MDL}$ ). |
| <b>L69144-02</b> | WG244276 | Nickel, dissolved   | M200.7 ICP                            | VC   | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [ $< \text{MDL}$ ].  |
|                  | WG244685 | Selenium, dissolved | M200.8 ICP-MS                         | BE   | Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [ $< \text{MDL}$ ].          |
|                  | WG244989 | Chloride            | SM4500CI-E                            | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10 \times \text{MDL}$ ). |
|                  | WG244599 | Cyanide, total      | M335.4 - Colorimetric w/ distillation | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10 \times \text{MDL}$ ). |
|                  | WG244784 | Fluoride            | SM4500F-C                             | M2   | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.  |
|                  |          |                     | SM4500F-C                             | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation ( $< 10 \times \text{MDL}$ ). |

**FMI Gold & Copper - Sierrita**

ACZ Project ID: **L69144**

No certification qualifiers associated with this analysis

**FMI Gold & Copper - Sierrita**  
OJ06DZ

ACZ Project ID: L69144  
Date Received: 5/9/2008  
Received By: lcp  
Date Printed: 5/12/2008

**Receipt Verification**

|  | YES | NO | NA |
|--|-----|----|----|
| 1) Does this project require special handling procedures such as CLP protocol? |     |    | X  |
| 2) Are the custody seals on the cooler intact?                                 | X   |    |    |
| 3) Are the custody seals on the sample containers intact?                      |     |    | X  |
| 4) Is there a Chain of Custody or other directive shipping papers present?     | X   |    |    |
| 5) Is the Chain of Custody complete?   | X   |    |    |
| 6) Is the Chain of Custody in agreement with the samples received?             | X   |    |    |
| 7) Is there enough sample for all requested analyses?                          | X   |    |    |
| 8) Are all samples within holding times for requested analyses?                | X   |    |    |
| 9) Were all sample containers received intact?                                 | X   |    |    |
| 10) Are the temperature blanks present?  |     |    | X  |
| 11) Are the trip blanks (VOA and/or Cyanide) present?                          |     | X  |    |
| 12) Are samples requiring no headspace, headspace free?                        | X   |    |    |
| 13) Do the samples that require a Foreign Soils Permit have one?               |     |    | X  |

**Exceptions: If you answered no to any of the above questions, please describe**

Cyanide and VOA trip blanks were not received.

**Contact (For any discrepancies, the client must be contacted)**

The client was not contacted.

**Shipping Containers**

| Cooler Id |  | Temp (°C) | Rad (µR/hr) |
|-----------|--|-----------|-------------|
| NA5996    |  | 4.9       | 13          |
|           |  |           |             |
|           |  |           |             |
|           |  |           |             |

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

**Notes**

**FMI Gold & Copper - Sierrita**  
 OJ06DZ

ACZ Project ID: L69144  
 Date Received: 5/9/2008  
 Received By:

**Sample Container Preservation**

| SAMPLE    | CLIENT ID | R < 2 | G < 2 | BK < 2 | Y < 2 | YG < 2 | B < 2 | O < 2 | T > 12 | N/A | RAD | ID                       |
|-----------|-----------|-------|-------|--------|-------|--------|-------|-------|--------|-----|-----|--------------------------|
| L69144-01 | IW-1      |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |
| L69144-02 | MH-13C    |       | Y     |        | Y     |        |       |       |        |     |     | <input type="checkbox"/> |

**Sample Container Preservation Legend**

| Abbreviation | Description            | Container Type | Preservative/Limits |
|--------------|------------------------|----------------|---------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2      |
| B            | Filtered/Sulfuric      | BLUE           | pH must be < 2      |
| BK           | Filtered/Nitric        | BLACK          | pH must be < 2      |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2      |
| O            | Raw/Sulfuric           | ORANGE         | pH must be < 2      |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *   |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12     |
| Y            | Raw/Sulfuric           | YELLOW         | pH must be < 2      |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2      |
| N/A          | No preservative needed | Not applicable |                     |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 µR/hr |

\* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: lcp

**Report to:**

|                                    |                                |
|------------------------------------|--------------------------------|
| Name: Billy Dorris                 | Address: 6200 W. Duval Mine Rd |
| Company: Freeport McMoran Sierrita | Green Valley, AZ 85614         |
| E-mail: billy-dorris@fmi.com       | Telephone: 520 648 8873        |

**Copy of Report to:**

|                         |                                 |
|-------------------------|---------------------------------|
| Name: Dan Simpson       | E-mail: dans@hginc.com          |
| Company: Hydro Geo Chem | Telephone: 520 293 1500 EXT 133 |

**Invoice to:**

|          |  |            |
|----------|--|------------|
| Name:    |  | Address:   |
| Company: |  |            |
| E-mail:  |  | Telephone: |

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

YES

**NO**

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

**is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.**

## PROJECT INFORMATION

## ANALYSES REQUESTED (attach list or use quote number)

[illegible]

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

## REMARKS/ SAMPLE DISCLOSURES

"Copy of Report" to Dan Simpson contains only 504 results with QC Summary.

PAGE

of

UPS TRACKING # 1Z 867 7E4 23 1000 4806

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

| RELINQUISHED BY: |  | DATE:TIME    | RECEIVED BY: |  | DATE:TIME    |
|------------------|--|--------------|--------------|--|--------------|
| Billy F. Davis   |  | 5-8-08/15:00 | WPL          |  | 5-9-08 10:50 |
|                  |  |              |              |  |              |
|                  |  |              |              |  |              |

## **APPENDIX C**

### **HYDRO GEO CHEM, INC. GROUNDWATER SAMPLING FORMS**





| WELL DATA                    |          |
|------------------------------|----------|
| Well Depth (ft bls):         | 955      |
| Casing Diameter (in):        | 16"      |
| Static Water Level (ft bmp): | NA       |
| 1 Casing Volume (gals):      | NA       |
| 3 Casing Volumes (gals):     | NA       |
| Time:                        | 11:55    |
| Point of Measurement:        | TOL      |
| GPS:                         | See File |
| Elevation:                   | See File |

| SAMPLE INFORMATION |       |                |        |                   |                 |              |            |
|--------------------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| Sample ID          | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
| CC of GV-F         | 12:15 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CC of GV           | 12:15 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

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**HYDRO GEO CHEM, INC.****Groundwater Sampling Form**

|             |         |               |                |
|-------------|---------|---------------|----------------|
| Project No. | 7830000 | Client:       | FMI - Sierrita |
| Phase No.   | 6.2     | Date:         | 4-17-08        |
| Well ID:    | CW-3    | Weather:      | clear          |
| ADWR No.    | 627483  | Collected By: | MA/AP          |

**WELL DATA**

|                              |        |                       |          |
|------------------------------|--------|-----------------------|----------|
| Well Depth (ft bls):         | 501    | Time:                 | 8:20     |
| Casing Diameter (in):        | 16"    | Point of Measurement: | Toc      |
| Static Water Level (ft bmp): | 266.46 | GPS:                  | See file |
| 1 Casing Volume (gals):      | 2439   | Elevation:            | See file |
| 3 Casing Volumes (gals):     | 7317   |                       |          |

**FIELD SAMPLING DATA**

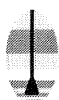
| Time | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 925  | 100                  | 80                        | 7.29    | 25.1      | 385                          | clear | None | Turb    |
| 928  | 100                  | 320                       | 7.47    | 25.1      | 403                          | "     | "    | 2.85    |
| 940  | 100                  | 1520                      | 7.13    | 25.3      | 402                          | "     | "    | 1.19    |
| 950  | 100                  | 2520                      | 7.16    | 25.5      | 397                          | "     | "    | 0.80    |
| 1000 | 100                  | 3520                      | 7.21    | 25.6      | 398                          | "     | "    | 0.63    |
| 1010 | 100                  | 4520                      | 7.21    | 26.0      | 399                          | "     | "    | 1.16    |
| 1020 | 100                  | 5520                      | 7.23    | 25.9      | 398                          | "     | "    | 1.16    |
| 1030 | 100                  | 6520                      | 7.32    | 25.7      | 394                          | "     | "    | 2.10    |
| 1040 | 100                  | 7520                      | 7.32    | 25.6      | 398                          | "     | "    | 0.70    |
|      |                      |                           |         |           |                              |       |      |         |
|      |                      |                           |         |           |                              |       |      |         |
|      |                      |                           |         |           |                              |       |      |         |

**SAMPLE INFORMATION**

| Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| CW-3F     | 10:45 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CW-3      | 10:45 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments:

Flow Rate is 100 gpm = 74 min purge  
MO-2007-5 wells are being pumped and discharged to  
the wash and may affect conditions in the wash.



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |         |               |                |
|-------------|---------|---------------|----------------|
| Project No. | 7830000 | Client:       | FMI - Sierrita |
| Phase No.   | 6.2     | Date:         | 4-15-08        |
| Well ID:    | CW-6    | Weather:      | clear          |
| ADWR No.    | 627485  | Collected By: | MA             |

### WELL DATA

|                              |             |                       |          |
|------------------------------|-------------|-----------------------|----------|
| Well Depth (ft bls):         | 840'        | Time:                 | 9:00     |
| Casing Diameter (in):        | 16"         | Point of Measurement: | TOC      |
| Static Water Level (ft bmp): | See comment | GPS:                  | See file |
| 1 Casing Volume (gals):      | NA          | Elevation:            | See file |
| 3 Casing Volumes (gals):     | NA          |                       |          |

### FIELD SAMPLING DATA

| Time                        | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|-----------------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 9:00                        | 700                  |                           | 7.24    | 26.8      | 382                          | clear | None |         |
| 9:03                        | 11                   |                           | 7.24    | 26.9      | 382                          | 11    | 11   |         |
| 9:05                        | 11                   |                           | 7.25    | 26.9      | 382                          | 11    | 11   |         |
| Total Discharge is 7000 gal |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |

### SAMPLE INFORMATION

| Sample ID | Time | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|------|----------------|--------|-------------------|-----------------|--------------|------------|
| CW-6F     | 9:10 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CW-6      | 9:10 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments: This well is running at sample time.  
Well is running at sample time; 254.20



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |         |               |                |
|-------------|---------|---------------|----------------|
| Project No. | 7830000 | Client:       | FMI - Sierrita |
| Phase No.   | 6.2     | Date:         | 4-15-08        |
| Well ID:    | CW-7    | Weather:      | clear          |
| ADWR No.    | 502546  | Collected By: | MA             |

### WELL DATA

|                              |                    |                       |          |
|------------------------------|--------------------|-----------------------|----------|
| Well Depth (ft bls):         | 1065               | Time:                 | 10:00    |
| Casing Diameter (in):        | 12"                | Point of Measurement: | Toc      |
| Static Water Level (ft bmp): | 426.40'            | GPS:                  | See file |
| 1 Casing Volume (gals):      | 3752.0             | Elevation:            | See file |
| 3 Casing Volumes (gals):     | 11256 9.5min Purge |                       |          |

### FIELD SAMPLING DATA

| Time                       | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | odor   | color     | Comment |
|----------------------------|----------------------|---------------------------|---------|-----------|------------------------------|--------|-----------|---------|
| 10:10                      | 1200                 | 2400                      | 7.21    | 27.9      | 1697                         | slight | Red/Brown |         |
| 10:14                      | "                    |                           | 7.37    | 27.7      | 1754                         | None   | clear     |         |
| 10:16                      | "                    |                           | 7.31    | 27.7      | 1755                         | "      | "         |         |
| 10:20                      | "                    |                           | 7.31    | 27.7      | 1759                         | "      | "         |         |
| 10:22                      | "                    |                           | 7.31    | 27.6      | 1758                         | "      | "         |         |
| Total Discharge 16800 gals |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |
|                            |                      |                           |         |           |                              |        |           |         |

### SAMPLE INFORMATION

| Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| CW-7F     | 10:25 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CW-7      | 10:25 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments:

Pump on @ 10:08



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |         |               |                |
|-------------|---------|---------------|----------------|
| Project No. | 7830000 | Client:       | FMI - Sierrita |
| Phase No.   | 6.2     | Date:         | 4-15-08        |
| Well ID:    | CW-8    | Weather:      | clear          |
| ADWR No.    | 543600  | Collected By: | MA             |

### WELL DATA

|                              |              |                       |          |
|------------------------------|--------------|-----------------------|----------|
| Well Depth (ft bls):         | 1200         | Time:                 | 10:45    |
| Casing Diameter (in):        | 16"          | Point of Measurement: | TOC      |
| Static Water Level (ft bmp): | 339.20       | GPS:                  | See file |
| 1 Casing Volume (gals):      | 8990         | Elevation:            | See file |
| 3 Casing Volumes (gals):     | 26972 14 min |                       |          |

### FIELD SAMPLING DATA

| Time                          | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor       | Comment        |
|-------------------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------------|----------------|
| 10:53                         | 1900                 |                           | 7.52    | 31.7      | 1010                         | Tan   | Slight egg | open Discharge |
| 10:55                         | "                    |                           | 7.51    | 30.6      | 980                          | clear | None       |                |
| 11:00                         | "                    |                           | 7.54    | 29.7      | 1054                         | clear | None       |                |
| 11:05                         | "                    |                           | 7.54    | 29.6      | 1114                         | "     | "          |                |
| 11:08                         | "                    |                           | 7.54    | 29.5      | 1135                         |       |            |                |
| Total Discharge is 32,300 gal |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |
|                               |                      |                           |         |           |                              |       |            |                |

### SAMPLE INFORMATION

| Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| CW-8F     | 11:10 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CW-8      | 11:10 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |         |               |                |
|-------------|---------|---------------|----------------|
| Project No. | 7830000 | Client:       | FMI - Sierrita |
| Phase No.   | 6.2     | Date:         | 4-15-08        |
| Well ID:    | CW-9    | Weather:      | clear          |
| ADWR No.    | 588121  | Collected By: | MA             |

### WELL DATA

|                              |                |                       |          |
|------------------------------|----------------|-----------------------|----------|
| Well Depth (ft bls):         | 1000           | Time:                 | 9:30     |
| Casing Diameter (in):        | 20"            | Point of Measurement: | TOL      |
| Static Water Level (ft bmp): | NA see comment | GPS:                  | See file |
| 1 Casing Volume (gals):      | NA             | Elevation:            | See file |
| 3 Casing Volumes (gals):     | NA             |                       |          |

### FIELD SAMPLING DATA

| Time                        | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|-----------------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 9:33                        | 1100                 |                           | 7.26    | 27.7      | 351                          | clear | None |         |
| 9:35                        | "                    |                           | 7.30    | 27.5      | 349                          | "     | "    |         |
| 9:37                        | "                    |                           | 7.39    | 27.5      | 347                          | "     | "    |         |
| 9:40                        | "                    |                           | 7.39    | 27.4      | 347                          | "     | "    |         |
| 9:                          | "                    |                           |         |           |                              |       |      |         |
| Total Discharge is 7700 gal |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |
|                             |                      |                           |         |           |                              |       |      |         |

### SAMPLE INFORMATION

| Sample ID | Time | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|------|----------------|--------|-------------------|-----------------|--------------|------------|
| CW-9F     | 9:40 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CW-9      | 9:40 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments:

This well is running since 4am

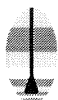
308.00



| WELL DATA                    |                              |
|------------------------------|------------------------------|
| Well Depth (ft bls):         | 1140                         |
| Casing Diameter (in):        | 12"                          |
| Static Water Level (ft bmp): | 187.95                       |
| 1 Casing Volume (gals):      | 5593                         |
| 3 Casing Volumes (gals):     | 16780 @ 2400 gpm 7 min Purge |
| Time:                        | 11:30 sample 8:30 w/         |
| Point of Measurement:        | TOC                          |
| GPS:                         | See file                     |
| Elevation:                   | See file                     |

| SAMPLE INFORMATION |       |                |        |                   |                 |              |            |
|--------------------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| Sample ID          | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
| CW-10F             | 11:45 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| CW-10              | 11:45 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

This pump has been running since 8:45 am



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |            |               |                |
|-------------|------------|---------------|----------------|
| Project No. | 7830000    | Client:       | FMI - Sierrita |
| Phase No.   | 6.2        | Date:         | 4-16-08        |
| Well ID:    | GV-1 GVDWD | Weather:      | clear          |
| ADWR No.    | 603428     | Collected By: | MA             |

### WELL DATA

|                              |             |                       |          |
|------------------------------|-------------|-----------------------|----------|
| Well Depth (ft bls):         | 645         | Time:                 | 10:37    |
| Casing Diameter (in):        | 16"         | Point of Measurement: | TOL      |
| Static Water Level (ft bmp): | 225.50      | GPS:                  | See File |
| 1 Casing Volume (gals):      | 4387        | Elevation:            | See File |
| 3 Casing Volumes (gals):     | 13/60 18min |                       |          |

### FIELD SAMPLING DATA

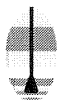
| Time                          | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|-------------------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 10:45                         | 730                  |                           | 7.09    | 25.3      | 397                          | Clear | None |         |
| 10:47                         | "                    |                           | 7.24    | 25.5      | 406                          | "     | "    |         |
| 10:50                         | "                    |                           | 7.27    | 25.8      | 402                          | "     | "    |         |
| 10:55                         | "                    |                           | 7.28    | 25.9      | 401                          | "     | "    |         |
| 11:00                         | "                    |                           | 7.30    | 26.2      | 402                          | "     | "    |         |
| 11:05                         | "                    |                           | 7.34    | 25.8      | 405                          | "     | "    |         |
| 11:08                         | "                    |                           | 7.29    | 25.8      | 399                          | "     | "    |         |
| Total Discharge is 18,980 gal |                      |                           |         |           |                              |       |      |         |

### SAMPLE INFORMATION

| Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| GV-1F     | 11:10 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| GV-1      | 11:10 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments: This pump was turned off at 2pm this morning  
Pump on @ 10:44





# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |             |               |                |
|-------------|-------------|---------------|----------------|
| Project No. | 7830000     | Client:       | FMI - Sierrita |
| Phase No.   | 6.2         | Date:         | 4-16-08        |
| Well ID:    | GV-2 6VDWID | Weather:      | clear          |
| ADWR No.    | 603429      | Collected By: | MA             |

### WELL DATA

|                              |             |                       |          |
|------------------------------|-------------|-----------------------|----------|
| Well Depth (ft bls):         | 560         | Time:                 | 9:30     |
| Casing Diameter (in):        | 16"         | Point of Measurement: | To C     |
| Static Water Level (ft bmp): | 194.95      | GPS:                  | See File |
| 1 Casing Volume (gals):      | 3812        | Elevation:            | See File |
| 3 Casing Volumes (gals):     | 11437 16min |                       |          |

### FIELD SAMPLING DATA

| Time                       | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|----------------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 10:02                      | 700                  |                           | 7.24    | 23.1      | 562                          | clear | None |         |
| 10:05                      | "                    |                           | 7.24    | 23.5      | 556                          | "     | "    |         |
| 10:10                      | "                    |                           | 7.28    | 23.4      | 553                          | "     | "    |         |
| 10:15                      | "                    |                           | 7.27    | 23.7      | 554                          | "     | "    |         |
| 10:18                      | "                    |                           | 7.28    | 23.7      | 553                          | "     | "    |         |
| Total Discharge 14,700 gal |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |
|                            |                      |                           |         |           |                              |       |      |         |

### SAMPLE INFORMATION

| Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| GV-2F     | 10:20 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| GV-2      | 10:20 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments:

This well had been off since only 8am this morning. Pump on @ 9:59



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |                            |               |                |
|-------------|----------------------------|---------------|----------------|
| Project No. | 7830000                    | Client:       | FMI - Sierrita |
| Phase No.   | 6.2                        | Date:         | 4-16-08        |
| Well ID:    | SI- <del>WELL</del> 6VDWID | Weather:      | clear          |
| ADWR No.    | 208825                     | Collected By: | MA             |

### WELL DATA

|                              |              |                       |          |
|------------------------------|--------------|-----------------------|----------|
| Well Depth (ft bls):         | 650          | Time:                 | 8:40     |
| Casing Diameter (in):        | 16"          | Point of Measurement: | Toc      |
| Static Water Level (ft bmp): | 247.55       | GPS:                  | See file |
| 1 Casing Volume (gals):      | 4209         | Elevation:            | See file |
| 3 Casing Volumes (gals):     | 12628 12 min |                       |          |

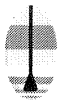
### FIELD SAMPLING DATA

| Time                          | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|-------------------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 8:52                          | 1050                 |                           | 7.09    | 26.0      | 324                          | clear | None |         |
| 8:55                          | "                    |                           | 7.19    | 26.5      | 331                          | "     | "    |         |
| 8:58                          | "                    |                           | 7.20    | 26.5      | 329                          | "     | "    |         |
| 9:00                          | "                    |                           | 7.36    | 26.6      | 329                          | "     | "    |         |
| 9:02                          | "                    |                           | 7.37    | 26.5      | 328                          | "     | "    |         |
| 9:05                          | "                    |                           | 7.41    | 26.3      | 328                          | "     | "    |         |
| 9:07                          | "                    |                           | 7.27    | 26.4      | 331                          | "     | "    |         |
| Total Discharge is 21,000 gal |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |
|                               |                      |                           |         |           |                              |       |      |         |

### SAMPLE INFORMATION

| Sample ID | Time | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|------|----------------|--------|-------------------|-----------------|--------------|------------|
| SI-F      | 9:10 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| SI        | 9:10 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments: Pump on at 8:50

**HYDRO GEO CHEM, INC.****Groundwater Sampling Form**

|             |            |               |                |
|-------------|------------|---------------|----------------|
| Project No. | 7830000    | Client:       | FMI - Sierrita |
| Phase No.   | 6.2        | Date:         | 4-15-08        |
| Well ID:    | HAVEN GOLF | Weather:      | Clear          |
| ADWR No.    | 515867     | Collected By: | MA             |

**WELL DATA**

|                              |                    |                       |          |
|------------------------------|--------------------|-----------------------|----------|
| Well Depth (ft bls):         | 500                | Time:                 | 12:48    |
| Casing Diameter (in):        | 14"                | Point of Measurement: | NA       |
| Static Water Level (ft bmp): | obstructed         | GPS:                  | See file |
| 1 Casing Volume (gals):      | Purge until stable | Elevation:            | See file |
| 3 Casing Volumes (gals):     |                    |                       |          |

**FIELD SAMPLING DATA**

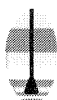
| Time  | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|-------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 12:51 | 900                  | 2700                      | 7.19    | 28.1      | 631                          | clear | None |         |
| 12:53 | "                    | 4500                      | 7.35    | 24.3      | 617                          | "     | "    |         |
| 12:57 | "                    | 9000                      | 7.31    | 23.7      | 630                          | "     | "    |         |
| 13:02 | "                    | 13500                     | 7.37    | 24.0      | 632                          | "     | "    |         |
| 13:07 | "                    | 18000                     | 7.38    | 24.6      | 631                          | "     | "    |         |
| 13:10 | "                    | 20700                     | 7.34    | 24.8      | 629                          | "     | "    |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |

**SAMPLE INFORMATION**

| Sample ID   | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-------------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| HAVENGOLF-F | 13:12 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| HAVENGOLF   | 13:12 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments:

Pump on at 12:48 - Since there is an obstruction for w/l measurements, I will purge for stability.



# HYDRO GEO CHEM, INC.

## Groundwater Sampling Form

|             |         |               |                |
|-------------|---------|---------------|----------------|
| Project No. | 7830000 | Client:       | FMI - Sierrita |
| Phase No.   | 6.2     | Date:         | 4-17-08        |
| Well ID:    | NP-2    | Weather:      | Clear          |
| ADWR No.    | 605898  | Collected By: | MA/AP          |

### WELL DATA

|                              |            |                       |          |
|------------------------------|------------|-----------------------|----------|
| Well Depth (ft bls):         | 515        | Time:                 | 12:00    |
| Casing Diameter (in):        | 12"        | Point of Measurement: | TOC      |
| Static Water Level (ft bmp): | 352.20     | GPS:                  | See file |
| 1 Casing Volume (gals):      | 958        | Elevation:            | See file |
| 3 Casing Volumes (gals):     | 2873 40min |                       |          |

### FIELD SAMPLING DATA

| Time  | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|-------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| 12:36 | 80                   | 80                        | 7.27    | 25.5      | 380                          | clear | None | 7.18    |
| 12:39 | "                    | 240                       | 7.45    | 25.2      | 360                          | "     | "    | 11.7    |
| 12:45 | "                    | 720                       | 7.43    | 25.6      | 365                          | "     | "    | 9.63    |
| 12:50 | "                    | 1120                      | 7.41    | 25.3      | 374                          | "     | "    | 3.67    |
| 12:55 | "                    | 1520                      | 7.41    | 25.5      | 376                          | "     | "    | 10.38   |
| 13:00 | "                    | 1920                      | 7.37    | 25.4      | 375                          | "     | "    | 2.46    |
| 13:05 | "                    | 2320                      | 7.36    | 25.4      | 380                          | "     | "    | 3.28    |
| 13:10 | "                    | 2720                      | 7.34    | 25.4      | 379                          | "     | "    | 2.41    |
|       |                      |                           |         |           |                              |       |      | 2.20    |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |
|       |                      |                           |         |           |                              |       |      |         |

### SAMPLE INFORMATION

| Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| NP-2F     | 13:15 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| NP-2      | 13:15 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments: Pump on at 12:35



| WELL DATA                    |                       |
|------------------------------|-----------------------|
| Well Depth (ft bls):         | Time: 11.00           |
| Casing Diameter (in):        | Point of Measurement: |
| Static Water Level (ft bmp): | GPS:                  |
| 1 Casing Volume (gals):      | Elevation:            |
| 3 Casing Volumes (gals):     |                       |

[illegible]

| SAMPLE INFORMATION |       |                |        |                   |                 |              |            |
|--------------------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| Sample ID          | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
| EQB-041808         | 11:00 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| FB-041808          | 11:00 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Groundwater Sampling Form.xls



**HYDRO GEO CHEM, INC.**  
**Groundwater Sampling Form**

|             |           |               |                |
|-------------|-----------|---------------|----------------|
| Project No. | 7830000   | Client:       | FMI - Sierrita |
| Phase No.   | 6.2       | Date:         | 4-18-08        |
| Well ID:    | NP-2      | Weather:      | Clear          |
| ADWR No.    | See F.I.E | Collected By: | MA             |

| WELL DATA                    |                       |
|------------------------------|-----------------------|
| Well Depth (ft bls):         | Time: 13:15           |
| Casing Diameter (in):        | Point of Measurement: |
| Static Water Level (ft bmp): | GPS:                  |
| 1 Casing Volume (gals):      | Elevation:            |
| 3 Casing Volumes (gals):     |                       |

| FIELD SAMPLING DATA |                      |                           |         |           |                              |       |      |         |
|---------------------|----------------------|---------------------------|---------|-----------|------------------------------|-------|------|---------|
| Time                | Discharge Rate (gpm) | Total Discharge (gallons) | pH (SU) | Temp (°C) | Specific Conductance (µS/cm) | Color | Odor | Comment |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |
|                     |                      |                           |         |           |                              |       |      |         |

| SAMPLE INFORMATION |           |       |                |        |                   |                 |              |            |
|--------------------|-----------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| DUP 04/17/08       | Sample ID | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
| NP-2E-DUP          |           | 13:15 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| NP-2-DUP           |           | 13:15 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Additional Comments: DUP 04/17/08

DUPLICATE OF NP-2



| WELL DATA                    |               |
|------------------------------|---------------|
| Well Depth (ft bbs):         | 500           |
| Casing Diameter (in):        | 10"           |
| Static Water Level (ft bmp): | 433.30        |
| 1 Casing Volume (gals):      | 273           |
| 3 Casing Volumes (gals):     | 820 2hr purge |
| Time:                        | 9:30          |
| Point of Measurement:        | TOC           |
| GPS:                         | See File      |
| Elevation:                   | See File      |

| SAMPLE INFORMATION |       |                |        |                   |                 |              |            |
|--------------------|-------|----------------|--------|-------------------|-----------------|--------------|------------|
| Sample ID          | Time  | Container Type | Volume | No. of Containers | Analysis Method | Preservative | Comment    |
| TMM-1F             | 10:30 | Plastic        | 250ml  | 1                 | EPA 300.0       | None         | Filtered   |
| Tmm-1              | 10:30 | Plastic        | 500 ml | 1                 | EPA 300.0       | None         | Unfiltered |

Groundwater Sampling Form.xls

## **APPENDIX D**

### **TIME SERIES GRAPHS OF SULFATE CONCENTRATION AND GROUNDWATER ELEVATION**



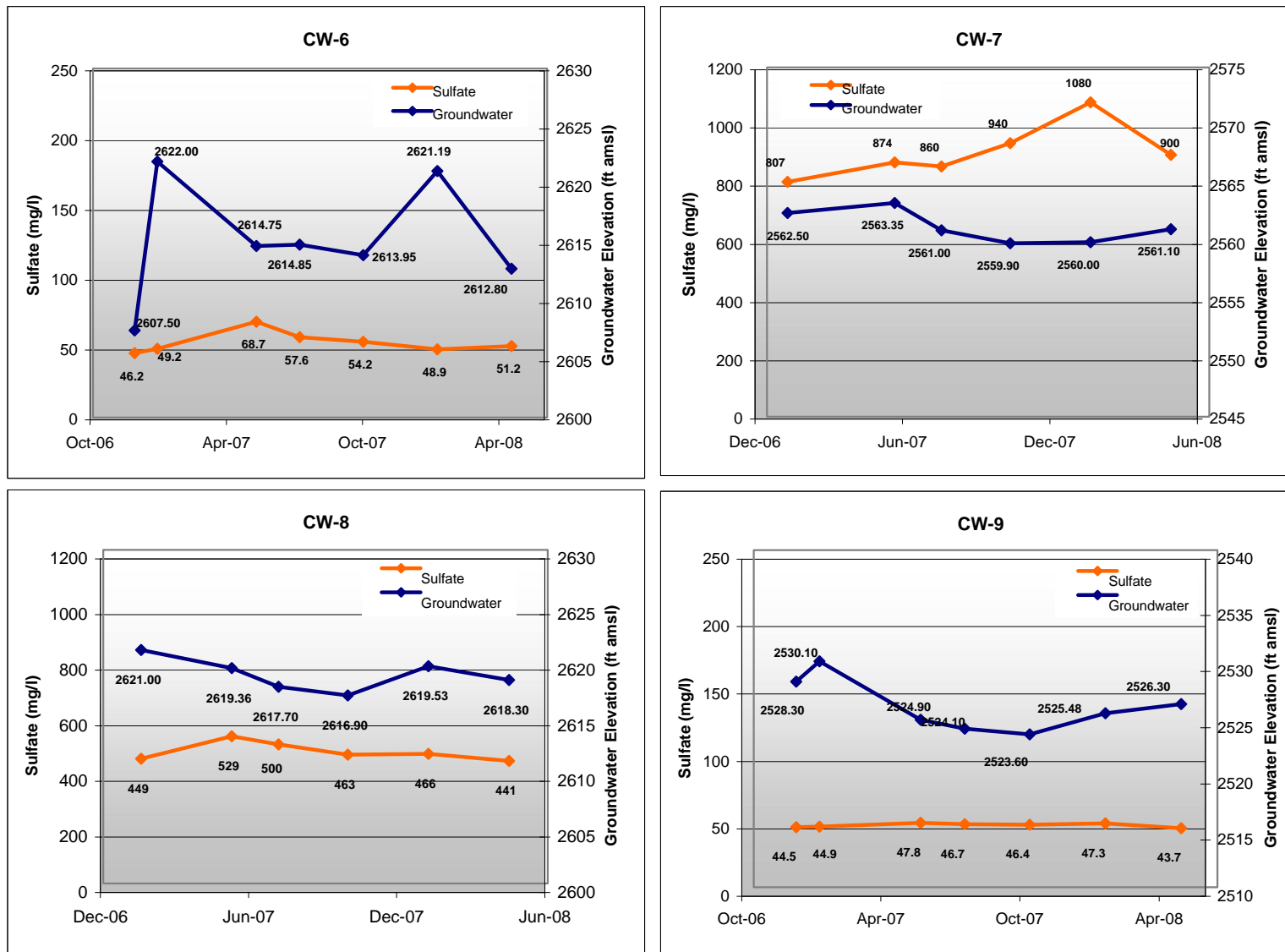


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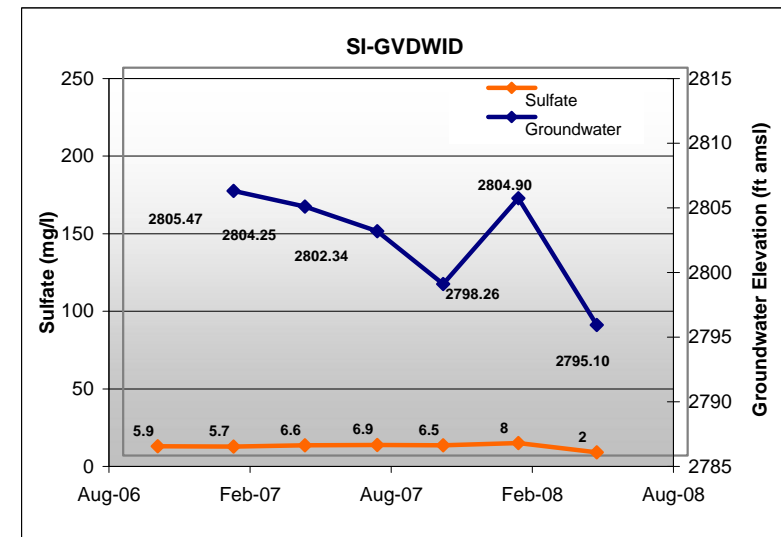
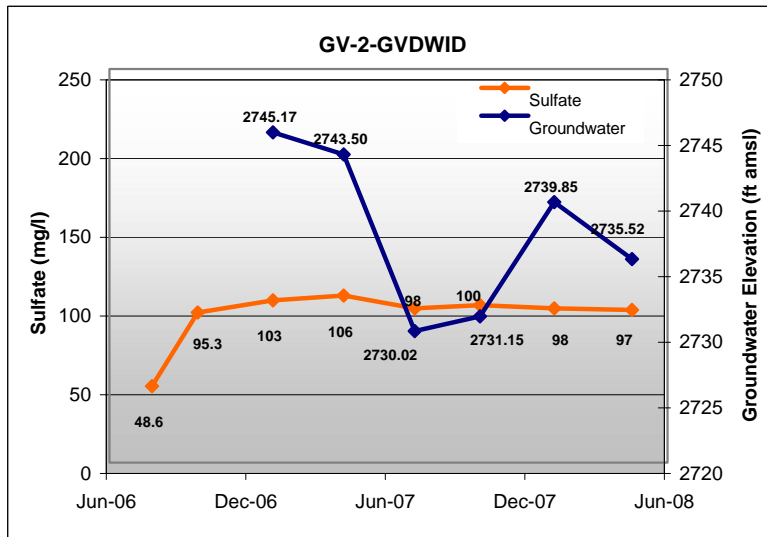
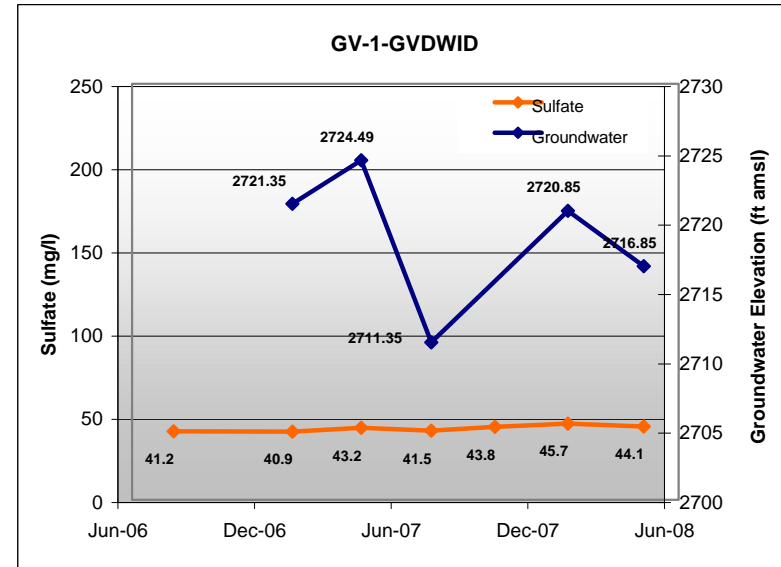
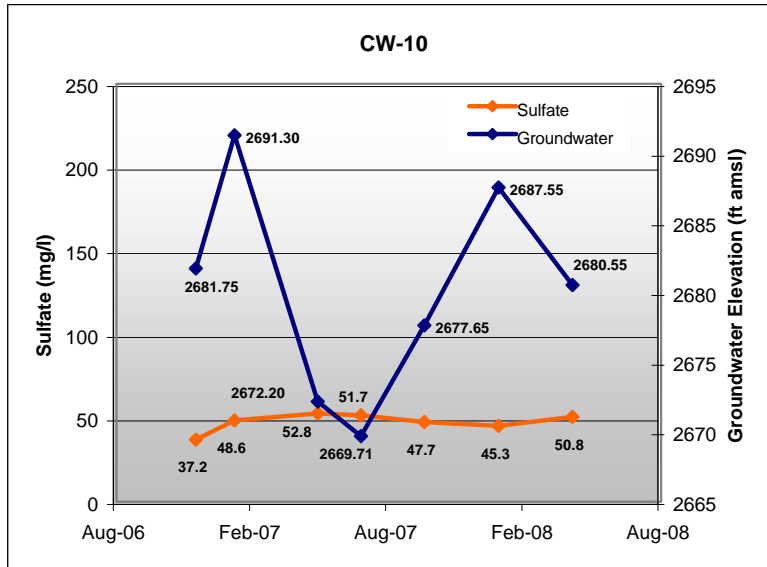
### **FIGURES**

- D.1 Sulfate Concentration and Groundwater Elevation Over Time for Wells CW-6, CW-7, CW-8, and CW-9
- D.2 Sulfate Concentration and Groundwater Elevation Over Time for Wells CW-10, GV-1-GVDWID, GV-2-GVDWID, and SI-GVDWID
- D.3 Sulfate Concentration and Groundwater Elevation Over Time for Wells ESP-1, ESP-2, ESP-3, and ESP-4
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- D.8 Sulfate Concentration and Groundwater Elevation Over Time for Wells MH-28 and MH-29

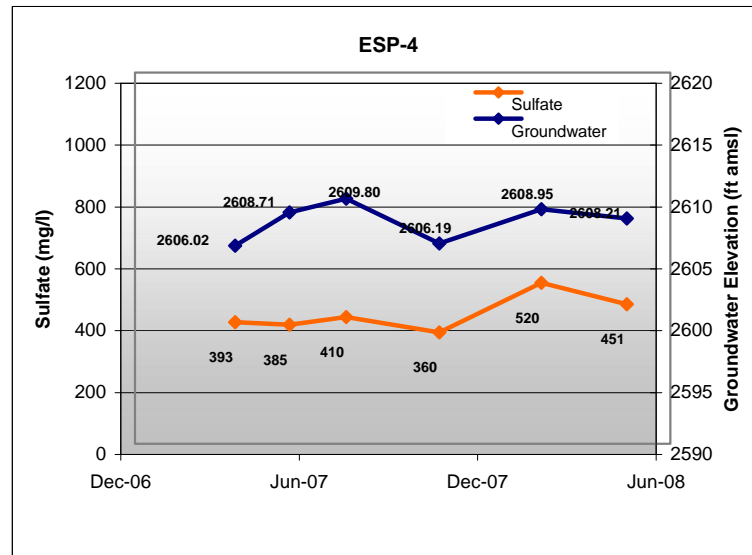
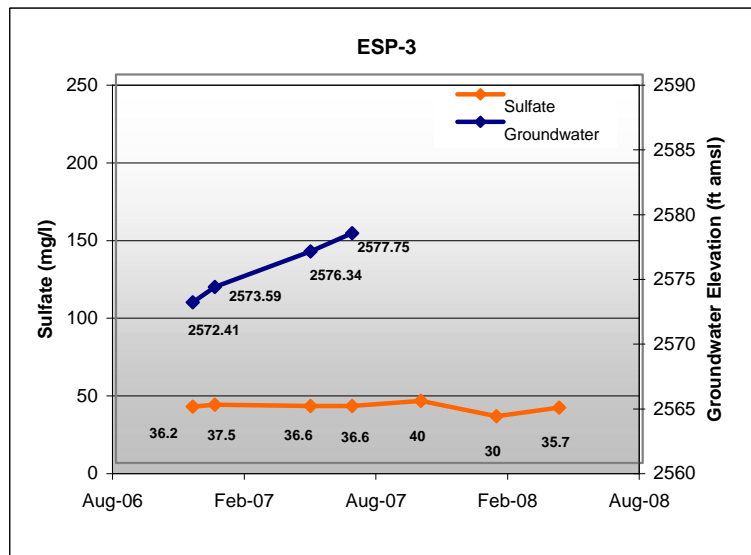
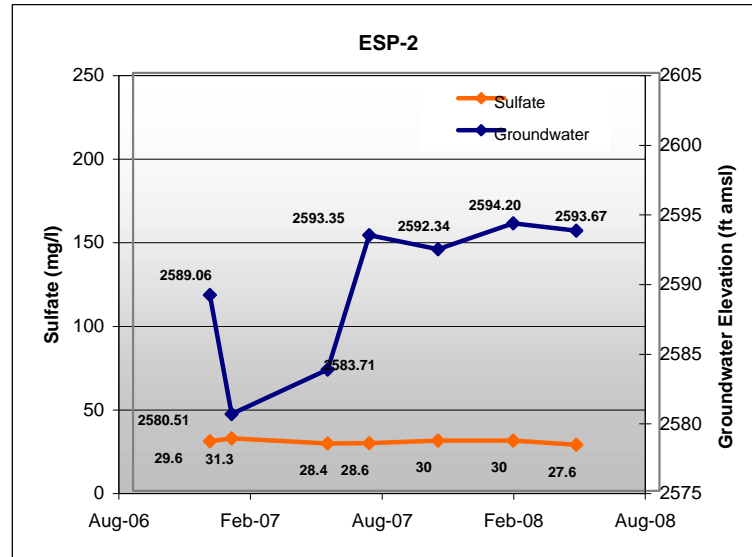
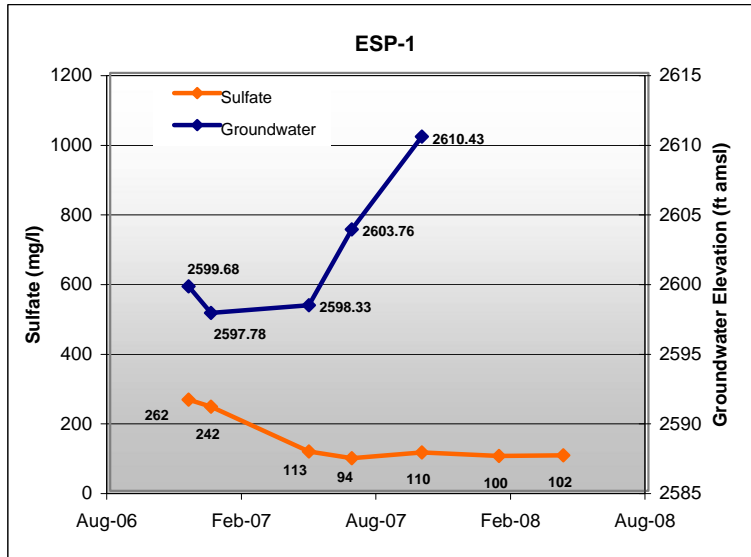
**FIGURE D.1**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
**CW-6,CW-7, CW-8, AND CW-9**



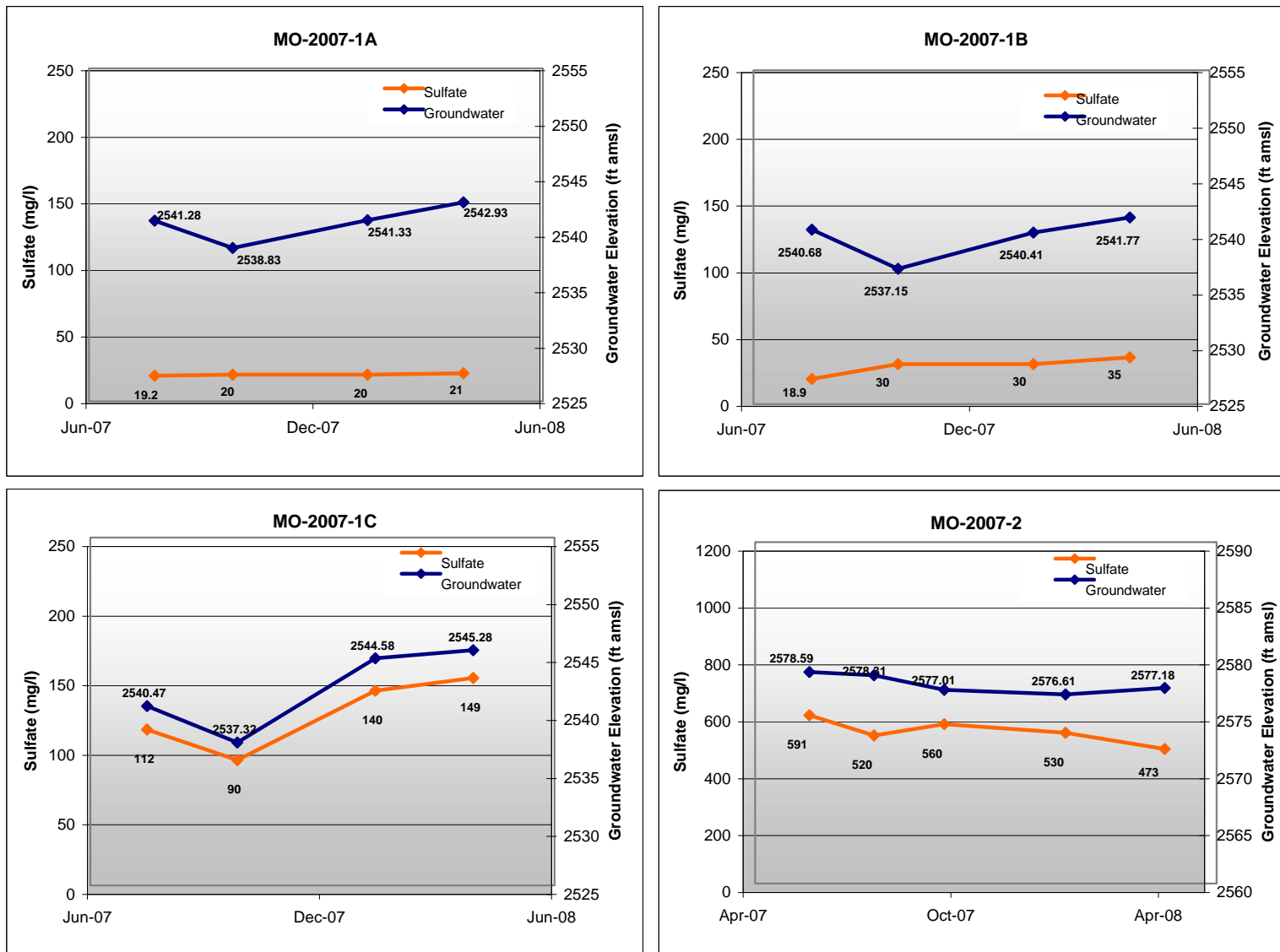
**FIGURE D.2**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
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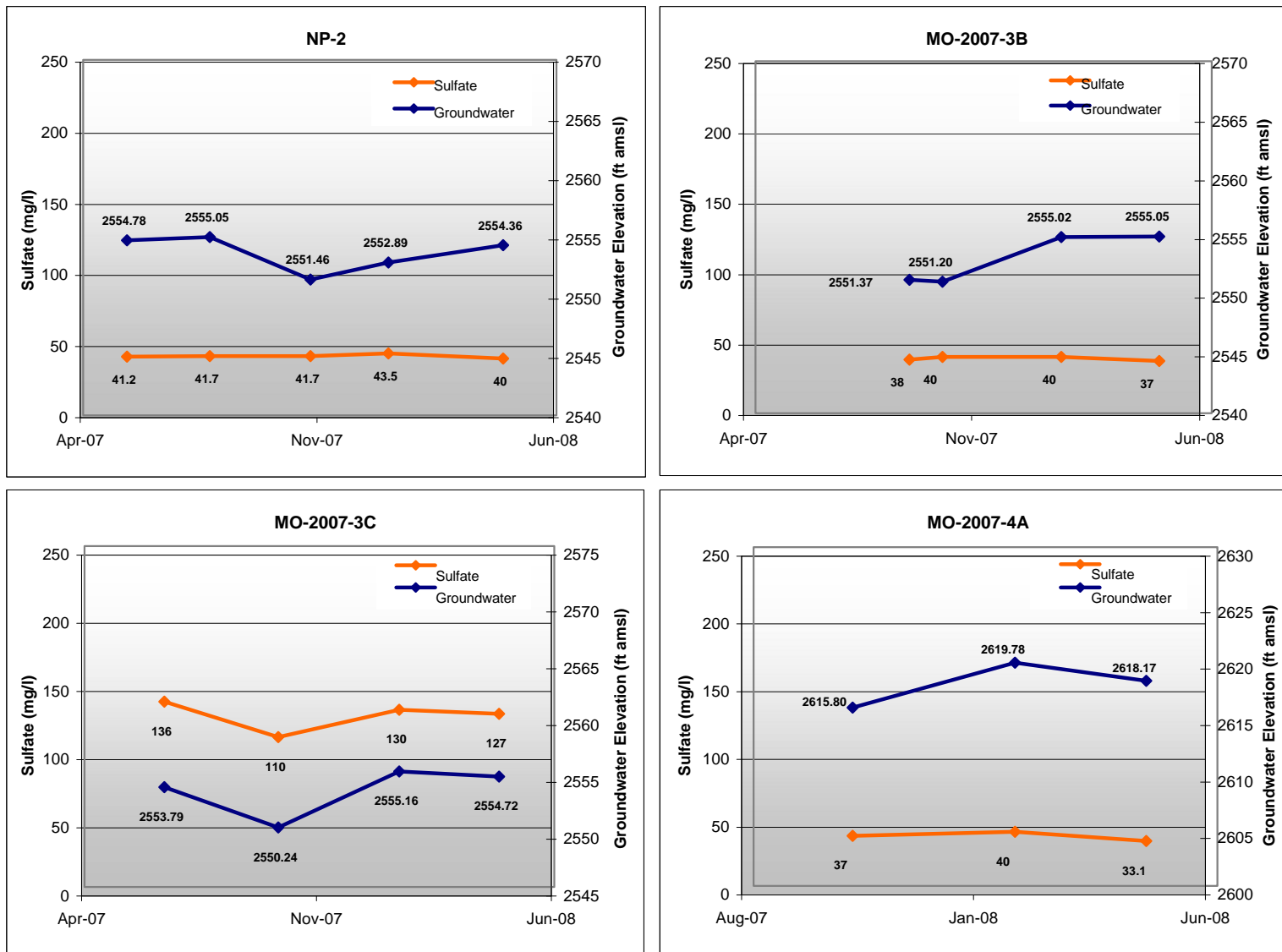
**FIGURE D.3**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
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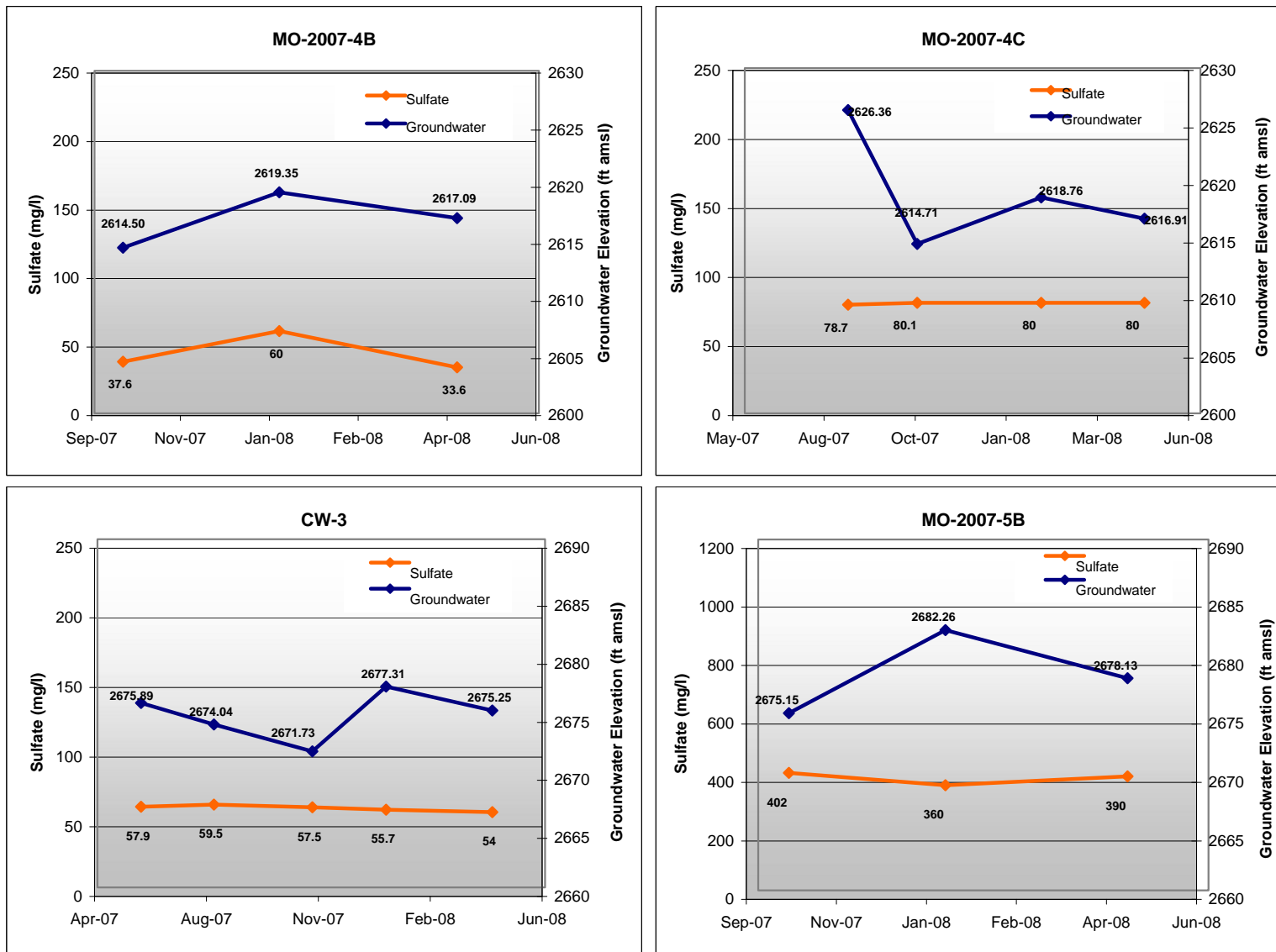
**FIGURE D.4**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
**MO-2007-1A, MO-20071B, MO-20071C, AND MO-2007-2**



**FIGURE D.5**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
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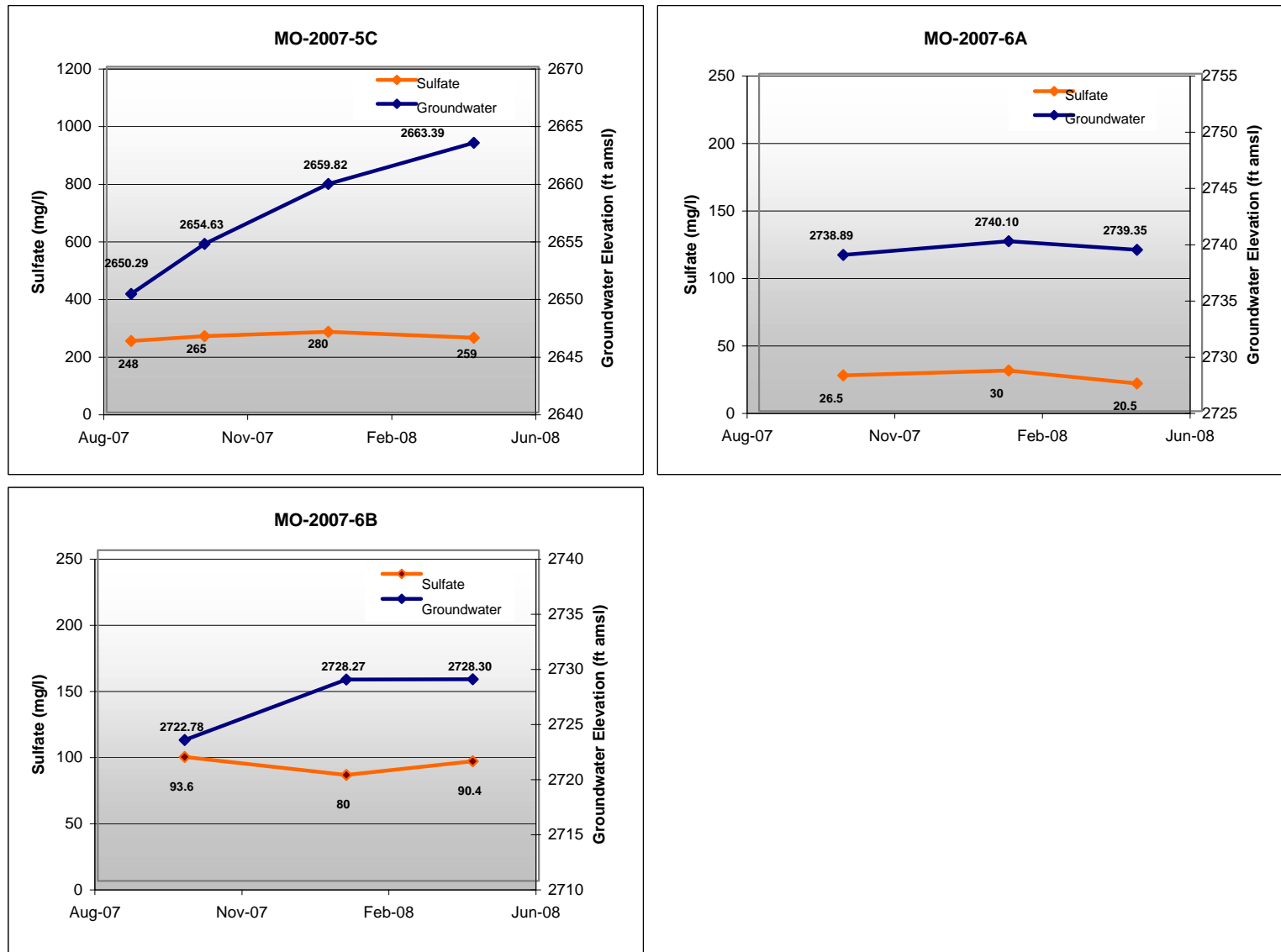


**FIGURE D.6**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
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**FIGURE D.7**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS**  
**MO-2007-5C, MO-2007-6A, AND MO-2007-6B**



**FIGURE D.8**  
**SULFATE CONCENTRATION AND GROUNDWATER ELEVATION OVER TIME FOR WELLS MH-28 AND MH-29**

